# SOUTHWICK TOLLAND REGIONAL SCHOOL DISTRICT ASSISTIVE TECHNOLOGY PROGRAM SUMMARY

#### What is Assistive Technology?

Assistive Technology (AT) is any item, piece of equipment or product system, either commercially purchased, modified, or customized, that is used to assist a student with disabilities to complete school assignments. This may include a device as simple as a pencil grip or as complex as a computer controlled by a laser head switch.

There are two types of Assistive Technology; lite technology and high technology. Lite technology does not require a power source and can easily implemented easily. High technology is a more complex form of technology.

# **EXAMPLES OF ASSISTIVE TECHNOLGOY**

#### Assistive Technology may include any of the following:

# **Motor Aspects of Writing**

- Adapted tool grips
- Stabilize materials with non-slip material
- Slantboard
- Stamps
- Raised lined paper
- Wrist weight
- Dictation software
- Sticky notes for fill-in-the-blank answers
- Drop Down menus in WORD documents

## Reading

- Book holder/easel
- Enlarged text
- Color Overlays
- Thesaurus
- Dictionary
- Books on tape
- E Texts
- Screen readers
- Picture Symbols
- Highlighter tape

# **Mobility**

- gait trainer
- stander
- walkers
- braces
- canes
- wheelchairs

#### Vision

- Screen Magnifiers
- Screen magnification software
- Enlarged text
- Braille
- Handheld magnifiers

# **Computer Access**

- Keyguard
- Mini mouse
- Touch screen
- Trackball
- Alternate keyboard
- Switch interface
- Speech to text software
- Text to speech software
- picture software

## **Study and Learning**

- Picture Schedules
- Post-it notes
- Highlighter tape
- PDA
- Outlining/organizing programs
- Handheld recorders
- Visual timers

## **Daily Living**

- Adapted eating and drinking utensils
- Adapted personal hygiene tools
- Switch operated cooking devices (ex-pouring, blender, etc)
- Picture task analysis for chores
- Switch adapted toys

- Environmental control units
- Adapted swings
- Adapted tricycle

#### Hearing

- Classroom amplification system
- Personal amplification system
- Captioning
- TTY

# **Written Composition**

- Word cards
- Handheld spell checker
- Sentence Strips
- Tape recorder
- Voice Recognition software
- Talking Word Processor
- Graphic Organizing software
- Microsoft Word accessibility features

#### Communication

- Eye Gaze board
- Object communication boards
- Single message voice output device
- Multi-message voice output device
- Voice output with multiple levels
- Voice output with dynamic display
- IPAD

## **Seating/Positioning**

- Non-slip surface on chair to prevent slipping
- Bolster, rolled towel, blocks for feet
- Adapted/alternate chair, sidelyer, stander
- Custom fitted wheelchair or insert

#### Math

- Counters/manipulatives
- Flash cards
- Rubber stamps for numbers/graphs
- Calculator
- Talking calculator

- Math software
- Graph paper to organize math problems
- Recorded word problems
- Computer calculator
- Math fact sheets

Assistive technology refers to the need for the use of devices and services to increase, maintain, or improve functional capabilities of students with disabilities. An "assistive technology device" refers to 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 functional capabilities of students with disabilities. An "assistive technology service" refers to any service that directly assists a student with a disability in the selection, acquisition, or use of an assistive technology device. Such term includes:

- 1. The evaluation of the needs of such child, including a functional evaluation of the child in the child's customary environment;
- 2. Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by such child;
- 3. Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing assistive technology devices;
- 4. Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;
- 5. Training or technical assistance for such child, or where appropriate, the family of such child; and
- 6. Training or technical assistance to individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of such child.

The District is responsible for assistive technology evaluations. The need for assistive technology will be determined by using the following procedure:

- 1. Team members identify the difficulty the student is experiencing and discuss the possible causes.
- 2. Team members review and gather baseline data.
- 3. The team identifies needs and generates possible assistive technology solutions. (May use Assistive Technology Consideration Resource Guide or Assistive Technology Checklist)
- 4. During a specified time frame, assistive technology trials are completed and data is collected.
- 5. The team analyzes data and makes decisions about the use or permanent acquisition of one or more assistive technology tools and/or services. These instructional resources allow learning goals to be attainable by individuals with wide differences in their abilities to see, hear, speak, move, read, write, understand English, attend, organize, engage, and remember.

- 6. If specific assistive technology is identified as being needed, it will be included in the student's IEP.
- 7. At any time, if the IEP team members need additional help in determining if a student needs assistive technology devices or services, the Assistive Technology Resource person may be requested for help. The IEP team would complete the Referral form for Assistive Technology Evaluation and Services.

Modified from the following source: http://www.jefferson.k12.wi.us/do/District\_Technology/IGBG & IGBG-R & IGBG-E (Assistive Tech).htm(IGBG)

# **HIGH Technology Programs**

BOARDMAKER WITH SPEAKING DYNAMICALLY PRO Designed for individuals challenged by significant speech, language or learning disabilities who need symbol support, Boardmaker with Speaking Dynamically Pro transforms a computer into a talking word processor, a speech output device and a powerful student-learning tool. Boardmaker with Speaking Dynamically Pro comes with the high-quality, natural-sounding RealSpeak voices, making it easy to understand. The optional AT&T voices provide even more voice choices. Individuals who are challenged with significant speech and language disabilities can often also benefit from symbol support for both communication and for access to learning activities. Use the included Picture Communication Symbols (PCS) to create interactive activities, as well as printed materials to aid in literacy instruction and access to the school's core curriculum.

**BOOKSHARE** Bookshare offers accessible books and periodicals for readers with print disabilities. Student memberships are currently funded by an award from the Department of Education for students with qualifying disabilities. An online searchable library of 60,000 digital books for readers of all ages, text books, trade books, teacher recommended reading, periodicals and assistive technology tools. Books can be converted and played on an MP3 player, print can be enlarged, books can be heard with synthesized speech and students can access Bookshare at home.

<u>COWRITER Universal</u> Co:Writer® Universal Extension for Chrome<sup>™</sup> helps you write with proper grammar and spelling using topic-specific vocabulary. It integrates with the Chrome<sup>™</sup> browser for word prediction and speech recognition just about anywhere you write online including Google Drive<sup>™</sup>, Microsoft Word, blogs, Learning Management Systems, testing, social networks, and email.

#### **DRAGON NATURALLY SPEAKING** Speech to text program.

NaturallySpeaking uses a minimal user interface. As an example, dictated words appear in a floating tooltip as they are spoken (though there is an option to suppress this display to increase speed), and when the speaker pauses, the program transcribes the words into

the active window at the location of the cursor (Dragon does not support dictating to background windows). The software has three primary areas of functionality: voice recognition in dictation with speech transcribed as written text, recognition of spoken commands, and text-to-speech: speaking text content of a document. Voice profiles can be accessed by different computers in a networked environment, although the audio hardware and configuration must be identical to those of the machine generating the configuration.

**FAST ForWord** Software program that builds foundational reading and language skills while improving memory, attention and processing rates. The series increases processing efficiency and builds critical reading skills.

**INSPIRATION** (grades 6 – 12) Software program that is a visual thinking and learning tool students can use to plan, research and complete projects successfully. With integrated Diagram and Outline Views, students can create graphic organizers and expand topics into writing. Encourages learning in multiple modes. Educators can use to customize instruction, achieve standards, assess student projects and encourage learning. Includes an expanded selection of 120+ cross-curricular templates in language arts, social studies, science, planning and thinking that makes starting assignments quicker and easier for student. This is a visual learning technique – a graphic way of working with ideas and presenting information – that will help students to clarify their thinking and to process, organize and prioritize new information.

**KIDSPIRATION** (grades K -5) Software program that develops thinking, literacy and numeracy skills using visual learning principles. In reading and writing, Kidspiration strengthens word recognition, vocabulary, comprehension and written expression. Visual math tools help students build reasoning and problem solving skills. In Picture View, students can build graphic organizers including concept maps, webs, bubble diagrams and Venn diagrams. In Math View, students use math manipulatives such as color tiles, pattern blocks, base ten blocks, fraction tiles and fraction boxes to build math skills.

**LEARNING ALLY** This is the leading accessible audiobook library for students with disabilities such as visual impairment or dyslexia. With titles available in every subject area and grade level, Learning Ally's digitally recorded audio textbooks help students challenged by the printed page. Learning Ally has a library of 40,000 books that can be played on a portable player or downloaded onto a computer. Special education teachers can order books for specific student use. Contact the Special Education office for membership number.

#### Comprehensive Reading Test - Grades K – 12

The Quick Reading Test takes on 5-8 minutes to administer and the resulting detailed reports indicate where practice is needed. The Comprehensive Reading Test evaluates a student's reading abilities and skill in four core areas; Readiness, Phonics/Decoding Skills, Sight Words and Reading Comprehension/Rate/Fluency/Miscue Analysis.

\*Early Reading software - ages 4 - 6

Reinforces the precursors to reading. The activities provide practice in rhyming, initial and final consonant sounds, word segmenting and sound blending, without requiring any knowledge of the alphabet

\*Phonics Based Reading software – ages 5 – 8

An interactive reading skills development program. Exercises provide practice in phonemic awareness, sound-symbol correspondence, word attack skill, and early comprehension skills, while introducing nearly 2,000 vocabulary words. Progress is not registered until each unit is mastered; the student must show both competency and fluency in each skill.

\* Reading S.O.S. (Strategies For Older Students) –ages 9 – 12

Activities provide practice in decoding skill, early comprehension, and keyboard skills. Students control their own activities providing motivation, but each student must show both competency and fluency in each skill before moving on. Activities reinforce word attack strategies and teach advance decoding skills. Included in S.O.S. Level 5 are activities for mastering high school vocabulary.

**PROLOQUO2GO** Symbol-supported communication app to promote language development and grow communication skills, from beginning to advanced communicators

SNAP AND READ UNIVERSAL Snap&Read Extension for Chrome™ reads both accessible and inaccessible text aloud from websites, Flash websites, images, Google Docs, eBook Readers, Kindle Cloud Reader, email, PDFs, web-based tests, and more. Snap&Read also adjusts complex text to be more readable, translates text into over 100 languages, and allows you to capture information and cite your sources for use in writings.

<u>TOUCH MATH</u> (grades Pre - 3/4) A program that teaches students to visually associate counters on top of the numbers. Students learn to tap a 2 at the top and at the point at the bottom of the number. There are touch points taught all the way to 9. Students learn to associate a concrete value to the numbers and this helps them learn to add and subtract with the visual and kinesthetic dimensions many students need.

**WORD ONLINE:** Word processing program that can be accessed through Office 365. Word online has an IMMERSIVE READER feature that allows from text to speech. It also has DICTATE built in which is Speech To Text (STT). Learning Tools includes a

modified reader view that utilizes techniques proven to help people read more effectively, such as:

- **Read Aloud**—Reads text aloud with simultaneous highlighting that improves decoding, fluency and comprehension while sustaining the reader's focus and attention.
- **Spacing**—Optimizes font spacing in a narrow column view to improve reading fluency for users who suffer from visual crowding issues.
- **Syllables**—Shows the breaks between syllables to enhance word recognition and decoding.
- **Parts of Speech\***—Supports writing instruction and grammar comprehension by identifying verbs, nouns and adjectives.

The Immersive Reader features help everyone on any device improve their reading skills, including those with dyslexia, dysgraphia, ADHD, emerging readers or a combination of the broad range of unique student abilities.