Interactive White Boards in the Special Needs Classroom

Assistive Technology Specialists
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www.ed.sc.gov
Satalight Accessible White Board
Accessories
What is an interactive electronic whiteboard?

- It is a presentation device that interfaces with a computer. The computer images are displayed on the board by a digital projector, where they can be seen and manipulated.
Why Use Them?

• The interactive electronic whiteboard is great for demonstrations.
• The interactive electronic whiteboard is a colorful tool.
• The board can accommodate different learning styles
• All ages of students respond favorably to board use
Even More Reasons...

• Students with limited motor skills can enjoy board use
• It is interactive
• It can interface well with other peripherals
• The board is great for meetings and lessons where the participants need printed copies of the proceedings
• It is a kid magnet!
UDL Principles and Interactive Whiteboards

• Interactive whiteboards are designed to engage a wide variety of students in the learning process
Three Principles of UDL:

• 1. Provide multiple means of representation – give learners various ways to acquire information and knowledge

• 2. Provide multiple means of action and expression – give learners alternatives for demonstrating what they know

• 3. Provide multiple means of engagement – tap into learners’ interests, offer appropriate challenges and increase motivation
Multiple means of expression

*Accommodating learners with special needs*

- Students do not need to be able to use all the features of the interactive whiteboard to unlock its educational potential
- The technology enables multiple means of expression, benefiting students of all ages and abilities
Fine motor delay

• Younger students and those with fine-motor challenges can operate interactive whiteboards by using special pens, a finger or fist, or any object, such as a tennis ball, depending on the type of board used.
Visually challenged

- Educators can use interactive whiteboards to adapt material for students with visual challenges in a variety of ways.
Deaf students

• Interactive whiteboards are also a boon for teachers of deaf students. Interactive whiteboards with finger-touch capabilities enable educators to keep their hands free of pen tools, which can interfere with signing.
Mental and Behavioral Challenges

• Interactive whiteboards, which provide a stimulating focal point for lessons, can therefore be a tremendous asset
Interactive Whiteboards and IEPs

- Educators who use interactive whiteboards find that not only is the technology a helpful teaching tool, but it can also maximize collaboration and facilitate clear communication in meetings with the special education team.
Interactive Whiteboards Conform to UDL Principles

• They are adaptable to even the most unique learning environments and student populations
• The opportunity to present information in multiple ways, allow flexible means of expression, and engage learners of the digital age makes it a natural fit with UDL
Literacy Activities
Discovery Learning

http://streaming.discoveryeducation.com/
Literactive

[Website Image]

Download Stories

**Nursery Rhymes 1**

<table>
<thead>
<tr>
<th>Text Focus</th>
<th>Pages</th>
<th>Words</th>
<th>Grammar</th>
<th>File Size</th>
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<tr>
<td>Familiar rhyme</td>
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<td>50</td>
<td>Rhyming</td>
<td>1100k</td>
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<tr>
<td>Non-decodable</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Rhythm and sequence</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Parts of a book</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(cover, title, orientation, pagination)</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

- **Hickory Dickory Dock**
  - Login to Download
- **It's Raining, it's Pouring**
  - Login to Download
- **Doctor Foster**
  - Login to Download
- **The Cat and the Fiddle**
  - Login to Download

- **On Top of Spaghetti**
  - Login to Download
- **Mary Had a Little Lamb**
  - Login to Download
- **Humpty Dumpty**
  - Login to Download
- **One, two, three, four, five**
  - Login to Download

The Literacy Center Education Network is a 501 (c) (3) non-profit organization with a mission to deliver free, professionally-designed, education material to preschool-age children. Utilizing the power of the Internet, we distribute education material directly to children in their homes, libraries, and schools.

Follow us on Twitter @ReadToday

Support the Literacy Center E-Books let you practice reading and writing fruit and vegetable names.
Read Along Stories & Songs
NATIONAL PARKS

Some countries have old castles and churches.

Some have old pyramids and statues.

But America is not an old country.

America loves the beauty of its wilderness.

http://www.pbs.org/nationalparks/
Fiction & Non-Fiction Books

Scholastic BookFlix is a new online literacy resource that pairs classic video storybooks from Weston Woods with related nonfiction eBooks from Scholastic to build a love of reading and learning. The engaging way to link fact and fiction, BookFlix reinforces early reading skills and introduces children to a world of knowledge and exploration.
Interactive Storybooks

Play tic-tac-toe while you wait for the storybook to load!

Click any space to start.

The storybook is ready! Click the bone to start reading.

Begin

Scholastic Word Wizard

Double click any word on the page! Or type any word in the box above. Then hit Enter or click the Look It Up button.
Interactive Books

Microsoft

Photo Story 3
for Windows

make show-n-tell cool again

Bring your digital photos to life with Photo Story 3 for Windows. Download Photo Story 3 for free and experience your photos in amazing new ways. Read the system requirements.
Making Books with Power Point
Vocational Skills

I just started a new job and my first project is working with spreadsheets. I am very happy I took the GCFLearnFree.org Excel tutorials. Thank you!

-Online Learner Greenwich, Connecticut

Everyday Life

Life is filled with chaos, and we have to learn how to work and solve problems in the midst of it every day.

In Everyday Life, our interactive lessons give you the opportunity to experience these daily challenges without real-world consequences. Learn more about the project or start learning!

Our HIV/AIDS interactive workbook helps you understand what causes this disease, and gives you tips for preventing or living with HIV/AIDS.

Start Here
Play through a short tutorial which explains how the activities work.

http://www.gcflearnfree.org/everydaylife/
Science Activities
PBS Science and Technology

http://www.pbs.org/teachers/classroom/prek/science-tech/
Math Activities
Super Math

http://www.supermathsworld.com/
Family Learning

Counting Games

These online counting games will help young children (age 2 to 6) get to grips with numbers. For the beginner, start with the counting games which can be limited to a maximum of 5 objects, such as the Ladybird Counting game, Gingerbread Men and Counting with Lecky.

Counting Scales
Simple & Easy Operation with High Performance Counting Function.

Free Phonics Fun
Phonics reading lessons that really work. Guaranteed. Free trial

Counting with Lecky
Help Lecky the Alien to catch balloons, fish, leaves, butterflies and balls. Choose whether to count up to 5 or 10. Very child friendly! (Crickweb)

http://www.familylearning.org.uk/counting_games.html
Internet Browser

ZACBROWSER™

The first Internet browser developed specifically for children living with variants of autism spectrum disorders.
Interactive Whiteboards for Students with Significant Disabilities
Adapting your Interactive Whiteboard
SMART Inclusion Pilot Project

• Conducted on Canada in September 2008
• Based on a Grant from Ministry Education Equipment Allowance
• Study was conducting on sixteen students significant learning disabilities
• Teachers, related service providers, and administrator where given a questionnaire
• Speech Language Pathologists conductive pre and post evaluations
Findings

• *All* students in the classrooms were highly engaged in classroom activities using Assistive and SMART Technology. Engagement was defined by teachers as “attentive, interested in activities, not disruptive, excited about learning.”

• Teachers reported that they were doing “more teaching, less behavior management” *with the entire class*. There were significant decreases in referrals to the school office and serious behavioral incidents for several students (including some of the Smart Inclusion target students) whose behavior had significantly impacted classroom participation and learning in previous years.

• Special needs students participated with peers in small and large group classroom activities to a greater degree in 2008-2009 compared to the previous school year.
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• Special needs students were not only more engaged and participating to a greater extent in classroom activities with peers, but teachers felt students were meeting their Individual Education Program (IEP) goals sooner than expected.
• Standardized language assessment pre- and post-data available for 8 students to date reveal that all students demonstrated growth in their speech and language skills; all students’ communication skills had improved to a greater degree when compared to growth over previous year.
Boardmaker Plus
Classroom Suite 4
Intellikeys
Pixwriter
Social Stories

Get Ready For Bed

1. Wash my face.
2. Brush my teeth.
3. Put on my pajamas.
Subtract. Use the calculator to help.

$$88 - 63 =$$
Switch Accessibility
SENswitcher, Talking Faces, CD Player, Etc.

http://www.inclusive.co.uk/downloads/downloads.shtml#cdplayer
Resources Section

This is the resource section of our Web site. From here you can download a wide variety of material including worksheets, curriculum documents, lesson plans and simple programs, which you are free to adapt and use in your school, college or home.

Click HERE to see the top twenty most popular downloads from our web site

CAUSE AND EFFECT / TARGETING ACTIVITIES

For many of our pupils, access to the computer requires the use of some assistive input device such as a switch or a touch screen. Priory Woods has developed a range of motivating programs to help our pupils develop the skills needed to use those devices in a meaningful way. Switch 'videos' are simple slideshows animations set to music which can be operated by switch or touch-screen. They feature sounds and images from popular music and TV shows and can be used with pupils of all ages.

INTERACTIVE TALKING STORY BOOKS

Children of all ages enjoy reading or looking at books. Stories are a firm favourite with our pupils especially when they write them themselves. Like many schools, we create lots of 'big books' with our pupils, many for use on an interactive whiteboard. Our pupils may struggle with writing but give them a digital camera and they can tell a story in pictures. Here is a collection of some of the books we have made in school.

We hope you find them a useful source of ideas.

USEFUL EDUCATIONAL PROGRAMS

http://www.priorywoods.middlesbrough.sch.uk/
Welcome to Hiyah.net

My name is Sara. I have 2 boys who both showed an interest in the computer, but didn't know how to use the mouse or keyboard. Since there was nothing on the market to meet their needs, I developed a series of educational computer software programs that they could operate on their own by simply pressing the spacebar. I am making these programs available at no charge to any parent or teacher who thinks they may be able to use them.

The programs are based on high interest subjects, such as nursery rhymes, holidays, and birthday themes. The software keeps children engaged and actively learning. And for children with limited language skills, my programs can help give meaning to words and concepts. Holidays, birthdays, going to the doctor, dentist, or getting a haircut, are all broken down into sequential steps to thoroughly explain the event.

This educational software is made for children 18 months to 4 years of age (or higher for children struggling with language delays due to autism or...
Alternative Augmentive Communication (AAC)

Boardmaker Plus

Pogo Boards
South Carolina
Assistive Technology Program
SCATP
The South Carolina Assistive Technology Program (SCATP) is located in Columbia, SC: provides state-wide resources for the community; demonstration lab for public; free trial loan of AT devices (pay only return shipping)

[www.sc.edu/scatp](http://www.sc.edu/scatp)

SC AT EXPO
March 18, 2010
Spartanburg, SC

Free and open to the public!
SC Department of Education
Assistive Technology Specialists (ATS)

Mission

• The mission of Assistive Technology Services (ATS) is to provide assistive technology support, training, consultation, equipment, and technical assistance to educators who teach students at risk of academic failure and students with disabilities.
ATS SERVICES

Professional Development
• presentations, workshops, and trainings on assistive technology for districts and regions, both in person and online;
• training on conducting assistive technology evaluations and assessments for local staff.

Funding Assistance
• Identification of funding sources
• Research into grant opportunities
• Formation of funding networks among AT professionals
Additional ATS Services

Technical Assistance
• Formation and support of AT teams within schools and districts
• Collaborative sessions with instructional technology specialists
• Recommendations on interventions for assisting students at risk of academic failure and students with disabilities
• Training in AT assessment, evaluation, and implementation for AT teams

E-News – “AT Connect”
• News on free software, scheduled trainings, and upcoming conferences
SCCATN WIKI!
SC Collaborative Assistive Technology Network
Join!!
http://sccatn.wikispaces.com/

Upcoming Trainings, Conferences
Free Resources
Vendor Links
FAQ
Best Practice in AT
AT Resources

- ABLEDATA [http://www.abledata.com](http://www.abledata.com) ABLEDATA is sponsored by the National Institute on Disability and Rehabilitation Research, U.S. Department of Education. The searchable ABLEDATA database contains over 21,000 products.

- Alliance for Technology Access (ATA) [http://www.ataccess.org](http://www.ataccess.org) The ATA provides AT information and support services to children and adults with disabilities.

- ATSTAR Program [http://www.atstar.org](http://www.atstar.org) The Assistive Technology - Strategies, Tools, Accommodations and Resources (ATSTAR) Program is designed to increase AT expertise through technology-enhanced learning environments.

- Assistive Technology Industry Association (ATIA) [http://www.atia.org](http://www.atia.org) The Assistive Technology Industry Association is an organization of manufacturers, sellers or providers of technology-based assistive devices and/or services. The organization sponsors the ATIA annual conference and the Assistive Technology Outcomes Journal.

- Assistive Technology Training Online (ATTO) [http://www.at-training.com](http://www.at-training.com) The Assistive Technology Training Online Project provides internet-based training in both general and specific areas of adapted computer use.
AT Resources

• California State University at Northridge, Center on Disabilities (CSUN) [http://www.csun.edu/cod/] Located at California State University, Northridge, the Center on Disabilities develops and publishes materials of interest to the field of disability and sponsors conferences, seminars, and workshops.

• Center for Applied Special Technology (CAST) [http://www.cast.org] CAST is an organization that works to expand learning opportunities for all individuals, especially those with disabilities, through the research and development of innovative, technology-based educational resources and strategies.

• Closing the Gap [http://www.closingthegap.com] This web site spotlights resources in computer technology, special education and rehabilitation. The Resource Directory is a database of over 2000 hardware and software products which is web searchable. Links to vendors are included.

• Council for Exceptional Children (CEC) [http://www.cec.sped.org] CEC is an international professional organization dedicated to improving educational outcomes for individuals with exceptionalities, students with disabilities, and/or the gifted. Services provided include professional
AT Resources

• Georgia Project on Assistive Technology (GPAT) http://www.gpat.org GPAT is a project of the Georgia Department of Education: Division for Exceptional Students, providing a range of technical support services in the area of assistive technology to local school system personnel and their students. Contains helpful resources, forms, and a video-linked consideration guide. GPAT Videos - http://coefaculty.valdosta.edu/spe/ATRB/Video_Tips.htm

• Guide to the Individualized Education Program http://www.ed.gov/parents/needs/speced/iepguide/index.html This publication is provided by the U.S. Dept. of Education and contains useful information related to developing effective IEPs.

• LD Online http://www.ldonline.com This interactive website provides resources on learning disabilities to parents, teachers, children and other professionals. The site includes books, articles, videos and a newsletter.

• LD Resources http://www.ldresources.com This site provides resources for people with learning disabilities. Materials include essays, articles, resources and other materials that can be used for non-commercial purposes only.

• National Assistive Technology Research Institute (NATRI) http://natri.uky.edu (NATRI) conducts assistive technology (AT) research, translates theory and research into AT practice, and provides resources for improving the delivery of AT services.
AT Resources

• National Center for Technology Innovation (NCTI) http://www.nationaltechcenter.org/ NCTI seeks to broaden and enrich the field of technology for the education of students with disabilities by providing resources and promoting partnerships for the development of tools and applications by developers, manufacturers, producers, publishers and researchers.

• Office of Special Education Programs (OSEP), U.S. Department of Education http://www.ed.gov/about/offices/list/osers/osep/index.html?src=mr OSEP is dedicated to improving educational results for children with disabilities. The site provides information on Federal policy, national grant projects, national studies, and statistics related to disabilities and other related resources.

• Oregon Technology Access Program (OTAP) http://www.otap-oregon.org/ OTAP provides training, information, technical assistance and resources regarding the uses of technology for children with disabilities.

• Quality Indicators for Assistive Technology (QIAT) http://www.qiat.org The QIAT Consortium is a national grassroots group dedicated to identifying, disseminating, and implementing a set of widely applicable quality indicators for assistive technology services in school settings. The QIAT listserv provides a national forum for discussion of AT issues.
AT Resources

• Rehabilitation Engineering and Assistive Technology Society of North America (RESNA) 
  http://www.resna.org/ RESNA is an interdisciplinary association that provides a 
  credentialing program for assistive technology service providers. The RESNA Technical 
  Assistance Project provides technical assistance to the 56 state/territory programs as 
  authorized under the AT Act of 1998.

• Technology and Media (TAM) Division of CEC http://www.tamcec.org TAM is a division 
  of the Council for Exceptional Children (CEC) that works to promote the effective use of 
  technology and media for individuals with exceptional educational needs. The site 
  includes information on conferences and professional publications including the JSET 
  Journal.

• Texas Assistive Technology Network (TATN) http://www.texasat.net TATN is a 
  collaborative network between the twenty (20) education service centers in Texas with 
  Region 4 Education Service Center in Houston providing statewide leadership. The site 
  provides links, resources, and training materials.

• Wisconsin Assistive Technology Initiative (WATI) http://www.wati.org WATI is a 
  statewide project funded by the Wisconsin Department of Public Instruction to help all 
  school districts develop or improve their assistive technology services. It includes 
  information on best practices, training materials, resources, sample forms, and provides 
  links to other sites related to AT.