

**Picture Students Reading and Writing: Peers
Creating Computerized Books for Students with
Severe Disabilities**

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Learner Outcomes for Today:

- Identify software for authoring computerized books
- Describe features of interactive computerized books
- List various ways to incorporate computerized books into the curriculum for general education and special education students
- Learn how to integrate assistive technology for writing into this process for students with physical disabilities
- See how easy it is to customized books with photos, videos, sounds, and voice recordings!

Overview of Project:

This is a pilot project involving general education peers and students with severe disabilities. Literacy and computer activities are adapted for students with disabilities by using a book-authoring program called "My Own Bookshelf".



SoftTouch



Project Funds



Funded by a mini-grant from the Dollar General Literacy Grant

Items purchased:

- *Boardmaker 6 Plus* (Mayer-Johnson)
- *Pixwriter* (Slater Software)
- *My Own Bookshelf* (SoftTouch)



RATIONALE

Research indicates that individuals with severe communication disabilities often demonstrate decreased literacy skills that limit educational, vocational and social aspects of daily life. (Light & Smith, 1993).

Light and Smith 1993

"Preschoolers with disabilities had as many print materials at home as nondisabled; but frequency, nature of interaction and opportunities were different"

**Children w/o
Disabilities**

- **often read to daily**
- **Asked and answered questions**

Children w/Disabilities

- **Read to only 1-2 x's weekly**
- **Listened, looked or pointed but unable to communicate interactively during the process**

Koppenhaver, Evans and Yoder 1991

Interview with 22 literate adults with severe speech and physical disabilities

- Homes rich in reading and writing material
- Varied experiences with print
- Time spent reading, seeing and following printed text
- Writing tools were primarily for drawing and making letters rather than writing for communication



Our Survey Says...

Most students are read to 3-4 times a week

A few are read to daily

Few students initiate

Most adults choose the book rather than the child

None of the families reported students requesting for a book to be re-read or for additional books to be read at one sitting

Emergent Literacy Learners

Literacy Beginners

- Learning that books are enjoyable
- Symbols convey meaning
- Interaction between reader and listener
- How to handle books

Novice Readers

- Learning printed text carries meaning
- Beginning to identify letters (in their name)
- Aware of environmental print (labels, logos)

Experimenting Readers/Writers

- More aware of effort it takes to read and write
- Recognize most of the alphabet and associate letters with their names
- They understand that words are made up of combinations of letters
- May use inventive spelling

McGee and Richgels - 1990

What is My Own Bookshelf?

A software-authoring program that is easy for students as well as staff to use. Combine pictures, videos, recorded text or synthetic speech to create customized books for students of all ability types.



Target Authors and Readers

- Elementary school students with severe disabilities in self-contained classroom
- General education 4th grade students
- Middle school students in inclusion settings with physical disabilities
- Middle school students with moderate – severe disabilities in self-contained class

Literacy Benefits of My Own Bookshelf

Repeated Phrases

- Repetition makes books predictable, and young readers love knowing what comes next. You can create books with repeated phrases and short rhyming poems.
- Draw attention to repeated phrases, inviting the children to join in each time they occur.

Literacy Benefits of My Own Bookshelf

Tracking Words

- The best way for children to achieve a concept of words in print is to have them point to words as they reread familiar texts. (Bear, 2008)
- With ***My Own Bookshelf*** students listen to the book while the sentences or words are highlighted. This allows the students to increase knowledge about words in print.

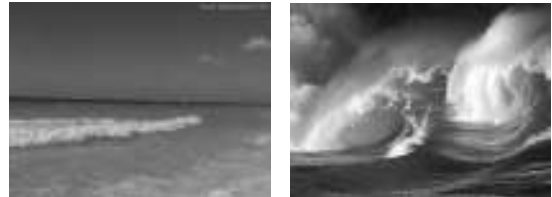
Literacy Benefits of My Own Bookshelf

Build Background Knowledge

- There is strong research that indicates that making use of prior knowledge improves reading comprehension.
- Showing pictures or diagrams prepares students for what they are going to read.

Students with Reading Challenges

- Write books to introduce subjects for prior knowledge before reading class text



Literacy Benefits of My Own Bookshelf: Build Background Knowledge

Narrative Text

- Sarah is sad because she missed the ocean. The children in the book wondered why she missed the ocean.
- Students can see the pictures and hear the sounds of the ocean to assist them with understanding why Sarah missed the ocean.



Expository Text

- Prior to a study about ocean life students can see the ocean and hear sounds from the ocean. The ***My Own Bookshelf*** book could also include life found in the ocean.



Literacy Benefits of My Own Bookshelf

Vocabulary

- Oral language skills and vocabulary are two of the most important factors impacting a child's ability to comprehend passages.
- To increase word consciousness, teachers should read-aloud literature EVERY DAY.

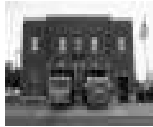


Literacy Benefits of My Own Bookshelf



Vocabulary Expand Conceptual Knowledge

- Plan authentic experiences-visits to the zoo, fire houses, farms, and museums.
- Use a multisensory approach. (See the word, hear the word, and see a picture of the word.)



Students with Physical Challenges in Inclusion Setting

- Practice computer skills in non-threatening way
- Work on composition skills using less complicated vocabulary and story structure
- Increase self-esteem by completing service learning project
- Practice using word prediction software before using it for graded assignments



Build background knowledge for students with severe disabilities before an activity

- Whole language experiences building up to zoo field trip
- Read "The Zoo" book in **Bookshelf** before field trip (on and off computer)
- Return from zoo and write story with photos from field trip
- Read "Our Trip to the Zoo" in **Bookshelf** after the field trip (on and off computer)

Students with Autism and or Developmental Disabilities

- Social skills stories
- Picture/video modeling
- Differentiated instruction
- Increase computer skills
- Introduce community locations
- Build background knowledge
- Access to books for leisure skill

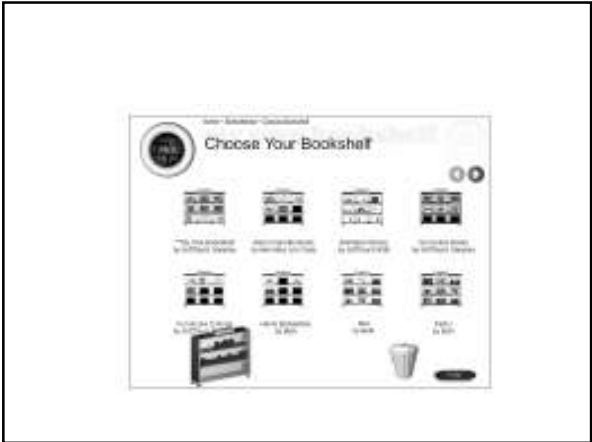


Students in General Education

- Motivating activity for practicing composition skills
- Increasing computer skills
- Practicing reading fluency while recording text
- Service learning

Features of My Own Bookshelf

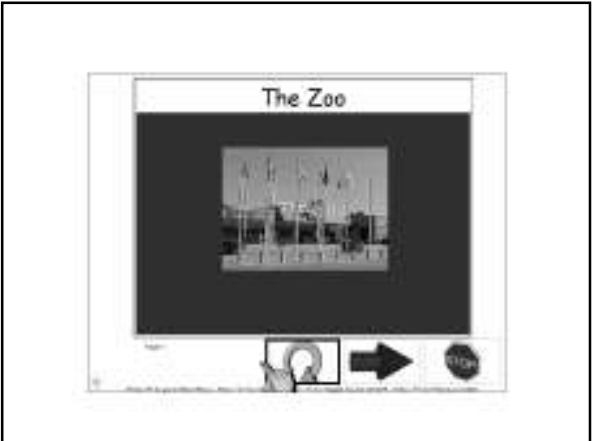
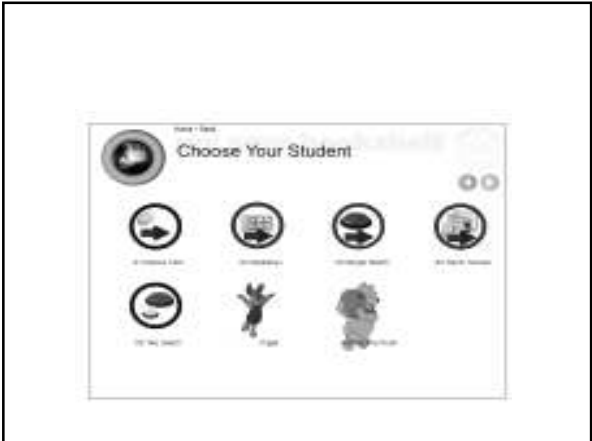
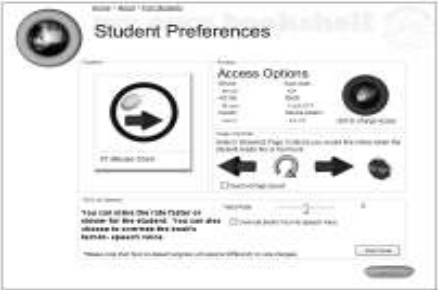
- Ability to use actual photos and videos of students and activities meaningful to them
- Text can be simultaneously highlighted and read aloud
- Books can be "published" – print them for off-computer activities
- Data (student reading time and selected books) can be collected and printed
- Burn your book to a CD and share with anyone with the free Book Reader software
- Only limited by your creativity!



Books are created and stored on “bookshelves” for student access



Access Options and Page Controls



Individual pages with controls for the reader



Literacy Benefits of My Own Bookshelf

Build Writing Skills

- Students who create the books must first use some type of writing process that would include pre-writing, rough draft, final draft and then the actual book.
- Teachers have used the 4-Square Method, 6+1 Traits of Writing, etc...



Writing Process of 4th grade general education students using word webs



Original story with illustrations



Literacy Benefits of My Own Bookshelf

Fluency

- An effective strategy that improves fluency is **repeated readings**.
- Children need many opportunities for practice.
- Allowing a child to read and to reread words aloud in connected text enables the student to build a more accurate mental picture of the word within his brain.



Social Skills

- Classroom rules and expectations
 - Playing Games
 - Entering the classroom and getting ready to work
- Life Skills
 - washing hands
 - brushing teeth
 - laundry



Literacy Benefits of My Own Bookshelf

Increase Motivation

- Provide daily opportunities for students to read self-selected text.
- Convey enthusiasm for the books your students are reading.
- Talk about what you are reading.
- Teachers who allow students to select books from a classroom library when they have completed their work not only minimize behavior problems that can arise from waiting, but also provide more opportunities for students to self-select books of interest.

My Own Bookshelf vs. Bookreader

Bookshelf software

- Reader has access to page controls and various physical access
- Data collection
- Reader can choose from the bookshelf
- Books can be written or adapted

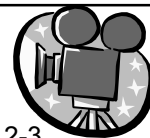
Bookreader

- Anyone can open the book and listen to it on a computer w/out buying anything
- Can read it as often as you want but no page controls or bookshelf
- No page controls or physical access options
- No data collection

Photos/Pictures Tips

- It is faster if you save your photos on your hard drive or USB drive before creating your book
- You may be able to toggle between the program and Internet or other programs by pressing “alt + tab” – (our school computers are locked so we can't use that command)

Video Tips



- Keep your videos brief – record 2-3 minutes at the most
- Software works best with shorter clips
- Uses Quicktime video or .AVI
- You may need a video conversion software –
- MPEG Streamclip free download at www.squared5.com

Resources

1. My Own Bookshelf – SoftTouch - www.softtouch.com
2. Audacity – free multi-track audio editing and recording software (it's awesome!)
3. WavePad – audio editing software free for Windows
4. Sound recorder – free audio recorder in Windows under “Entertainment”.
5. Switch – free *trial* audio file conversion
6. MPEG Streamclip – free full audio conversion
7. Wikipedia info on video formats –
8. Learning Magic - The Magic BookshelfCD with 18 original stories <http://www.learningmagicinc.com/prods/bookshelf.html>
9. Free sound effects – www.findsounds.com
10. Bethwaitetech.com – handouts, workshops, resources