

Overview of the ARRA funded Tools Purchased for Elementary Schools

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Outcomes

- Be familiar with the materials that have been purchased
- Understand how these materials support UDL

Background

- \$1 million to purchase materials to support UDL in elementary schools
- Worked with curriculum, special education to come up with a list of items
- Items purchased needed to be directly used with students and by students

Weaknesses of Traditional Teaching Methods

Auditory Information:
requires quick
auditory processing
and recall.



Printed Information:
demands the immediate
recognition of print and
rapid comprehension

Supporting the principles of UDL

- Support for comprehension
- Visual Supports
- Alternative presentation of text
- Interactivity / multiple representations
- Supports for ALL students

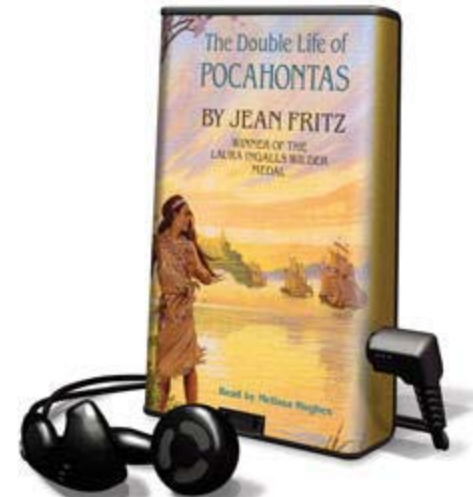
Alternative Presentation of Text

- Online Subscriptions to
 - One More Story
 - Tumble Books
 - Pebble Go Earth and Space
- Playaway Audio Books
- Accessible Book Collection



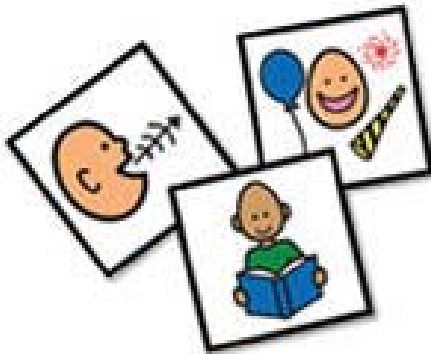
Accessible Book Collection

Providing Digital Text to Persons with Disabilities

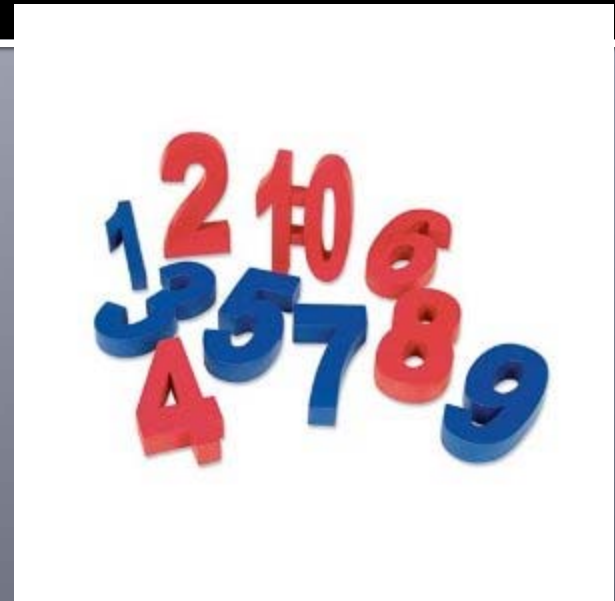
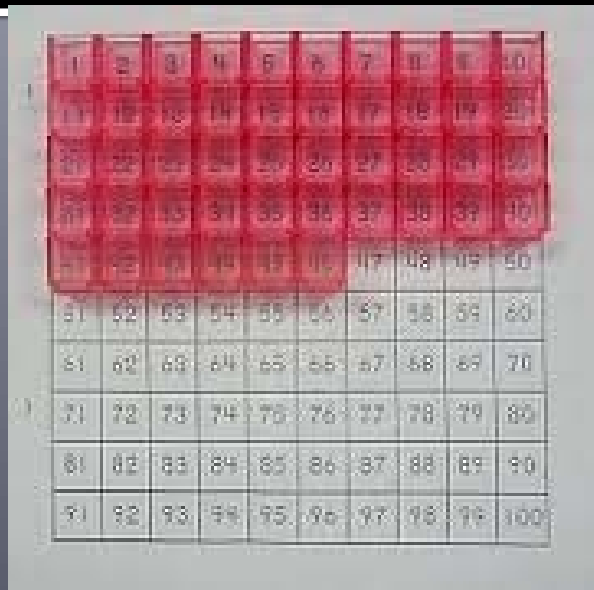


Comprehension and Visual Supports

- Boardmaker Plus Upgrade
- Math Manipulatives
- Elmo Document Cameras with LCDs



Math Kits

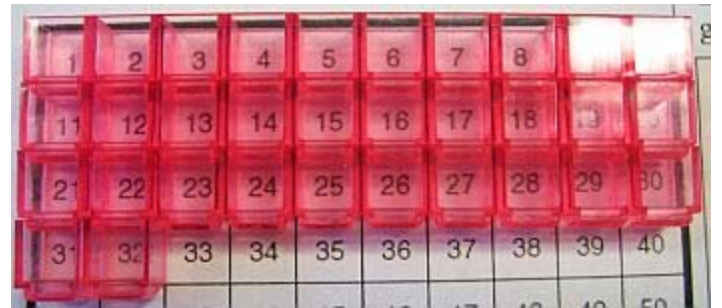
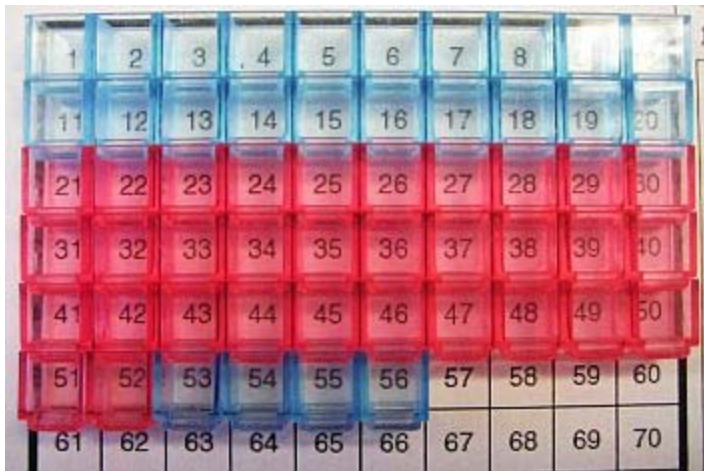


Contents of the Math Kits

- Weighted Numbers
- Clear View Base Ten Blocks
- Angle Viewer 360 Degree Protractor
- Elapsed Time Line
- Fraction Circle Equivalent Rings
- Pattern Blocks Expanded Set
- Fraction Blocks
- Geared Mini-Clocks

Clearview Base Ten Blocks

- Groupable base ten models
- Math Concept – number and place value
- Confusing aspects/ misconceptions
 - misconceptions with operations
 - composing and decomposing a ten (regrouping)



Angle Viewer 360 Degree Protractor

- Protractor
- Math Concept – measure angles
- Confusing aspects/ misconceptions
 - traditional protractor is procedural and students don't know what they're measuring

Elapsed Time Line and Geared Clock

- “A movie ends at 3:05. It lasted an hour and 45 minutes. When did the movie start?”
- Geared Clock – minute hand moves hour hand; Elapsed Time Line Strip including full day cycle p.m./a.m.
- Math Concept – Establishing start time given beginning time, determining time elapsed, reading informational text

Fraction Circle Equivalence Rings- time, percent, degree, decimal, fraction


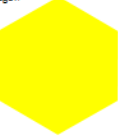









- Used with fraction circles
- Math Concept - equivalents
- Confusing aspects/ misconceptions – relating the whole to different parts (half an hour)

Pattern Blocks: Expanded Set

- Four new blocks that expand the set of pattern blocks to ten
- Math Concepts
 - K-2 geometry concepts
 - composing and decomposing shapes
 - 3-5 geometry concepts
 - congruence, area, perimeter
 - equivalent fractions

Expanded Set of Ten Pattern Blocks

The following shapes are part of an expanded set of ten pattern blocks available as concrete models. Elementary schools will be provided with the four addition pattern blocks by the 2011-2012 school year. Grade 2 students are introduced to the term quadrilateral.

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<p>Pattern Blocks in a Standard Set</p> <p>yellow hexagon</p> 	<p>Additional Pattern Blocks for an Expanded Set</p> <p>pink double hexagon</p> 
<p>red 4-sided shape (quadrilateral)</p> 	<p>black hexagon</p> 
<p>orange square</p> 	<p>brown 4-sided shape (quadrilateral)</p> 
<p>blue 4-sided shape (quadrilateral)</p> 	<p>purple triangle</p> 
<p>tan 4-sided shape (quadrilateral)</p> 	
<p>green triangle</p> 	

Weighted Numbers

- 3 dimensional weighted numerals
- Math Concept – balance/equal sign, equality/inequality
- Confusing aspects/ misconceptions – meaning of the equal not equal, greater than, less than sign(s)

Online Resources

TumbleBooks Library



Staff and Students:

Here is the link to TumbleBook Library. Enjoy!

http://www.tumblebooks.com/library/auto_login.asp?U=mcsm&P=books

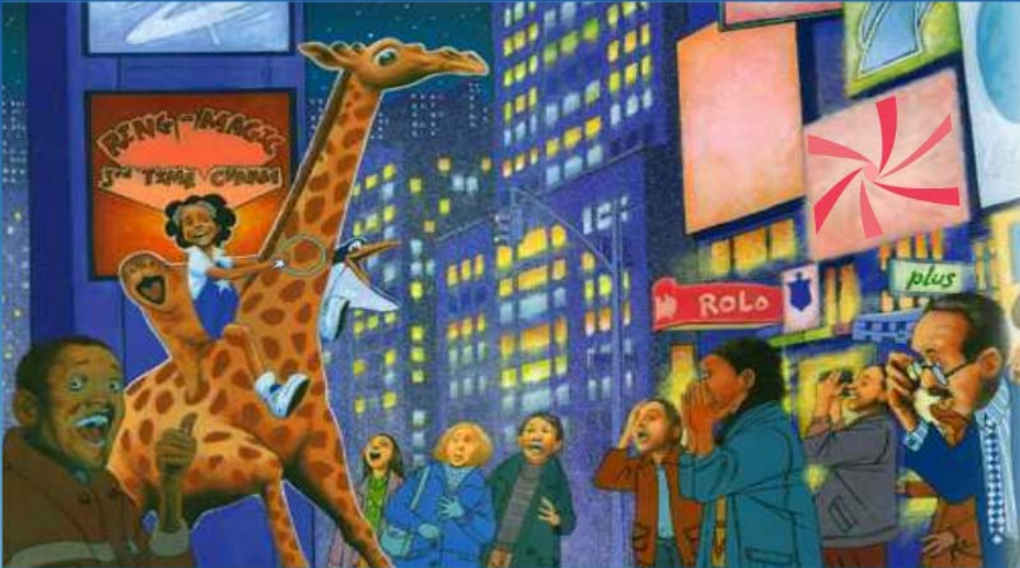
Your School Library Media Specialist

- 193 English books with quizzes
- 83 Spanish books
- Lesson Plans, worksheets and teachers guides



Tumblebooks

TUMBLEPAD



The illustration depicts a giraffe in a city at night. A woman is riding the giraffe, and a man is taking a photo of her. Other people are in the background, some taking photos. A sign in the background says 'PENG-IMAGE' and 'THE TIME CHANG'. A red spiral graphic is visible in the background.

She was.
So were
Seal
and
Penguin
and
Giraffe.

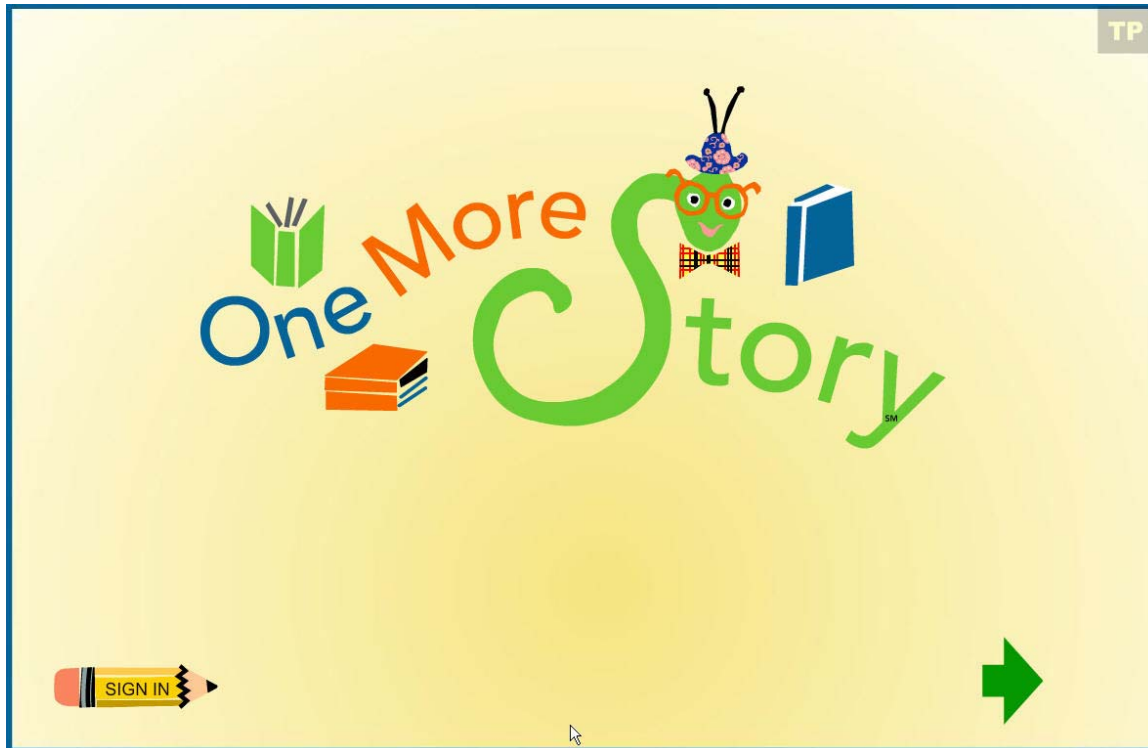
Help
Off

Auto

Manual


One More Story

- PreK-2
- 59 popular titles
- No home use
- Independent mode
- Click a word to hear it




One More Story

<http://www.onemorestory.com/> - One More Story - Windows Internet Explorer provided by MCPs



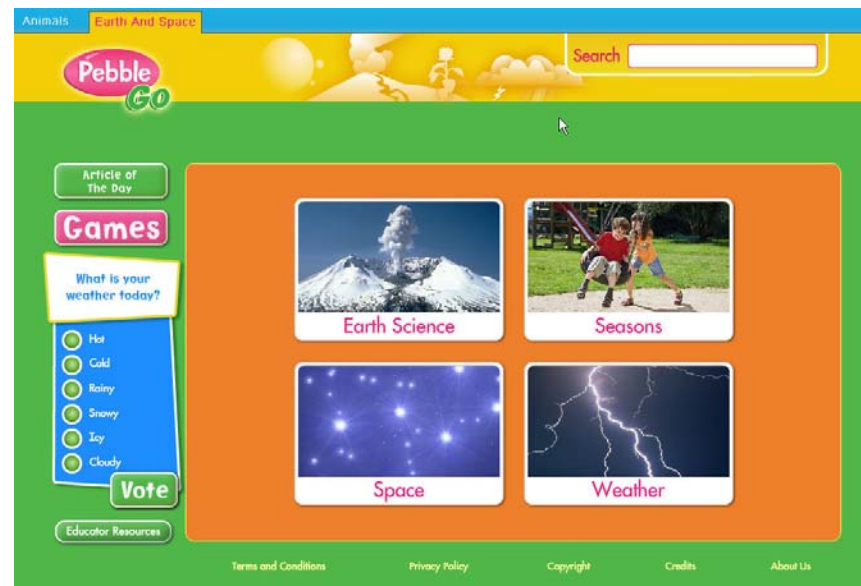
**Striped beetles,
spotted beetles,
all-over-dotted beetles.**

**Striped beetles,
spotted beetles,
all-over-dotted beetles.**



Pebble Go Earth and Space

- An addition to Pebble Go Animals
- Audio
- Video
- Interactive Games

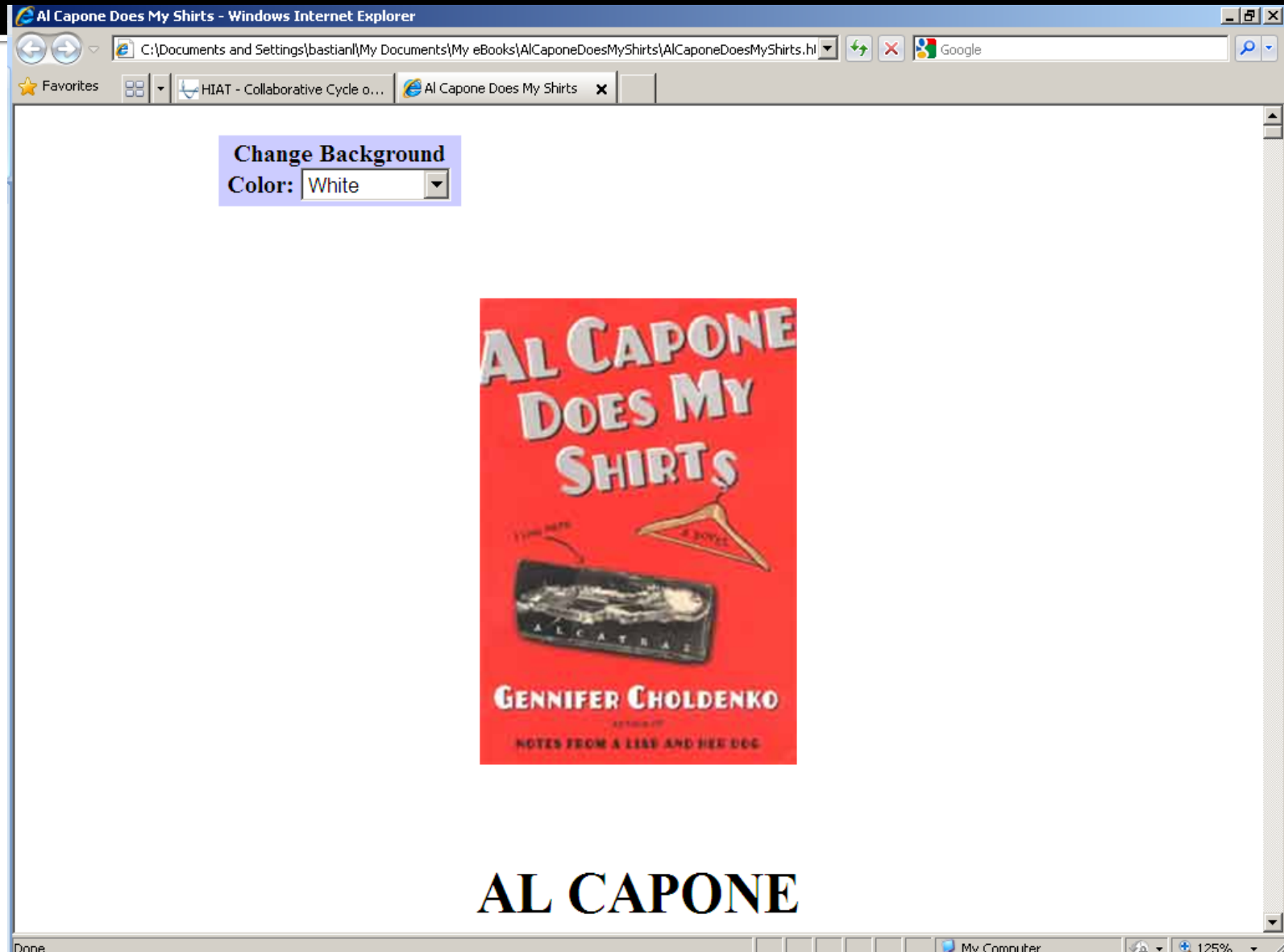


Accessible Book Collection

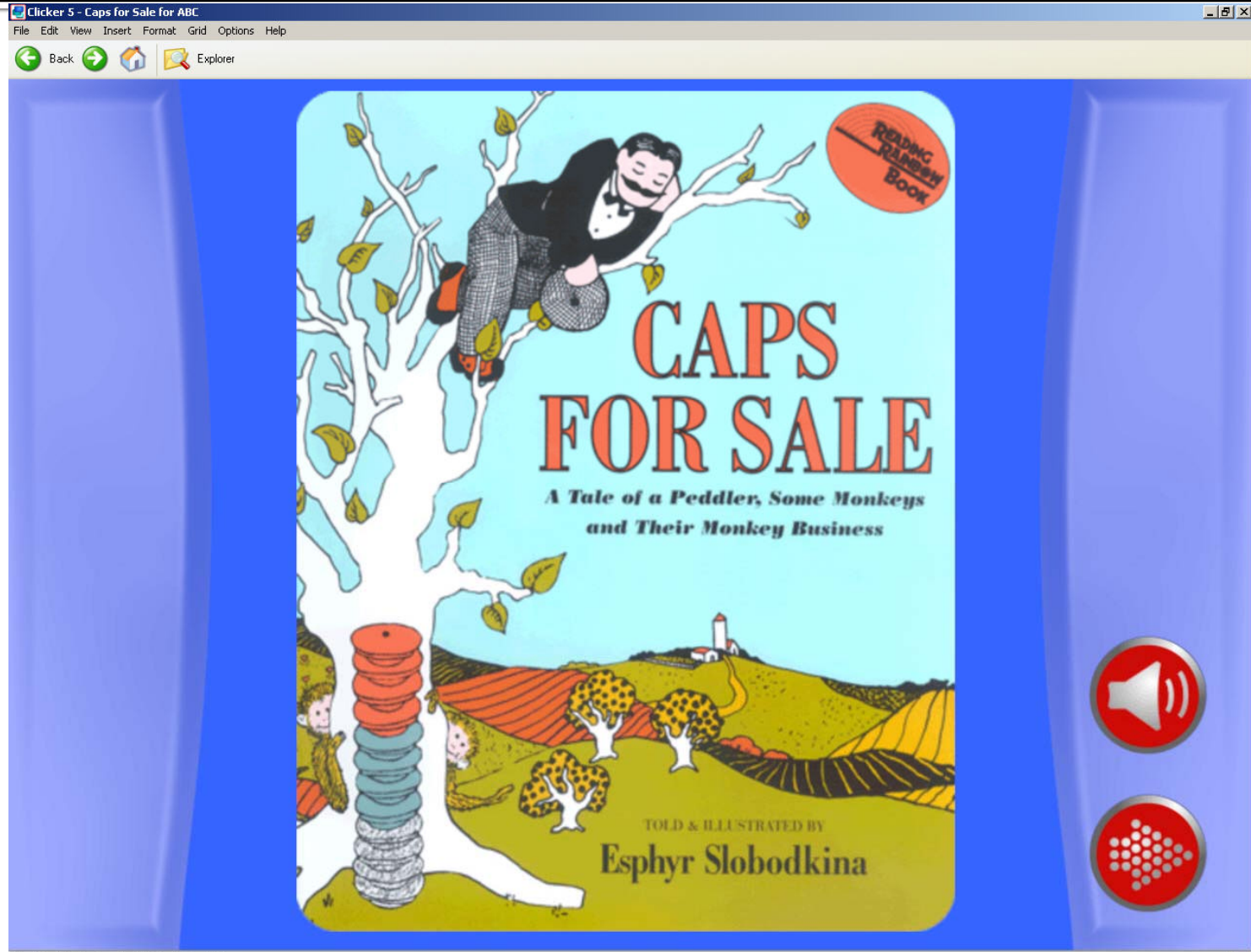
- Students with Print Disabilities (like Bookshare)
- Picture books
- Use a text reader to read them
- Switch Accessible Books
- [Quick Guides on HIAT](#)



ABC Book



ABC book in Clicker 5



Playaway Audio Books

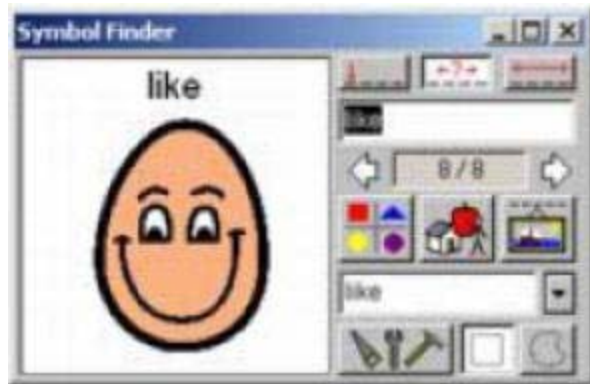
- 2 copies each of 5 titles
- 4th and 5th grade
- E/LA and Social Studies Content Related
- Includes William and Mary titles



Playaway Titles

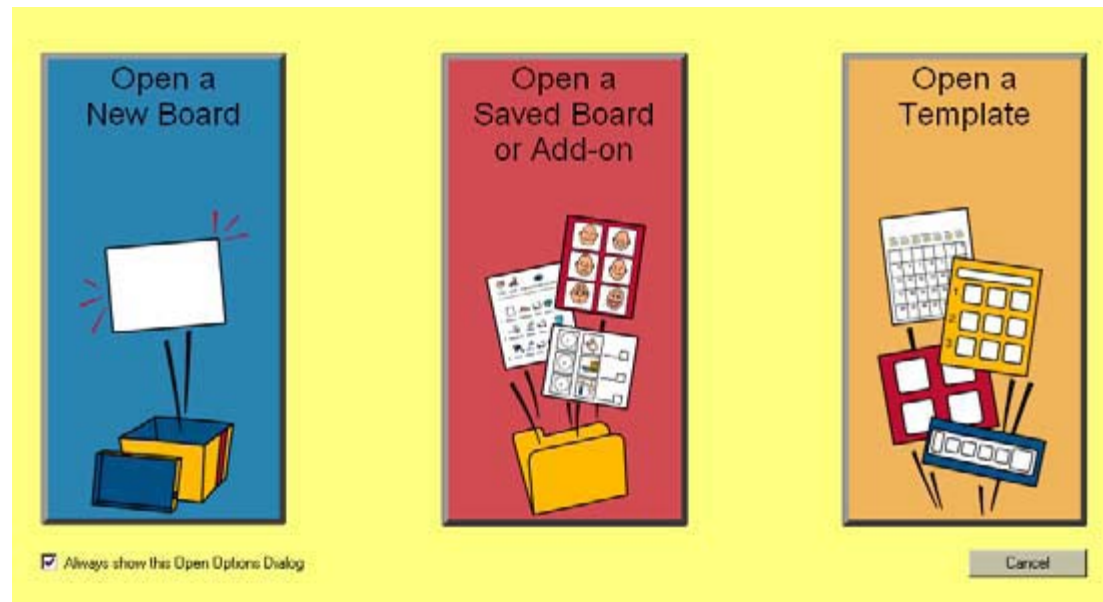
- Secret Garden
- Year of the Boar and Jackie Robinson
- Number the Stars
- The Double Life of Pocahontas
- Shh! We're Writing the Constitution: And Other Stories about America's Beginnings

Boardmaker Plus



- One license to each SCB, LFI, Learning Center, Autism, PEP, and SLP

- Create picture sentences, communication boards, adapted stories, picture labels



Boardmaker Plus Upgrade

- TM o8 schools upgraded this summer.
- Other schools already have this.
- One license is provided to each SCB, LFI, Learning Center, Autism, PEP class, and one for the speech and language department at each school.
- CDs must be in the CD-Rom drive for the software to run.
- Quick Guides on the [HIAT website](#).

ELMOs and LCD Projectors

- Minimum 4 per school
- Use your own carts and computers
- To enhance instruction for all grades
- Allows all students to see what is being demonstrated by one person
- Allows you to take a digital image for annotation or use in other learning materials

Ways to Use ELMOs

- Display a worksheet while you are explaining it
- Enlarge text on a page
- Model what is expected – steps in a process
- Show a book to students while you are reading, zoom in on pictures in a book
- Demonstrate how to use math manipulatives or other 3 dimensional items
- Take a picture of an object and then annotate on the computer
- Take pictures of a sequence of actions in order to create a document or e-book
- Take pictures of student work to save in electronic portfolio

Questions/Feedback
