“A Refreshing Look at Refreshable Braille.”

Beth Stormont & Jim Sullivan
Agenda

• Introduction to Refreshable Braille
• Advantages Elementary School
• Advantages Jr. High / High School
• Advantages Transition
• Advantages Education Professionals
Presenters

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Trends in Education - Michigan

• Assessment
  • M-Step / MI-Access / WIDA / NWEA / IOWA

• Content Delivery
  • Notebook PCs / iPads / SMART Boards / ELMOS / Skype

• Technology
  • MDE – LIO Michigan Assistive Technology Guidelines for TBVI
  • Grades 3-5 Technology Operations and Concepts

6. Demonstrate the use of a keyboard, navigational keys, a mouse, multi-dynamic touch screen and buttons of ATDs specific to the student’s needs and 21st Century toolkit.
Refreshable Braille

- Electromechanical Device
- Usually of 12 to 80 Cells
- Each Cell Made up of 8 Round Tipped Pins
- Utilizes the PIEZO EFFECT to Refresh at Rapid Rate
Notetaker

- Intelligent Device
  - Speech/Braille/Navigation Woven In
- Braille Terminal Mode
  - iOS/PC
  - Braille/Navigation/Input Provided by Screen Reader
  - USB/Bluetooth Connectivity
Braille Terminal/Display

- Braille Terminal
  - iOS/PC
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Benefits – Elementary School

• Motivates students in the classroom to learn Braille
• Students not afraid to make mistakes and take risks when writing
• Great way to avoid tracking issues with new Braille readers
• Introduction to Technology and Concepts used in Future
• MDE Standards being addressed when used at this level
• Access to computer and iPad
• Routing Cursors Allow Easy Access to Editing/Writing Process
• Flexibility to use materials at spur of moment
Benefits / Jr High – High School

• Access to Electronic Information in Braille
  • Example – Thousands of books from Bookshare
• Proof and Edit Writing Assignments Easily
• Identify Spelling of Complex Words
• Read and Re-Read Content to Improve Comprehension
• Access Document Formatting and Spatial Attributes
• Access Forms, Numbers, Spread Sheets and Tables
• Social Benefits
Benefits / Transition

- All the same benefits listed at Jr. High/High School Levels
- Access to Braille textbooks at College Level
- Access to electronic documents and online courseware
- Career Readiness Content Accessible
Benefits / Education Professionals

- Produce Less Hard Copy Braille
- Increase Access to Braille
- Improve Turnaround Time for Braille Materials
- Offer Flexibility with Reading and Writing Assignments
- Nurture Independence within Students
MDE – Loan Library

• Low Incidence Outreach Library
  702 W. Kalamazoo St
  PO Box 30742
  Lansing, MI 48909
  Phone: 517-373-2887
Wrap Up

• Brief Review
• Question and Answer