Assistive Technology: Building Bridges for Better Transitions

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STARS
Strategies for Technology Assistance in Rural Settings
at New Mexico Highlands University

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BACKGROUND

- Need for Assistive Technology in schools
- Need for access to NMTAP Loan-bank
- Need for services for adults with disabilities
  - Assistive Technology Assessment, Training and Supports
  - Transition Assessment and Supports
Types of Services Provided

- Assistive Technology Evaluation
- AT training and supports
- Assistive Technology Loans
- Vocational and Career Evaluation
- Worksite Evaluation
Our youngest client, age 5

Transitioning from Early Childhood to School, Needs Accommodations for Physical Disability
Mobility and Access of Computer
Our most senior client, age 104
Transitioning to 2\textsuperscript{nd} Century of Life
Needs accommodation for Communication
## Primary Disability

<table>
<thead>
<tr>
<th>Primary Disability</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Disability (Reading, Writing, Comprehension)</td>
<td>34</td>
</tr>
<tr>
<td>Communication Impairment</td>
<td>7</td>
</tr>
<tr>
<td>Vision or Hearing</td>
<td>4</td>
</tr>
<tr>
<td>Mobility Impairment</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>47</strong></td>
</tr>
</tbody>
</table>
Accommodations for Reading and Writing

- Scan Text to Audio (OCR)
- Text Reader
- Speech Recognition (Dragons)
- Note Taking
- Audio Recorder
- Word Predictor
AT for Communication Disability

Augmentative and Alternative Communication:

- Dynavox, Nova Chat
- Text to Speech and Talking Board apps for iPad and Android
## Some Useful AT Applications

<table>
<thead>
<tr>
<th>Reading</th>
<th>Writing</th>
<th>Communication (AAC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prizmo (iPad)</td>
<td>Dragon Dictation (iPad, Android)</td>
<td>ProLoQuo (iPad, Android)</td>
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<tr>
<td>Text Fairy (Android)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-Writer (PC)</td>
<td>Dragon Naturally Speaking (PC)</td>
<td>Posco (iPad)</td>
</tr>
<tr>
<td>Read and Write Gold (PC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Note (iPad)</td>
<td></td>
<td>Dynavox (Device)</td>
</tr>
<tr>
<td>Typ-O (iPad)</td>
<td></td>
<td>Nova Chat (device-Samsung Galaxy)</td>
</tr>
<tr>
<td>Built in Accessibility (tablet &amp; PC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smart Pens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Built in Accessibility (tablet &amp; PC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Speak It (iPad)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Voice Record Pro (iPad)</td>
</tr>
</tbody>
</table>
Audio Text Technology and Services

- Learning Ally
- Book Share
- E-books
- PDF Conversion Software
  - Kurzweil Scan-Reader
  - Co-writer
  - Read & Write Gold
Universal Design for Learning Barriers

- Classroom Computer Station
  - Text to Speech (Co-writer, Read & Write Gold)
  - E-books, Learning Ally (Audio Library)
  - Speech to Text (Windows accessibility, Dragon Naturally Speaking)

Smart Phone/ Tablet
- Audio Record
- Photograph
Peer Support

- Research indicates that children and adolescents learn best with peer support.
- Use of technology is effective when all students are engaged, not just one or two.
- All students should be encouraged to use the technology-based accommodations in the classroom and assist each other in learning.
A Transition Model of Service and Supports

- AT is often needed at transition points in education and life.
- Effective transitions sometimes require evaluation, resources, training and supports.
- Sustainability of accommodations across settings makes for good transitions.
Examples of Specific AT Accommodations (school age)

• Age 11, Hearing deficit, ADHD
• Age 16, Juvenile Arthritis
• Age 10, Reading and Writing deficits
• Age 20, ID, non-verbal
• Age 18, Learning Disability transitioning to college
• Age 15, CP with limited verbal abilities, quadraplegia, uses wheelchair,
Examples of Specific AT Accommodations (adult)

• Age 45, Severe Dyslexia, workplace accommodation
• Age 36, Paraplegia, workplace accommodation
• Age 58, Vision Impairment, Reading/Writing deficits
• Age 19, Learning Disability, transition to college
• Age 21, Learning Disability, TBI transition to college
• Age 30, Dyslexia, TBI, Career change
• Age 65, Vision Impairment related to reading
Services to Schools

• Assistive Technology screening and evaluation
• Assistive Technology equipment and software loans
• Training technical assistance and accommodations using technology in the classroom
• Transition assessments
Demonstrations

- Speech Recognition (write by speaking)
- Text to Speech (read by listening)
- Learning Ally (audio library)
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