Supporting early literacy through universal design and assistive technology

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Today we will discuss how to:

- Design high quality early literacy opportunities for young children with disabilities through:
  - Universal design for learning (UDL)

- Provide young children with disabilities who might need extra support with:
  - Curriculum modifications and adaptations
  - Assistive technology (AT)
Universal design for learning

- Universal Design for Learning (UDL) is a philosophy for designing environments, curriculum content, learning activities and materials to be useable by children with the widest range of abilities.

- UDL also includes products and services that are compatible with assistive technologies.
Example: UDL and book selection

- How might a teacher use the principles of UDL to decide which books to provide in her classroom?

- *From the beginning*, the teacher selects a wide variety of high-interest books that will be accessible to all children.

- Examples: books with high-contrast visual images, touch-and-feel books, ‘big’ books, books with electronic sound, stories with repeated lines, books with thick cardboard pages.
UDL and book selection

• While providing a wide range of books will make them accessible to children with specific needs, all children benefit from having a variety of high-interest literacy materials available.
UDL, Curriculum Modifications, & AT
What is a Curriculum Modification?

• A change to the ongoing classroom activity or materials in order to facilitate or maximize a child’s participation in planned activities and routines

• Example:

Simplify the Activity
What is Assistive Technology (AT)?

• “Any item, piece of equipment or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability” (IDEA, 2004)
The Continuum from Low- to High-Technologies

“High-Tech”
- Specially manufactured
- Individualized

“Low-Tech”
- Simple
- Off-the-shelf
- Easy to create
The Continuum from Low- to High-Technologies

- Children will need different supports from along the continuum to support participation in different settings and activities
Examples: AT and Early Literacy

- Examples of low-tech AT supports for early literacy include:
  - Providing page fluffers
  - Re-binding a book to lay flat
  - Using peel away photo albums
  - Using Velcro® to support book positioning
  - Providing two-dimensional and/or three-dimensional props
  - Using highlighter tape to mark repetitive lines

- See our resource list for sites with many more ideas!
Example: Page Fluffers
What is Augmentative and Alternative Communication (AAC)?

• AAC is a type of AT that allows a child who is either unable or needs help with communication to communicate with others.

• AAC includes use of sign language or gestures and both electronic and non-electronic communication systems.
AAC and Early Literacy

- A teacher of a child who relies on AAC to communicate will need to plan for use of the system to allow the child to access and participate in early literacy experiences.
# UDL and Early Literacy: Ms. Beverly’s Classroom

<table>
<thead>
<tr>
<th>Concept</th>
<th>What might it look like to support early literacy?</th>
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</thead>
<tbody>
<tr>
<td>Universal Design</td>
<td>• Ms. Beverly provides materials that meet the needs of a wide range of children</td>
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<tr>
<td>A philosophy for designing environments, curricula content, and associated learning materials and activities to be useable by children with the widest range of abilities</td>
<td>• Example: She provides a wide variety of books, including: books with high-contrast visual images, touch-and-feel books, ‘big’ books, books with electronic sound, stories with repeated lines, books with thick cardboard pages</td>
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<td></td>
<td>• Ms. Beverly structures activities to meet the needs of a wide range of children</td>
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<td>• Example: She designs her schedule to provide multiple literacy opportunities in different contexts. She includes time for children to explore books individually and with peers during center time, in small groups with an adult, and during whole-group read alouds</td>
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## Curriculum Modifications and Early Literacy: Ms. Beverly’s Classroom

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<td>Curriculum Modification</td>
<td>• Ms. Beverly gives a child who is reluctant to talk during story time a turn after a particularly talkative child. This gives the child an idea about what to say or do</td>
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<td>• A few of Ms. Beverly’s children have difficulty using the tape player at the listening center. She simplifies the activity by using red and green stickers on the stop and play buttons</td>
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<td>• A child is not interested in books while at the library center. Ms. Beverly joins in at this center to support his engagement by modeling how to enjoy books and by providing praise and encouragement</td>
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### AT and Early Literacy: Ms. Beverly’s Classroom

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| Assistive Technology | • Ms. Beverly provides uses three-dimensional props to help a child with a visual impairment to enjoy the story  
• A child uses a voice-output switch to say when to turn the page |

*Any item, piece of equipment or product system, whether acquired commercially off the shelf, modified, or customized that is used to maintain or improve the functional capabilities of a child with a disability*
Planning for UDL and Extra Supports

Universal Design for Learning

Assistive Technology

Curriculum Modifications & Adaptations

Least Intrusive

Most Intrusive

Low Tech

High Tech
Program Considerations about the Use of AT

• Team collaboration works best!

• Teams should work to identify individuals who can lend support and expertise
Family Involvement

- It is important for families to be involved in planning and using supports for their young children.

- Professionals might consider:
  - How will supports match with family preferences?
  - How will supports fit into family routines?
  - How will supports meet the needs of families from diverse backgrounds?

- Resources and information should be shared between home and school.
Review

• Early literacy experiences are important for all children

• Universal Design for Learning (UDL) is a philosophy for designing environments, curriculum content and learning activities and materials to be useable by children with the widest range of abilities

• For children whose needs are not met through UDL, educators might modify or adapt the curriculum or provide AT supports
Review

• When a child needs additional support, the teacher will want to match the child with the least intrusive support that will meet his or her needs.

• Collaboration with other professionals and families is important.
Supporting early literacy

More Information

- See the materials that accompany this presentation for further tips, ideas, and checklists that can help guide your practice.
More Information

• Also see the resource list for links to excellent websites
We would like to thank the Desired Results access Project for many of the pictures seen in this presentation.

For more information on the Desired Results access Project, visit:

www.draccess.org

Desired Results access Project (2010). *Using Adaptations with the DRDP Instruments*. Sacramento: California Department of Education, Special Education Division.