Students with Significant Cognitive Disabilities: Adapting Books

PowerPoint Slides to be used in conjunction with the Facilitator’s Guide
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Session Agenda

• Introduction
• Session Goals and Objectives
• Background- Why Adapt Books?
• Preparing to Adapt a Book
• Physical adaptations
• Adapting the content
Session Agenda, continued

• Adapting Books for Students with the Most Significant Disabilities
• Adapting Books with a Focus on Comprehension
• Summary
• Evaluation
Introduction

• One of the few things that people of all ages, races, and backgrounds have in common is books.

• Literature crosses all boundaries. You can talk to your best friend or a complete stranger about a book.

• Books create trends and hot topics. Consider Harry Potter or Twilight.
Introduction, continued

• Literature is deeply woven into society; some of our best school memories come from reading books.

• People with disabilities deserve to be a part of the conversations that we have around literature. They should have the opportunity to create memories about favorite books.
Introduction, continued

• Several things must happen in order for students with significant disabilities to experience literature.
  – First, teachers must see the value in teaching literacy;
  – Second, they have to know how to provide access to books that may seem above their students’ ability levels; and
  – Third, they have to know how to provide the lessons.
Session Goal

• The goal of this module is to gain the necessary information to provide detailed instructions on how to adapt books that are appropriate for a student’s grade level and to provide instructions on how to adapt books for various purposes.
Session Objectives

Participants will be able to:

1. Identify reasons for adapting books,
2. Select steps for adapting book materials,
3. Select steps for adapting text,
4. Identify steps to create a new adapted book for a grade level content class, and
5. Identify different ways to adapt books for varying purposes.
Background- Why Adapt Books?

• The idea of modifying books or more specifically, text, is not new.
  – Students with visual impairments have had Brailled books for years.
  – Several companies offer books that are high interest but are written at a low reading level for struggling readers.
  – But students with significant disabilities require teachers to go a step further.
Why Adapt Books? continued

• When adapting books for students with significant disabilities, consider more than the text. Consider the physical barriers that are created by a typical book. Some of these barriers are:
  – Students with fine motor limitations may not be able to hold the book or turn the pages. Most chapter books will not even stay open to a page without holding the book and it is difficult to manipulate one page at a time.
Why Adapt Books? continued

- Students can be rough with books, tearing pages. Unadapted books may be too fragile.
- Chapter books with pages and pages of text may be unappealing.
- In addition to the physical features of a book, the text creates greater barriers. These include:
  - Not being able to read the words. Students with disabilities will not be fluent readers, we do not want to simply read aloud to them, we want them to be active participants.
Why Adapt Books? continued

– Few chapter books will have pictures to support the events of the story. Learners need a visual referent to help them understand the events and characters.

– There is often too much text to be read. Students with short attention spans require shorter stories.
Why Adapt Books? continued

– By late elementary school, books may use vocabulary that students with disabilities do not understand. Vocabulary often needs to be simplified or defined.

– In order for our students to be active participants they may require visual or tactile cues added to the text.
Activity- Why Adapt Books?

• View examples of adapted chapter books at http://coedpages.uncc.edu/access/adaptedbooks.htm
Preparing to Adapt a Book

• First read the book you are adapting.
  – Many popular chapter books have summaries online. Use these to get the gist of chapter, then summarize in your own words.
  – Ask peers in your school to summarize books that they have already read.

• Two types of adaptations:
  – Physical adaptations to the book
  – Adaptations to the content of the book.
Preparing to Adapt a Book, continued

• The order you chose to adapt may vary.
  – If you are adapting an elementary book with lots of pictures and not a lot of text, start with the physical adaptations.
  – If you are adapting a chapter book, start with the content.
  – For chapter books, do not actually take the book apart because you will be re-writing it.
Activity - Preparing to Adapt a Book

• Select one or two books you use in your work or other setting.
• Review the content of the elementary book or a section of a chapter book.
• Consider which type of adaptation needs to be made first.
• You will use these books for the option activities later in this module.
Physical adaptations

Adapting books: Physical adaptations
Physically alter the book

• Begin by cutting the book apart
• When you are ready to physically alter the book, begin by cutting the book apart. This is an easier process if you have chosen a soft back book.
Laminate the pages of the book.

This will make the book sturdier and will allow it to be cleaned.

Using a heavy laminate will make it easier for students to turn the page.

If you do not have access to a laminator, sheet protectors will do.
After the book is taken apart, decide if there are any pages that you will skip. Tape those pages together.

Decide how you will make the pages sturdier: laminating, sheet protectors or simple taping them with packaging tape.
Bind your book. Many schools have a spiral binding machine.
If adding objects, consider a 3 ring binder. Velcro the cover to the book to the cover of the binder. The problem with the binders is that the students tend to be distracted by the rings and they want to grab them.
Re-bind the book pages using spiral binding.

or

Hole punch the pages and insert into 3 ring binder.
If using the spiral binding, choose a larger binding. This will allow the pages to turn easier.

When using the 3-ring binders, the opposite is true. A 1- or 2-inch binder allows the pages to turn easily and the rings are not as distracting as those in a 3- or 4-inch binder.
You will need to make the book accessible for students with physical challenges. Above left: a handle has been added for opening the book. Above right: Popsicle sticks may make turning the page easier. Bottom right: page fluffers separate the pages and make it easier to turn one at a time. Use cut up sponges, or stacked foam squares.
Encourage active participation. Opening the book and turning the pages allows the students to actively participate in the lesson, but think about your book before any adaptations.

Would it be possible for the students in you class to manipulate the book? If so, then don’t add these things to your book. Only provide the modifications necessary.
Add physical cues to books

- Add foam letters to the title
- Add a colorful frame around the author’s name.
- Fade the frame away over time.

Trace the title in puff paint
Students with significant disabilities may not know what a title is or what an author is. It may be helpful to add some physical cues to the book, to make the act of finding the title more engaging. Some cues such as the frame around the author’s name above can be faded over time by making it smaller or cutting away one side at a time. For students who are visually impaired but have functional vision, the physical cues give them something to feel. Do not add these cues if students can find the title and author without them. Ideally, keep the book as close to its original form as possible.
Modifications to the author

Author: Lois Lowry
Most of the time the authors name will be in very small print.
Re-type the name in larger print and paste it over the original name. To make the concept of the author more concrete, it may be helpful to print a picture of the author and label it as shown above.
Consider always adding a small picture by the author’s name. Since there are sometimes more than one name on the front of the book (for example the illustrator), the student would know that they should look for the name with the picture by it.
Always use the same cue, slowly fade
Be systematic about the cues you add to your books. For example, the picture on previous slide has a felt star added to the authors name. If this is your choice, be consistent and always add a felt star to the authors name. Do the same with the title of the book, the repeated story line, and even vocabulary words. Pick one visual and or tactile cue for each.

For example, always underline the repeated story line with pipe cleaner, the title with foam letters, and put vocabulary words in green.
• Decide where the students will text point, highlight or underline the sentence(s)
  – Use puff paint
  – Pipe cleaner
  – Highlighting
  – Popsicle stick

Image of hand pointers obtained from www.augresources.com
Understanding that we read from left to right is an important emergent literacy skill. When learning to text point, it may be helpful to add a tactile cue underneath the line or lines where you want the student to text point. This can be something as inexpensive as a piece of spaghetti! Some students may enjoy using pointers such as the ones pictures above.
Activity - Physical adaptations

• Using the books selected for the previous activity, consider at least two physical modifications described in this section.

• Then present to small groups detailing why you selected the modifications for your specific book and learners.
Adapting the content

Adapting the content of the book gets more difficult as you move up the grades. It is still very important to choose books that are grade appropriate and, if possible, the same books that the student’s peers without disabilities are reading.
Where to start...

- When adapting books, it is helpful to decide on questions first.
- Once you have the questions, that will help you adapt the text.
- You will have to create text that allows you to ask certain questions
  - For example, you may want to ask what the problem was but the problem may not be explicitly stated.
- Which of these facts from the story support the statement “Johnny is a good person?”
- Johnny saw the church burning and went in to save the kids.
- Was this a
  1. good choice or
  2. a bad choice?
Starting by planning your questions – this is absolutely necessary when re-writing text. Consider whether you’re asking simple literal recall and summary questions or if your students will be able to answer some higher level questions. Because the same book will be read repeatedly, plan to vary the questions.
Adapting the Book (Shorten or Rewrite)

• Shorten or rewrite the text
  – After reading the book, decide-
    • If the vocabulary is basic and easy to understand (e.g., K-1 level)- will I need to eliminate some pages/parts of page to shorten the story?
    • If the vocabulary is complex- will I need to rewrite the story? Will it be one summary story or by chapters?
    • How much do I need to condense? Four chapters down to two chapters or each chapter down to one page?
• Even some elementary books have a lot of text.
• Decide how much you need to condense based on the needs of your students. Leave in as much detail as possible without making it too long.
• In elementary picture books, you may just re-type the text and paste it over the original.
• In chapter books you will actually create a new book.
How to Shorten/Rewrite Text

• **Pre-read** text

• **Summarize** each chapter to capture main idea- provide details

• **Re-write** chapter summary using considerate text:
  – Grade 2-3 listening comprehension level (Send plain text file to Lexile Framework for Reading™ website, obtain lexile level, adjust if needed to Level 400-600)(MetaMetrics, Inc., 2005)
Adapting the Book (Chapter Books)

- Re-write chapter summary using considerate text:
  - Add graphics (picture symbols) to key vocabulary
  - Add definitions to text
  - Add explanations to text
  - Use Repeated Story Line to support main idea of each chapter
• Using programs such as Writing with symbols or Sym Writer you can re-type your text and add picture symbols where needed.

• Consider the amount of symbols your students benefit from. Some students can read complete sentences if they have symbol support. Others will be distracted by too many symbols. If you do not have a program or your students do not yet use symbols, you can insert small pictures above key words in the text.
From this..to this...

Buck did not read the newspapers, or he would have known that trouble was brewing, not alone for himself, but for every tide-water dog, strong of muscle and with warm, long hair, from Puget Sound to San Diego. Because men, groping in the Arctic darkness, had found a yellow metal, and because steamship and transportation companies were booming the find, thousands of men were rushing into the Northland. These men wanted dogs, and the dogs they wanted were heavy dogs, with strong muscles by which to toil, and furry coats to protect them from the frost.

Buck lived at a big house in the sun-kissed Santa Clara Valley. Judge Miller's place, it was called. It stood back from the road, half hidden among the trees, through which glimpses could be caught of the wide cool veranda that ran around its four sides.
This is an excerpt from *The Call of the Wild* and then an example of how it might look after being condensed down. In the original text, sentences are constructed in a way that make them more difficult to understand. There is also several vocabulary words that are not common such as “toil”, “groping”, and “veranda”. You may choose to simply change words such as these or if they are important to the story, define them.
Here is an example for vocabulary

**Main Idea:** Dad saved money by buying food & clothes in bulk, saying that a family was “cheaper by the dozen”. Children often wore the same clothing styles.

**Vocabulary:** Clothes-supports main idea and has functional value
In the book *Cheaper by the Dozen*, *clothes* is chosen as a vocabulary word. The picture symbol seen above is added since the students will not know the word. This word is chosen because it is both important to the story and it has functional value.

Choose a balance of words- a few that will have meaning to the student outside of the story and some that enhance the meaning of the story but may also be unique to the story.
Vocabulary

Cloud is one of the pre-selected vocabulary words. The word always being in red provides an added visual cue that can be faded later.

Dance is the vocabulary word. It is highlighted; another visual cue that can be faded later.
These are some other examples of vocabulary words and examples of visual cues.

The word *cloud* always appears in red; the word *dance* is always highlighted in yellow.
Holes  Chapter 1

Camp Green Lake is a camp for bad boys

Vocabulary:

Stanley
holes
camp
boys
family

lake
green
hot
bad
friends
This example is from the adapted chapter book *Holes*. The repeated story line and the vocabulary are preselected and reviewed with the students.

Most of these vocabulary words are functional. However, words like “camp” and possible “lake” would be words that the students may not know but these words are important to understanding the story.
Plan to meet all of your students response needs
As you are planning your vocabulary words and your response options for comprehension questions, think about the response options that you will need to present to your students. Will you need words, words with symbols, words with photos or possible even objects?
Example: Definition & Repeated Story Line

Dad had a special way of calling all of us together quickly. It was called the assembly call. **Assemble means to get together.** Dad would blow a whistle. Then, we would all line up in the front of the house. One time, there was a small fire in the driveway. Dad called us together and we put out the fire with buckets of water.

Dad was proud of his family.
Sometimes we come across words in books that are not commonly heard in everyday language or we know will not be familiar to our students. Sometimes these are important to the story and possible chosen vocabulary. We will then need to define vocabulary as well as other words that students may not know but are important to the story.
Definition & Repeated Story Line

Johnny is in critical condition and might die. He is very weak. He knows that he is paralyzed from the waist down. He talks to the boys. Johnny's mother wants to visit. Johnny refuses to see her. He does not want her to see him in critical condition. He passes out. Dally is in better condition than Johnny. He wants to fight in the rumble tonight. A rumble is a big fight with lots of people. On the way home Ponyboy runs into Cherry. Ponyboy and Cherry talk about Johnny.

Johnny is a hero, but he gets hurt.
This is another example of how you might define a word that is important.
Repeated story line

Repeated story line added in text

Repeated storyline added using picture symbols
A repeated story line is critical.
Select a line that reflects the main idea of the book or for chapter books, the main idea of the chapter. This will allow students to participate in reading. They will be able to use a voice output device to read the line.
Dad liked to take us for rides in the car. All of us had to put on big robes called dusters so that our clothes would not get dirty. We lived in a time when the roads were still made of dirt. Dust would cover our clothes after a long ride. People would stare at our big family in the car. They asked dad how he took care of so many children. Dad joked that it cost less money to feed a big family than a small family.

Dad said we were "cheaper by the dozen".
This is similar to defining the words but instead you write a sentence or two that explains the word. Adding an explanation provides more information than just defining the word.
Add pictures and make changes to the text

• Add pictures to support the story.
• If story has pictures, no adaptation may be needed.
• Enlarge the font.
• If a chapter book or limited pictures
  – Use digital photographs.
  – Use Boardmaker symbols.
  – Cut pictures from inexpensive picture books that can be used to help convey the story.
  – If artistic, illustrate your book!
As you work through a book, consider:

- Did you create a repeated story line?
- Select vocabulary words?
- Consider your students current literacy skills?
Adapting the Content, continued

- We have reviewed how to adapt books both inside and out. Once adapted, these books will meet the needs of most of your students.

There are always those students who fall above and below your core group of students. For students who fall below your core group, you may need to adapt books differently.
For students with the most significant disabilities you will need to:

- Keep themes simple, focusing on one or two concepts.
- Use a few objects to represent the most important things in the story.
- Break down chapter books to one or two pages per chapter focusing on the main idea for each chapter.
- Use a few photographs to represent key events or main characters in the book.
Activity- Adapting the Content

• Using the “Adapted Book Plan” (in Facilitator’s Guide), plan for how to adapt a typical picture book that would be appropriate for learners Kindergarten through 2nd grade.
Adapting Books for Students with the Most Significant Disabilities

• These next slides provide examples of books adapted for students with the most significant disabilities.
Add objects and texture

At the end of the baseball game we find a shady spot under the tree and cool off.

We have a snack and a juice box.

The coach talks about the game. He picks one player that played hard and gives them the game ball.

I have told him it's very easy, anyone can fly. All you need is somewhere to go that you can't get to any other way. The next thing you know, you're flying among the stars.

I love to fly!
For students with multiple disabilities, consider the use of as many senses as possible to increase engagement with the book. On left of previous slide, a juice box is attached to the page. By feeling the juice box the student gets a concrete representation of what the reader is reading about.

On right, felt stars have been added to the page. This adds texture that the students can feel and is also a topic in the text.
Oversized pictures required

Very large pictures may be needed to represent things or concepts
• On left in previous slide is another example of how an object can be added to the story. The student feels the object as you read; then you can use that same object to ask a comprehension questions. For students with visual impairments, this is a wonderful strategy. Above right is a large (8 x 11) picture of the sky with clouds. For students with the most significant disabilities, it is often necessary to enlarge images.
Gather objects and photos

Most of the time you can find the objects that you need around your house.

Some things you cannot represent with objects. Represent the characters with pictures you already have or with ones found in public domain on the Internet.
• Choose up to 3 things from the book that you can represent with objects. If possible, these items should appear more than once in the story.

• Choose the main character for the book or chapter and find a photo to represent that person or animal.
Choose an object to represent the main idea of the story or chapter.
• Recall the importance of an anticipatory set to go with your books for students with the most significant disabilities. Use this object to relay what the story is about. Students can answer summary questions using this object.

• It is not always possible to represent what the story is about with an object. If you cannot, then choose something from the front cover.
• For example, in the book *Alexander and the Terrible, Horrible, No Good, Very Bad Day*, without a boy doll it would be hard to represent the main idea of this story. We chose to use a pillow since there is one of the cover.

• We chose the baseball for *Dewey McGee Loves a Good Game* and shells for *Tar Beach*. You could also use a piece of asphalt for *Tar Beach*. 
• Here a parrot is used for this chapter book and clouds are created for *It’s Your Cloud*.

• Notice that the clouds are just cotton balls glued to construction paper. You can often find inexpensive ways to make what you need.

• A nice extension activity could involve students creating their own clouds.
Adapting Books for Students with the Most Significant Disabilities, continued

• You can learn more about literacy for students with the most significant disabilities in the MAST “Story Based Lessons” module.
Activity- Adapting Books for Students with the Most Significant Disabilities

• Using the “Adapted Book Plan”, plan for how to adapt a book for a student who is visually impaired.
Adapting Books with a Focus on Comprehension

• Let’s look at how we can adapt books for higher level comprehension or for students who are moving towards being independent readers.

• When adapting books with a comprehension focus you may decide not to focus of elements such as the repeated storyline, text pointing, or pointing to the title and author.
Adapting Books with a Focus on Comprehension, continued

• Instead, you want students to work on listening comprehension. As the teacher you want to do all the reading, making sure that you are reading fluently and in an engaging voice.

• When adapting books:
  – Use Blooms Taxonomy to create questions that require higher level thinking.
Adapting Books with a Focus on Comprehension, continued

– Create questions boards with the questions typed out and the response options attached to the page. This allows the student to be more independent.

– Create an answer board where the student can place answers. Answers can then be checked by the teacher or a peer.

• Now let’s look at some examples from a book that has been adapted for higher level comprehension.
Adapting Books with a focus on Comprehension

Examples of questions following Bloom’s Taxonomy
Questions from the book: *Jamaica’s Find*

**Prediction/Synthesis**
- What do you think the story will be about?
- worm
- girl who found a dog
- sun

**Literal Recall/knowledge**
- Where did Jamaica arrive?
  - tv
  - park
  - sea shell
Although they may seem easy, prediction questions are actually higher level questions because they require the student to use the knowledge that they have gained from the book, combine it with knowledge they already possess and make a prediction.

Include several literal recall questions. These questions can be answered by simple recalling facts from the story. For example, the text leading up to this questions was “Jamaica arrived at the park…”
Jamaica is in her bedroom? Are you in your bedroom right now?

- no
- yes

Jamaica ran to the park house. Are you running?

- yes
- no
Application questions involve applying what was learned by listening to the text to something novel.

In addition to questions, students can demonstrate application knowledge by drawing or otherwise creating a scene from the story, acting out a scene, pointing to a location from the story on a map.
Sequencing/comprehension

When Jamaica found the stuffed dog what did she do first, next, last?

- bicycle
- park ranger
- house

- house
- flower
- chair

- boat
- bicycle
- crayon

Analysis

How are Jamaica and Kristin the same?

- books
- baseball
- girls
Sequencing comes out of the comprehension level of Bloom’s taxonomy. In this example there are three scenarios of the sequence given as response options. Another option is to present the correct sequence only, in random order, and ask what happened first, next, and last.
An analysis question may ask what is the same or different about two things. In this example the focus is what is the same and the three responses are provides. Another option would be to create a Venn diagram for Jamaica and Kristen and analyze the characteristics of both girls individually as well as what is the same about them.
What was our story about?

chair  tree

Jamaica was almost as happy as Kristin, who took Edgar dog in her arms and gave him a big welcome-back hug.

What did Jamaica do when Kristin said she could not find Edgar dog?

socks  went to the park ranger  cup
Summary questions fall under the synthesis category. Synthesis is second from the top of the order on Bloom’s Taxonomy. Summary questions require the student to consider the main idea of the story to answer the question. Questions that require inference are also examples of synthesis questions. In *Jamaica’s Find*, it is not directly stated where Jamaica will take Kristen, therefore the student has to infer the answer.
Evaluation is the highest level of question on Bloom’s Taxonomy. There is not one pictured but an example would be: Jamaica decided to return the stuffed dog to the park ranger. Do you think that was the right thing to do?
Adapting Books with a Focus on Comprehension, continued

When creating comprehension questions, try not to limit your students by only asking literal recall questions.
Adapting Books with a Focus on Comprehension, continued

• One last thing to consider…assistive technology. As you are planning on how to adapt your book, consider how assistive technology will be used and what responses need to be created for use on the devices.

• Some examples:
A device that allows you to put in several response options at one time is perfect for comprehension questions.
A single message voice output device is great for the student reading the repeated story line, requesting to turn the page, or open the book.
When creating response options, individualize them for your students. Can they answer with words, symbols, photos, or objects?
Summary

- Adapting books can be a lot of work.
- But a well adapted book will last for years and you may spend several weeks reading the same book to your students.
- If other teachers at your school need adapted books, one way to lessen the load is to each adapt one or two books and then pass them around.
Summary, continued

• There are also many resources and shortcuts available. Several companies sell products that make adapting books easier.
• There are also chapter books that have already been condensed down. These are available on several websites.
• See resources in Facilitator’s Guide or online module for specific information.
Session Evaluation

• A form for participants to evaluate the session is available in the Facilitator’s Guide.
Focus and Reflection Questions

1. At the beginning of this session, it was stated that “People with disabilities deserve to be a part of the conversations that we have around literature. They should have the opportunity to create memories about favorite books.” What are some of your favorite memories from books? What would be some adaptations you would use to share those memories with students?
2. What are some other reasons for adapting books?
Focus and Reflection Questions, continued

3. Name a popular book with children today – maybe one that has been made into a movie.
   a. Discuss some ways to adapt the book for content.
   b. For physical limitations.
   c. For students with most significant disabilities.
   d. Using adaptive technology.
Application & Extension activities

1. Read one chapter of a chapter book that is appropriate for middle or high school. Adapt the text so that it falls within the K-2 reading level. You can determine the level by typing in your adapted text at http://www.lexile.com/analyzer/.
Application & Extension activities, continued

2. Books can be adapted for different purposes and different types of students. Consider how you might adapt a book for a group of students that
   – Do not have any physical limitations
   – Are tactile defensive
   – Need symbol support along with the text
Application & Extension activities, continued

– Comprehend text that is read aloud and can answer literal recall questions easily
– What physical adaptations will you make?
– What adaptations to content will you make?
– How will students demonstrate comprehension?
Self-Assessment

A self-assessment with response feedback is available at http://mast.ecu.edu/modules/sscd_ad/quiz. Participants may take this assessment online to evaluate their learning about content presented in this module.