

# Research Based Effective Practices in Educating Students with Moderate to Severe Disabilities



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# What the Research Indicates that Inclusive Education Accomplishes

- Students' Presence
- Students' Participation
- Achievement of ALL Students
- Modeling a social just world for All
- Welcoming & Living Diversity



# We have to Stop Focusing on the Why so that we can Focus on the How



# Research has Guided New Assumptions

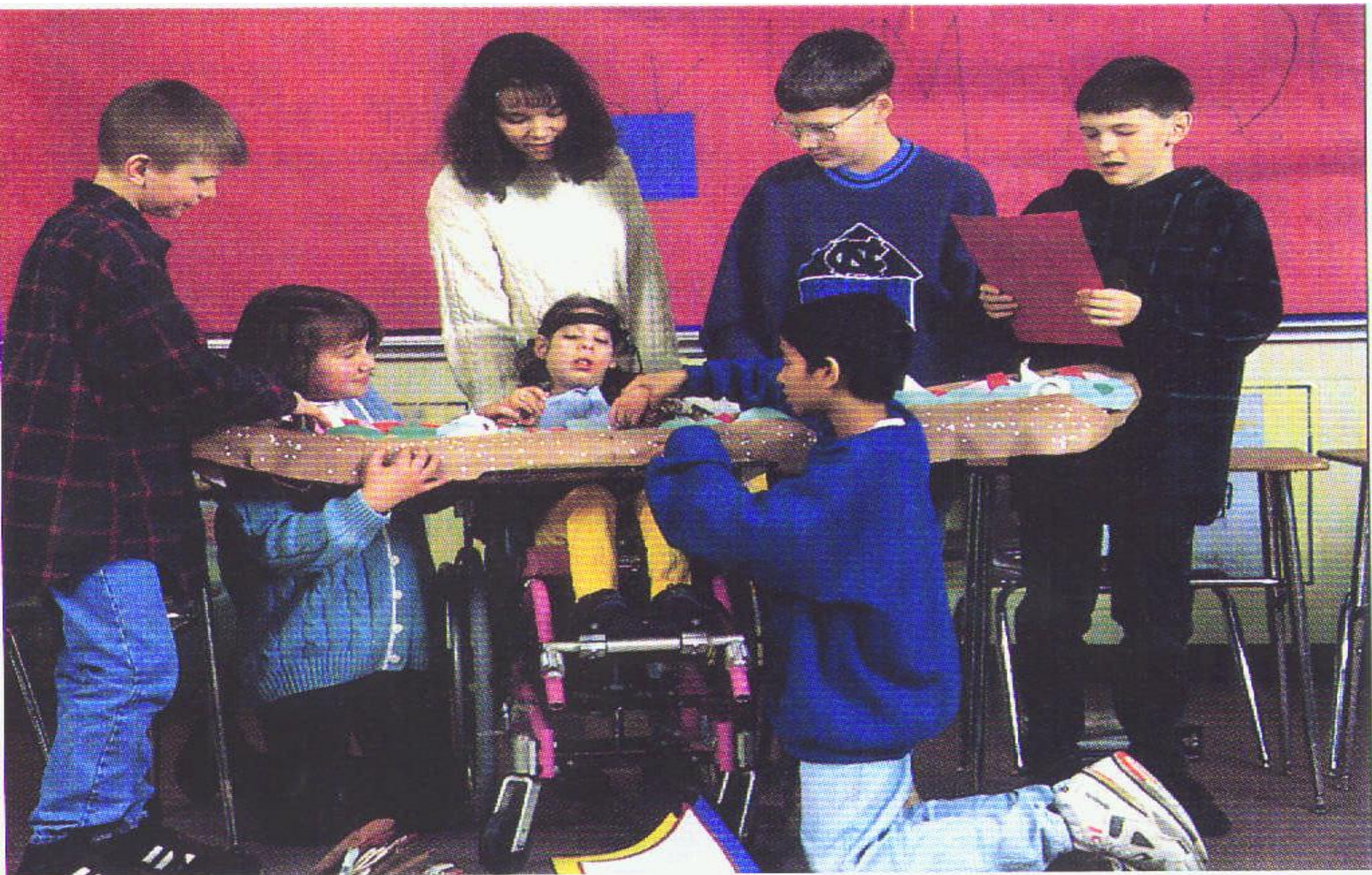
- Education & Other Services Provided in **Inclusive Settings** with Nondisabled Peers is more effective
- Meaningful **Access to Grade Level Standards is a must**
- Ongoing & Accountable **Assessment Systems**
- Focus on Providing Meaningful & Functional **Communication Skills training and opportunities**
- Use of Effective & Consistent **Instructional Practices**
- **Teacher Accountability** Includes Special Education
- **Parents as Partners** working in Collaboration with Educators
- **Transition** for post school, including work, post secondary education, self determination, & living in communities of choice



# What do I Teach Students with Moderate to Severe Disabilities?









# Emerging Positive Trends

- Research indicates that students with significant cognitive disabilities can learn academic skills (Browder & Flowers, 2004).
- Many social, communication, motor, & self-help skills can be practiced during academic learning activities
- Students who participate in general education are more successful in work, post secondary education and life after high school.



# Steps to Accessing Curriculum

- Identify the most basic concept of the content standard -the essence or the intent of the standard
- Define the outcome of Instruction
- Identify prioritized outcome for your student
- Focus on what student needs to learn academically and functionally to be successful
- Reduce the complexity level- student may be working on accessing the entry-level skills related to the standard
- Identify the supports needed



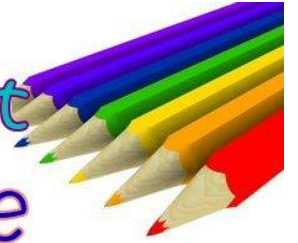


# To Access the General Education Curriculum

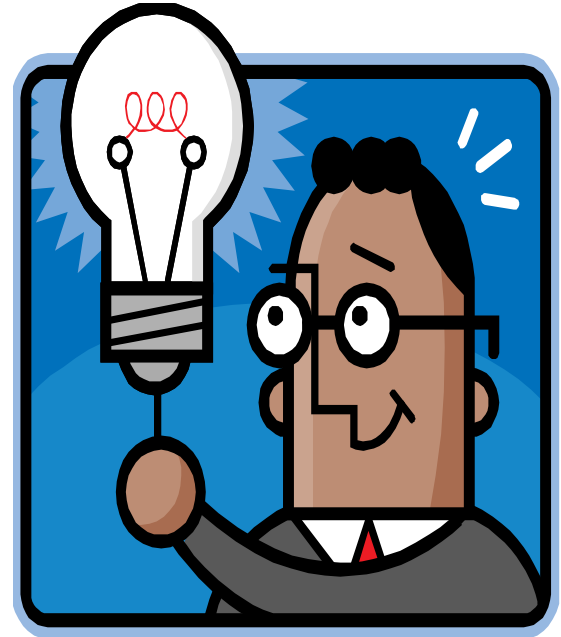
What **adaptations & supports** are provided to students disabilities to access general education curriculum?

- How are the **adaptations & supports** designed to make them student-specific and activity-specific?
- How are they implemented?
- What techniques, tools & technology are being used in different content areas?

If I don't  
learn the  
way you teach,  
then teach the  
way I learn!



# Capacity: Criterion of the Least Dangerous Assumption



Heidi's Story



The Criterion of the Least Dangerous Assumption (Donnellan, 1984) remains unheeded. Design systems that hold the least danger to individuals and independent functioning. In the absence of conclusive data, **assume the person can achieve.**

# Always Assume Competence



3<sup>rd</sup> grade reading



Ronnie's story



# Provide What is Needed to Support Competence

- Assistive Technology
- Communication
- Social Stories
- Behavior Supports
- Self Advocacy
- And so forth...



# How do I Teach Students with Moderate to Severe Disabilities?





# Hook them on to Learning with Multi-sensory Activities

- Use hands-on activities and real-life experiences. For example:
  - Use cotton balls when discussing snow.
  - Ice to demonstrate how cold snow feels.
  - A stop sign when presenting the shape 'Octagon'.
- Make sure that students are familiar with the words and concepts introduced; Adapt it to the student's comprehension level.



# Active Participation for Students with Significant Challenges

- Get student's attention by tapping on the picture, object, or symbol associated with the story.
- Maintain attention by illuminating the pictures and key words in the book or adapted text with shining light from behind (Downing, 2005).
- Provide appropriate cues & prompts to gain student attention & to focus.





# Employ Interactive Instructional Strategies

- Animated story-reading
- Choral-reading
- Story-telling/Story re-telling
- Drama
- Personal experience stories
- Simulated real-life situations
- Role Play
- Interviewing Techniques
- Frame story-writing using predictable text
- Student-authored thematic books
- Mock store
- Literacy/Math Games
- “Apps”

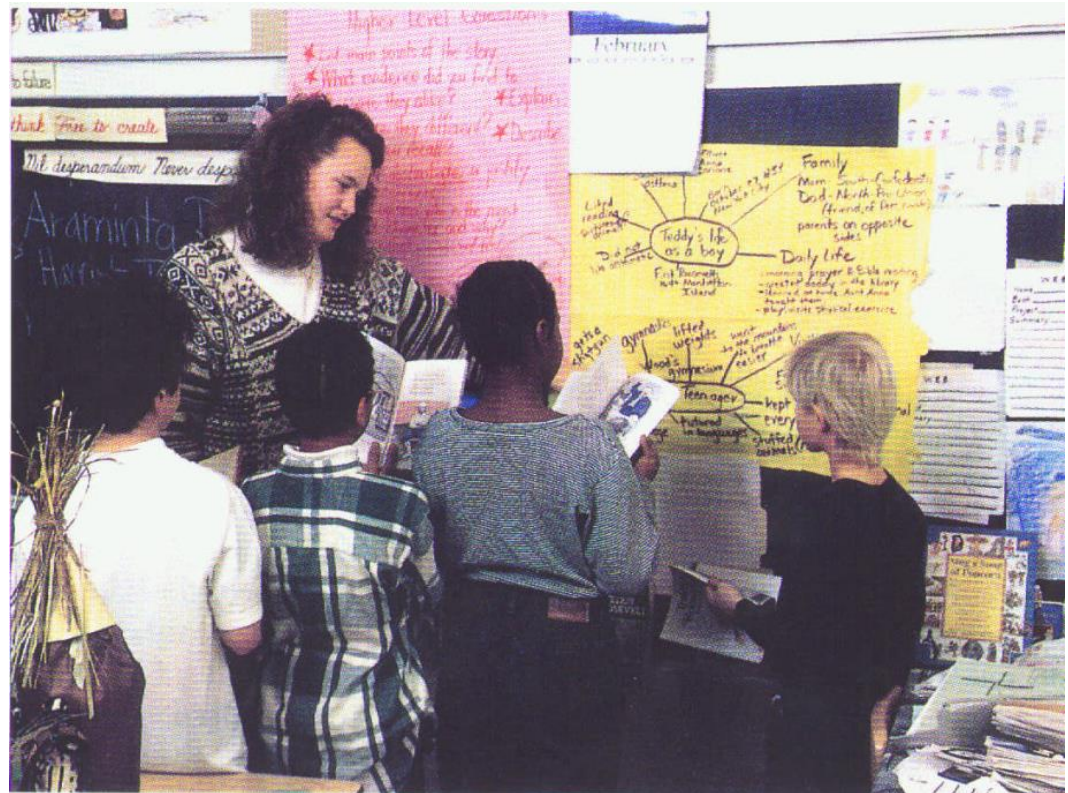


# Providing Participation

- It's better to at least partially participate than to be denied access!!
- Students can participate in classrooms, routines & other locations by doing for example, Pledge of Allegiance, lunch counts, errands, school plays, sports activities, field trips, & extra-curricular activities
- Students can participate in classroom, school academic & non-academic activities, even if only partially
- Students must have a way to communicate in all classes & instructional structures (e.g., whole class, small group, at the board, when called on by the teacher)
- Students can complete assignments & other work products with needed adaptations & modifications

# Learning that Makes Sense & Has Purpose

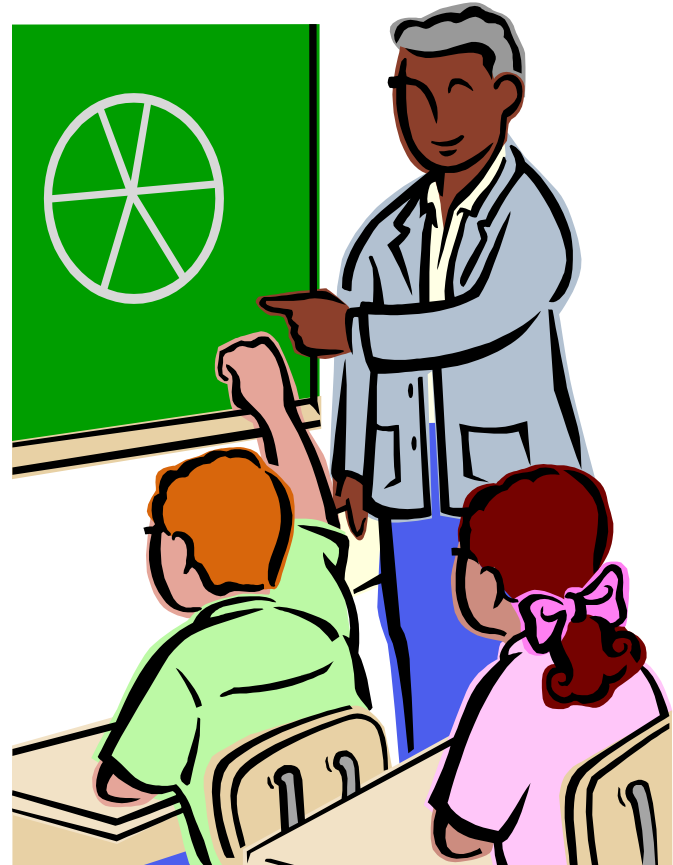
- Things that matter
- Things that are interesting
- Things taught in ways that make sense



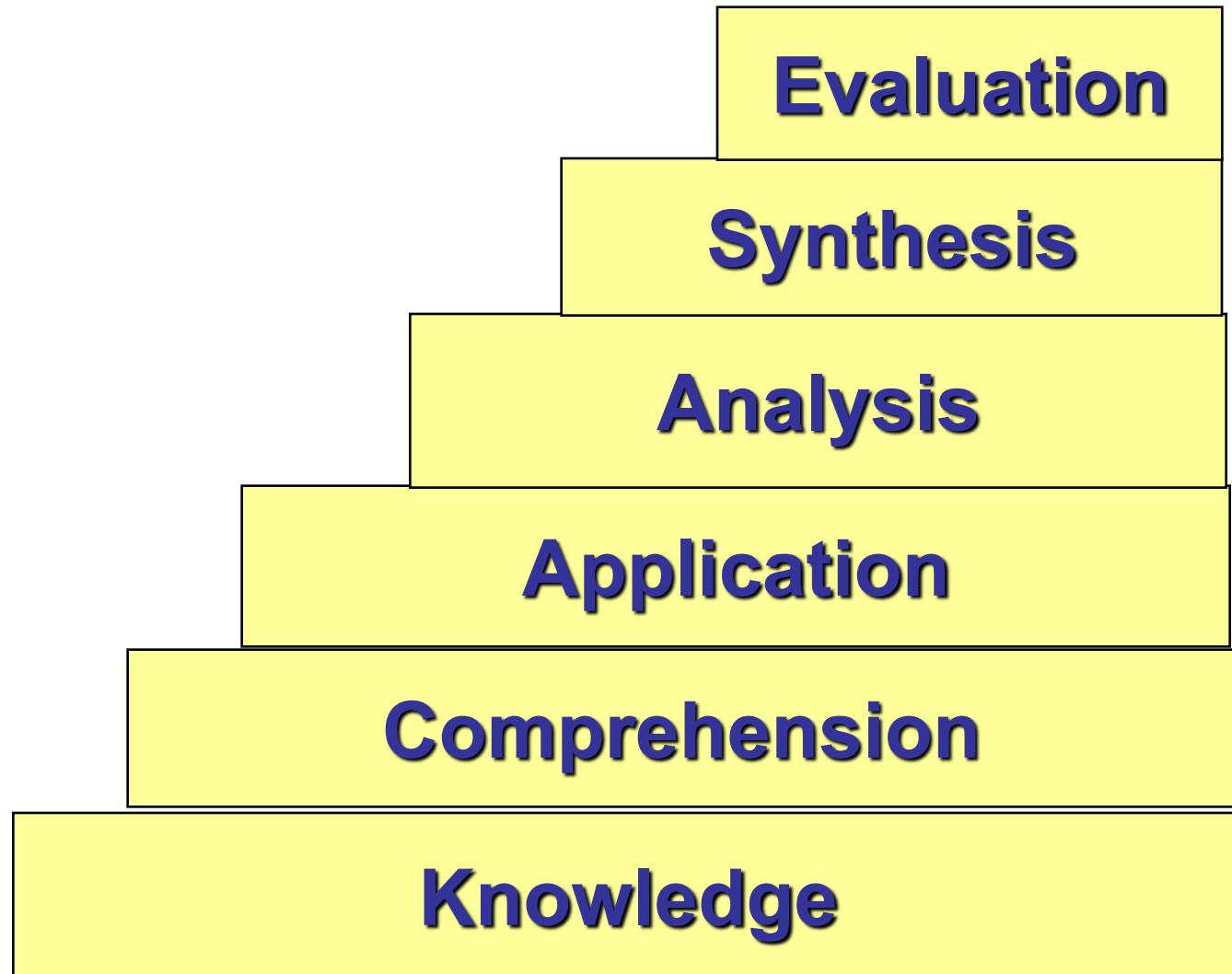


# Universal Design

- Creation & design of products & environments without need for modifications or specialized designs
- Examples: Curb Cuts, Graphic organizers for all, Varying instructional strategies across multiple intelligences



# Bloom's Taxonomy



# Modifications



- Changing performance standards
- Use only if all other options are have not worked or are not appropriate
- Fade whenever possible to Accommodations or Universal Design Principles





Wants to Be a girl



Likes to Read



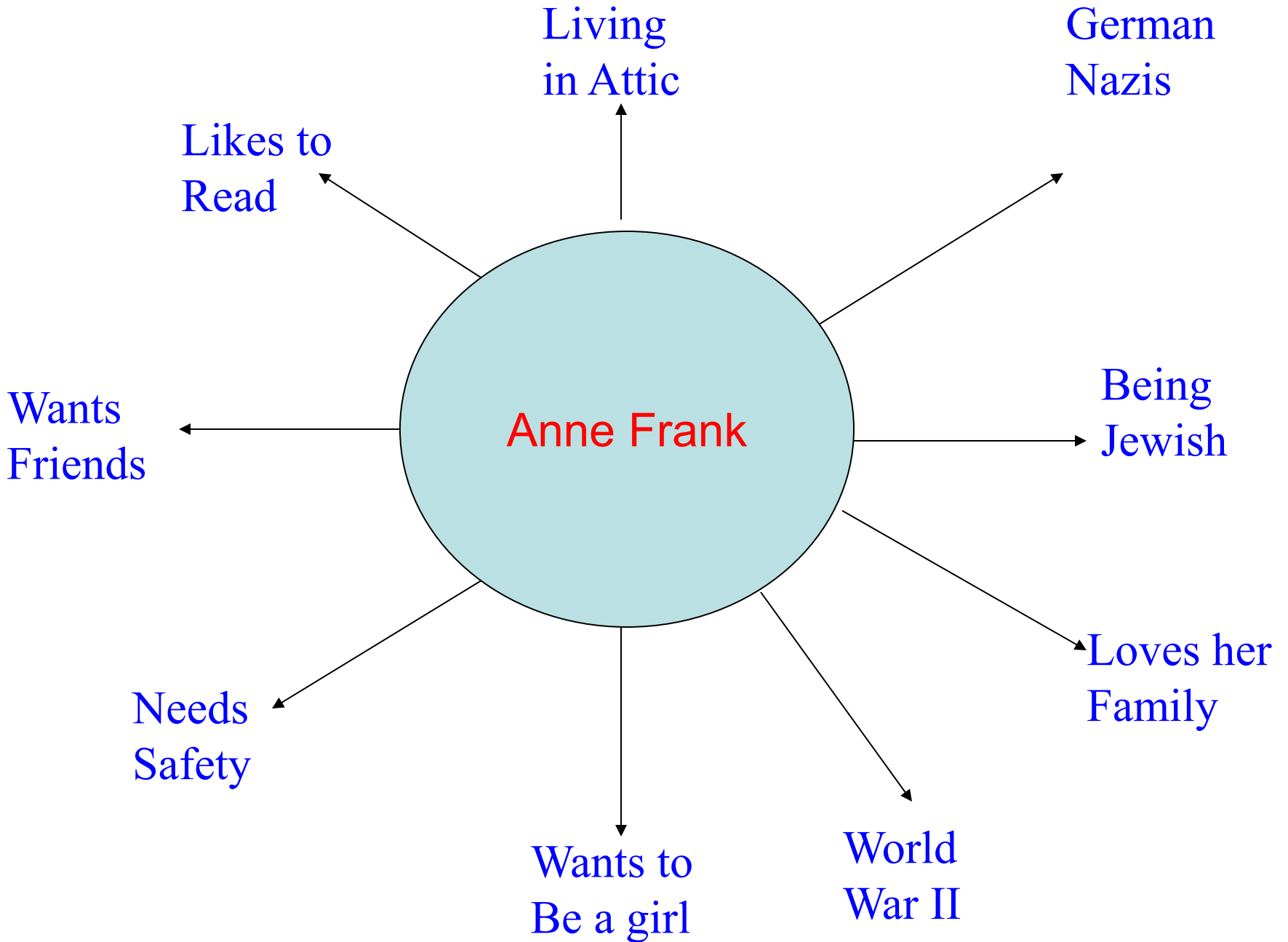
Anne Frank

Loves her Family

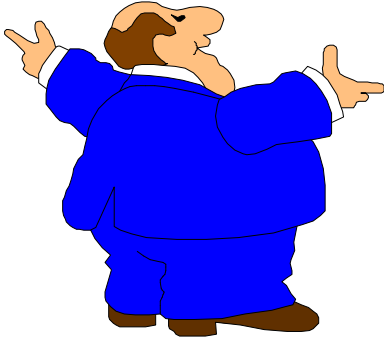


Wants Friends

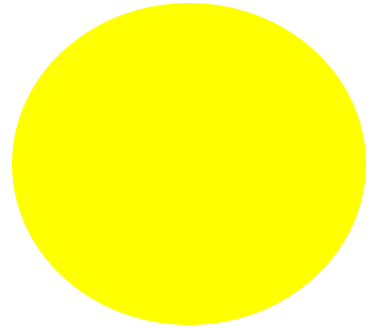
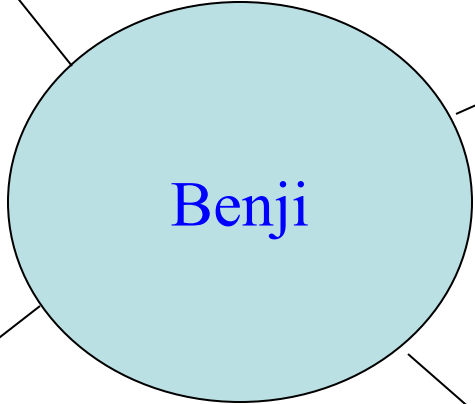




big



dog

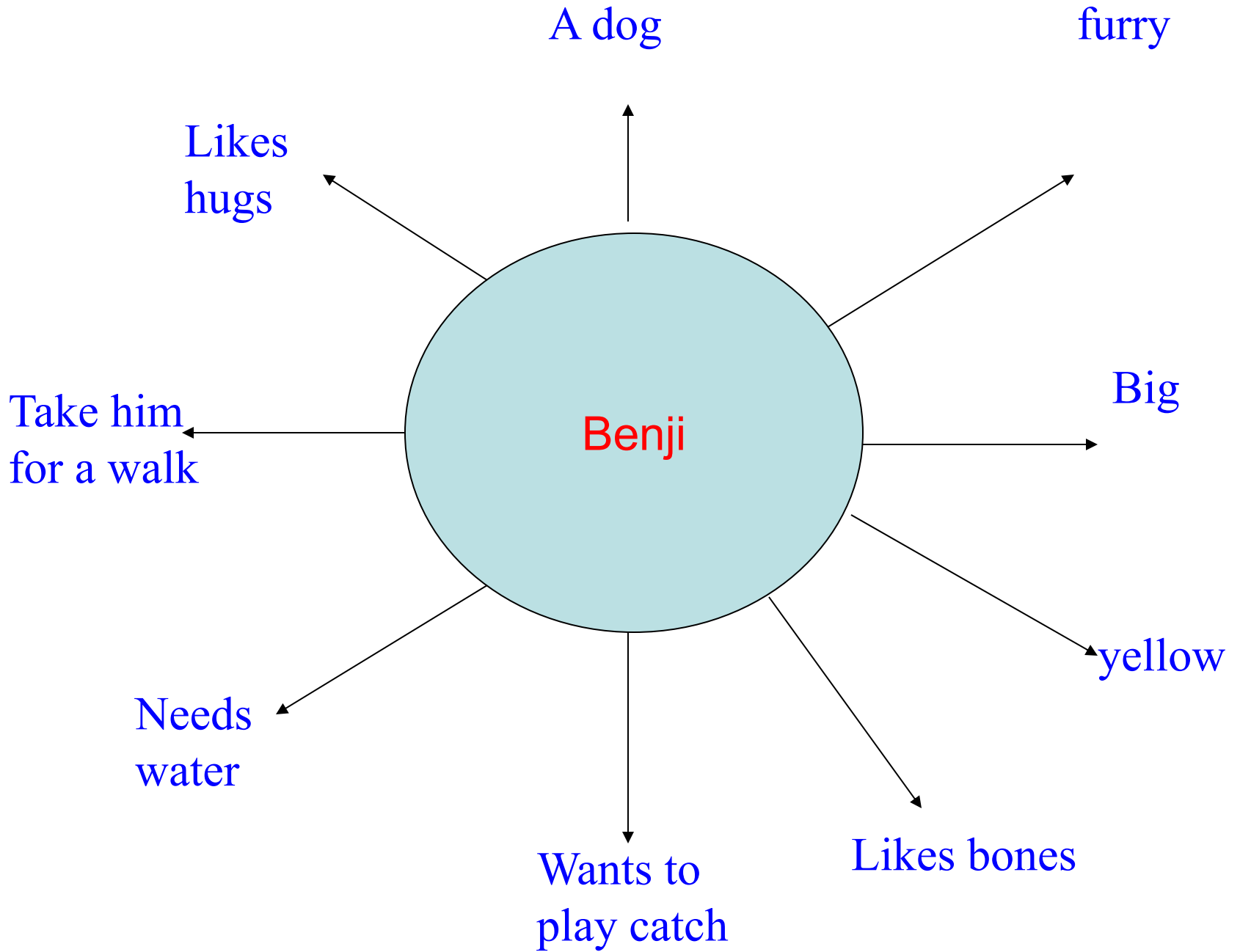


yellow

Wants to play





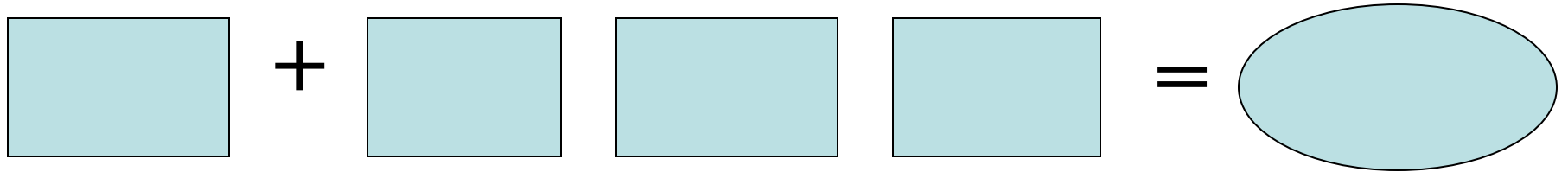


# Developing Character Descriptions

Get a basket with large lid and stuff it with items to be used as clues for a "mystery person".



# Modified Math Worksheet





# How do I Assess Students with Moderate to Severe Disabilities?

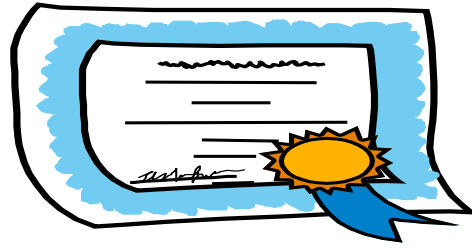




**"'F' means 'fantastic.'"**



**"I think you'll find my test results  
are a pretty good indication of  
your abilities as a teacher."**

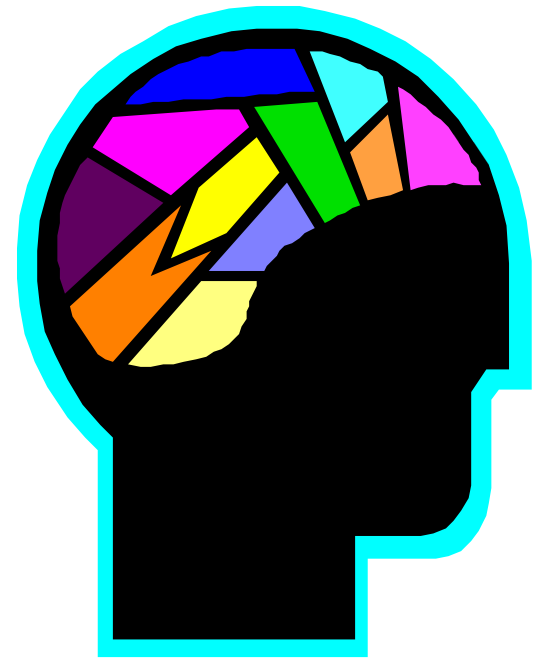


# Assessment Should be to:

♥ Determine How a Child is Smart

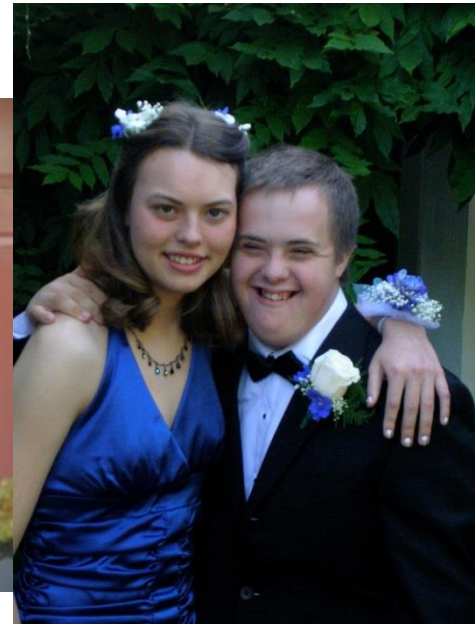
NOT

∅ How smart a child is!!





# It's All about Relationships



# Enhancing Membership

- The student attends the school he/she would attend if did not have a disability
- The student is a member of an age appropriate general education class (not a visitor)
- The student's name is on all class lists, lists of groups put on the board, job lists, yearbook, & so forth
- Related services are delivered primarily through consultation in the classroom
- The student receives the same materials as other students with the needed supports, if necessary
- The student has a locker/cubby alongside other students
- Students' parents are provided the same information and access as parents of nondisabled students

**More Alike Than Different ...**  
**More Typical Than Special**





# Communication Imperative

All students must develop symbolic language systems before they leave school.



Using speech generating devices to communicate during play





# Providing for Effective Communication for all Students



# Offer Multiple Ways for Students with Significant Disabilities to Respond

Indicate response through:

- Eye gaze
- Eye blinks
- Vocalizations
- Body orientation
- Facial Expressions
- Fixate on and track an object
- Acknowledge through-manipulating, touching, eye-gazing, or body orientation, etc.



# A Case Example of Jose

- 4<sup>th</sup> Grader with significant cognitive disabilities
- Uses a wheelchair; has limited use of his upper extremities; can grasp objects; has difficulty writing; & gets frustrated
- He is friendly by nature, initiates interactions with peers & adults using facial expressions, vocalizations, & objects
- He is learning to use picture symbols to communicate & participate in the learning
- He recently received training in the use of a couple of AT devices for communication & participation in class



# AT Supports for Jose

- Uses several 'Voice Output' communication devices to greet, respond to questions, & participate in learning activities.
- Uses 2 BIGmacks (Ablenet, Inc) (say "hello" & the other answer "yes" & "no")
- A Cheap Talk 4 Communicator (Enabling Devices) to participate in instructional activities
- Requires verbal reminders & prompts to prevent his accidental activation of devices & use it only for communication purposes instructional activities





# A Sample Lesson Framework



# Materials Needed *The Giving Tree*

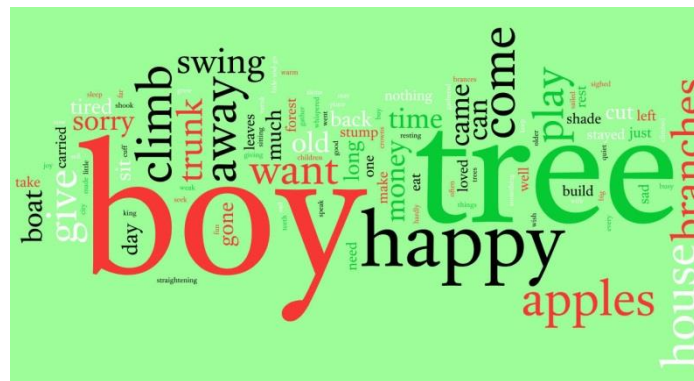
Book: The Giving Tree by Shel Silverstein

- A video of the book or digital depiction of the story found on Youtube at [http://www.youtube.com/watch?v=dMIU7wVj\\_PY](http://www.youtube.com/watch?v=dMIU7wVj_PY)
- **A power point presentation of 'The Giving Tree'** with limited number of slides that offers a brief adapted summary of the book
- **Objects related to the story:** leaves, a wooden boat, apple, tree bark, and a few products from trees.
- **Pictures and Photos:** trees, apples, boy, old man, etc.



# Materials Needed

- Story pictures with a distracters —tree, a boy, apples; a monkey, a fish, etc.
- A ‘Graphic Organizer’ chart, e.g., Wordle on Google
- Sentence strips with frame sentences for student to fill-in.
- Other items: a dry-erase board, a small flashlight, reflective tape, puppets, a story bag or theme box with a collection of items, etc.
- Assistive Technology (AT) Devices: Voice output devices, IntelliTools (if available), etc.



# Use a Variety of Strategies to Deliver Instruction

- Provide an adapted summary of the story.
- Present it in a power point format.
- Print out individual slides for student to read & respond.
- Use a story board with Velcro-backed pictures &/or objects related to the story.
- Provide concrete props, if appropriate to meet student needs.
- Make it interactive.





# Delivering Instruction

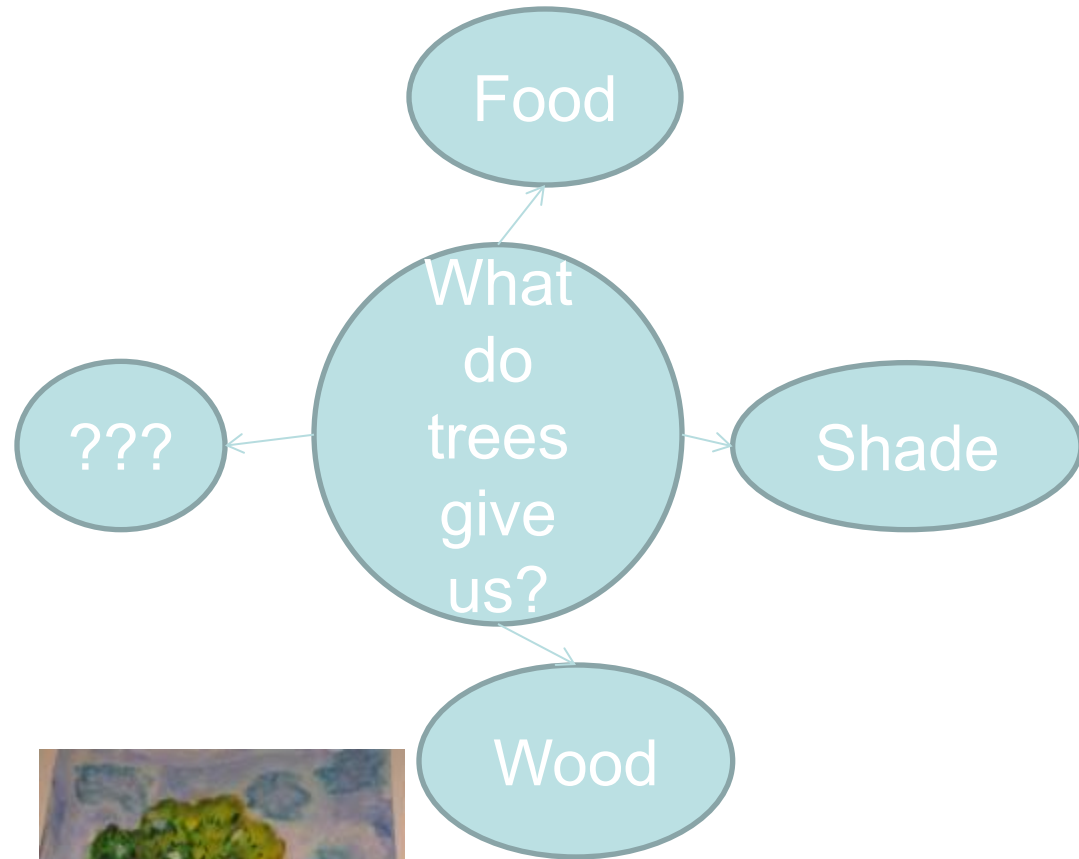
(continued)

- Read story multiple time to focus on teaching 'The Big Idea' (key concepts).
- Use systematic & direct instruction to teach key vocabulary words.
- Use direct instruction & errorless prompting techniques.
- Involve students actively in responding with different questioning: e.g., Simple recall; Making predictions; Inferential questions.
- Link it to real-life events.
- Have apples to share.
- Experience real trees outside.



# Use Graphic Organizers for Brainstorming

- Have students identify products from trees.
- Give students examples: food: fruits, nuts, etc.
- Discuss how to the things trees produce – e.g., apples, banana, wood, tree shade.



The Giving Tree



# Vocabulary Words

- Create **photo or object wall** with key words/concepts.
- Pair photos/objects with words to teach vocabulary words, e.g., **Tree, apple, leaf, seed, flower, boy, etc.**
- Play vocabulary games: Act out the words using 'charades' game.

**Offer a variety of activities to teach the target words/concept.**

**Tree**



**Leaf**



**Apple**





# Delivery of Instruction

- Adjust & adapt comprehension questions to match student skill levels.
- Ask **simple recall** questions, e.g.,:
  - Who are the characters in the story?
  - Identify the sequence of events:
    - What did the tree give the boy when he was a child?
    - What did the boy ask the tree when he was a young man?
    - Where does the story take place?

"I don't need very much now,"  
said the boy,  
"Just a quiet place to sit and rest.  
I am very tired."  
"Well," said the man,  
"Brightening himself up  
as much as the world,  
"well, old man, it goes  
for nothing and nothing."  
Come, then, sit down,  
No down and out!"

"Then buy yourself a rocker,  
you jerk!"



And the boy just ignored  
her and sat on  
her.



## The Giving Tree: Idea Web

Author: Shel Silverstein

Name: \_\_\_\_\_ Date: \_\_\_\_\_



1. → \_\_\_\_\_  
2. → \_\_\_\_\_  
3. → \_\_\_\_\_



1. → \_\_\_\_\_  
2. → \_\_\_\_\_  
3. → \_\_\_\_\_



# Use a Variety of Ways to Facilitate Student Participation & Response

- Jose listens to the story summary read by a peer.
- Provide Jose additional opportunities to listen to the story using an audio tape
- Jose uses voice output devices
- Using augmentative communication device, pictures, and sentence strips, repeat lines, phrases and words from a story.



# Use a variety of ways to facilitate student participation & responses

(continued)

- Create an **e-story** on the computer with auditory input and have the student access it with a switch interface.
- Photo or picture cues are provided to assist some students . Object referents are used with some others.
- Proactive behavior supports are provided to students experiencing challenging behaviors.
- A student with the most significant cognitive, communication and motor difficulties indicates using eye-gaze toward the right item on a eye-gaze board.



# Students Respond to Questions in Variety of Ways

- Some respond in complete sentences.
- Some will read the text with the aid of the picture cues.
- Some will point to pictures or objects related to story as story or text passage is read.
- Some will make a choice of the correct picture between 2-3 options given.
- Some will respond with the aid of assistive technology.



The girl cried.

The boy played.

The dog ran.

The movie star screamed.

The fireman yelled.

The policeman drove.

# Student Responses

(Continued)

- Makes a choice from 2-3 Velcro-backed pictures or objects related to story.
- Manipulates objects related to story.
- Eye-gazes (or orients body or vocalizes) as the adult points to objects/photos of characters from story.
- Places pictures or objects to complete 'Fill-in' sentences about the story (teacher-made text).
- Responds/comments by activating an assistive technology device.





# Reading-Writing Connection

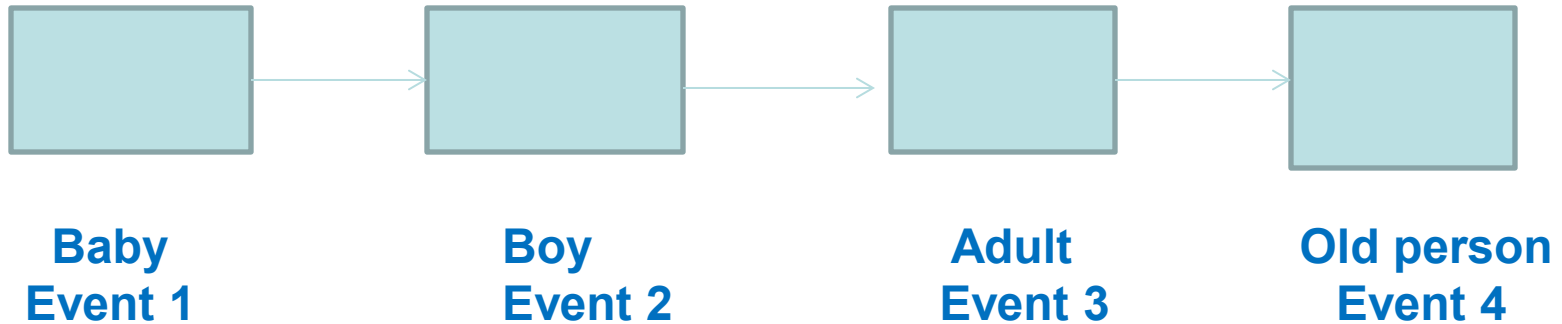
## The Giving Tree

- Prepare a frame story for the students to complete the fill-in-the-blank sentences.
- The student composes sentences to build the story or completes the sentence with supplying the missing word or with pictures and/or photos:
- The trees are part of nature. They help us in many ways.
  - The trees give people \_\_\_\_\_.
  - The trees give birds \_\_\_\_\_.





# Building A Timeline



- Create a 'Timeline' sequencing the life stages of a person: a Baby, a boy, an adult person, and an old person.
- Use photos paired with text for student to place in the right sequence in the boxes.

# Case Example - Jerod is a Ninth-Grader Who has the Diagnosis of Autism

- Has normal vision & hearing.
- Has significant cognitive & communication delays; communicates through vocalizations, facial expressions, pushing away items that he does not want & limited picture use.
- Needs adult support for self-care needs.
- Can independently turn the pages of a book, operates the CD player & the computer.
- Responds to his name immediately by looking at the person calling his name.
- Gets frustrated & becomes occasionally aggressive when others do not understand him.

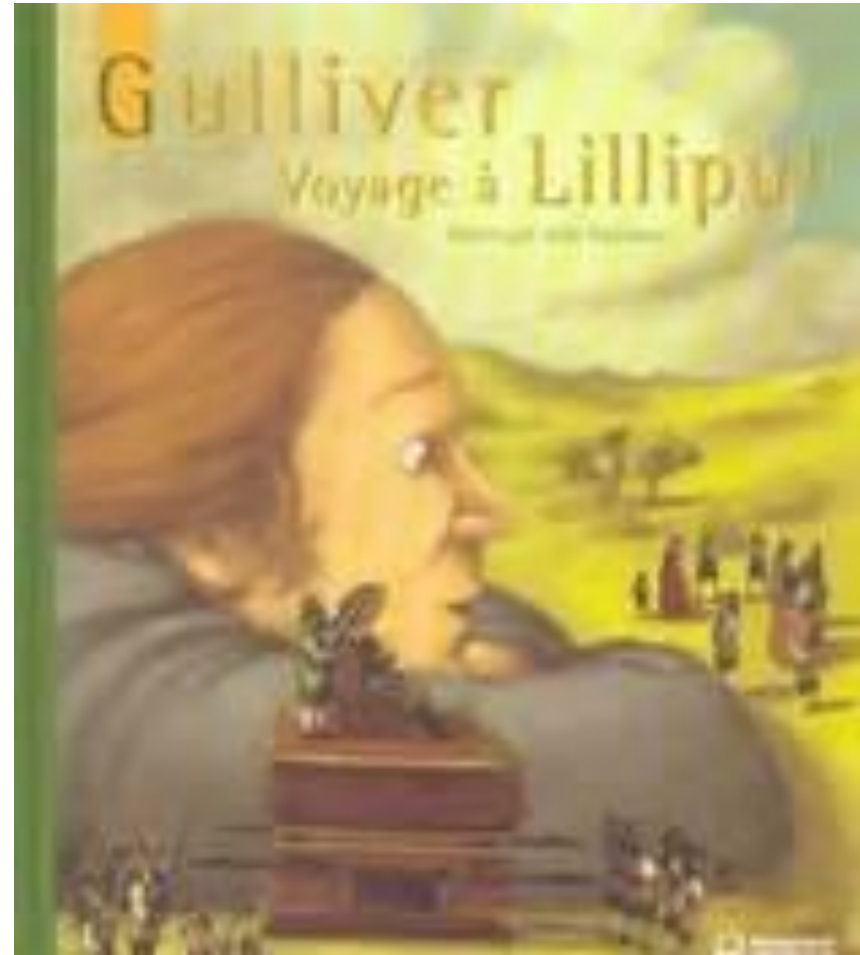
# Technology Devices to Support Jerod

- A “Personal Talker,” a pocket-size single-message device with a picture symbol when he needs a break
- An IntelliKeys alternate keyboard with a four-key custom overlay (from IntelliTools) with 4 pictures, 3 related to the theme & 1 distracter.
- A Step-by-Step Communicator for Jerod’s participation in group
- Smart phone/tablet to use his “apps”



# Materials Adapted for Instruction

- A brief & simplified summary of Gulliver's Travels first voyage - "Voyage to Lilliput" is prepared.
- Gulliver's Travels MP3 CD, audio tape, or film version is used to supplement the summary.
- Theme-related pictures (6 related & 4 distracters are used).
- Assistive Technology Devices used specific to meet student needs





# Building a Power point Presentation

- Picture of Gulliver
- Picture of Lilliputians
- Picture of the Emperor
- Picture of Gulliver captured by the Lilliputians (on the ground tied up)
- A picture of ship
- A picture of a shipwreck

**Note:** most of these can be downloaded from the internet



THE FIVE GREAT BIG GEMS ARE EACH NEARLY FORTY POUNDS IN THE HEAVENS

# Presenting the Reading Activity

- Present a very brief & simplified summary of Voyage to Lilliput; a peer tutor writes the summary & reads it to Jerod.
- Provide direct & systematic instruction linking theme related pictures to story summary with the aid of AT (e.g., IntelliTools)
- Provide Instruction on how to use the IntelliTools keyboard & the custom overlay with story pictures



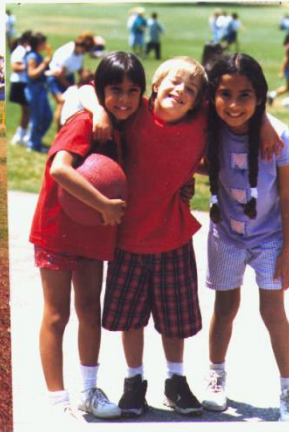
# Students Participation

- Select pictures to go with the theme while peers are preparing for a written & oral presentation.
- Create a collage to go with the group presentation.
- Learn new vocabulary (e.g., a large person; a very small person; king/emperor; ship; travel, ship wreck)
- Gain general knowledge & build concepts (e.g., travel-transportation, globe).



[http://www.youtube.com/watch?v=b\\_Lax4zFFoA](http://www.youtube.com/watch?v=b_Lax4zFFoA)





# Jace and Others Have Impacts we will never Know --- It Works



**We are a long way from where we want to be...a long way from where we should be, but also a long way from where we were.**





"We remember the lessons of our past, where ...parents of a child with a disability had no where to turn. We do not believe...that freedom is reserved for the lucky or happiness for the few."

President Obama, 1-21-13




# Make it your passion, not just a job!

- Create examples of success
  - The instructions are written. Know them & discover more, tell others
- Shape attitudes of competence
  - including our own
- Educate & promote successes of others
  - Find innovators & promote them
- Challenge deficit-model thinking
  - Assume a full participation in life





A photograph of two dogs sitting on a grassy hill at night, looking up at a starry sky with a full moon. The dog on the left has long black hair, and the dog on the right has long white hair. The scene is framed by a grey border.

*The Sky Is The limit*

Tag by Jewels



<http://www.bing.com/videos/search?q=bruno+mars+down+syndrome&qpv=bruno+mars+down+syndrome&FORM=VDRE#view=detail&mid=69AEE2EE585CF59F23F869AEE2EE585CF59F23F8>

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