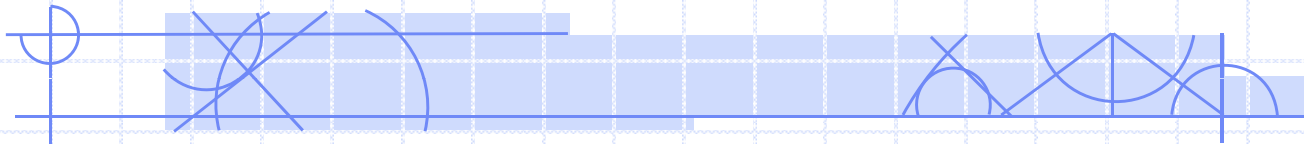
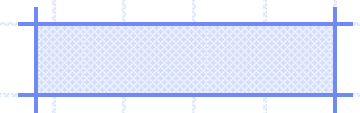


# Large Scale Assessment of Students with Significant Cognitive Disabilities

NSW Special Education Conference  
June 16, 2005



## Access and Alignment to Grade-level Content



# Objectives:

- Increase general awareness of trends in large scale assessment that impact on students with disabilities and school accountability
- Increase awareness of alternate assessments for students with significant cognitive disabilities
- Increase awareness of the impact of alternate assessments upon instruction

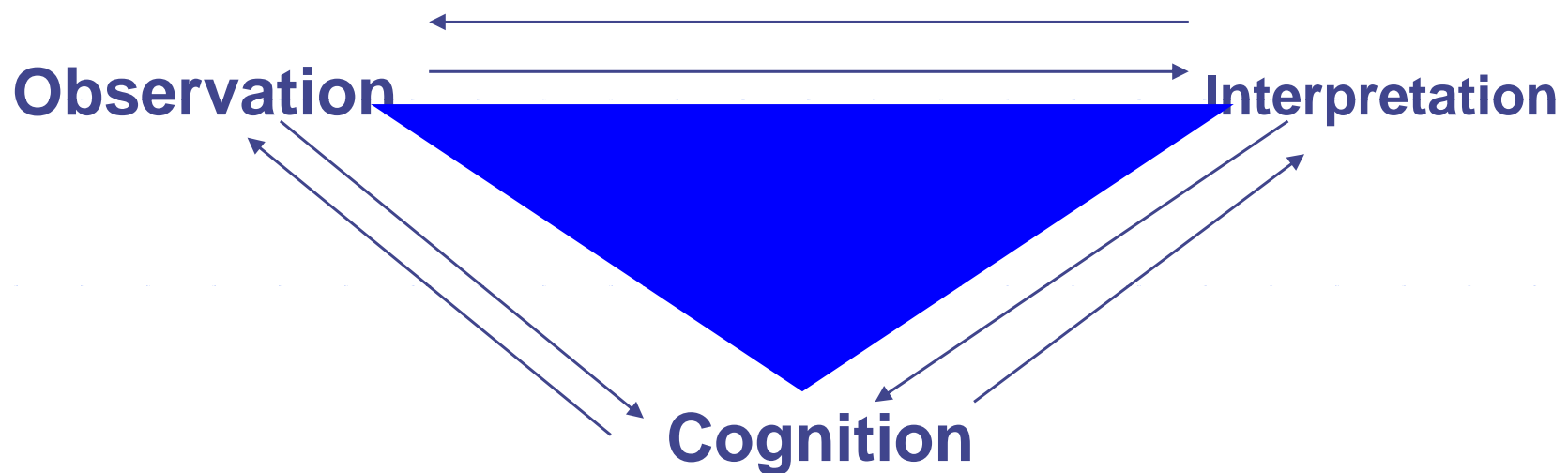
# This session is not intended to compare the Disability Discrimination Act of 1992 with

- The Americans with Disabilities Act of 1990 (Expansion of 1973 Rehabilitation Act)
- The Individuals with Disabilities Education Act 2004 (reauthorization of law enacted in 1975)
- No Child Left Behind 2002 (reauthorization of law enacted in 1965)

# Purpose of Assessment Requirements of IDEA and NCLB

- **Improve results** for student with disabilities through **improved teaching and learning**
- **Raise expectations for students with disabilities**
- **Increase access** to the general curriculum
- **Provide parents information** about their child's achievement in relationship to the performance of other children in their school
- **Evaluate** Schools and Programs
- **Accountability** for student learning

# Effective Assessment Practice: Interconnected Assessment Elements



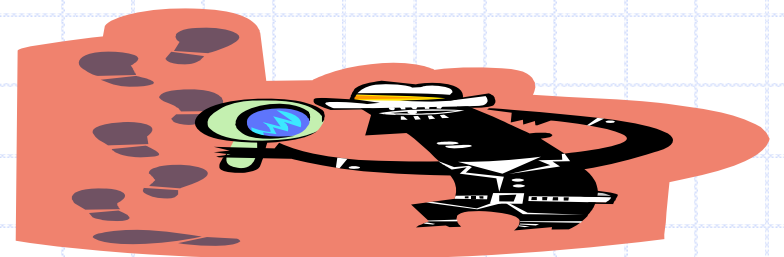
Pellegrino et. al (2001). *Knowing what students know*. National Research Council: National Academy Press.

# Interconnected Elements

- ***Cognition*** - A theory of ***what*** students know and ***how*** they know it in a subject domain
- ***Observation – tasks or situations*** designed to collect evidence about student performance
- ***Interpretation*** - a ***method for drawing inferences*** from the observation(s)

# Assessment By Nature Imprecise

- “Assessment result is an *estimate* of achievement based on samples of knowledge and performance from the much larger universe of what a person knows and can do” (Pellegrino, Chudowsky, Glaser 2001 p.36)
- “Assessment is a process of *reasoning from evidence*. Using *less than direct* methods to make judgments about what students know” (Pellegrino, Chudowsky, Glaser 2001 p.36)



# Assessment Options for Students with Disabilities

- General assessment
- General assessment with accommodations (or modifications), including computer based assessments
- Alternate assessment on grade level achievement standards
- \*Alternate assessment on alternate achievement standards (Focus of this presentation)
- Modified assessment on modified achievement standards (2005 flexibility)

# Steps necessary for developing assessments

- Articulate guiding principles for assessment
- Review and articulate academic standards
- Define population to be assessed (Participation Guidelines)
- Define a theory of learning for assessed population
- Determine observation strategies (Format for collection of evidence)
- Select assessment content
- Determine interpretation strategies (Scoring, Standard Setting, Reporting)
- Ensure assessment effective practice (Reliability/Validity/Comparability of data)



# Academic Content Standards=NSW Outcomes

- Defines what student are expected to know and be able to do

# Examples of Academic Content Standards (NSW Outcomes)

- Recognizes and compares size of groups
- Sequence events
- Use context cues
- Select and use appropriate problem solving strategies
- Communicate prior knowledge regarding topic
- Ask questions about literacy topic
- Communicates with variety of purposes
- Categorizes connections across texts
- Lists details about topic
- Organizes information while reading

# Academic Achievement Standards

- Answer the question “How good is good enough”
- Must be **aligned** with academic content standards
- Description of achievement levels (e.g., basic, proficient, advanced)
- Description of rationale and procedure used to determine levels (standard setting)

# Alternate Academic Achievement Standards

- Must be *linked* to grade-level content standards,
- Promote access to the general curriculum,
- Reflect professional judgment of the highest learning standards possible,
- Defined by a documented and validated standard setting process.

# Alternate Academic Achievement Standards (cont.)

- Grade-level content may be reduced in complexity.
- For each grade level, one or more alternate achievement standards may be defined.
- Should be defined in a way that supports individual growth because of their *linkage* to different content across grades.

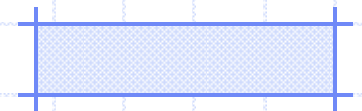
# How Students with Disabilities participate in Assessment

	<i>Gen'l Assmt</i>	<i>AA-GLAS</i>	<i>AA-AAS</i>
<i>Content Standards taught and assessed (access and alignment targets)</i>	Grade level	Grade level	Grade level, w/ extension or expansion to entry points
<i>Achievement Standards</i>	Grade level	Grade level	Alternate level
<i>Participating Students</i>	Most students, including those with disabilities, (with or w/o accommodations)	Students with disabilities who need alternate way(s) to show what they know	Students with significant cognitive disabilities

# Part II: Who are the Students with Significant Cognitive Disabilities

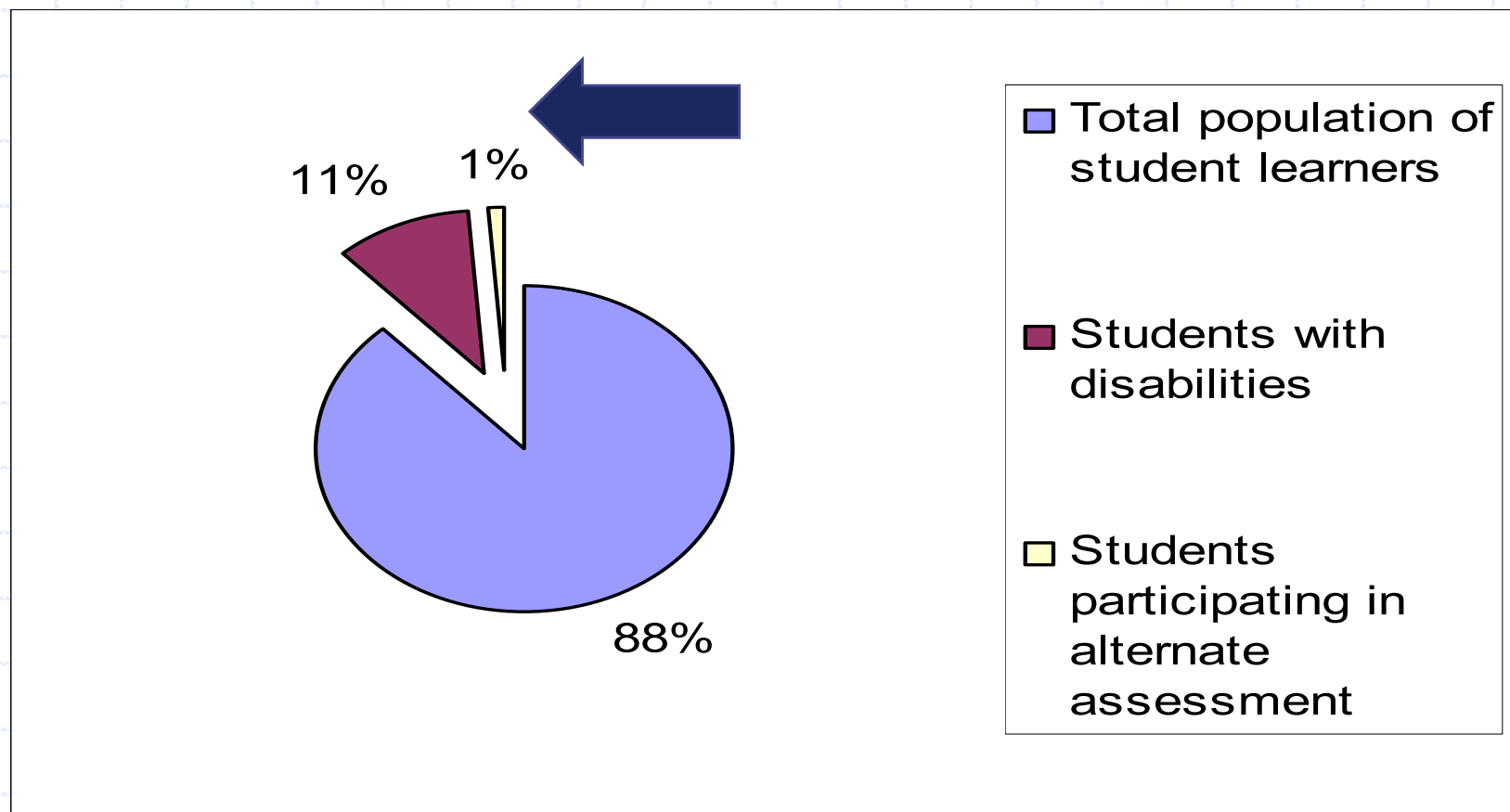


More different than alike.....

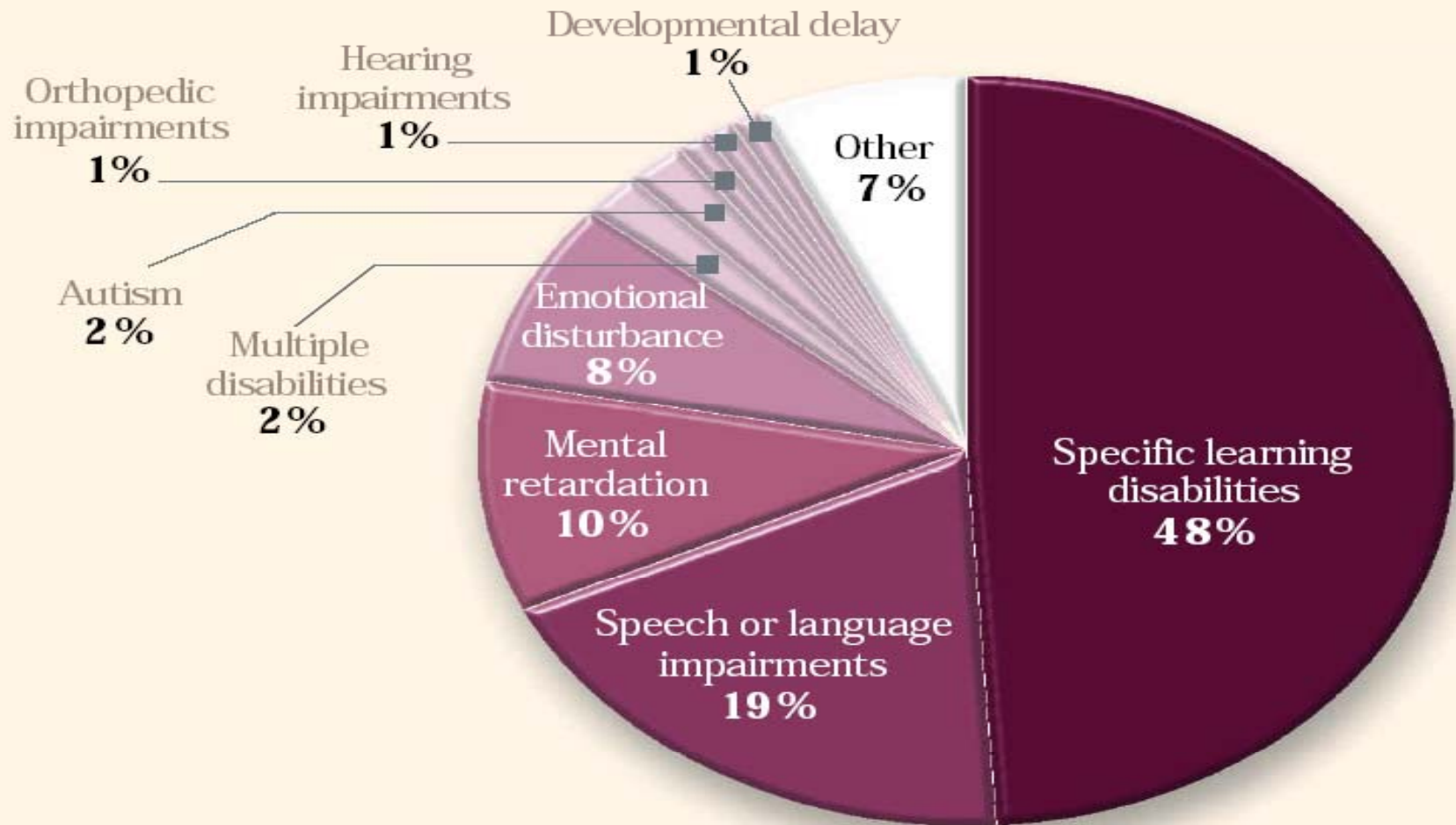


# More different than alike...

The number of students participating in alternate assessments as compared to the total population of student learners and students with disabilities...



# More different than alike....



SOURCE: *Education Week* analysis of data from the U.S. Department of Education, Office of Special Education Programs, Data Analysis System, 2002-03

# Students with Significant Cognitive Disabilities present problems with learning in these areas

- Attention to Stimuli
- Memory
- Generalization
- Self-Regulation
- Limited motor response repertoire
- Meta-cognition
- Skill Synthesis
- Sensory Deficits
- Special Health Care Needs

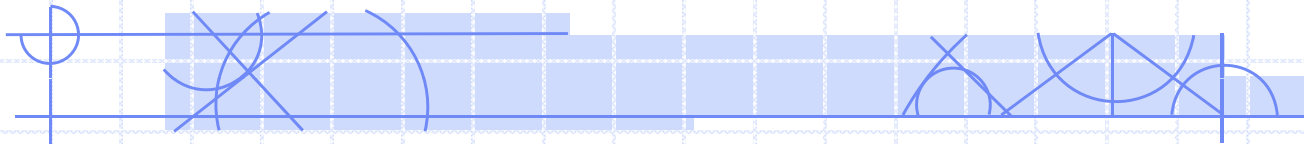
# Ways To Assess

- Vast majority of states in U. S. use:
  - A body of evidence or portfolio collected over time
- A small number of states use:
  - Teacher Checklists
  - On Demand Performance Tasks
  - IEP reviews

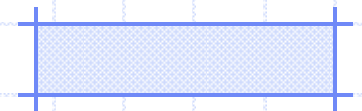
# Rubric Issues

- Level of complexity of student response
- Accuracy of student performance
- Independence
- Self-evaluation/determination
- Generalization of skills
- Student Measures Vs. Program Measures

# Part III: Theory of Learning



What students with Significant  
Cognitive Disabilities should know  
and be able to do.....



# Research on Academic Interventions-UNC-Charlotte

- Currently conducting comprehensive literature reviews on acquisition of academic skills by students with moderate and severe disabilities
- Have found 190 studies to date; 47 with students with severe cognitive disabilities
- There is emerging evidence that this population can acquire academic skills
- Limitation in types of academic skills addressed- mostly sight words and money

# Strongest research exists for...

- Teaching students with significant cognitive disabilities sight words using repeated trial instruction with systematic prompting with feedback
  - With errorless learning strategy like time delay



# We have not yet tried to teach this population to read....

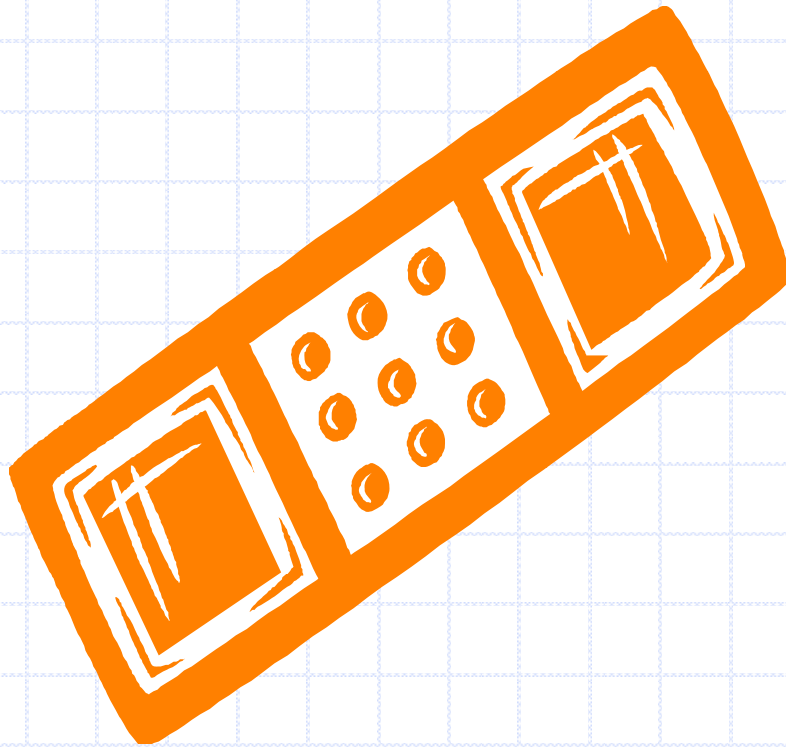
- Kliever, C., & Bilken, D. (2001). "School's not really a place for reading": A research synthesis of the literate lives of students with severe disabilities. *The Journal of The Association for Persons with Severe Handicaps*, 26, 1-12.
- Joseph, L. M., & Seery, M. E. (2004). Where is the phonics?: A review of the literature on the use of phonetic analysis with students with mental retardation. *Remedial and Special Education*, 25, 88-94.

# We Have Strongest Evidence for...

- Teaching students to use money in context of making a purchase
- Using systematic prompting and fading
- Task analysis of steps to make the purchase



# We have the most evidence for...



- Teaching science using real life activity
  - Specifically First Aid and Safety
- Using systematic prompting and fading

# Reasons for the problem

- Lack of literature defining academic outcomes for students with significant cognitive disabilities
- Variety of curricular philosophies in place across states.

# Changing Curricular Context for Students with Significant Disabilities

- **Early 1970s**
  - Adapting infant/ early childhood curriculum for students with significant disabilities of all ages
- **1980s**
  - Rejected “developmental model”
  - Functional, life skills curriculum emerged
- **1990s**
  - Also: social inclusion focus
  - Also: self-determination focus
  - Intro of assistive technology
- **2000**
  - General curriculum access (academic content)
  - Plus earlier priorities (functional, social, self determination)

# Historical Look-- Developmental Curriculum (1970s)

- What it looked like...
  - Visually track object
  - Find partially hidden object (object permanence)
  - Put peg in pegboard
  - Wash hands and use the toilet
  - Motor imitation (“Pat your head”)
- Why rejected...
  - Not chronologically age appropriate
  - Not functional (i.e., did not promote skills of daily living)
  - Readiness- never ready
  - Students did not follow the developmental sequence
  - “Criterion of ultimate functioning” in community
  - “Least dangerous assumption”-teach what student needs for life

# Community-Referenced Instruction Era (1980-1990)

- First opportunity for adults with severe disabilities to live and work in the community
- Curriculum based on what is needed to live and work in the community
- “Ecological inventory” - assessed the environment to identify needed skills
- Chronologically age appropriate; also called “top down” curriculum
- Applied behavior analysis foundation for systematic instruction methods widely supported in research

# Functional, Community-Referenced Curriculum

- What it looks like-
  - Task analysis of 10 steps to place an order at Burger King
    - (Go to counter...place order...etc.)
  - Repeated trials of counting out \$5.00
  - Repeated trials of reading sight words "hamburger", "fries"
- Current status
  - Continues to be valued and promoted in texts in Severe Disabilities
  - Some criticize separate curriculum; atypical school experience
  - Most educators blend functional with academic

# Social Justice Perspective Influences Curriculum

- Inclusion in general education as a civil right
  - Neighborhood school, general education class, “belonging”/ full membership
  - Activities to promote social inclusion/ teach social interaction
- Self determination
  - Emphasis on student making own choices; person-centered planning
- Provide support for inclusion versus expecting student to earn inclusion by learning “prerequisite” skills

# Inclusion/ Self Determination Added to Functional Curriculum

- What it looks like
  - Choose restaurant; choose order
  - Greet peer in English class
  - Self instruction to perform job task
  - Pass item to peer in cooperative learning activity
- Current status
  - Some states' alternate assessments include quality indicators related to inclusion, self determination factored into student score
  - General curriculum access as a "right"; versus earning it with progression of skills

# General Curriculum Access

- Not just access to general education settings; but access to CONTENT and expectation for learning
  - Even students in separate settings have this expectation per IDEA and NCLB
- Assessing progress on state standards
- Teaching grade level academic content with expectation for alternate achievement

# General Curriculum Access

- What it looks like...
  - Same/ similar materials and activities as peers in general education
  - Indicate comprehension of main idea of story by selecting picture
  - Use technology to solve math problem; chart data
  - Emerging case studies
- Current status...
  - New for most educators; including experts in the field
  - Many students receiving academic instruction for the first time
  - Some educators worry about loss of focus on functional curriculum; see it as either/or

# What Is New in Current Curricular Context....

- All students having the opportunity to learn academic content
- Sequential versus catalog approach to curriculum
- Less complex performances of grade level achievement standards
  - But high expectations are creating success stories

# "Active Participation"



Cheap  
Talk 4  
(Enabling  
Devices)



DynaVox 3100



Step By Step  
Communicator,  
Abel Net

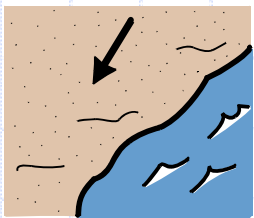
***Communication devices must provide a means of active participation within the curriculum***



Picture Exchange  
Communication System, PECS  
(Pyramid Educational  
Consultants)

# "Active Participation" - reading with...

  
Look carefully at the insect



.. graphics/symbols  
(Writing with Symbols  
2000, Widgit)



.. objects

.. a communication aid  
(Step-by-Step, AbelNet)



.. tactile cues

# "Active Participation" - writing with...

..word prediction  
(Read and Write Gold, textHELP)

**Word prediction**

1	at
2	sail
3	the
4	to
5	what
6	
7	
8	
9	
10	

Speak  
Spell Aloud

Speak When Clicked  
✓ Type When Clicked

Font Size ▶  
✓ Type a space after the word.



Polar Bears can be found in all of the polar regions of the entire northern hemisphere.

adult Polar Bears stand approximately 3 1/2 feet tall when on all fours and have an approximate body length from nose to tail of 8 feet to 11 1/2 feet. However some Polar Bears have been captured measuring up to 19 feet tall, so they can grow to be quite tall, given the proper diet.

Most Scientists believe that the Polar Bear evolved about 200,000 years ago from brown bear ancestors.

There are many different type of Polar Bears, about 6-7, depending on who you ask.

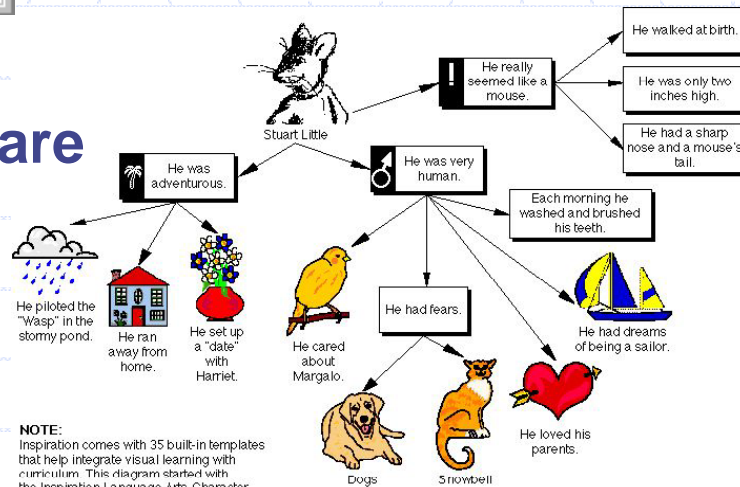
Our report is on Polar Bears.

.. a custom overlay and adaptive keyboard  
(Overlay Maker, IntelliTools)



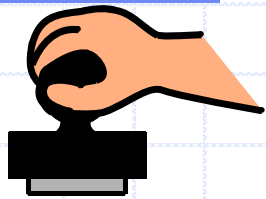
A portable keyboard  
(AlphaSmart)

..webbing software  
(Inspiration)



**NOTE:**  
Inspiration comes with 35 built-in templates that help integrate visual learning with curriculum. This diagram started with the Inspiration Language Arts-Character template. Try editing it and the other templates found under the Inspiration File menu to meet the needs of your classroom.

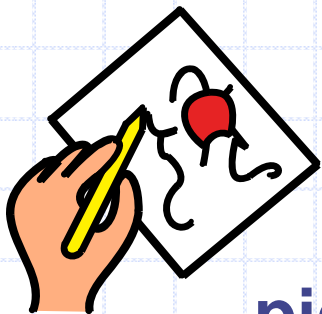
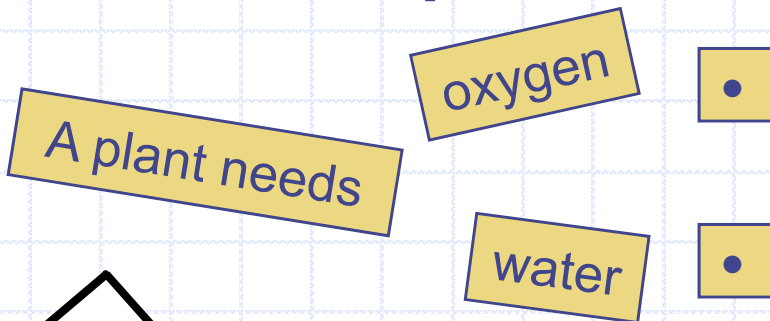
# "Active Participation" - write with



.. word stamps

.. individual laminated symbols  
secured with Velcro  
(Boardmaker, Meyer-Johnson)

.. sentence strips in science



.. pictures – drawn, magazine



The plant needs sunlight.

# Testimony

- Teacher : “I used to pride myself on being a good caregiver. Alternate assessment taught me to be a good teacher.”
- Parent: “I first thought testing these kids was crazy. All I wanted was for the school to keep my child safe, warm, and nourished. Thanks to alternate assessment, we learned my child could learn, can communicate, and make choices.”

# Alternate Assessment: Teacher and State Stories

- [http://www.ihdi.uky.edu/msrrc/PDF/Alt\\_Assm\\_stories\\_handout.pdf](http://www.ihdi.uky.edu/msrrc/PDF/Alt_Assm_stories_handout.pdf)
- **Alternate Assessment: Teacher and State Stories.** A collection of stories from teachers and state level staff who have experienced alternate assessment and seen improvements in both the education system and lives of individuals with the most significant cognitive impairments. The stories can be helpful in development, training and policy-setting activities, especially when there are concerns about the costs and time involved in alternate assessment.

# Quotes from state stories

- He is doing things I didn't realize he could.
- All students are academic students.
- Now I look at the possibilities instead of the limitations.
- My attitude was denying her the opportunity to succeed.
- I am important enough for them to know what I can do.
- Before alternate assessment, we sat at the back of the regular education classroom on the special education rug!
- Think differently. Push the limit!

# References

- CAST, 2002.
- Kleinert, H. K. & Thurlow, M. (2001). An introduction to alternate assessment. **Alternate Assessments Measuring Outcomes and Supports**. Baltimore: Paul Brookes.
- Pellegrino, Chudowsky, Glaser( 2001) *Knowing what students know*. National Research Council: National Academy Press.
- USDOE (2004) : **Standards and Assessments Peer Review Guidance**. Washington, D.C.: OESE