



NATIONAL ALTERNATE ASSESSMENT CENTER

# Step 5: Changing Curricular Context for Students with the Most Significant Disabilities

## Articulating the population

The National Alternate Assessment Center is supported through a cooperative agreement through the US Department of Education, Office of Special Education Programs (Grant Number H324U04001). However, the contents of this presentation do not necessarily represent the positions or policies of the Office of Special Education or the US Department of Education, and participants should not assume endorsement by the federal government.

# History of Curricula for Special Education

- *Developmental: looks at sequential steps defined for typically developing children and takes students step by step through exactly the same sequence*
- *Functional: looks at future environments in which a student must function and work on skills necessary for success in those environments*
- *Social Inclusion: looks at the skills necessary for students to participate in learning and social activities with their age appropriate peers and focuses on participation in those activities*
- *General Curriculum Access: looks at elements of grade level appropriate, general education curriculum and focuses on learning that content*

# Pros and Cons

- Discuss each curriculum and identify some of the good and not-so-good qualities.



# Kentucky Content Validity Study

- Experts in Severe Disabilities noted a high degree of professional congruence on the core of best practices.
  - Experts questioned:
    - if the 'critical functions' of the standards aimed high enough
    - if these adapted ways of achieving the standards captured the meaning or intent of the standards
    - whether a 'functional' application for each academic expectation should even be offered, given the tendency to establish separate curricular models for students with significant cognitive disabilities
- (Kleinert and Kearns, 1999)

# Research on Academic Interventions

- Reading
- Math



Browder, D.M., Wakeman, S., Spooner, F., Ahlgrim-Delzell, L., & Algozzine, B (manuscript submitted for publication). Research on reading for students with significant cognitive disabilities. *Exceptional Children*.

# How Literature Was Identified

- A total of 362 terms or combinations of terms were used to define the research base.
- Both electronic and print resources were used.
- The table of contents in current refereed journals were manually searched.

# How Literature Was Organized

- National Reading Panel (Components of Reading)
- National Council of Teachers of Mathematics Education (Content Standards)
- National Research Council (National Science Education Standards recommended strands for science)

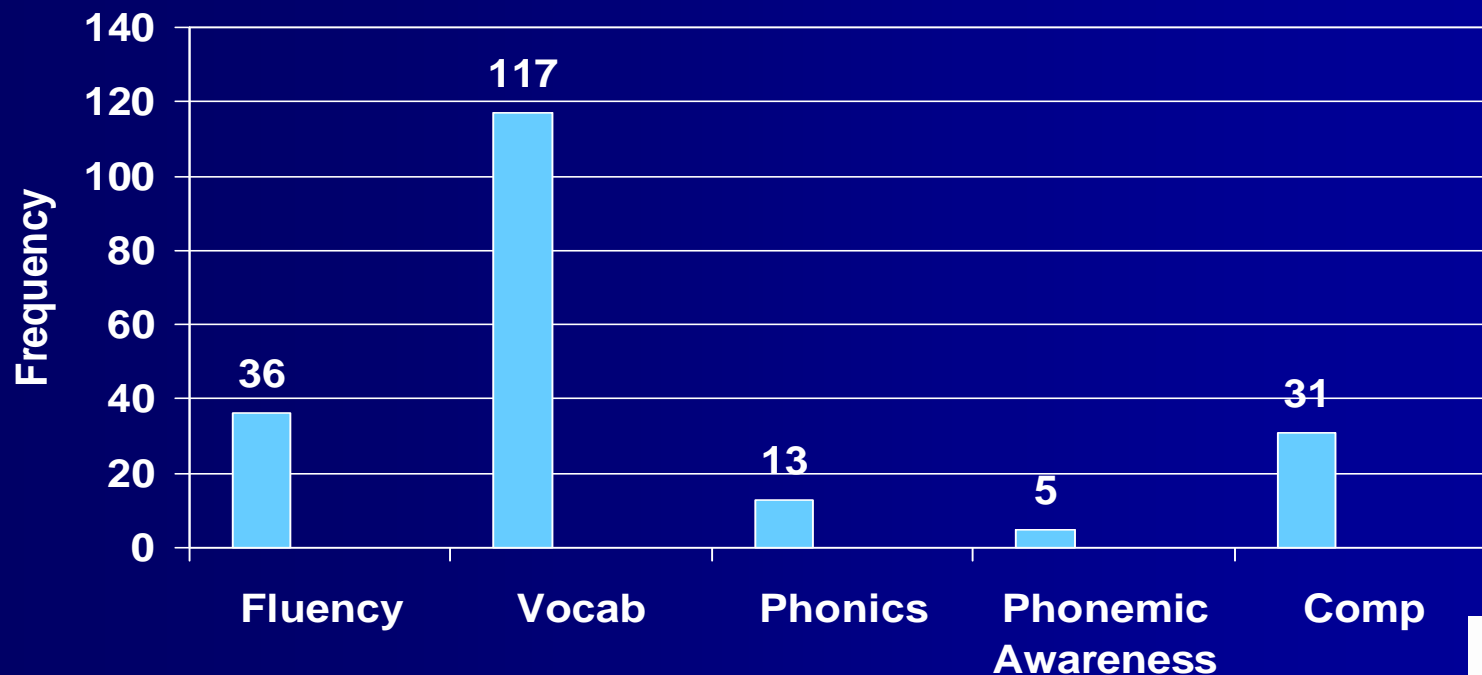
# Review of Reading

- 128 studies found within 119 articles
- Disabilities
  - N=617 moderate MR
  - N=124 severe MR
  - N= 60 autism
  - N=114 other terms (e.g., severe developmental disability)
  - N=204 other disabilities
- Age
  - Most elementary age
  - Rest were younger adolescents or high school transition
  - Older studies may not have specified age (used mental age)
- Setting
  - Most in self contained special education classrooms or research settings
  - A few in general education classrooms (N=14)



# Literature Review Categories for Reading

Literature Review Categories for Reading  
128 experiments (119 articles)



## Components of Reading

Assessing Students with the Most Significant  
Cognitive Disabilities

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# Strongest research exists for...

- Teaching students with the most 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....

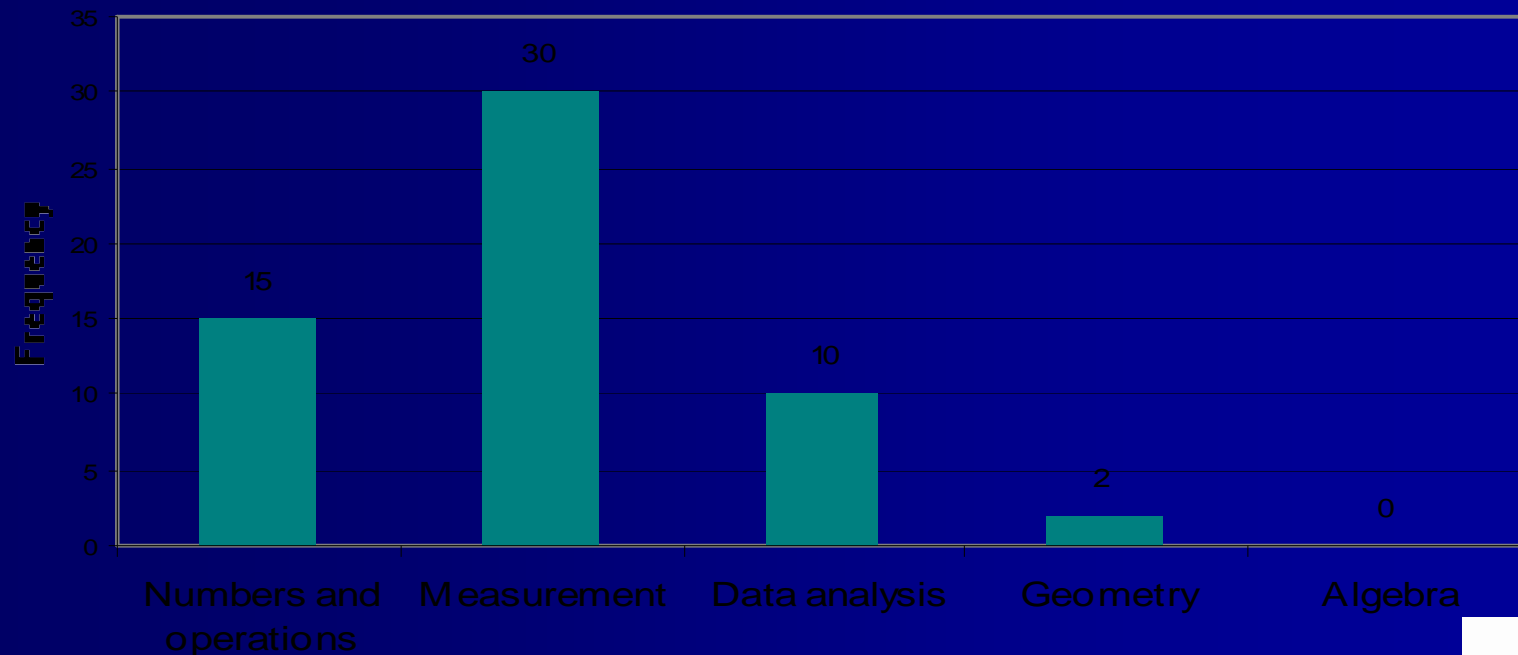
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# Review of Mathematics

- N= 55 experiments in 53 articles
- Disabilities
  - 47 experiments studied students with moderate MR
  - 16 experiments studied students with severe MR
  - 5 experiments studied students with autism
  - 1 experiments studied students with other disabilities
- Age
  - Most studies included participants ranging from elementary to high school
  - 13 articles also included adult participants
- Setting
  - 51% of the experiments took place in the special education classroom
  - 33% of the experiments took place in the community setting

# Literature Review Categories for Mathematics

## Literature Review Categories for Math 55 experiments (53 articles)



### Components for Math

\* categories are not mutually exclusive  
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# 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 Know The Least About Teaching This Population...

- Geometry and spatial sense
- Algebra, including patterns and sequences

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Assessing Students with the Most Significant  
Cognitive Disabilities

# Reasons for the problem

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





# Checkpoint

- Does your alternate assessment on alternate achievement standards include:
  - Clear assessment content targets based on a theory of learning for the intended population in the content domains of reading and mathematics?
- Let's revisit our needs assessment to be sure we have addressed everyone's questions.

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