



History of Curriculum: Where We Are Today

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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.



Developmental (1970's)

- Innovative and showed that students with disabilities could learn
- Didn't work for students as they got older

Functional (1980's)

- Made sense
- Student success
- "Push down" effect
- Activities vs. skills
- Limits on expectations

Social Inclusion (1990's)

- Communication and social skills could flourish
- Realized that classroom routines had functional opportunities
- Academic skills were functional

Access to the General Curriculum (2000's)

- Realizes that students could learn content
- Increased knowledge and development of technology offers increased access
- Does not limit expectations
- Addresses standards based curriculum (sequential vs. catalog approach to curriculum)

Important Learning from Each Evolutionary Period

- Activities and materials must be chronologically age appropriate while understanding the emerging development of each student
- Functional skills remain a high priority, but must be taught in the context of general curriculum/activities
- Social relationships are important but are developed around a shared culture

Videoclips

Riannah's Science Probe

Videoclips

Riannah's Self Evaluation

Videoclips

Riannah's Terrarium

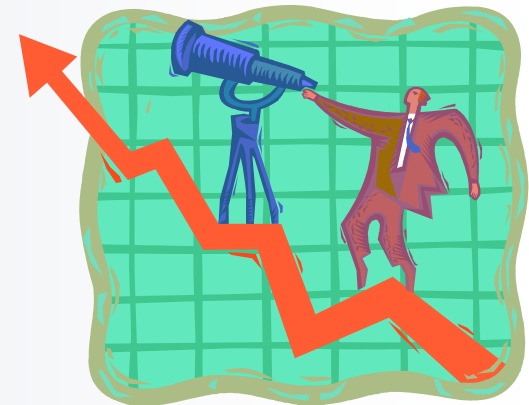
What Did You See?

- Items from other curricula
- Presentation of content
- Supports (assistive technology, etc.)
- Expectations
- Performance



Standards Based Curriculum

- New for all education
 - Curriculum became focused on a goal
- Links to real-life situations
 - Authentic learning
 - High expectations



Research on Academic Interventions

Browder, D.M., Wakeman, S., Spooner, F., Ahlgrim-Dezell, L., & Algozzine, B (in press). Research on reading for individuals with significant cognitive disabilities. *Exceptional Children*.

- Reading
- Math
- Science



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

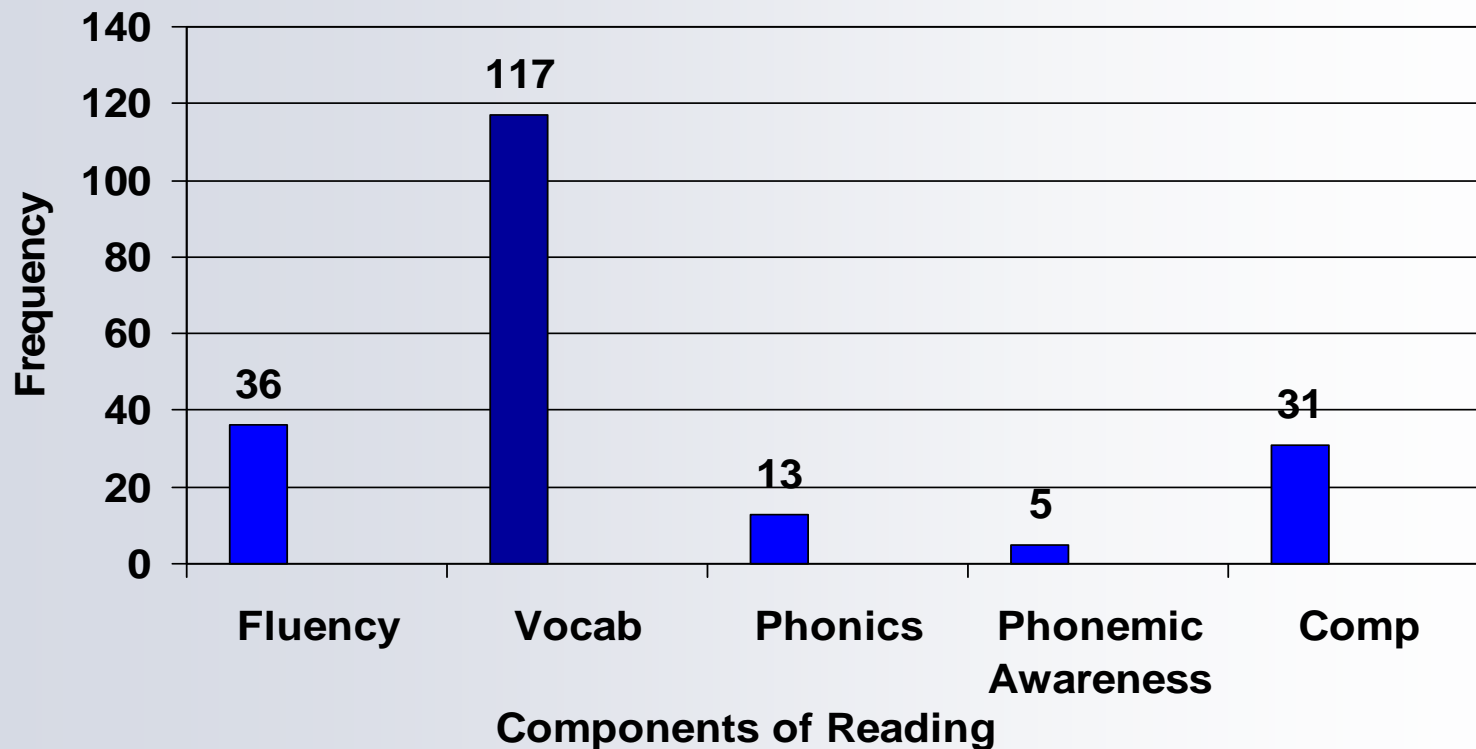
- National Reading Panel (Components of Reading)
- National Council of Teachers of Mathematics Education (Content Standards)
- National Research Council (National Science Education Standards recommended strands for science)

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)



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....

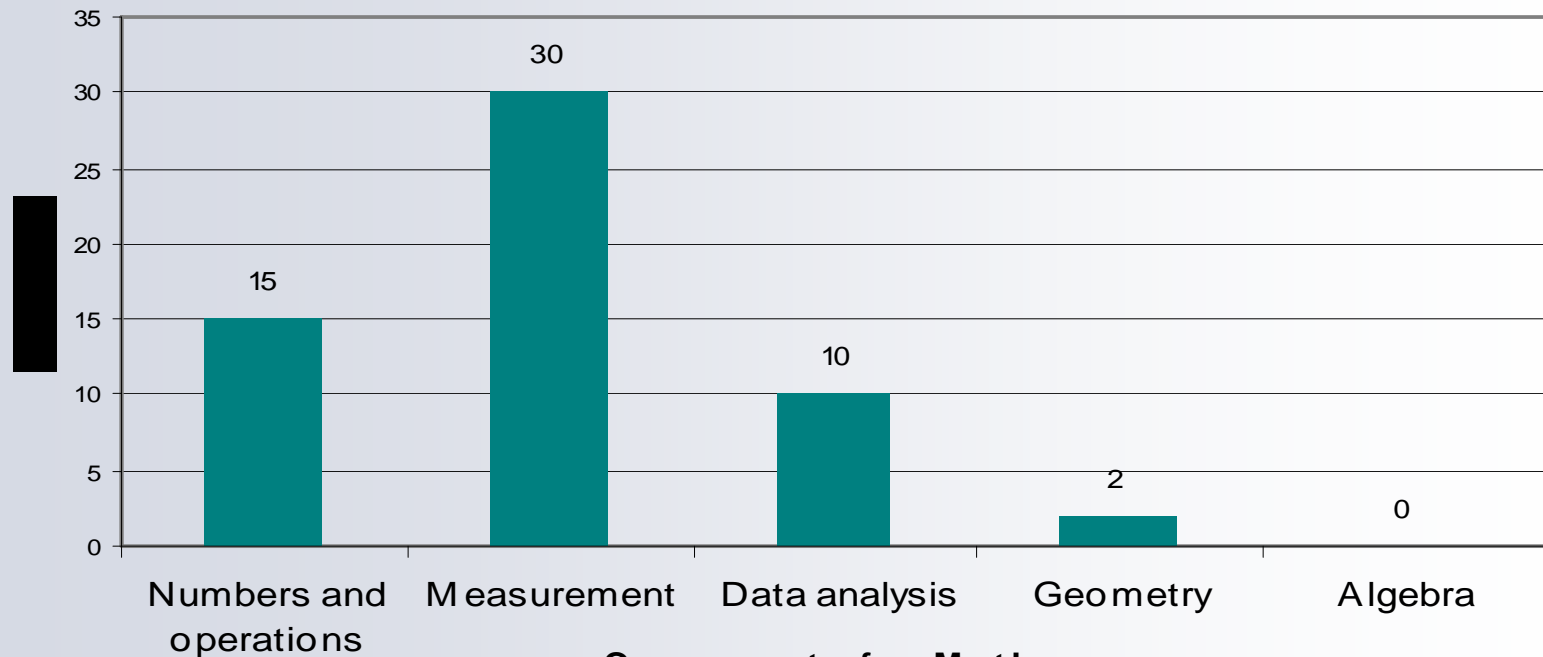
- Kliever, C., & Biklen, D. (2001). "School's not really a place for reading": A research synthesis of the literate lives of students with severe disabilities. *The Journal of The Association for Persons with Severe Handicaps*, 26, 1-12.
- Joseph, L. M., & Seery, M. E. (2004). Where is the phonics?: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

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

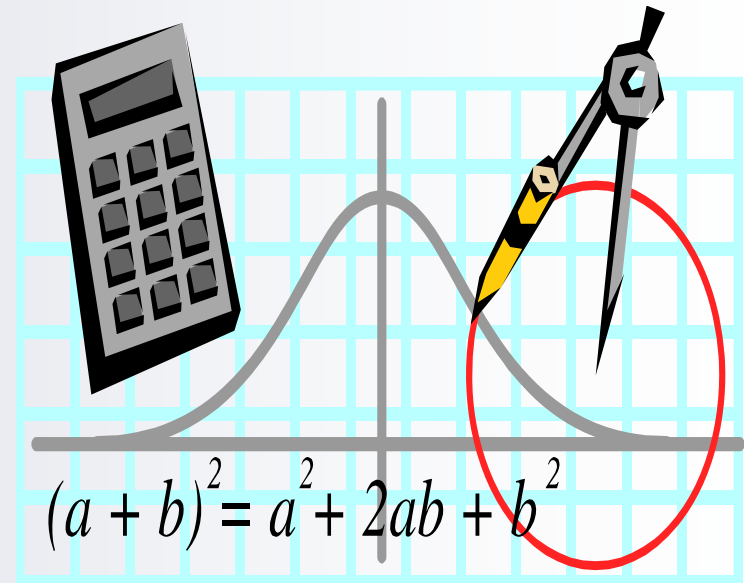
We Have Strongest Evidence for...

- 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

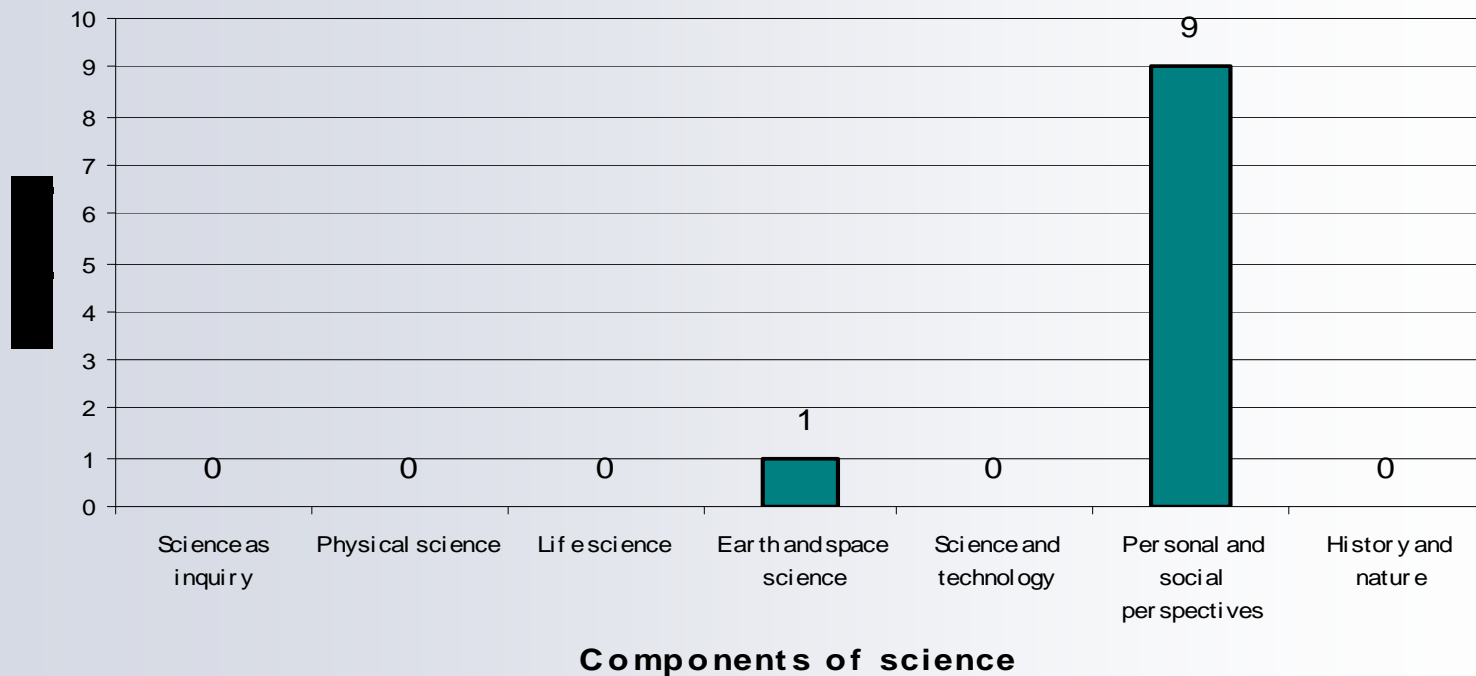


Review of Science

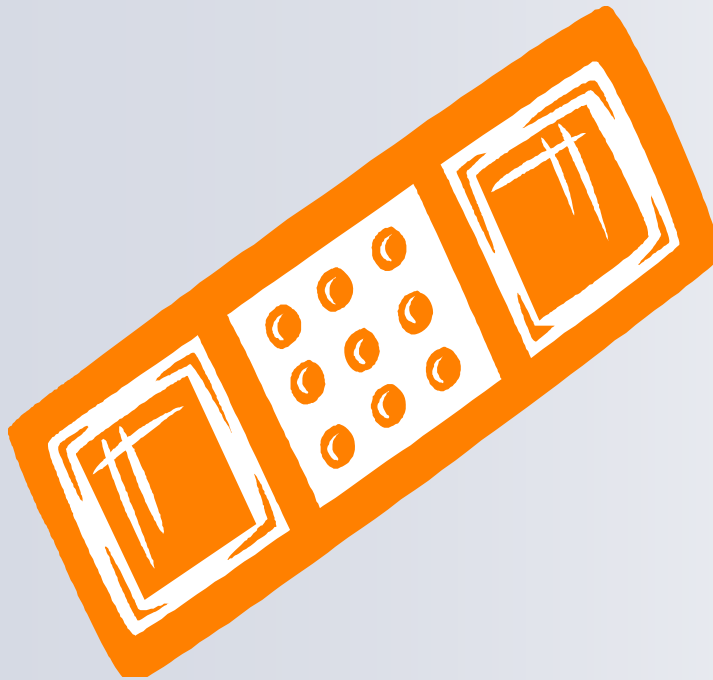
- Least frequently addressed area
- Only found 10 studies; all single subject
- Total N=42 participants
- All in separate special education contexts; one in a summer program
- Nearly all were Science for Personal and Social Perspective (First aid and safety research)

Literature Review Categories for Science

Literature Review for Science
10 articles, 10 studies



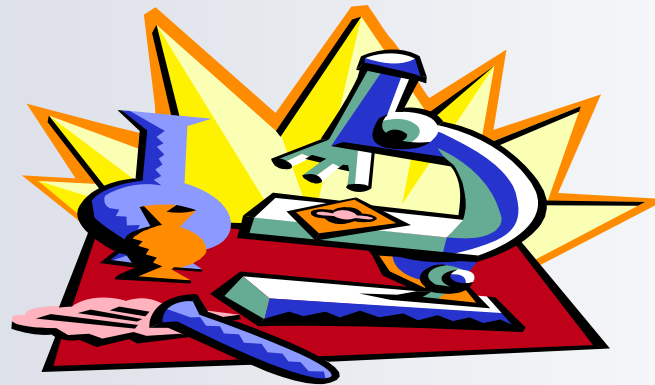
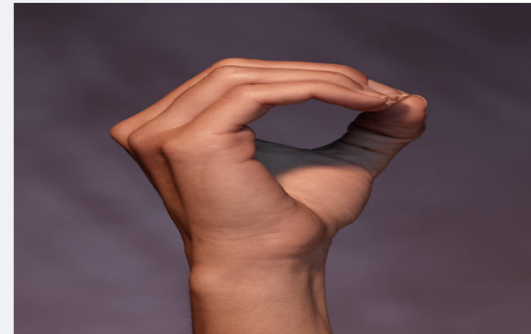
We have the most evidence for...



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

What we have the least of...

- Not a great deal for any category of science



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

Continued Learning

- Continue to refine our perceptions of curriculum to ensure success in current and future environments
- Access to formal and informal curriculum
- Functional skills have not been sacrificed

