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# **Education for Students with Reading/Learning Disabilities: What Makes it ‘Special’**

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## CENTER ON INSTRUCTION

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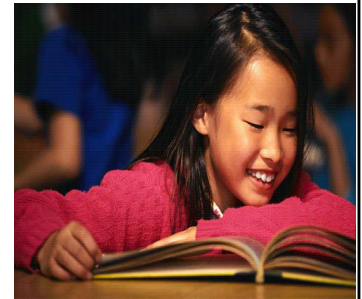
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# Education for Students with Reading/Learning Disabilities: What Makes it 'Special'

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# What is Special about Treatment for Students with LD?



- Neurological disorder models
- Modality-matched instruction
- Multi-Sensory teaching
- Academic Instruction

# Neurological Disorder Models



- Underlying process disability
  - Learning problems linked to underlying processes interfering with effective learning
- Intra-individual differences (Kirk & Kirk, 1971)
  - Identify individual student psycholinguistic strengths and weaknesses and design educational treatment plan accordingly
  - Students with LD require unique instructional practices beyond those used in general education

# Challenges of Neurological Disorder Models



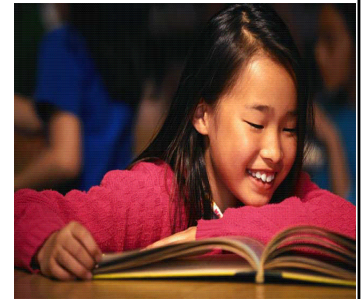
- Reliable identification and treatment of underlying deficits unsuccessful thus far
- Treatments not specific to learning difficulties
- Treatments not powerful enough to make discernable differences in academic learning (Hammill & Larsen, 1974, 1978; Kavale, 1981)
- Lack of measurement precision to identify process disorders and match appropriate treatments

# Challenges to Modality-Matched Approach



- Little empirical support for modality-matched instruction or learning styles for improving outcomes for students with LD (Arter & Jenkins, 1979; Kavale & Forness, 1987; Kavale, Hirshoren, & Forness, 1998; Larrivee, 1981)

# Multi-Sensory Approach



- Positive outcomes for individual cases  
(Fernald & Keller, 1921; Strauss & Lehtinen, 1947)
- Lack of compelling evidence that multi-sensory is a necessary instructional element for students with LD



# Academic Instruction



Effective instruction is:

- Closely related to area of instructional need (e.g., reading, spelling, math)
- Well-specified
- Explicit
- Carefully designed

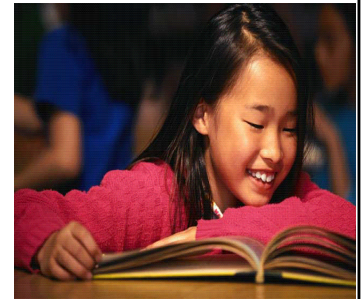
# What is Special about Academic Instruction?



Specialized academic instruction for students with LD is:

- More explicit, more intensive, more supportive (Torgesen, 1996)
- Individualized, validated (Fuchs, 1996)

# Increasing Intensity of Instruction



- Teacher-student ratio
  - Lower ratios increase interactions, individualization, on-task behavior, monitoring and feedback (Elbaum, et al., 2000; Thurlow et al., 1993)
  - Optimal group size unknown, but instruction provided in small groups enhances student outcomes over whole class instruction

# Summary



- Initially, neurological disorder models and psycholinguistic training
- Recently, more emphasis on interventions corresponding to academic needs of student
  - Considerable overall effects on instructional outcomes for students with LD
  - Still more to learn - students who have not successfully responded to treatments

# Levels of Intervention in Public Health Model



- Primary Intervention
  - Implemented to avoid or prevent occurrence of illness/injury by preventing exposure to risk factors
- Secondary Intervention
  - Implemented to minimize severity of illness/injury once risk or illness is identified
- Tertiary Intervention
  - Implemented to minimize disability by providing medical care and rehabilitation services

(Schneider, 2000)

# Public Health Model Applied to Education



## Multi-tiered Instruction

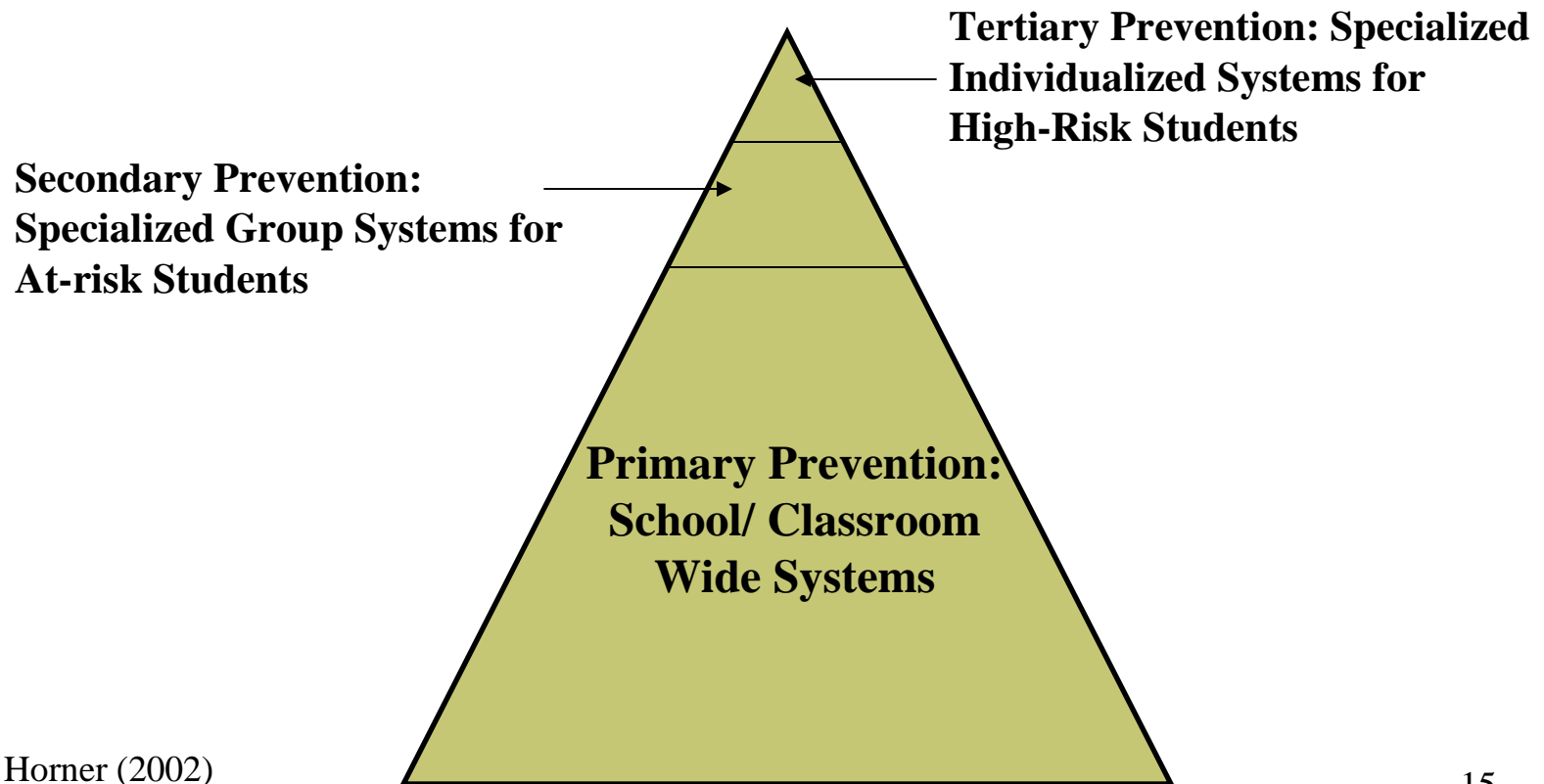
- Incorporates prevention and intervention
- Includes ongoing screening and progress monitoring to identify student needs for designing instruction and assess effectiveness of interventions
- Implement effective practices class-wide in general education (primary intervention)
- Provide successive levels of support to students as needed (secondary/tertiary intervention)

(Dickson & Bursuck, 1999; O'Connor, 2000)

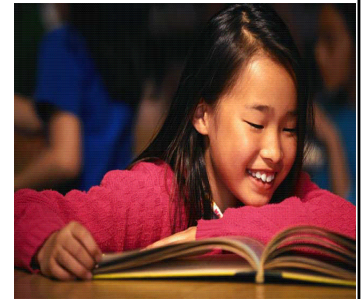
# Example: School-wide Positive Behavior Support



## 3-Levels of Behavior Support



# Why are leveled or tiered models used for academic interventions?



- Allow for use of a range of programs
- Allow for integration of services (e.g., Title I, general education, special education)
- Allow for practices related to Response to Intervention



# What is Response to Intervention?



- RTI as an approach to LD identification was proposed in a National Research Council report (Heller, Holtzman, & Messick, 1982)
  - Recently supported by national organization on LD groups including IRA, NASP, DLD
  - NASDSE defined RTI as “the practice of (1) providing high quality instruction/intervention matched to students needs and (2) using learning rate over time and level of performance to (3) make important educational decisions (2005, p.5)
  - NASDE recommends a multi-tier system across educational system

# National Joint Committee on LD Report on RTI



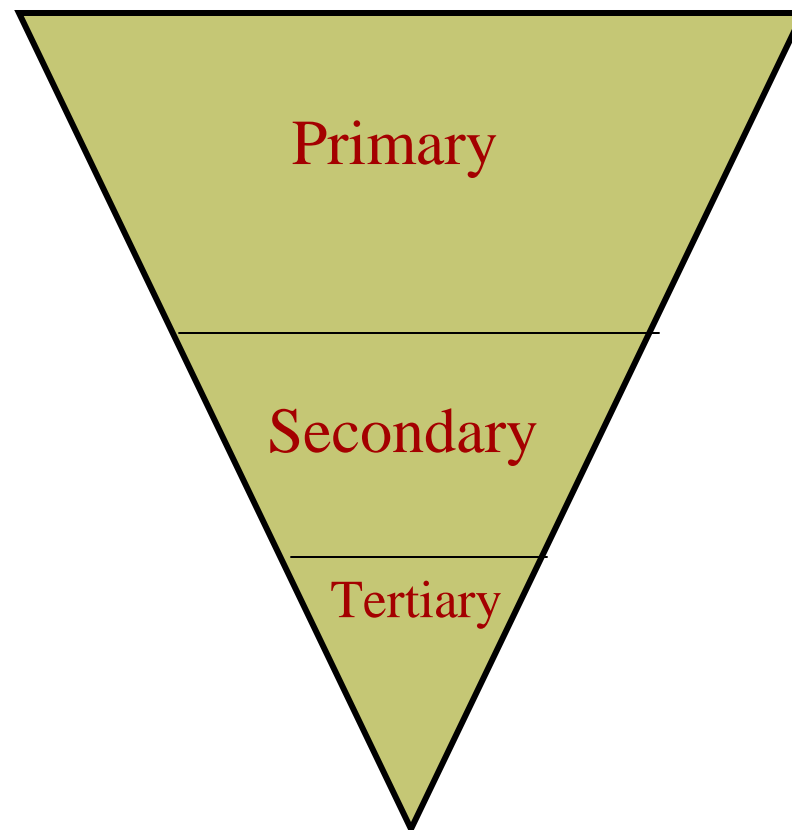
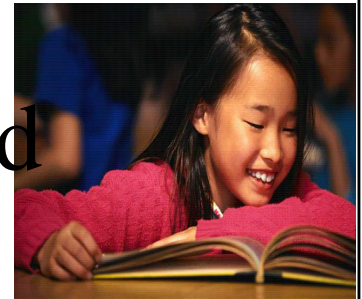
## Use of 3-tiered model

Tier 1: High quality instructional and behavioral supports

Tier 2: Specialized intervention for students behind peers

Tier 3: Comprehensive evaluation and specialized services with intensive intervention

# A Model for Primary, Secondary, and Tertiary Intervention (cont'd)

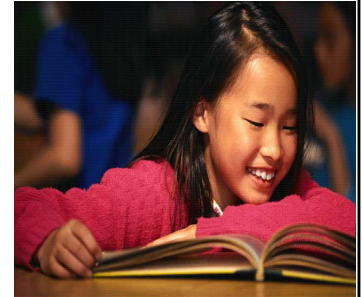


# Primary: Core Class Instruction



<b>Focus</b>	For all students
<b>Program</b>	Scientific-based reading instruction and curriculum emphasizing the five critical elements of beginning reading
<b>Grouping</b>	Flexible grouping
<b>Time</b>	90 minutes or more per day
<b>Assessment</b>	Screening assessment at beginning, middle, and end of the academic year
<b>Interventionist</b>	General education teacher
<b>Setting</b>	General education classroom

# Secondary: Intervention



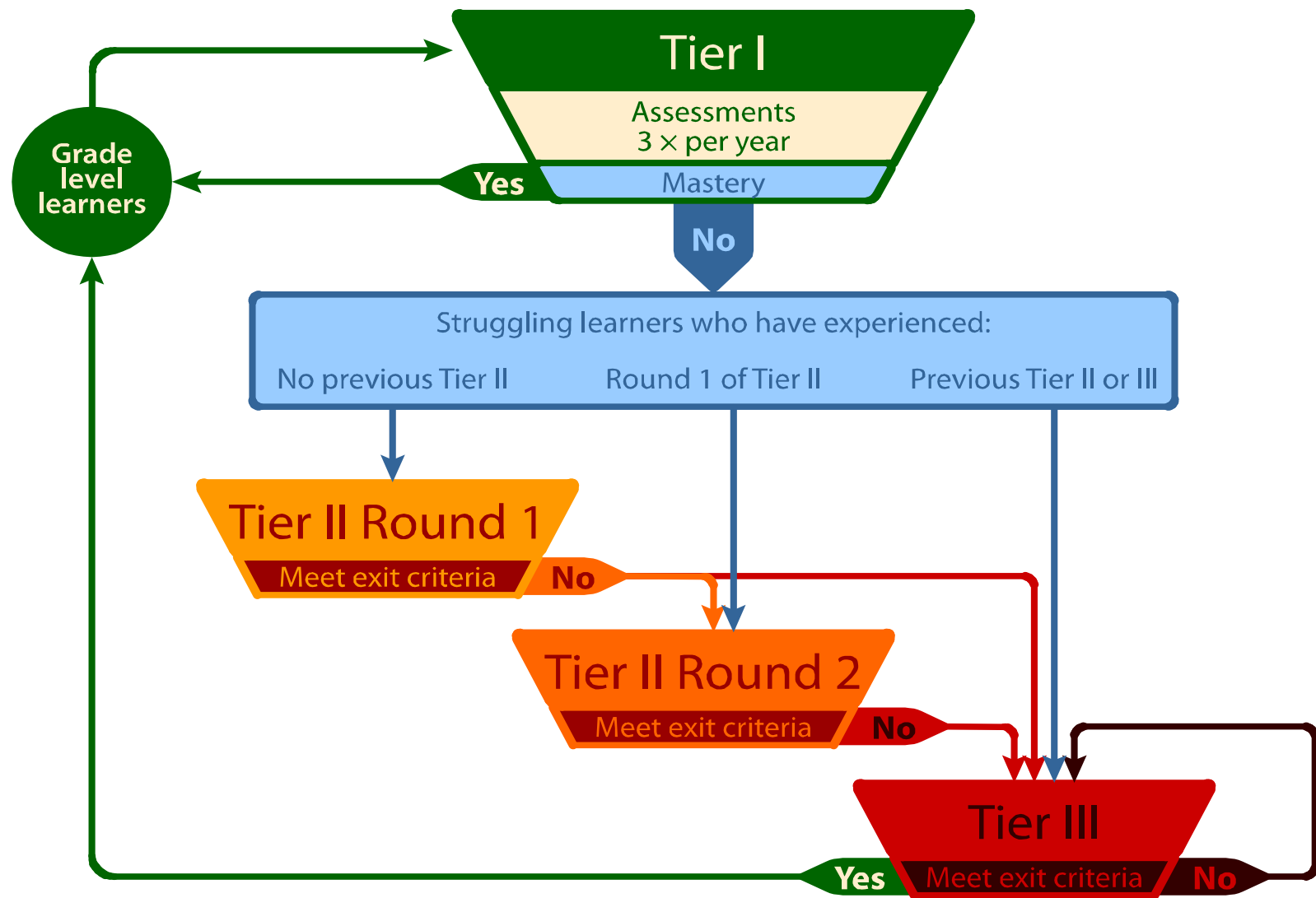
<b>Focus</b>	For students identified as at-risk for reading difficulties, and who have not responded to Primary Intervention efforts
<b>Program</b>	Specialized, research-based interventions
<b>Grouping</b>	Homogeneous small group or one-on-one instruction
<b>Time</b>	15-30 minutes per day in addition to 90 minutes of core reading instruction
<b>Assessment</b>	Progress monitoring twice a month on target skill(s) To ensure adequate progress and learning
<b>Interventionist</b>	Personnel determined by the school (e.g., classroom teacher, a specialized reading teacher, an external interventionist)
<b>Setting</b>	Appropriate setting designated by the school

# Tertiary: Intensive Intervention



<b>Focus</b>	For students with marked difficulties in reading or reading disabilities and who have not responded adequately to Primary and Secondary efforts
<b>Program</b>	Sustained, intensive, scientifically based instruction
<b>Grouping</b>	Homogeneous small group or one-on-one instruction
<b>Time</b>	45-minutes or longer sessions per day tailored to students' individual needs
<b>Assessment</b>	Progress monitoring twice a month on target skill to ensure adequate progress and learning
<b>Interventionist</b>	Personnel determined by the school (e.g., a classroom teacher, a specialized reading teacher, an external interventionist)
<b>Setting</b>	Appropriate setting designated by the school

# Movement Through the Tiers



# Advantages of Multi-tiered Approaches



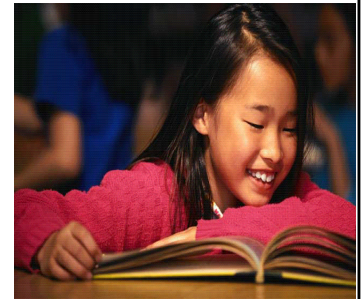
- Serves students who require little intervention as well as students who require long term intervention
- Informs instructional needs for special education decisions
- Matches level of support to student need
- Allows for exit from special education when appropriate based on ongoing measurement of progress and response to intervention



# What Is Special about Special Education for Students with LD?



- Delivery of instruction
  - Though students should have access to the same content as non-disabled peers, general education instruction alone will rarely meet needs
  - Instruction that is explicit and systematic and closely related to area of instructional need is most effective
  - Amount and Type of instruction needed to “close the gap”?



“Whereas many typically achieving students can make up for lost time, learn well independently, and make up for mistakes made by educators, special education students cannot. The influence of research and evidence on decision making has even greater value for those students with disabilities who most require precision in their instructional and behavioral plans.” (Vaughn & Dammann, 2001, p.27)