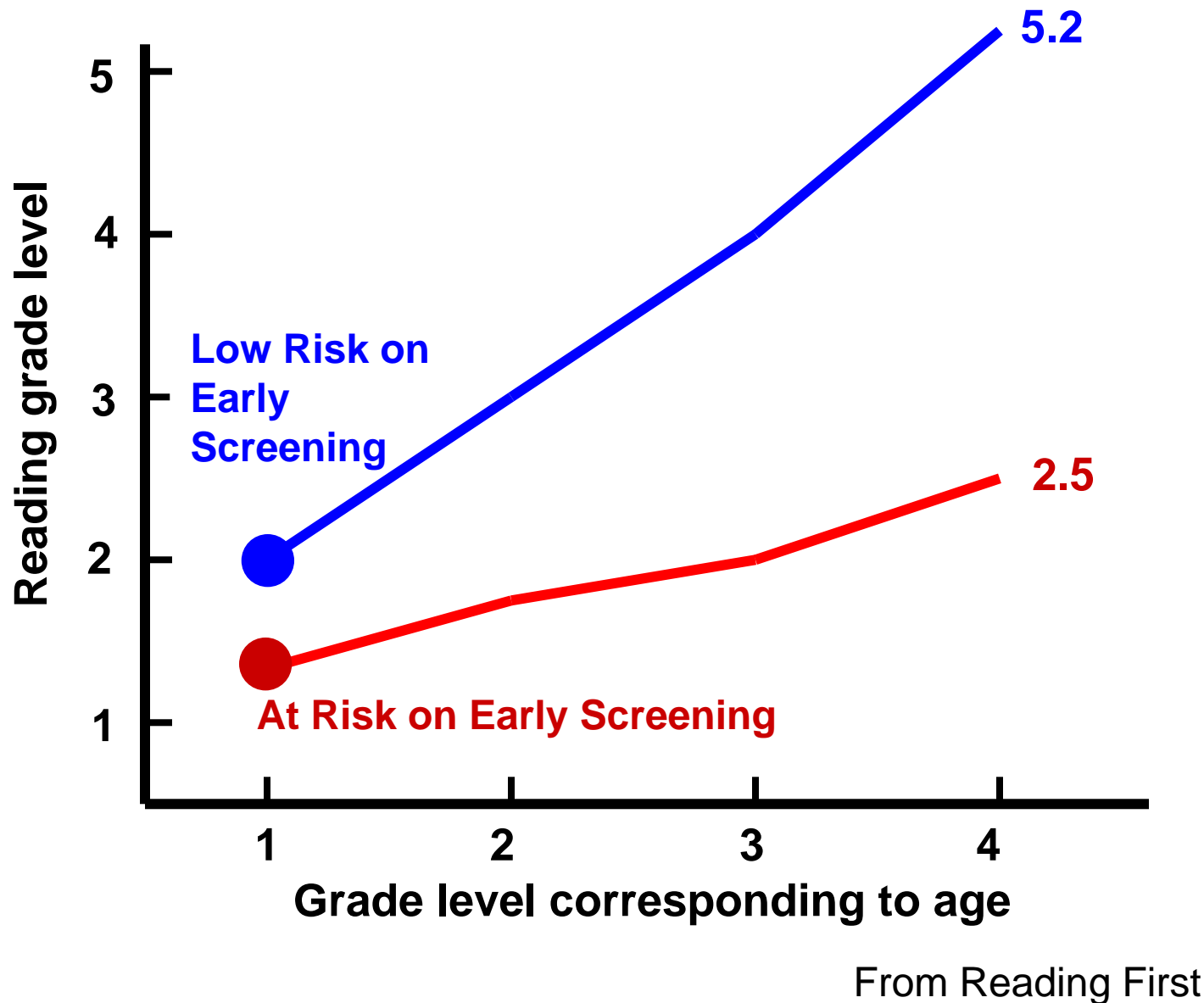


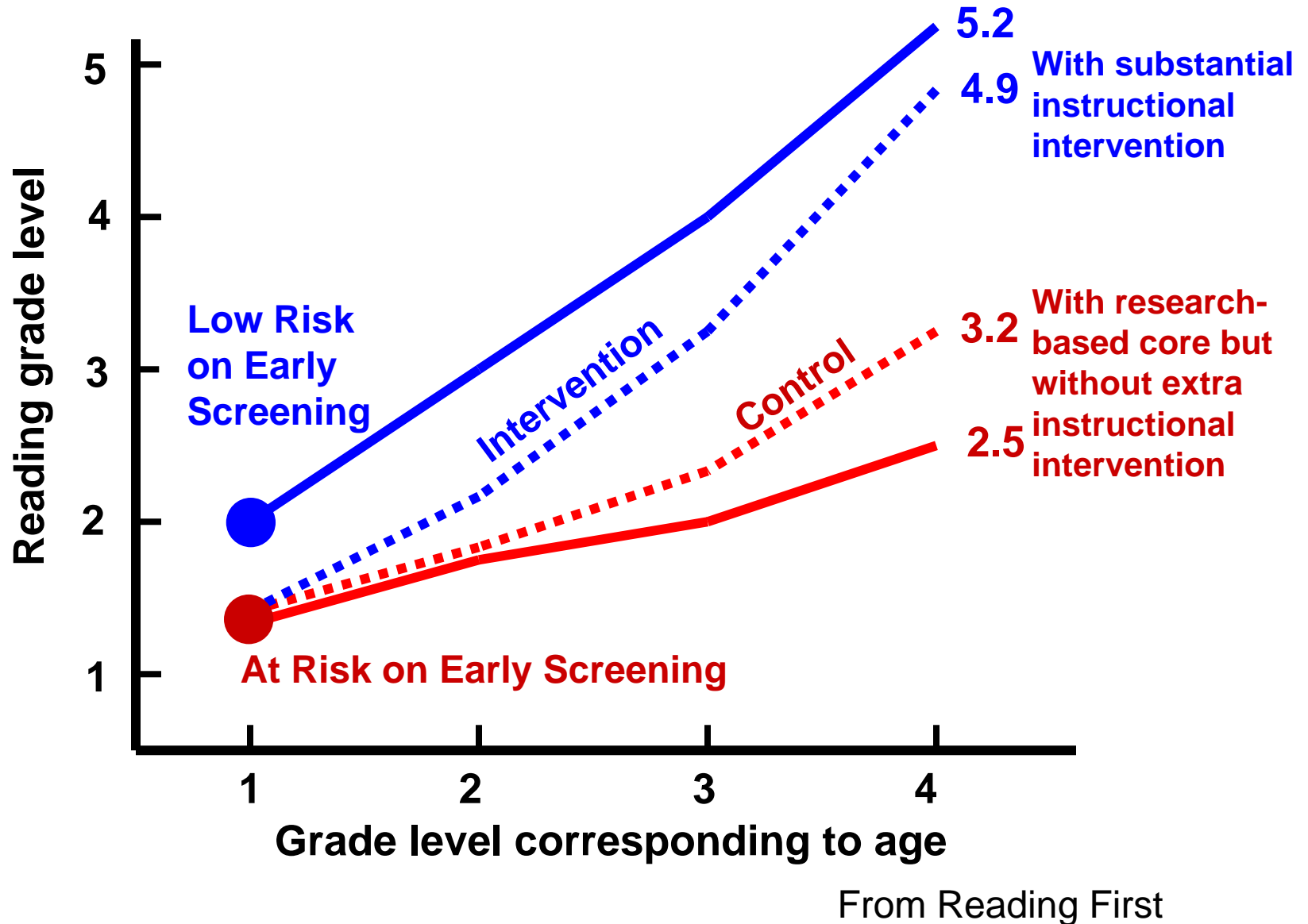
# Technically Adequate Rtl Implementation

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# Early Screening Identifies Children At Risk of Reading Difficulty



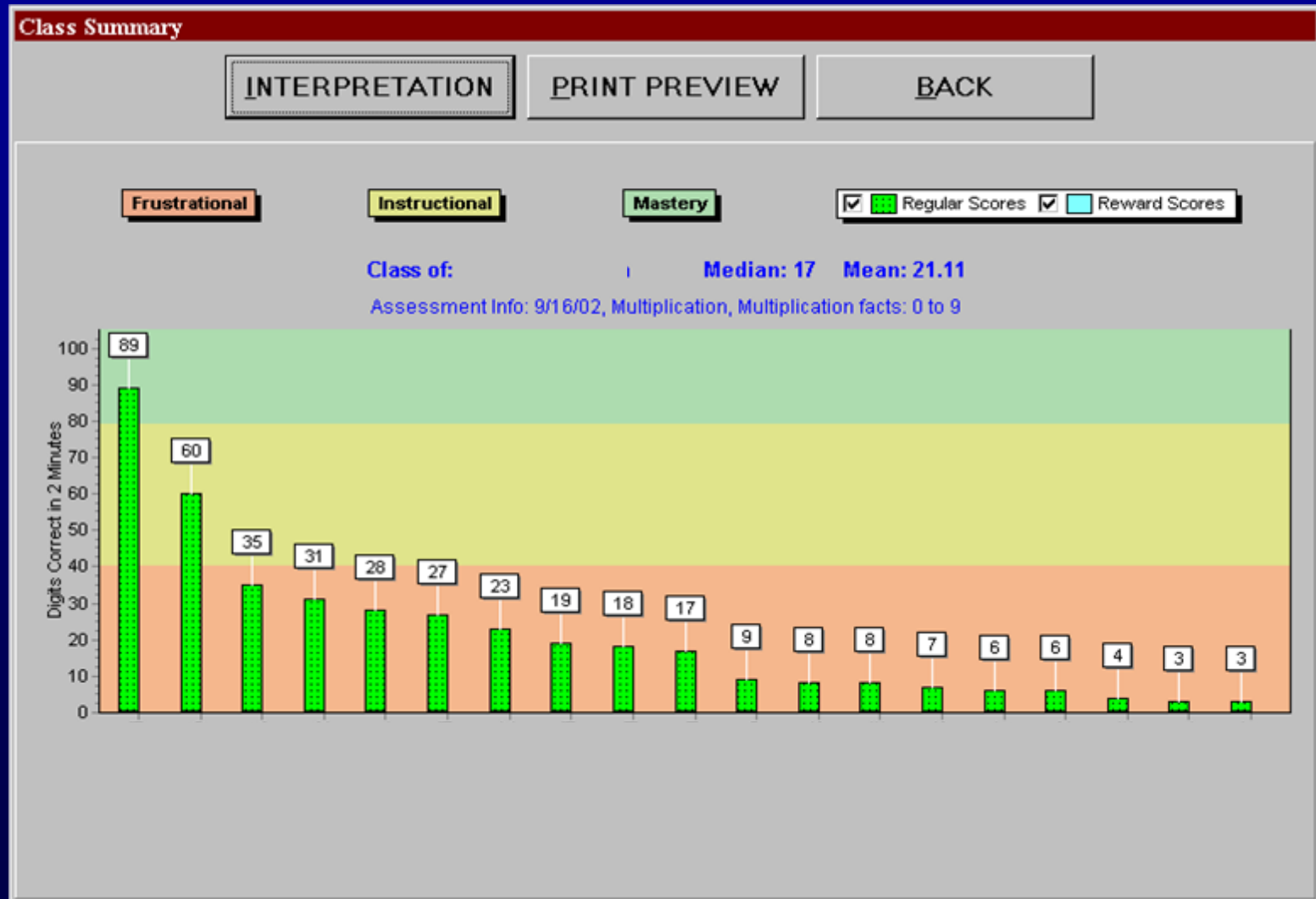
# Early Intervention Changes Reading Outcomes



# What do you do if you get this?

In a high-quality environment?

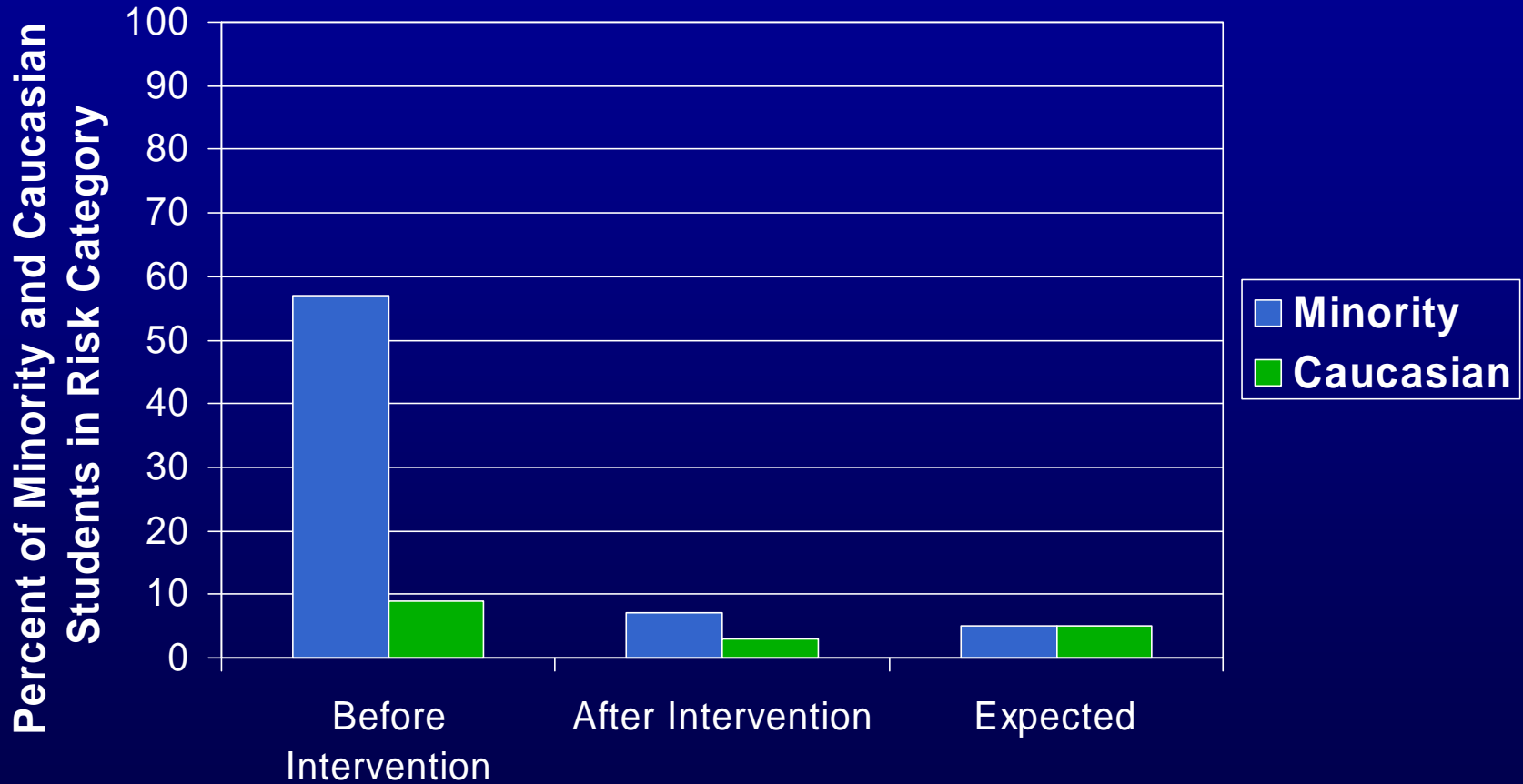
In a low-quality environment?



# Challenges

- Base rates present significant challenges to accurate decision making across variable environments
- Single-point in time screeners are not viable
  - Intervention changes rank-order of children and risk judgment relative to criterion
  - Intervention is responsible for equity improvements

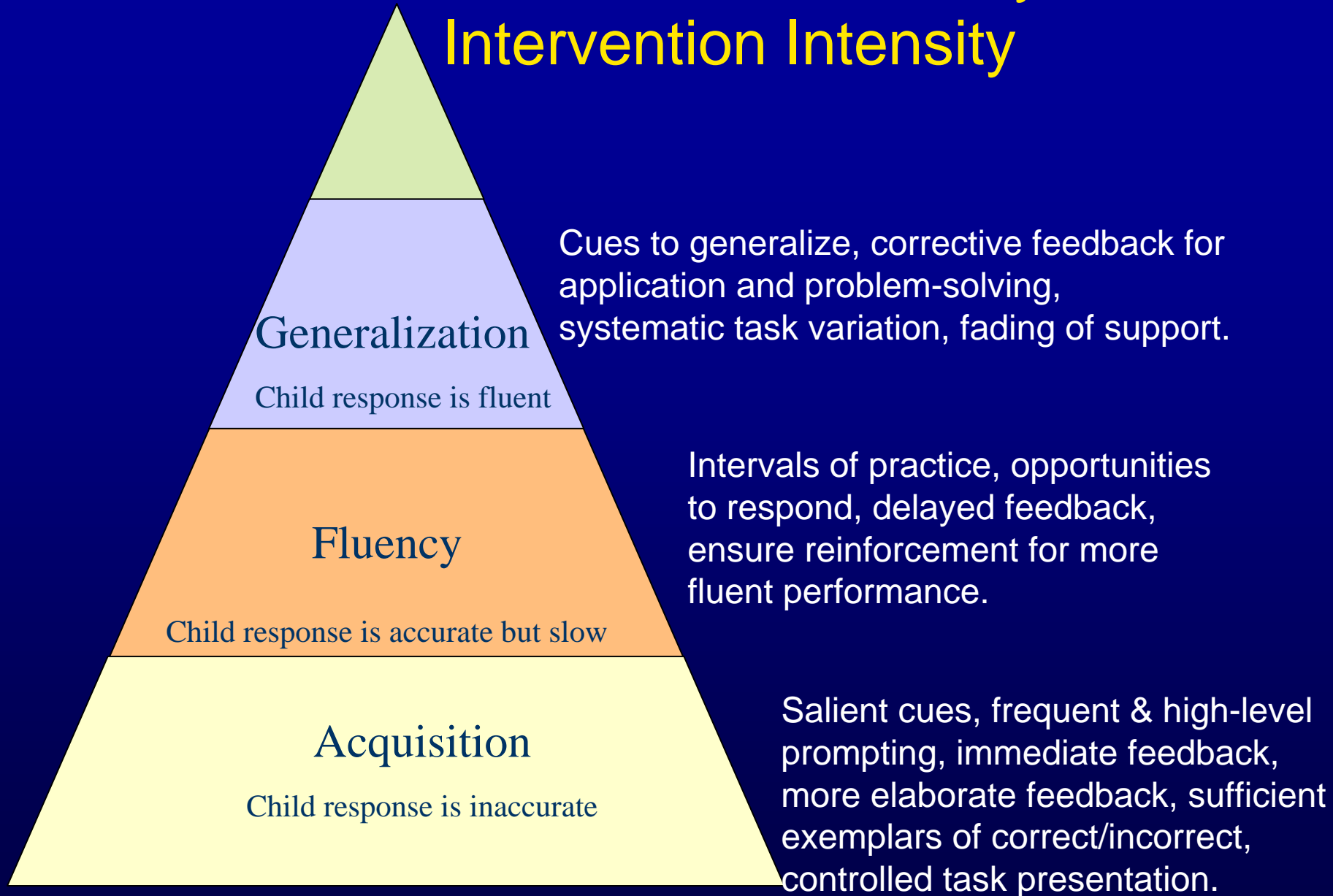
# What Proportion of Ethnicity Represented Before and After Intervention in Risk Category?



# Intervention Characteristics

- Capacity to create and detect short-term gains that lead to longer term adaptation (i.e., prevention)
  - Hence, two measures: mastery, generalization
- We struggle to get the “right” intervention into the room with the child
  - Integrity
  - Intensity (not just frequency, duration, ratio)

# A More Powerful Way to Define Intervention Intensity



**Generalization**

Child response is fluent

Cues to generalize, corrective feedback for application and problem-solving, systematic task variation, fading of support.

**Fluency**

Child response is accurate but slow

Intervals of practice, opportunities to respond, delayed feedback, ensure reinforcement for more fluent performance.

**Acquisition**

Child response is inaccurate

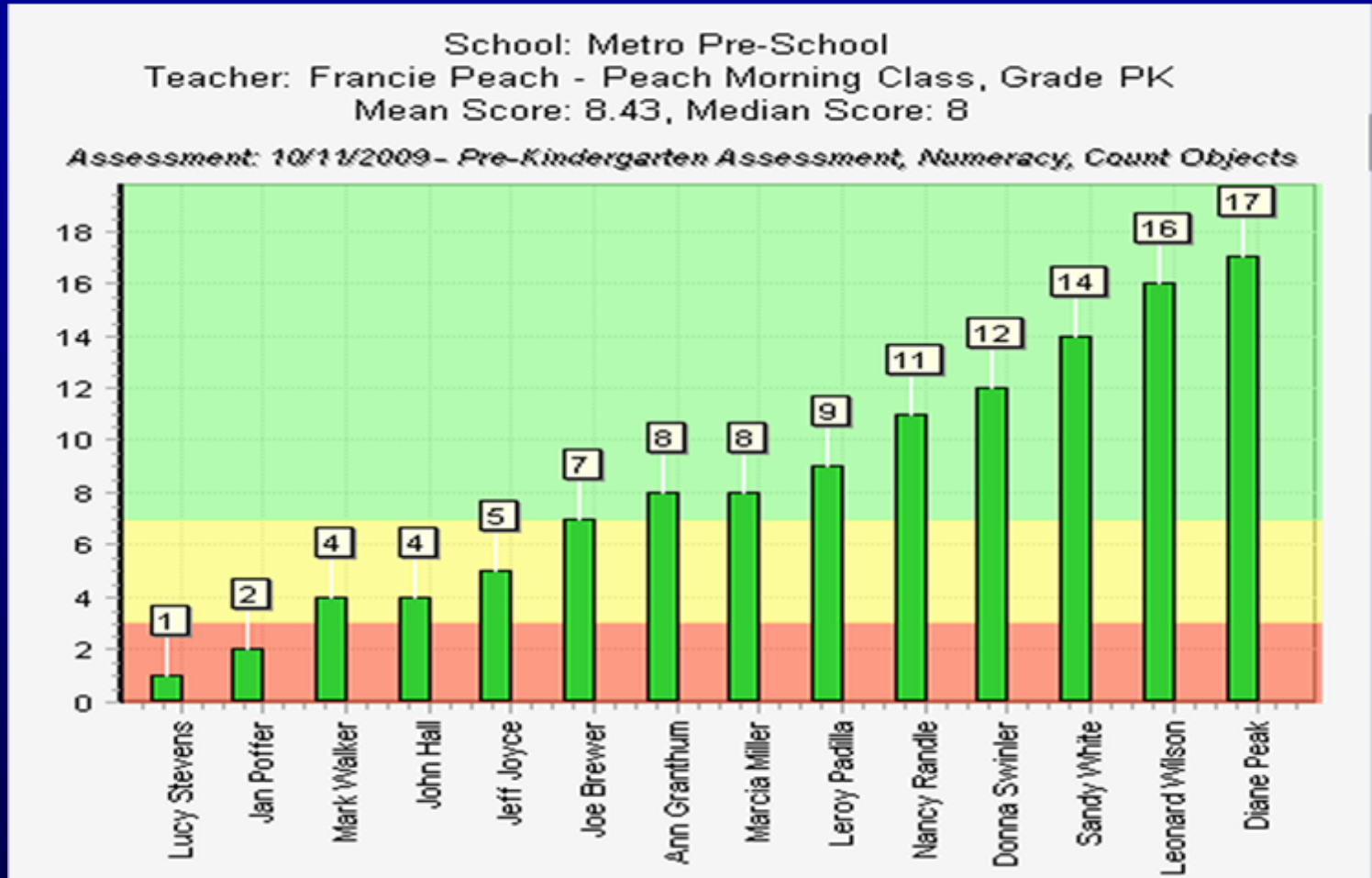
Salient cues, frequent & high-level prompting, immediate feedback, more elaborate feedback, sufficient exemplars of correct/incorrect, controlled task presentation.



# Early Math Screening

QuickTime™ and a  
decompressor  
are needed to see this picture.

# Tier 1 Screening



Bottom 16% on Classwide Screening for Number Naming

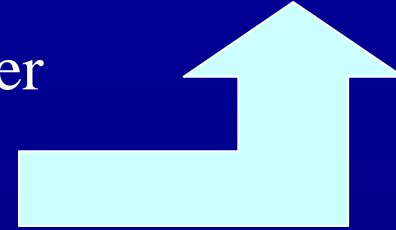
# Tier 2 Intervention

- Identify instructional-level task
  - Develop logical hierarchy (VanDerHeyden, 2005)
  - Identify difficulty level for which child responding is accurate most of the time
- Emphasize multiple opportunities to respond
  - Use response cards
  - Use choral responding
- Provide Immediate Corrective Feedback
- Provide rewards for skill gains each session

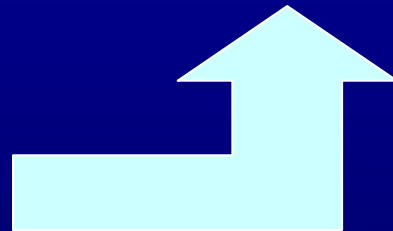
# Define the Behaviors/skills

Identifies Number  
of Objects in a Set  
to 10

Fluent Number  
Names to 10

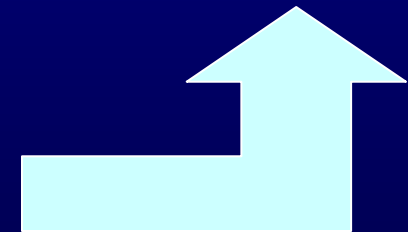


Accurate Number  
Names to 10



Fluent  
Number  
Names to 5

Accurate Number  
Names to 5



Counts in order to 10



# Tier 2 Intervention

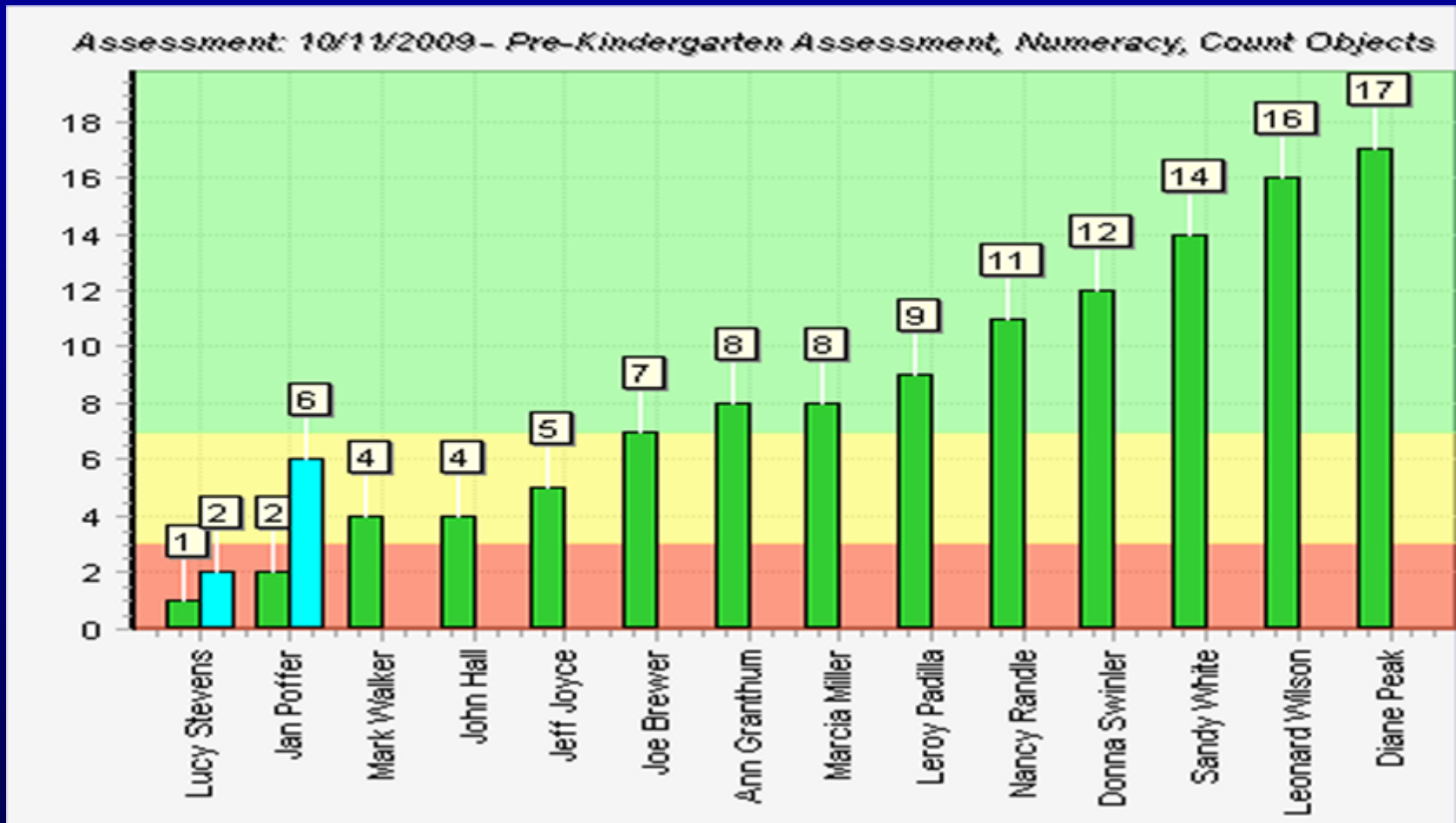
QuickTime™ and a  
decompressor  
are needed to see this picture.

# Progress Monitor Intervention

QuickTime™ and a  
decompressor  
are needed to see this picture.



# Intervention Effects



Outcome 1: Children improve to instructional criterion- successful RTI

Outcome 2: Upward Trend but not to instructional range. Continue Intervention

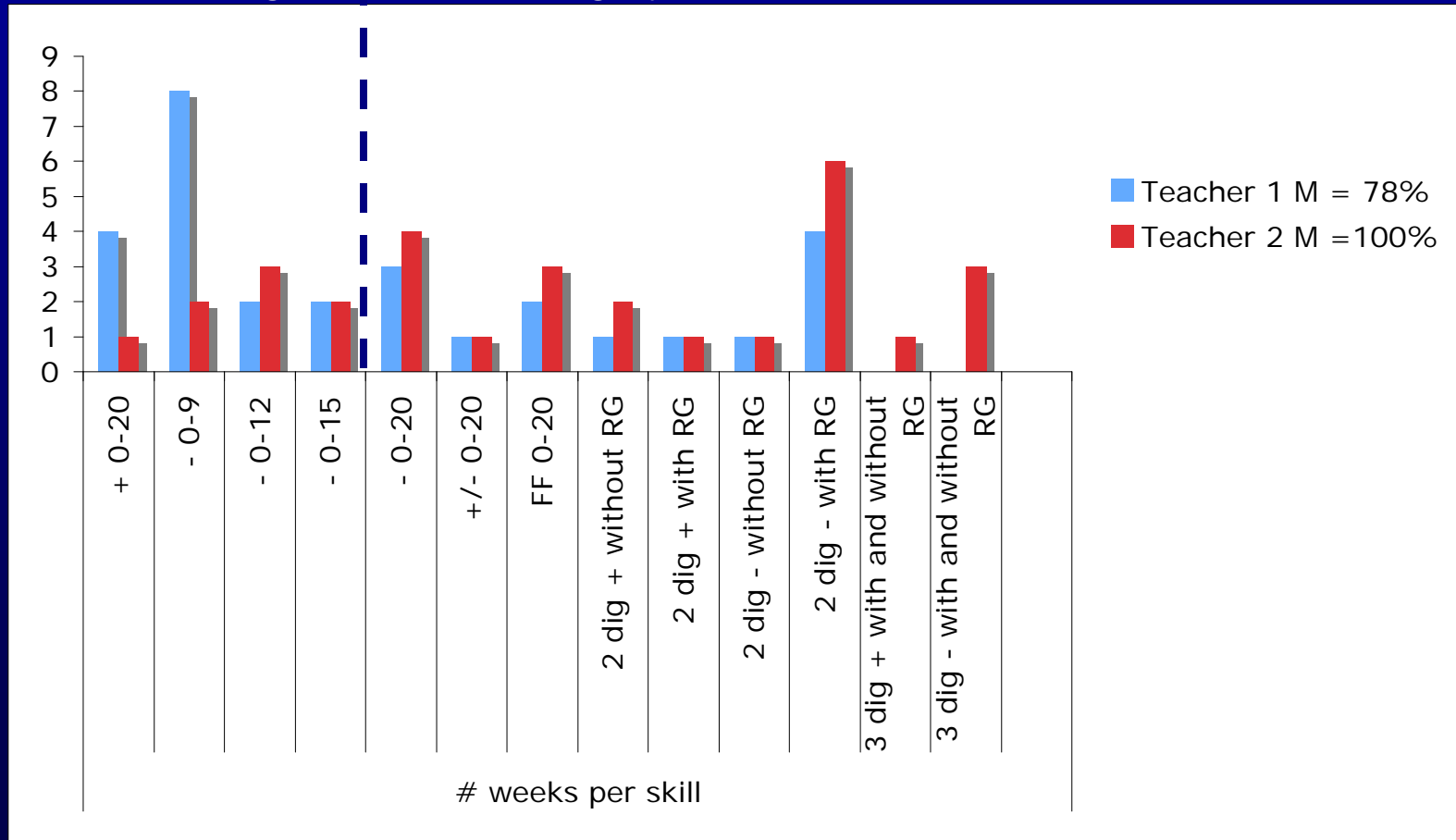
Outcome 3: No upward trend. Verify Integrity. Verify Intervention Effect outside of Classroom



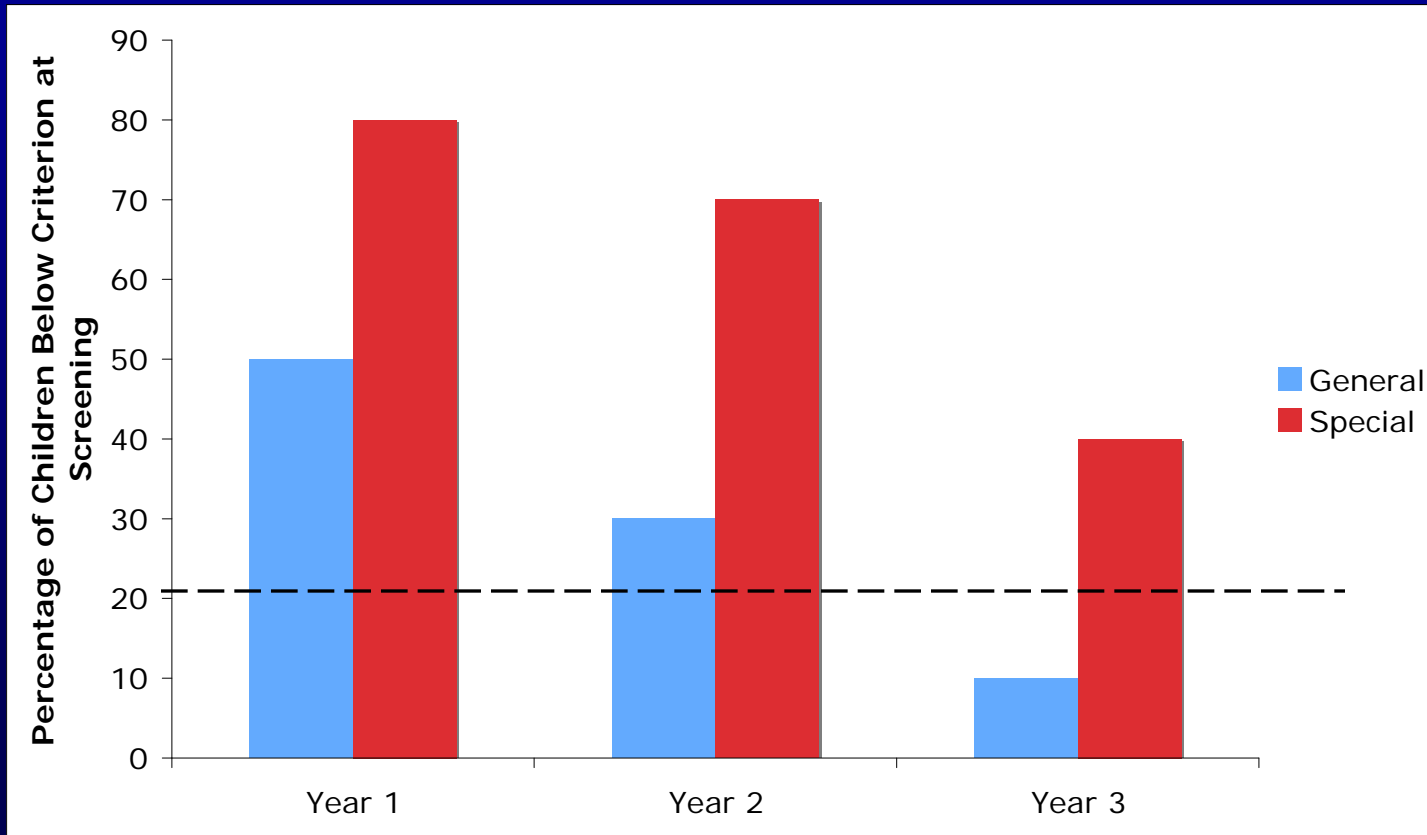
# Just like your mama told you: INTEGRITY MATTERS

59% Integ

96% Integrity



# Percent at Risk Over Time



# Future of Measurement in Rtl

QuickTime™ and a  
decompressor  
are needed to see this picture.

- Accuracy of decision making
- Nuanced risk models leading to more efficient and more effective prevention efforts
- Data base for selecting least costly and most effective interventions
- Hybridized models of technical adequacy for datapoints (scores versus behaviors)

Enrolled in first, second, or third grade  
Receives free and reduced lunch  
Disrupted school history (mobility)

Prevalence = .05

+

Class median score during screening is greater than benchmark criterion associated with success.  
Child's score is below the benchmark criterion  
Child performs in the bottom 16% of the class.

Prevalence = .43

+

Incentives do not increase performance to above the benchmark criterion.  
Brief instruction does not increase performance above the benchmark criterion.

Prevalence = .77

+

Risk for continued failure without intensive intervention  
Risk for Specific Learning Disability

# Pitfalls and Pearls

- Make implementation **simple** and **easy**
- Use what we know to translate powerful effects to learning in the most efficient way
  - Think “core-plus” in EC/EI
- Cannot have an allegiance to content or philosophies that supercedes the *effects attained*.
- Attend to technical adequacy lest “**today’s flagship**” becomes “**tomorrow’s abandoned shipwreck**” (Ellis, 2005, p. 200)

# For More Information

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- [www.isteep.com](http://www.isteep.com)