

# Prevention: The Promise and the Power

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## Keynote Address

DIBELS Next Super Institute  
Las Vegas, Nevada  
July 10, 2018

Ruth Kaminski  
Dynamic Measurement Group

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## Back to the Basics

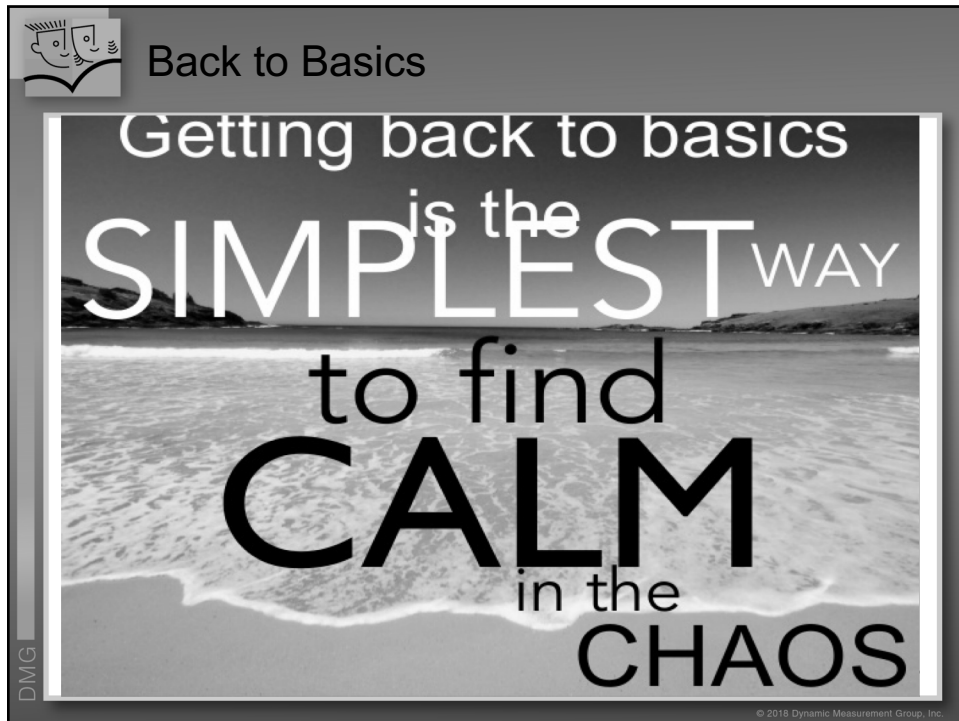
“Back to the Basics” From Urban Dictionary:

If you talk about getting back to basics, you are suggesting that people have become too concerned with complicated details or new theories, and that they should concentrate on simple, important ideas or activities.

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2

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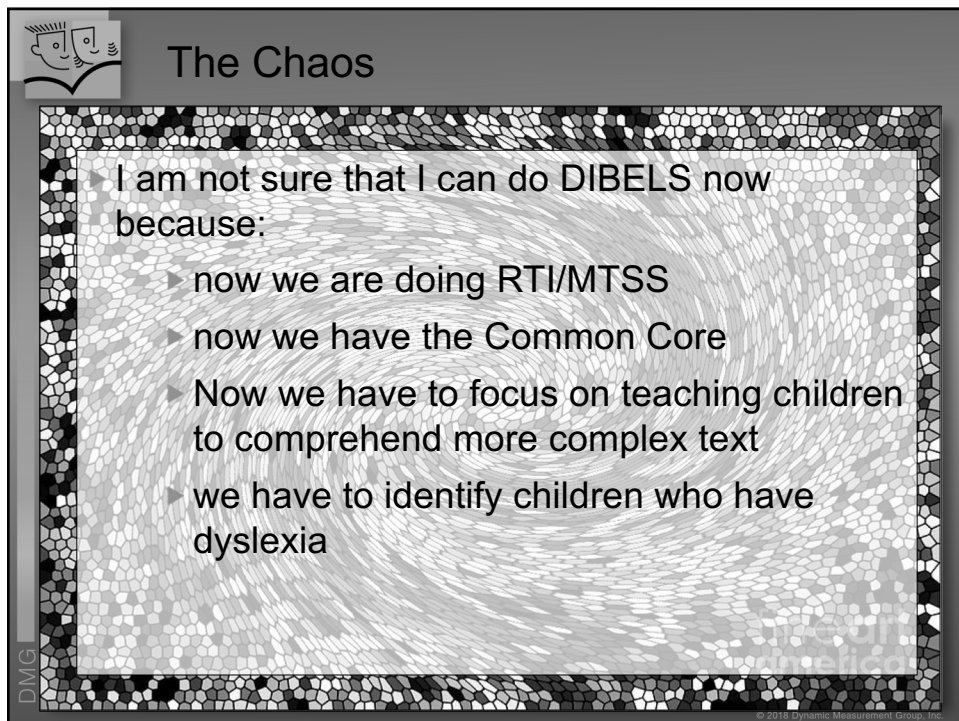


Back to Basics

Getting back to basics  
is the  
**SIMPLEST** WAY  
to find  
**CALM**  
in the  
**CHAOS**

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The Chaos

I am not sure that I can do DIBELS now because:

- ▶ now we are doing RTI/MTSS
- ▶ now we have the Common Core
- ▶ Now we have to focus on teaching children to comprehend more complex text
- ▶ we have to identify children who have dyslexia

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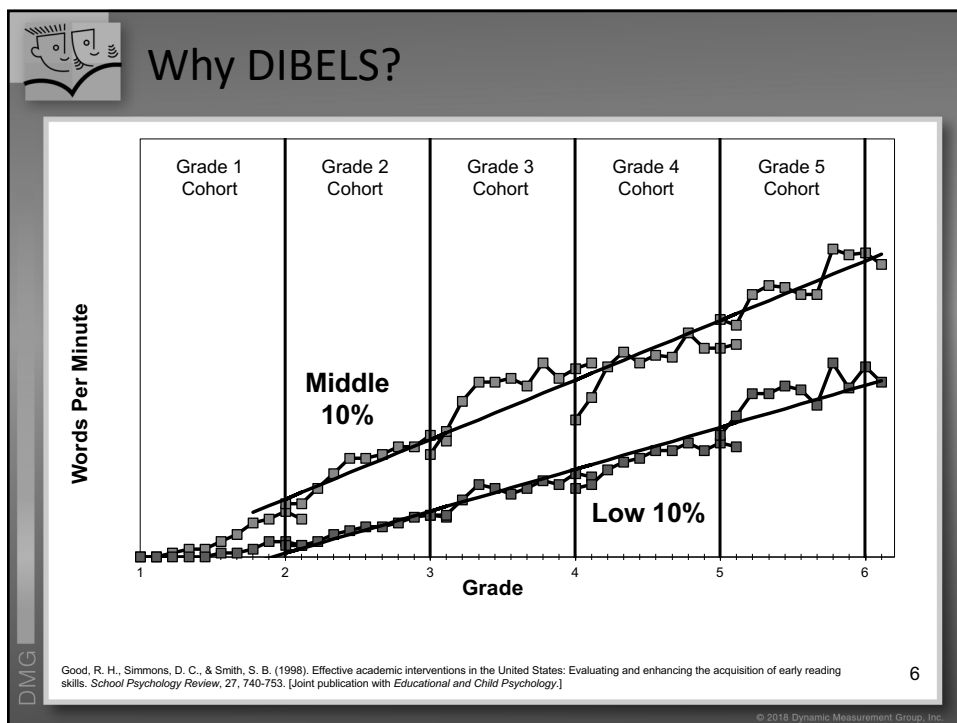
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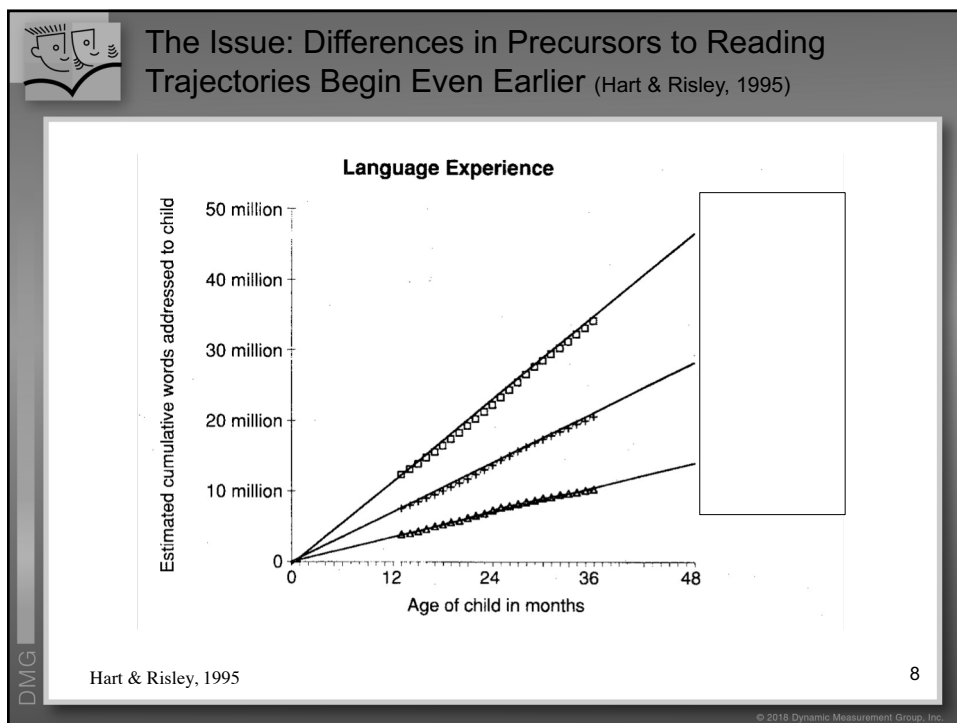
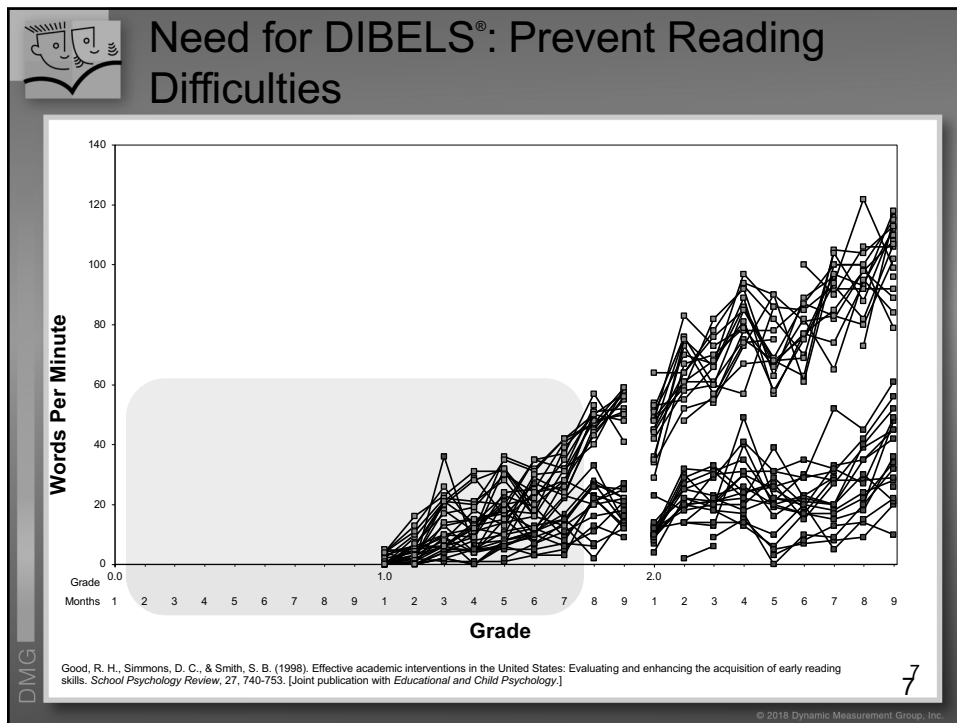
## Back to Basics: DIBELS


# PREVENTION

5

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## Effects of Preschool?


- ▶ Marked variation in findings of lasting effects of preschool:
  - ▶ Some evidence of long-term benefits
  - ▶ Sizeable short-term benefits in children's academic skills
    - \* Initial gains tend to dissipate as children progress through elementary school

Campbell et al., 2012; Jenkins et al., 2011; Philips, Gormley, & Anderson, 2016; Schweinhart, 2005; Yoshikawa, Weiland, & Brooks-Gunn, 2016

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9

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## Role of Kindergarten

Complementary	⇒	Enhance
Compensatory	⇒	Compensate
Discordant	⇒	Dissipate

Bailey, Duncan, Odgers, & Yu, 2017; Phillips et al., 2017

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10

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## Preschool Early Literacy Indicators (PELI)

11

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## PELI to Kindergarten DIBELS Data

- ▶ 604 children with PELI and DIBELS Next Data at BOY, MOY, and EOY in PreK and K
  - ▶ 50 preschool classrooms in 26 schools from 8 different states
  - ▶ 105 kindergarten classrooms in 42 schools

12

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## Effectiveness of Preschool and Kindergarten in Promoting and Maintaining Early Literacy Skills


Poster Presented at the  
National Research Conference in Early Childhood  
Arlington, VA

Ruth Kaminski  
Roland H. Good  
Mary Abbott  
Rachael Latimer  
Amy Warnock

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13

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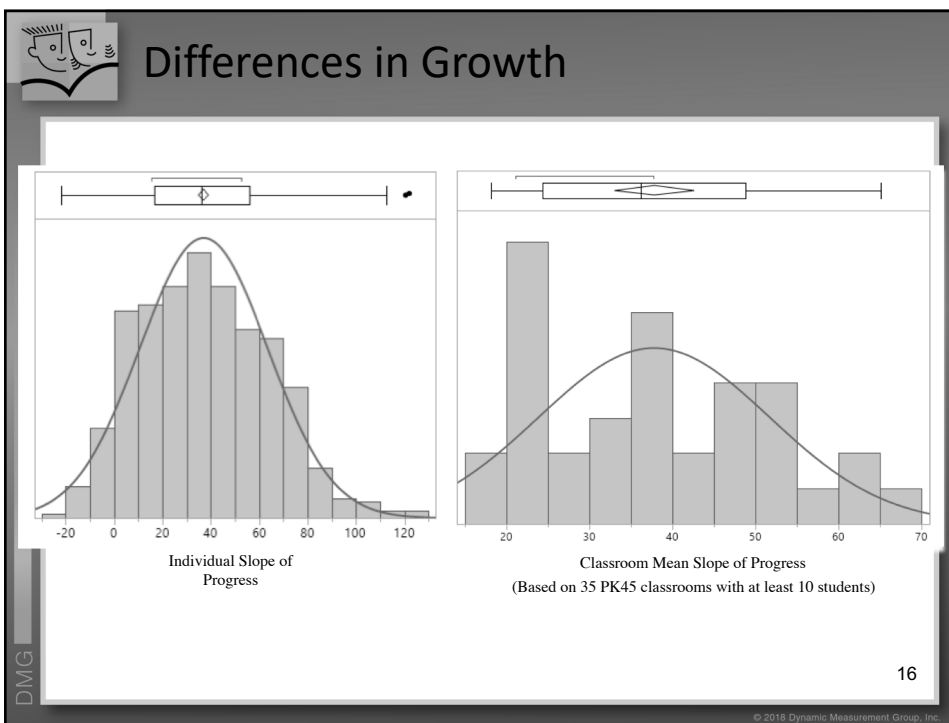
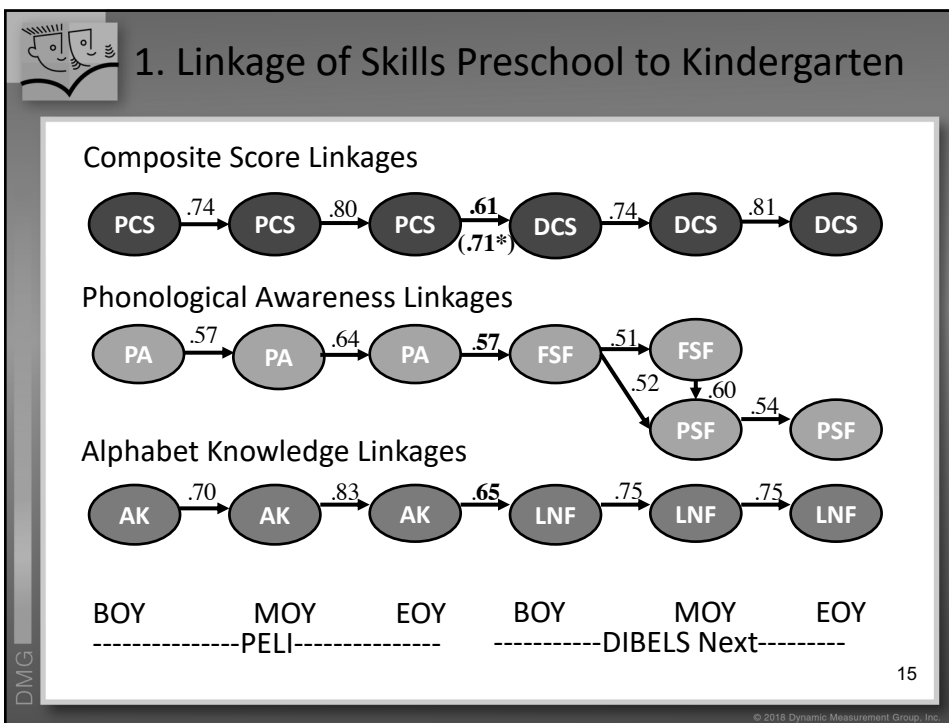
## Research Questions

1. What is the linkage between children's early literacy skills at the end of preschool and their performance on early literacy skills at the beginning of kindergarten?
2. Are there programmatic differences in growth of early literacy skills during preschool?
3. Are there programmatic differences in the degree to which kindergarten programs (i.e., kindergarten context) maintain and increase early literacy skills acquired in preschool?


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## Kindergarten HLM Model

**Level 1, individual student progress model**

$$RLexile_{it} = \pi_{0i} + \pi_{1i} * TOY_{it} + \pi_{2i} * TOY_{it}^2 + e_{it}$$

Where:

$RLexile_{it}$  = Research Lexile for student  $i$  at time  $t$

$TOY_{it}$  = time of year (1 = beginning, 2 = middle, 3 = end)

**Level 2, between student model of progress**

$$\pi_{0i} = \beta_{00} + \beta_{01} * PK45INT_i + \beta_{02} * PK45SLP_i + r_{0i}$$

$$\pi_{1i} = \beta_{10} + \beta_{11} * PATH345C_i + r_{1i}$$

$$\pi_{2i} = \beta_{20} + \beta_{21} * PATH345C_i + r_{2i}$$

Where:

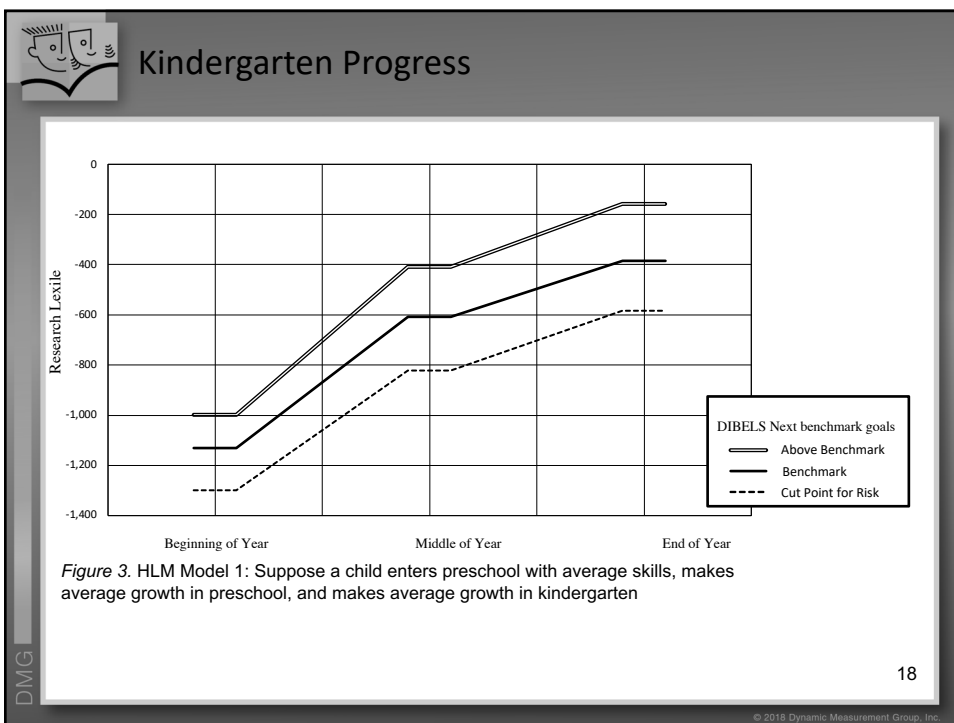
$PK45INT_i$  = Preschool intercept (initial skills) for student  $i$  from the preschool model of growth

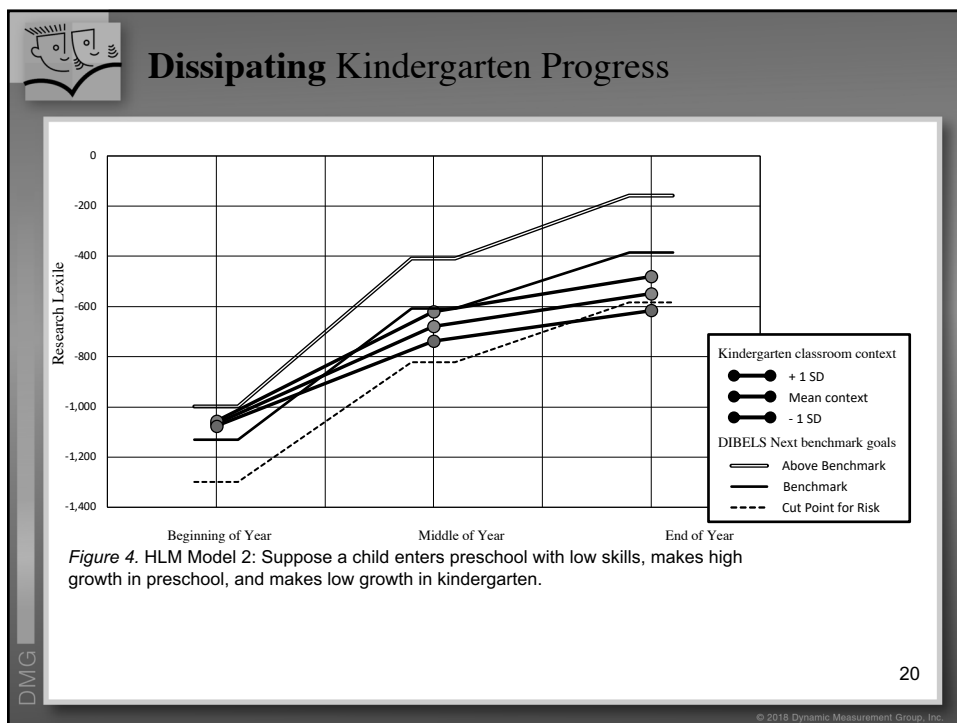
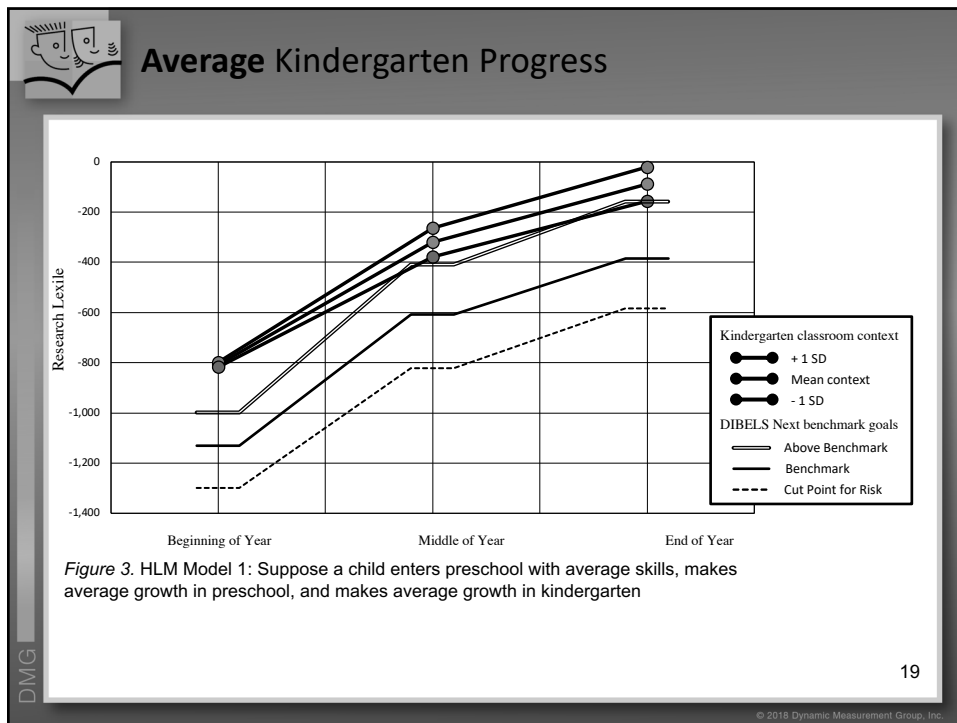
$PK45SLP_i$  = Preschool slope (rate of progress) for student  $i$  from the preschool model of growth

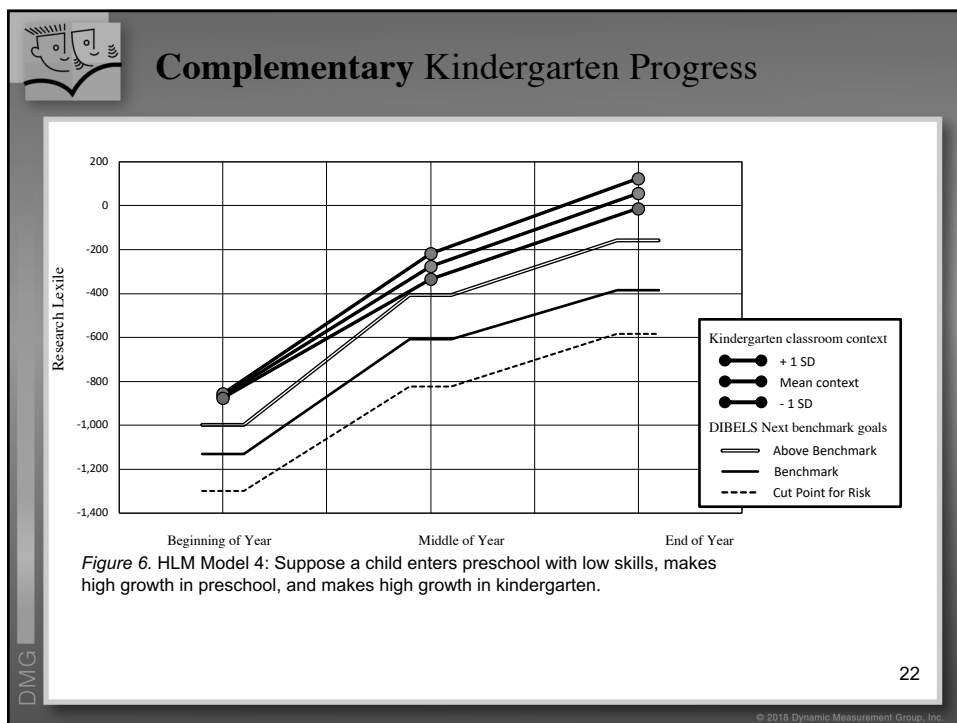
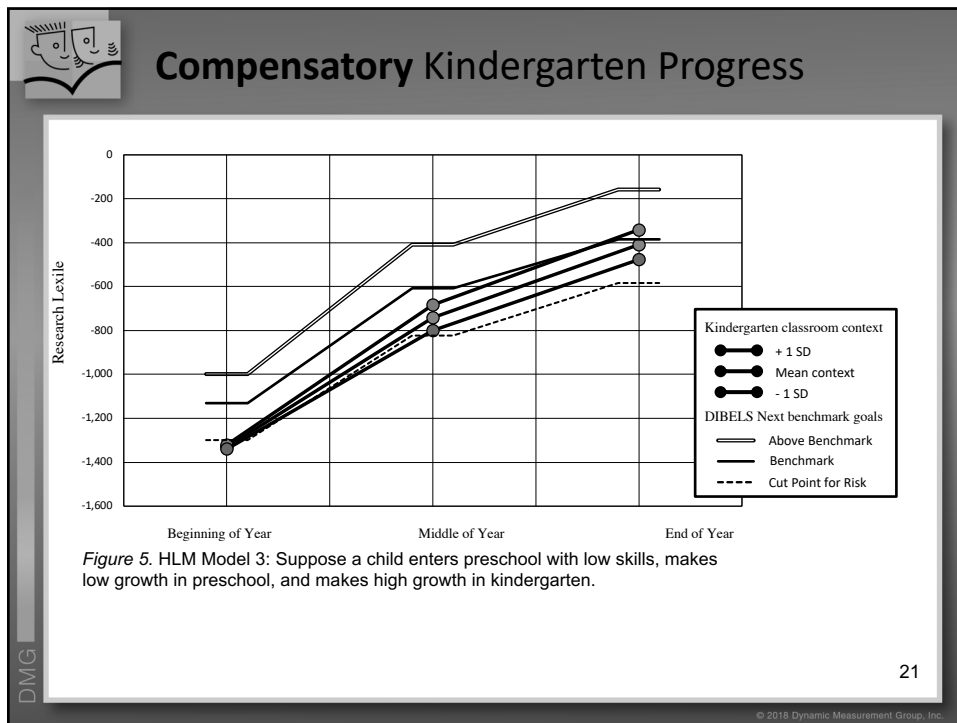
$PATH345C_i$  = Proportion of kindergarten context students making at least typical progress on DIBELS Next.

17

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## How to Sustain Preschool Effects


- ▶ Hypotheses proposed:
  - ▶ Focused kindergarten curricula teaching advanced content
  - ▶ Alignment of instructional content between preschool and kindergarten
  - ▶ Onsite support/coaching for teachers
  - ▶ Summer school
  - ▶ Family involvement

Entwisle, Alexander, & Olson, 2001; Galindo & Sheldon, 2012; Yoshikawa et al., 2016

23

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## Thinking is Required One Size Does Not Fit All



24

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## Formative Assessment

John Hattie evaluated more than 800 meta-analyses of 138 influences on student achievement:

- Student
- Teacher
- Teaching
- Curricula
- School
- Home

25


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## Formative Evaluation and Progress Monitoring, $d = 0.90$

The 3<sup>rd</sup> largest effect on student achievement out of 138 possible influences.

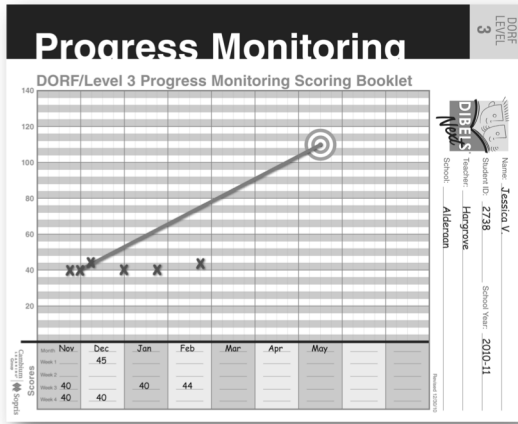
26

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## How to Sustain Preschool Effects

► How about if we do formative assessment and progress monitoring?



27

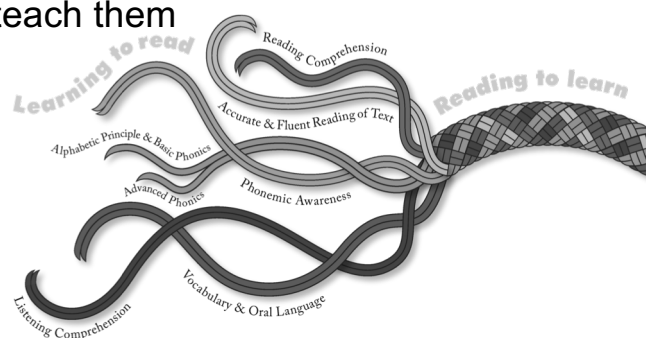
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## Notion of Measures as Indicators

► Teachers have to understand the **skills**

- What they are
- How they develop
- How to teach them



28

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What Are DIBELS®?

*Dynamic*

*Indicators*

*of*

*Basic Early Literacy Skills*

29

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Understand Bench Mark Goals

- ▶ What they are
- ▶ What they are not
- ▶ How to use them

If the student achieves a score	The odds of achieving subsequent early literacy goals are:	The likely need for support to achieve subsequent early literacy goals is:
at or above the benchmark goal	→ 80% – 90%	→ Core Support
below the benchmark goal and at or above the cut point for risk	→ 40% – 60%	→ Strategic Support
below the cut point for risk	→ 10% – 20%	→ Intensive Support

30

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 There are Shades of Red, Yellow, and Green

Benchmark Status	What it Means: Design Specifications	Likelihood of Meeting Later Reading Goals
At or Above Benchmark	<i>Overall likelihood of achieving subsequent early literacy/reading goals is 80% to 90%</i>	80% to 90%
Below Benchmark	<i>Overall likelihood of achieving subsequent early literacy/reading goals is 40% to 60%</i>	40% to 60%
Well Below Benchmark	<i>Overall likelihood of achieving subsequent early literacy/reading goals is 10% to 20%</i>	10% to 20%

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