



64<sup>TH</sup> CONFERENCE ON EXCEPTIONAL CHILDREN

**WORKING TOGETHER  
TO ACHIEVE STUDENT SUCCESS**

*Responsiveness to Instruction:  
Meeting the Literacy Needs of  
Exceptional Children*

Melissa Garner  
Paula Ledford

PUBLIC SCHOOLS OF NORTH CAROLINA  
State Board of Education | Department of Public Instruction

NOVEMBER 3-5, 2014

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**Welcome!**

- Melissa Garner, Lindamood-Bell Associate Director of Professional Development
- Paula Ledford, Macon County Schools Director of Exceptional Children Dept.

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**Our Challenges**

- We have 6,500,000 students with learning disabilities across the United States.
- We spent \$70,000,000,000 to \$80,000,000,000 on students with disabilities, primarily in special education and related services.
- 80-90% of the students in special education are there because they can't read.
- If we teach students how to read we will fundamentally redefine who gets put into special education.
- 38% of our nation's fourth graders cannot read at a basic level.
- In many low-income urban school districts that number approaches 70%.

(Dr. Robert Pasternack, former Assistant Secretary, Office of Special Education, DOE)

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### Agenda

- Relationship between RtI and Common Core
- Process-Based Instruction Within a Standards-Based Framework
  - Sensory-Cognitive Instruction
  - Imagery for Cognition, Memory, and Reading
  - Personalized Learning based on data: Decoding vs. Comprehension Deficits
- Macon County Schools: How they have continued to meet the needs of Exception Children while raising expectations

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How many of your students are unable to access the common core?



20% or more?  
Is it because of a literacy deficit?

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### Common Core: An Overview for Parents

*“The standards are a road map for learning. Teachers can guide students along different routes to their destination, but the key goal is to reach the standards, or the destination...”*

*-<http://www.ncpublicschools.org/>*

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***The Common Core: An opportunity to provide the right instruction for all students***

- The difference between a learning disability and a literacy deficit?
  - Sensory input underlies cognition, reading, and language comprehension—and those underlie success with RTI and the Common Core.
- Concept Imagery’s role in Common Core and application to content
- Dual Coding Theory and how it’s related to RTI and personalized instruction

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***The Common Core: An opportunity to provide the right instruction for all students***

- Setting expectations for ALL Students
  - ELL and EC students
  - Identifying and intervening early
  - Aligning all tiers of intervention—“de-compartmentalizing” services for students on IEPs
  - Prescriptive remediation in the least restrictive environment
- Is a literacy deficit the primary reason for the LD label?
- Closing the achievement gap for Exceptional Students?

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*Sensory-cognitive functions are the first dominoes.*

*Processing language is a cognitive act.*

*Instruction in language and literacy should match a theory of cognition.*

*Cognition underlies success in RTI and implementation of the Common Core.*

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Independence  
Self-Correct  
Monitor  
Sensory Input

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*How is imagery related to cognition—and language and literacy skills?*

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**Imagery for Cognition and Memory**

References as far back as Aristotle, in his contemplations on the ability to reason, theorized that man cannot think without mental imagery.

*"Thus, we have explained that memory or remembering is a state induced by mental images."*

The psychologist Edward Titchener wrote,

*"My mind, in its ordinary operations, is a fairly complete picture gallery, not of finished paintings, but of impressionist notes."*

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### **Imagery for Cognition and Memory**

Mozart said that a piece would grow in him until *“the whole, though it be long, stands almost complete and finished in my mind, so that I can survey it, like a fine picture or a beautiful statue, at a glance. Nor do I hear in my imagination the parts successively, but I hear them, as it were, all at once.”*

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### **Imagery for Cognition and Memory**

Albert Einstein’s esteemed contributions were the result of his ability to think critically and creatively. He made his thinking concrete with the sensory-cognitive function of mental imagery. He did image “thought” experiments and said, *“If I can’t picture it, I can’t understand it.”*

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### ***Imagery for Cognition, Word Reading, and Reading Comprehension***

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### Imagery for Cognition and Memory

Allan Paivio, a cognitive psychologist, researched and developed Dual Coding Theory (DCT) as a theoretical model for cognition.

*“Performance is mediated by the joint activity of verbal and nonverbal systems...**cognition is always an interplay between the verbal and nonverbal systems.**”*

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### Dual Coding Theory Imagery and Verbal Processing

Paivio suggested that linguistic competence and performance are based on a substrate of imagery.

*“**Individuals differ** in the extent, manner, and efficiency of employment of each of the systems according to their verbal and nonverbal habits and skills.”*

And:

*“Imagery includes not only **static** representations but also **dynamic** representations of action sequences and relationships between objects and events.”*

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### Two Sides of Imagery: Symbol Imagery and Concept Imagery

- **Symbol Imagery (SI):** the ability to create mental imagery for sounds and letters (parts) within words.



- **Concept Imagery (CI):** the ability to create an imaged gestalt (whole) from oral or written language.



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## Imagery Underlies the Component Parts of Reading

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## The Reading Circles

Sensory-cognitive functions underlie component parts.  
TWO reading disabilities: Word Reading / Reading Comprehension

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## Root Cause: Underdeveloped Imagery

Weakness in decoding and comprehension is the primary cause of failure to make 1 year of gain for 1 year of instruction.

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## Weak Decoding to Weak Comprehension: Two Types of Reading Disabilities

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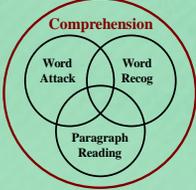
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## Imagery and the Language Processing Spectrum

← Weak Decoding                      Weak Comprehension →  
Dyslexia                                      Hyperlexia/Autism







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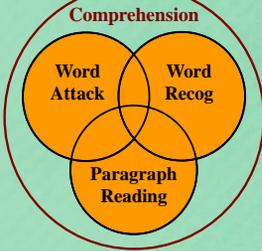
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## Word Reading Phonological and Orthographic Processing





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### Buzz

Grade: 6.0

Peabody Picture Vocabulary Test.....	75th	Percentile
Woodcock Word Attack.....	<b>16th</b>	Percentile
Wide Range Achievement Test		
Word Recognition.....	<b>37th</b>	Percentile
Detroit Tests of Learning Aptitude		
Oral Directions.....	75th	Percentile
Gray Oral Reading Tests-3		
Rate.....	10th	Percentile
Accuracy.....	<b>25th</b>	Percentile
Fluency.....	<b>16th</b>	Percentile
Comprehension.....	37th	Percentile

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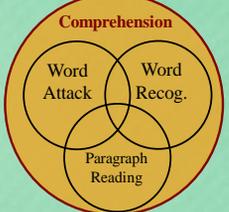
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### Reading Comprehension and Imagery

- Is reading comprehension just a matter of good oral vocabulary and accurate decoding?
- Is the sensory input of imagery a factor in reading comprehension and higher order thinking?

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### Natalie

CA: 11-2 • Grade: 6.0

Did her decoding and vocabulary guarantee comprehension?

Peabody Picture Vocabulary Test.....	86th	Percentile
Woodcock Word Attack.....	86th	Percentile
Wide Range Achievement Test		
Word Recognition.....	87th	Percentile
Detroit Tests of Learning Aptitude		
Oral Directions.....	<b>37th</b>	Percentile
Gray Oral Reading Tests-3		
Rate.....	84th	Percentile
Accuracy.....	95th	Percentile
Fluency.....	91st	Percentile
Comprehension.....	<b>2nd</b>	Percentile

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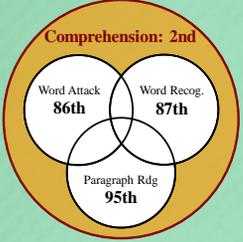
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### Natalie




Despite Natalie's strength in word reading, her reading comprehension was at the 2nd percentile.

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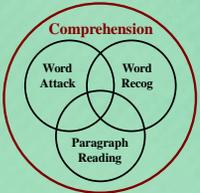
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### Imagery and the Language Processing Spectrum

Weak Decoding ← Dyslexia      Weak Comprehension → Hyperlexia/Autism






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### A Partnership for Reading Success




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### Macon County Schools

- Franklin, Highlands and Nantahala
- Region 8 (Far West)
- 4300 students
- Reading scores have been around or slightly above state average. Have moved from bottom of region to the middle.
- 11 Schools
- Four Elementary (k-4)
- One Intermediate (5-6)
- One Middle School (6-7)
- One High School
- One Early College
- One alternative
- Two K-12 schools

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### Building Reading Capacity District Wide

- Breaking down barriers and collaborating for success
- How we got started
- Where we are now?

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### Macon's Challenges

- Teachers functioning as independent contractors
- No consistency with researched-based programs across schools in district
- Limited use of data for making instructional decisions
- Development of process for RtI and beginning implementation (grouping kids, scheduling, finding protected time, staff, materials)
- No instructional coaches
- PLCs that were not functioning effectively
- Lack of fidelity with SCOS/common core implementation
- Separation between EC and general education

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## Must-haves

- Evidenced Based approach to teaching reading
- Addressed ALL 5 components of reading (we were doing pretty well with decoding using various programs but needed to address comprehension and written application)
- On-going professional development especially through the use of coaching
- Fit into RtI model

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## How we did it...

- Professional development in a 4 week summer reading program serving approximately 50 kids
- Implementation began in classrooms and small groups for Tier 3 students Fall 2011
- Individual Assessment to determine individualized student skill deficits
- Restructured day to accommodate small group instruction
- Implemented dedicated small group instruction time based on tier level (90 min)
- Onsite instructional coaching by Lindamood-Bell consultant
- Certified mentors to support implementation at building level

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### Macon County Schools RtI Model

**Identification criteria - failing students**

- Below the 20<sup>th</sup> <sup>tile</sup> on Dibels Next benchmark assessments, Aims Web, or Lindamood Bell battery of assessments
- Instruction
- Minimum of 75-120 minutes daily
- Homogeneous groups of 5 students or less

**Identification criteria - at risk students**

- Between 20<sup>th</sup> and 37<sup>th</sup> <sup>tile</sup> on Dibels Next benchmark assessments or Aims Web
- Instruction
- Minimum of 45 minutes daily
- Homogeneous groups of 10 students or less

**Tier 3 (5%)**  
Intensive

**Tier 2 (15%)**  
Targeted group instruction

**Tier 1 (80%)**  
Core instruction

**Grades K-2**

- Decoding - Seeing Stars - 20 min daily
- Comprehension - WJ - 20 min daily
- Math - OCN - 20 min daily
- Houghton Mifflin
- Guided Reading

**Grades 3-6**

- Decoding - SS/review 1<sup>st</sup> month
- Comprehension - WJ 20 min.
- Comprehension Toolkit
- Math - OCN

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## Where are we now?

- Summer school 2012, 2013 and 2014
- District Facilitator responsible for sustaining the fidelity of the implementation
- Mentoring provided by 11 certified mentors, 1 district facilitator
- Mentoring: 1 on 1, PLC, and top down approach
- District wide classroom focus
  - Read to Achieve
  - Data to drive instruction
- ESL emphasis (vocabulary)
- On Cloud Nine math implementation –small group and classroom
- Written application to content areas

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## Some initial outcomes

- Highlands School doing school wide implementation (this is third year) K-3 and there are NO students identified as LD.
- More students are receiving 90 minutes instruction daily to close the gap.
- Lowest performing school made significant gains using the combination of school wide approach and Lindamood Bell as the instructional strategy 2 years ago.
- Same school changed structure of grouping and support and failed to show as much gain the following year.
- Middle School students— Talking Bookshelf.

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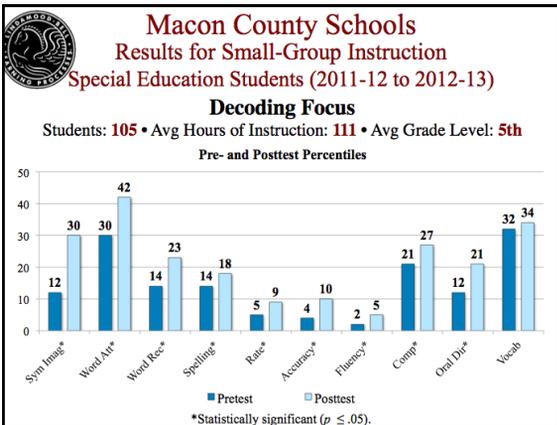
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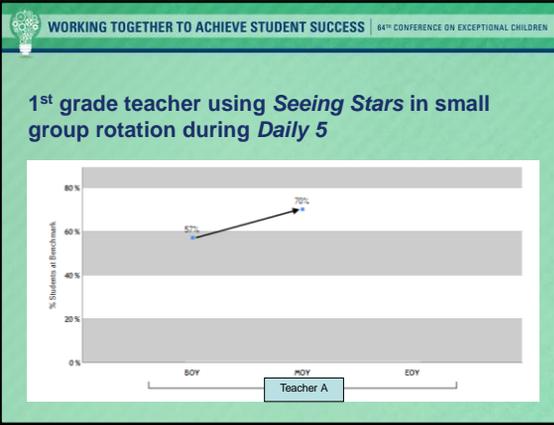
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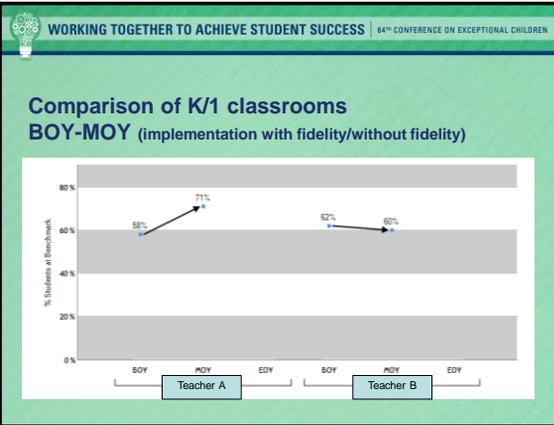
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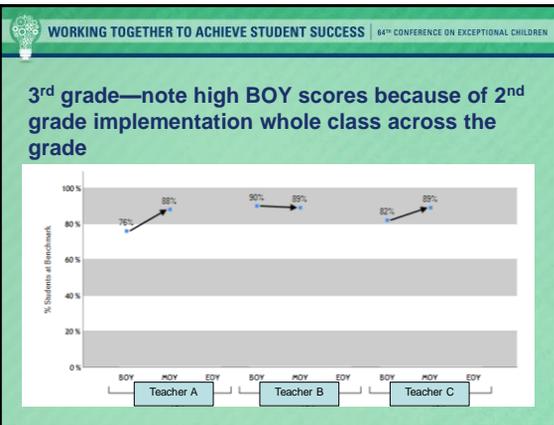
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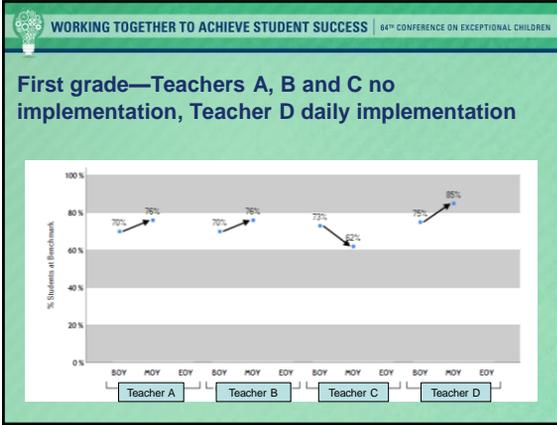
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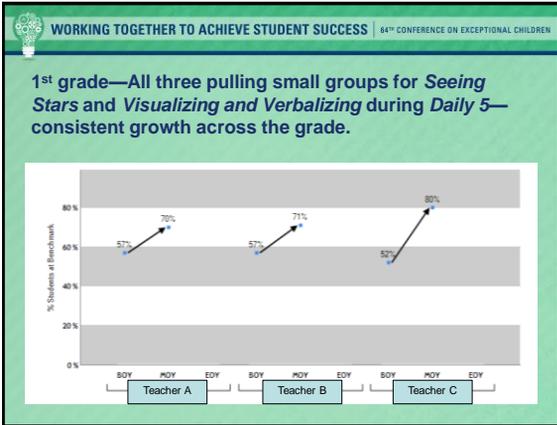
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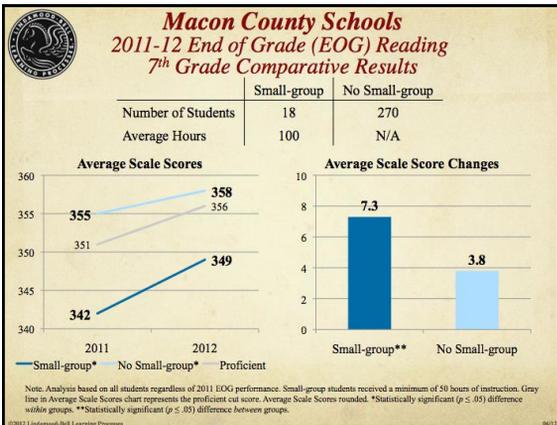
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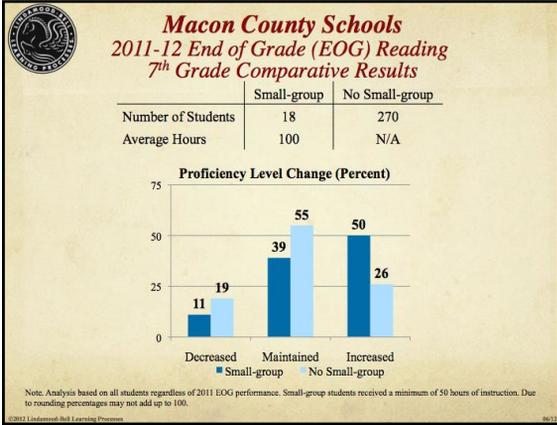
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- EVVAS data from participating students**  
**Grades 6-7**  
(Preliminary data and does not account for attendance, hours in the program etc.)
- |   |   |
|---|---|
| <p>6<sup>th</sup> Grade</p> <ul style="list-style-type: none"> <li>• SLD 14 (7 made no growth or negative)</li> <li>• SI 17</li> <li>• SLD 19</li> <li>• SI 19</li> <li>• SLD 25</li> <li>• SED 26</li> <li>• AU 3</li> <li>• OHI 3</li> <li>• SLD 3 exited</li> <li>• SI 30</li> <li>• SI 39</li> <li>• SLD 4</li> <li>• OHI 48</li> <li>• SLD 66</li> <li>• SLD 7</li> <li>• OHI 8</li> </ul> | <p>7<sup>th</sup> grade</p> <ul style="list-style-type: none"> <li>• SLD 6+</li> <li>• OHI 18+</li> <li>• SLD 34+</li> <li>• OHI 5+</li> <li>• SLD 11+</li> <li>• SLD 22+</li> <li>• OHI 22+</li> <li>• SLD 11+</li> <li>• SI 6+</li> </ul> |
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**Early Intervention=Prevention**

- 2<sup>nd</sup> grade (non EC) poor reader placed in small group for half of the year, plus whole class instruction everyday.
- At the beginning of the year, her fluency was a 38 which was in the yellow for slight risk. At mid-year her fluency was 55 which was still yellow for slight risk. Today, her fluency was 92 which is green.
- She had the top score in her class on 3<sup>rd</sup> grade EOG.

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*How early do we know students are struggling?*

*How early should we intervene?*

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**Pulling it all together**

- District level collaboration with EC and reg ed
- Blended funding
- Consistent instructional language between EC and classroom
- Differentiated instruction based on skill deficiency rather than disability label
- Both proactive and preventive rather than reactive
- Aligns with common core standards
- Meets all Tiers by intensifying instruction at each tier rather than changing the strategy
- PLC for staff and mentor support
- Fidelity check put on place
- Principal walk-throughs
- Certified mentors

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<p><b>Essentials to success</b></p> <ul style="list-style-type: none"> <li>• Teacher buy in (“buy in is an outcome, not a precondition”)</li> <li>• School Board Support</li> <li>• District Level Support and collaboration among gen ed, Title 1 and EC</li> <li>• Administrative buy in and Support (setting the expectation, scheduling, use of resources, ensuring fidelity)</li> </ul>	<p><b>On second thought</b></p> <ul style="list-style-type: none"> <li>• Don't try to go too big too fast</li> <li>• Sometimes the evidence has to speak for itself</li> <li>• Change is hard, don't expect too much too soon and celebrate forward progress.</li> </ul>
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**Questions?**

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**Thank you!**

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