

# The Science of Reading: Applying the Science in the Classroom

Partner Webinar

*The second in a two-part series on the Science of Reading*

May 19, 2020

[gradelevelreading.net](http://gradelevelreading.net) @readingby3rd #GLReading #LearningTuesdays





Munro Richardson, Ph.D.  
*Moderator*  
Executive Director  
Read Charlotte



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*Co-Presenter*

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Chief Impact Officer

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Todd M. Hanson

*Co-Presenter*

Vice President, Center for Engaged Philanthropy  
Orange County Community Foundation



Angela Rutherford, Ph.D

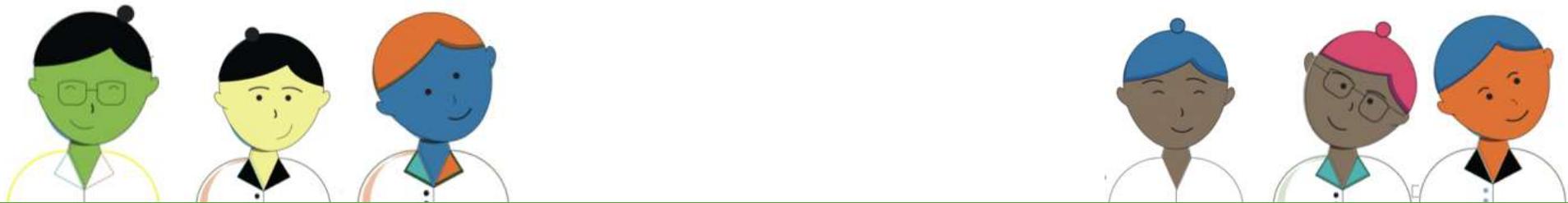
*Commentator*

Director, Center for Excellence in Literacy Instruction  
University of Mississippi



# Applying the Science of Reading

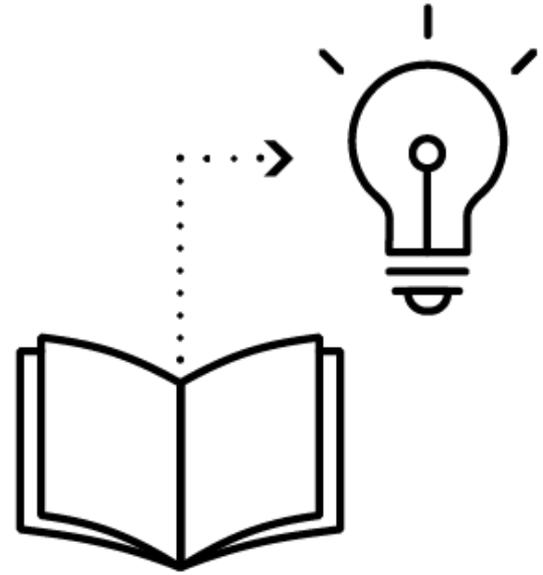
**Different kids need  
different things to be  
successful.**



# The What?

Science of Reading &  
Child Development

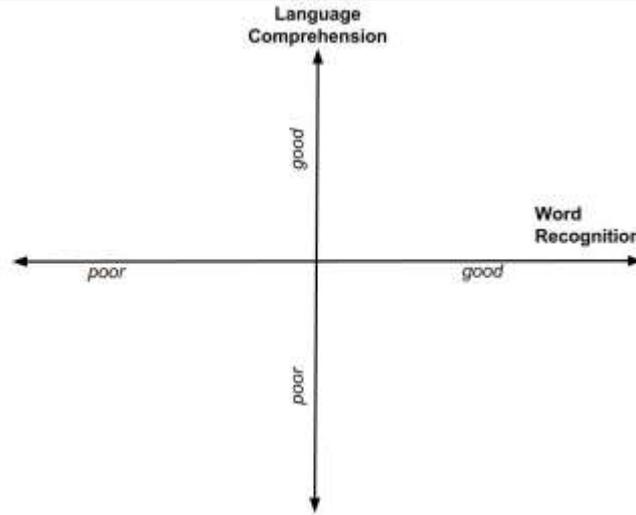
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# READING THEORIES

## The Simple View of Reading

Decoding  $\times$  Language Comprehension = Reading Comprehension





## LANGUAGE COMPREHENSION

BACKGROUND KNOWLEDGE  
(facts, concepts, etc.)

VOCABULARY  
(breadth, precision, links, etc.)

LANGUAGE STRUCTURES  
(syntax, semantics, etc.)

VERBAL REASONING  
(inference, metaphor, etc.)

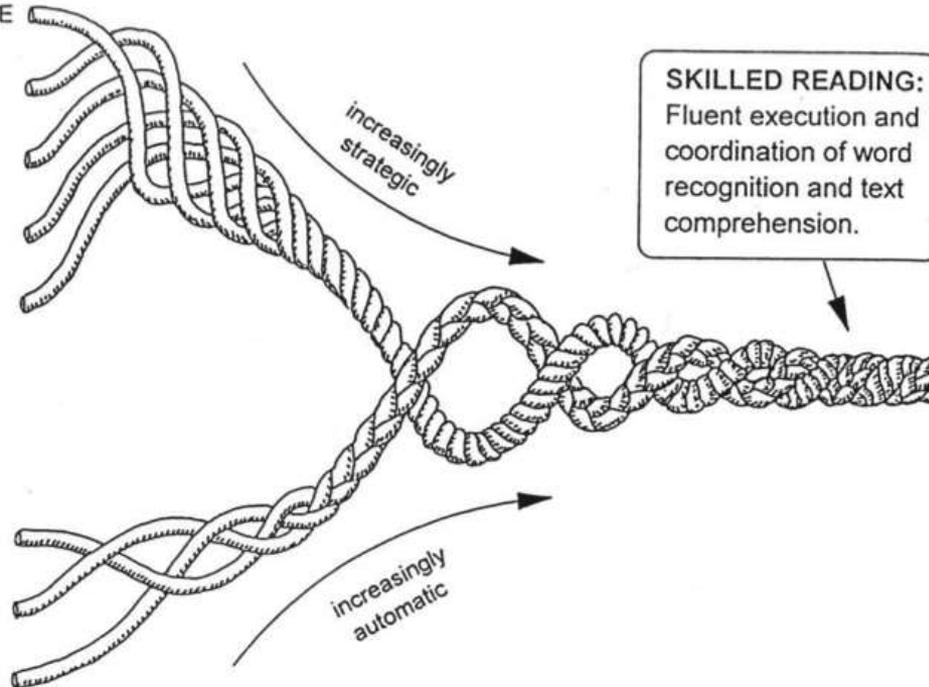
LITERACY KNOWLEDGE  
(print concepts, genres, etc.)

## WORD RECOGNITION

PHONOLOGICAL AWARENESS  
(syllables, phonemes, etc.)

DECODING (alphabetic principle,  
spelling-sound correspondences)

SIGHT RECOGNITION  
(of familiar words)

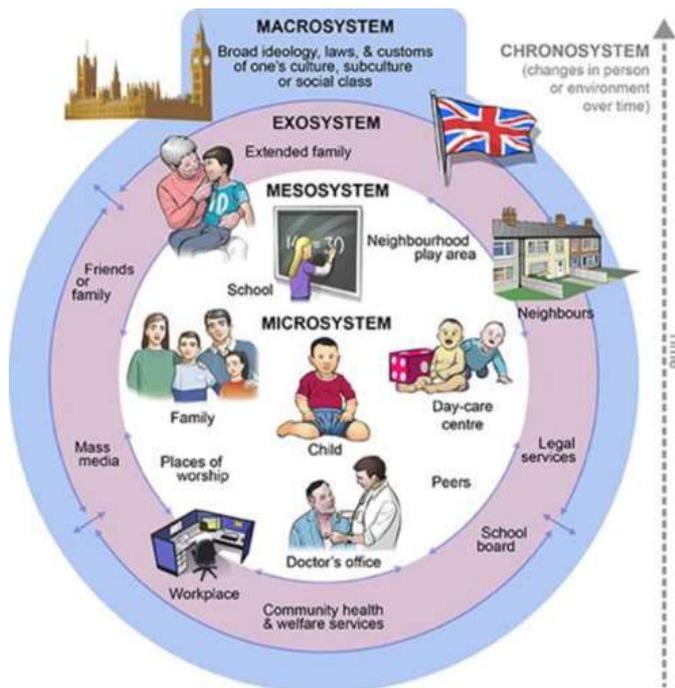


**SKILLED READING:**  
Fluent execution and  
coordination of word  
recognition and text  
comprehension.

Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice, by H. S. Scarborough, in S. B. Newman & D. K. Dickinson (Eds.), 2002, *Handbook of early literacy research*, p. 98, Copyright 2002, New York, NY: Guilford Press.



# CHILD DEVELOPMENT



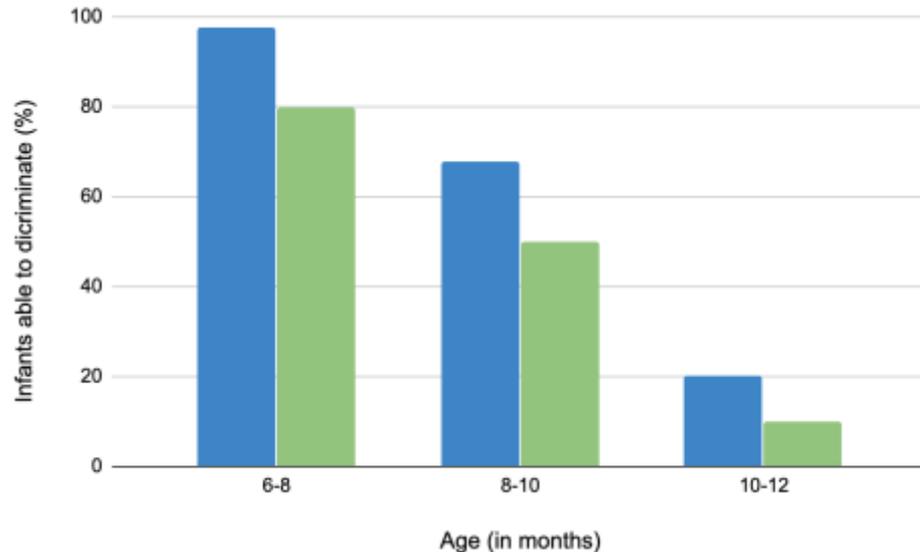
# HISTORIC TIMELINE

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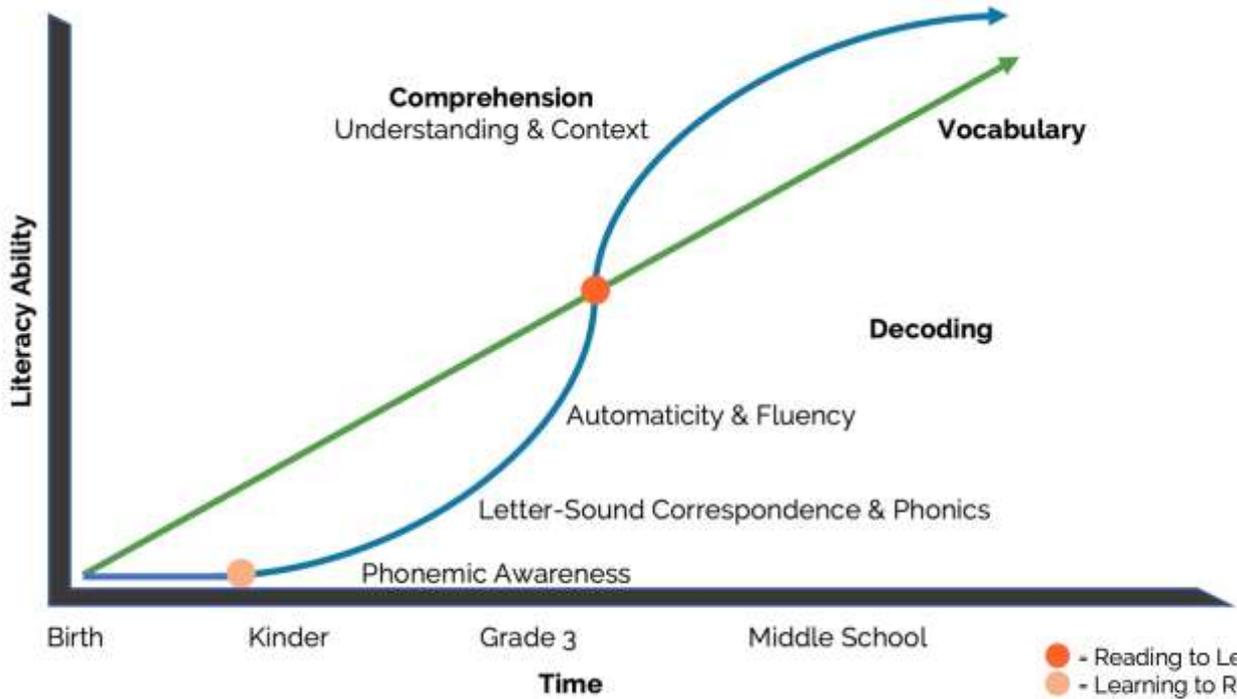
# LINGUISTIC DEVELOPMENT



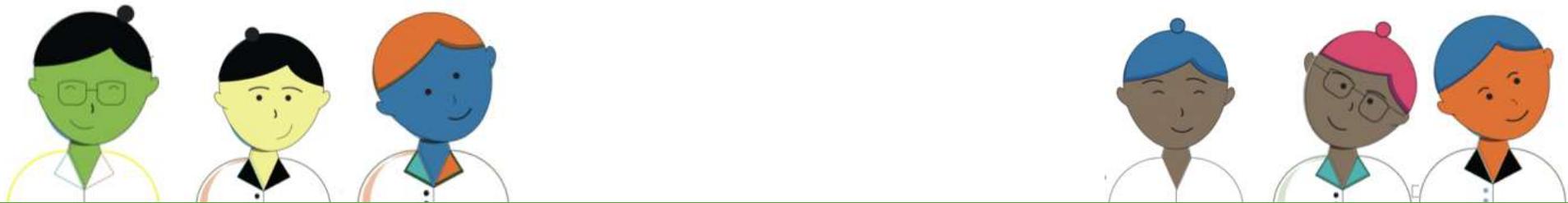
“Percent of infants able to discriminate foreign-language speech sounds infant's ability to discriminate between speech sounds that are not in their native language declines between 6 and 12 months of age. Most 6-month-olds from English-speaking families readily discriminate between syllables in **Hindi (blue bars)** and **Nthlakapmx (green bars)**, but most 10-to 12-month olds do not.

(Adapted from Werker, 1989)”

# READING DEVELOPMENT



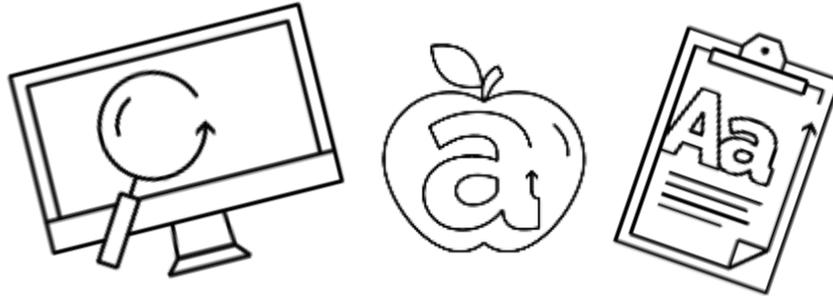
**Different kids need  
different things to be  
successful.**



# The How?

## Bringing Research into the Classroom

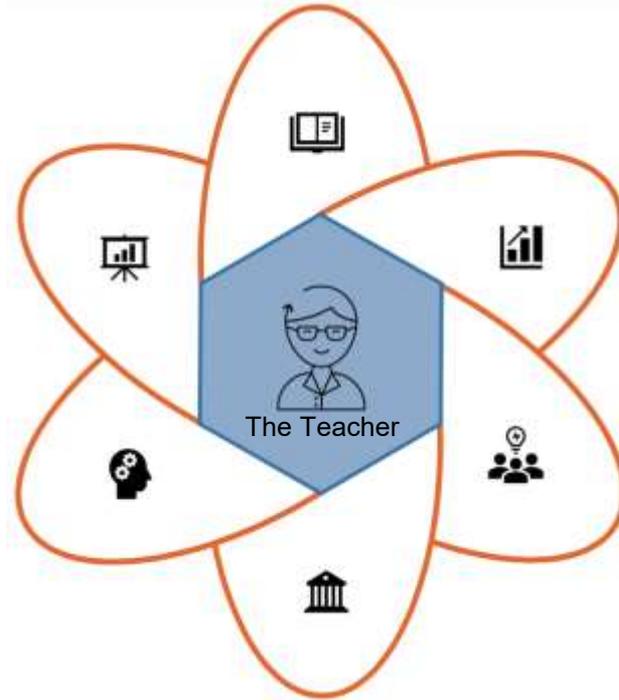
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# THE HOW

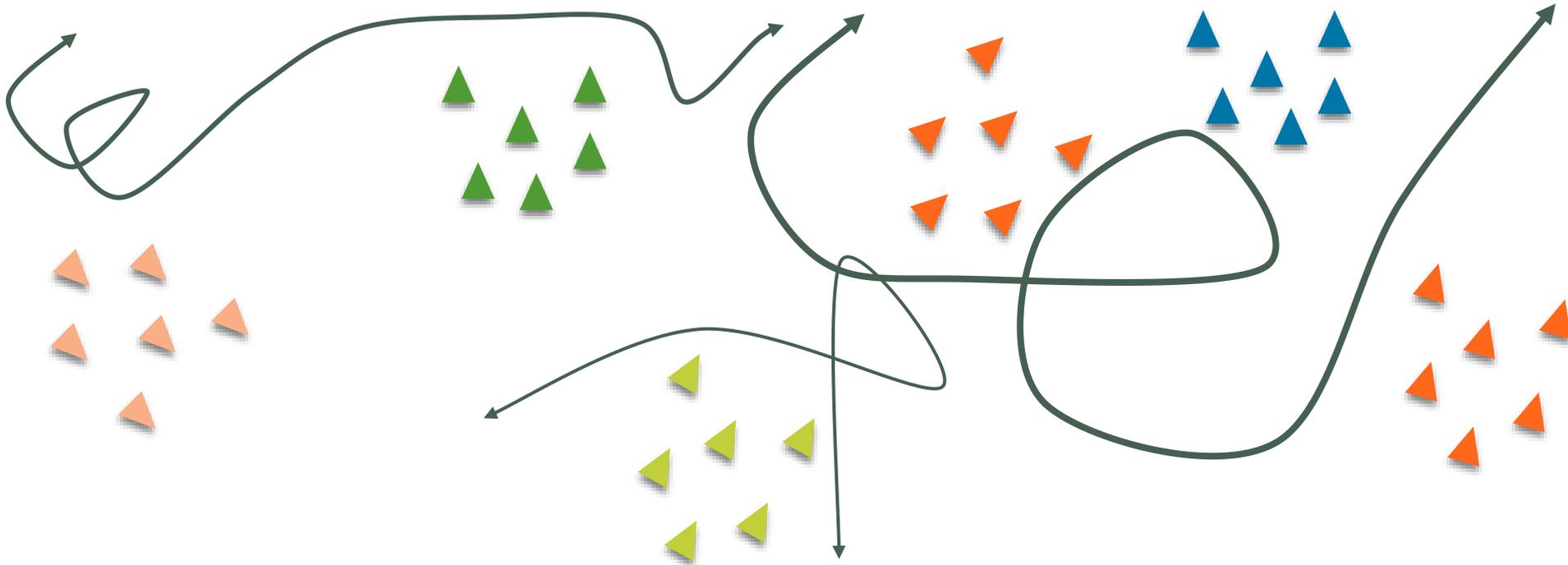
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The System

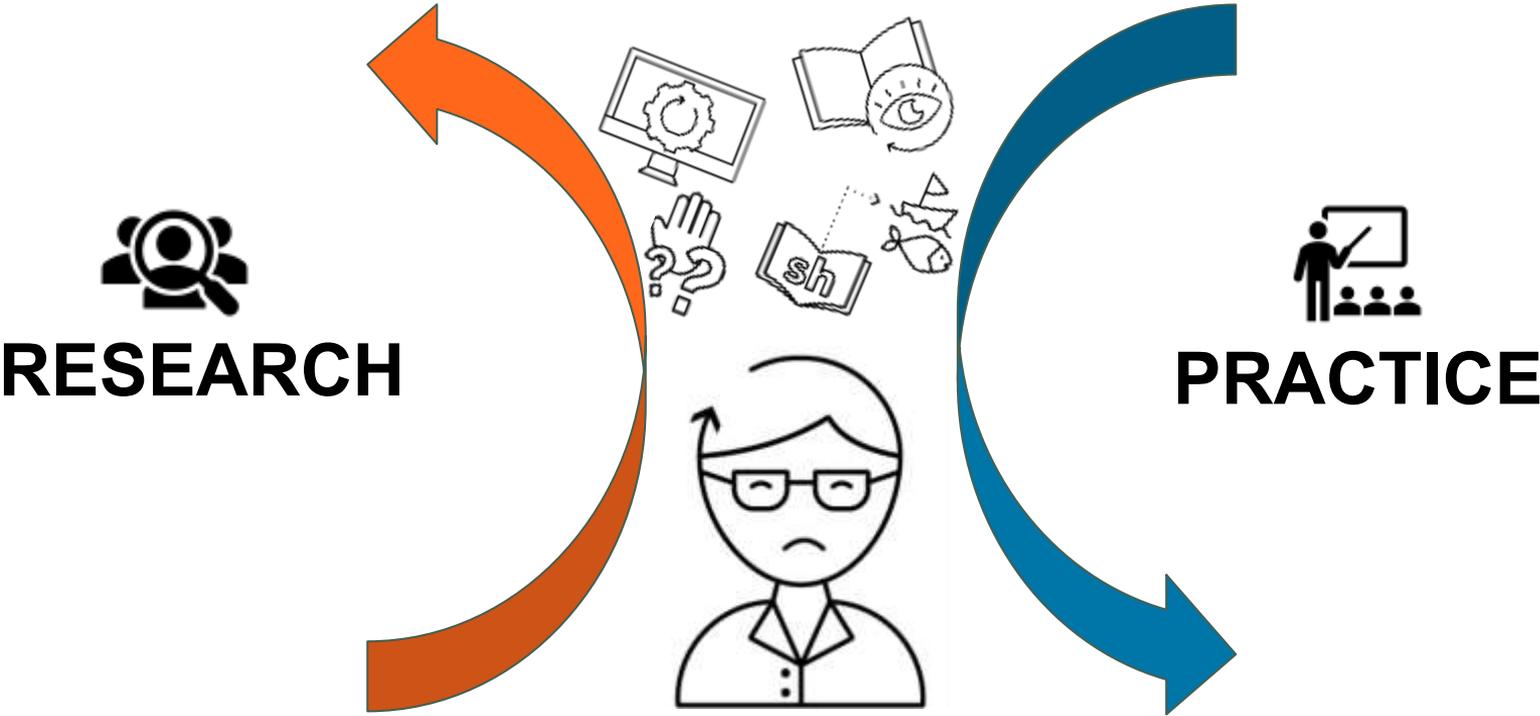


# FRAGMENTED LANDSCAPE

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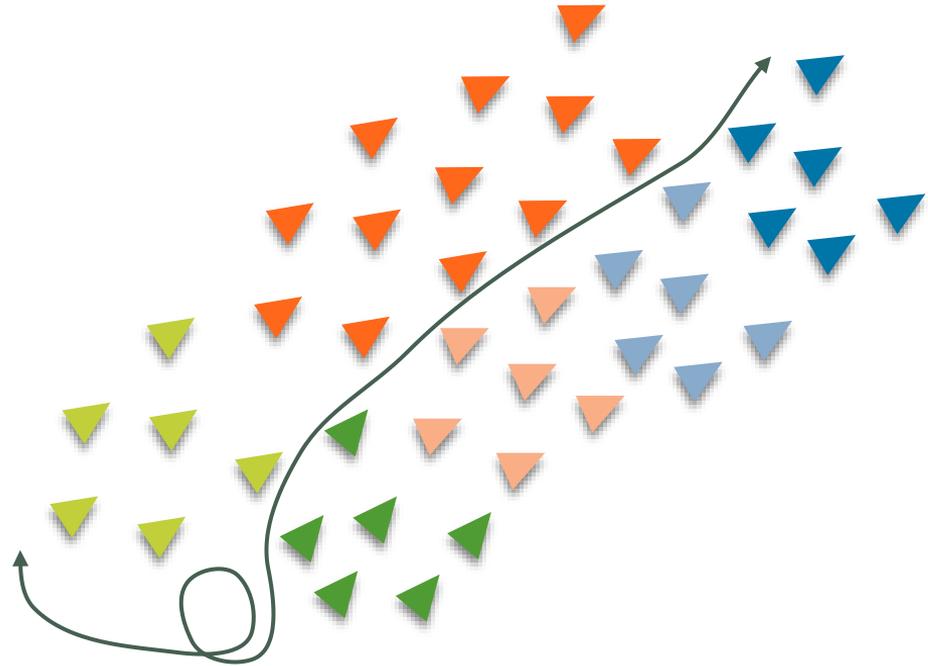


# RESEARCH *VERSUS* PRACTICE



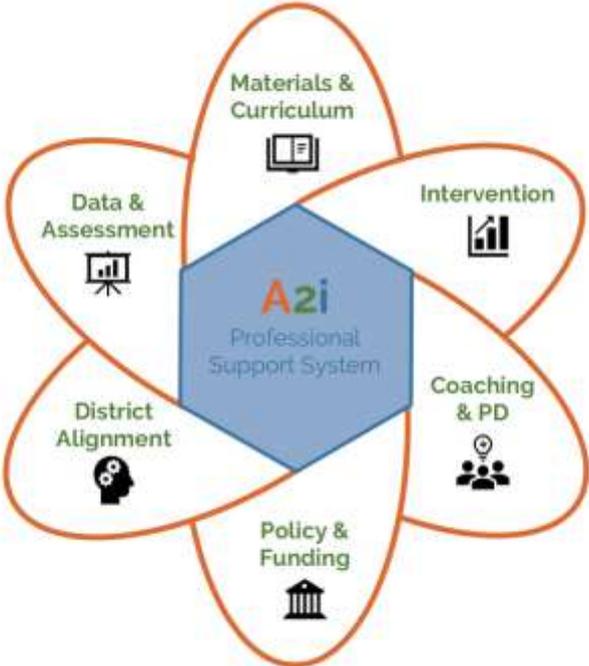
# SYSTEMS ALIGNMENT

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# THE HOW

The System



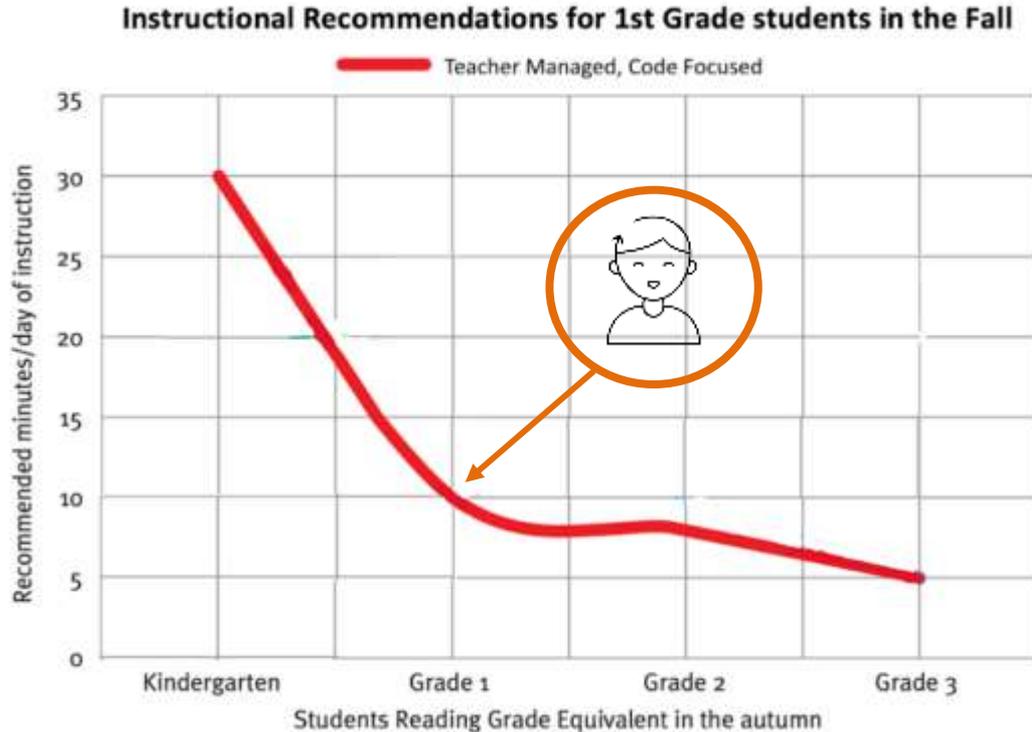
# THE HOW

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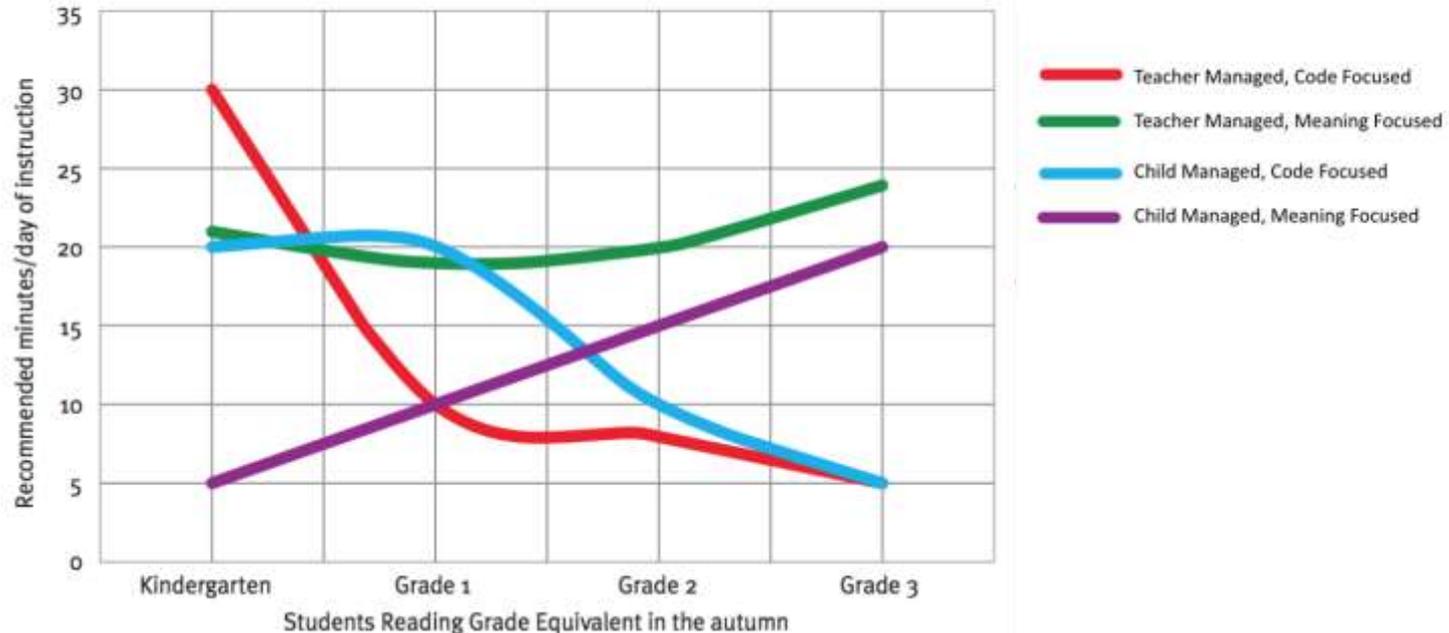
**The Teacher**

# RESEARCH RESULTS



# RESEARCH RESULTS

**Instructional Recommendations for 1st Grade Students in the Fall**



# SOFTWARE PLATFORM





# SUPPORT SYSTEM

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**Different kids need  
different things to be  
successful.**



ALL CHILDREN READING AT, OR ABOVE, GRADE LEVEL BY  
THE END OF THIRD GRADE.

**THANK YOU!**



**Learning Ovation**

YOU WILL KNOW US BY YOUR OUTCOMES

# CONTACT INFO

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**Dr. Sarah Siegal** - [ssiegal@learningovations.com](mailto:ssiegal@learningovations.com)  
*Vice President for Research & Practice*

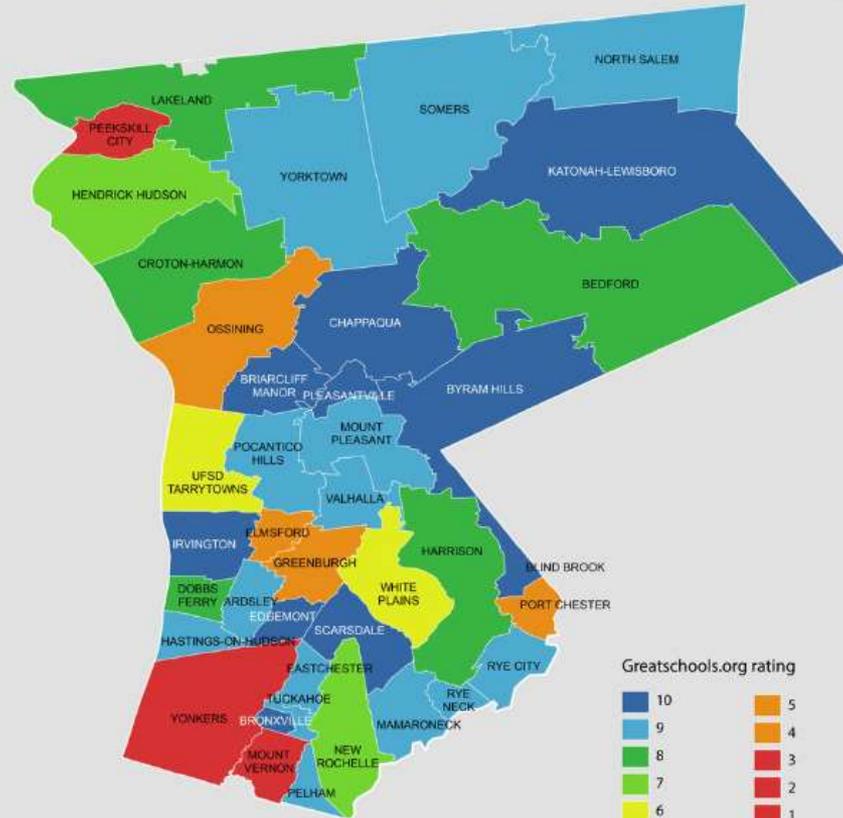
**or visit us:**  
learningovations.com

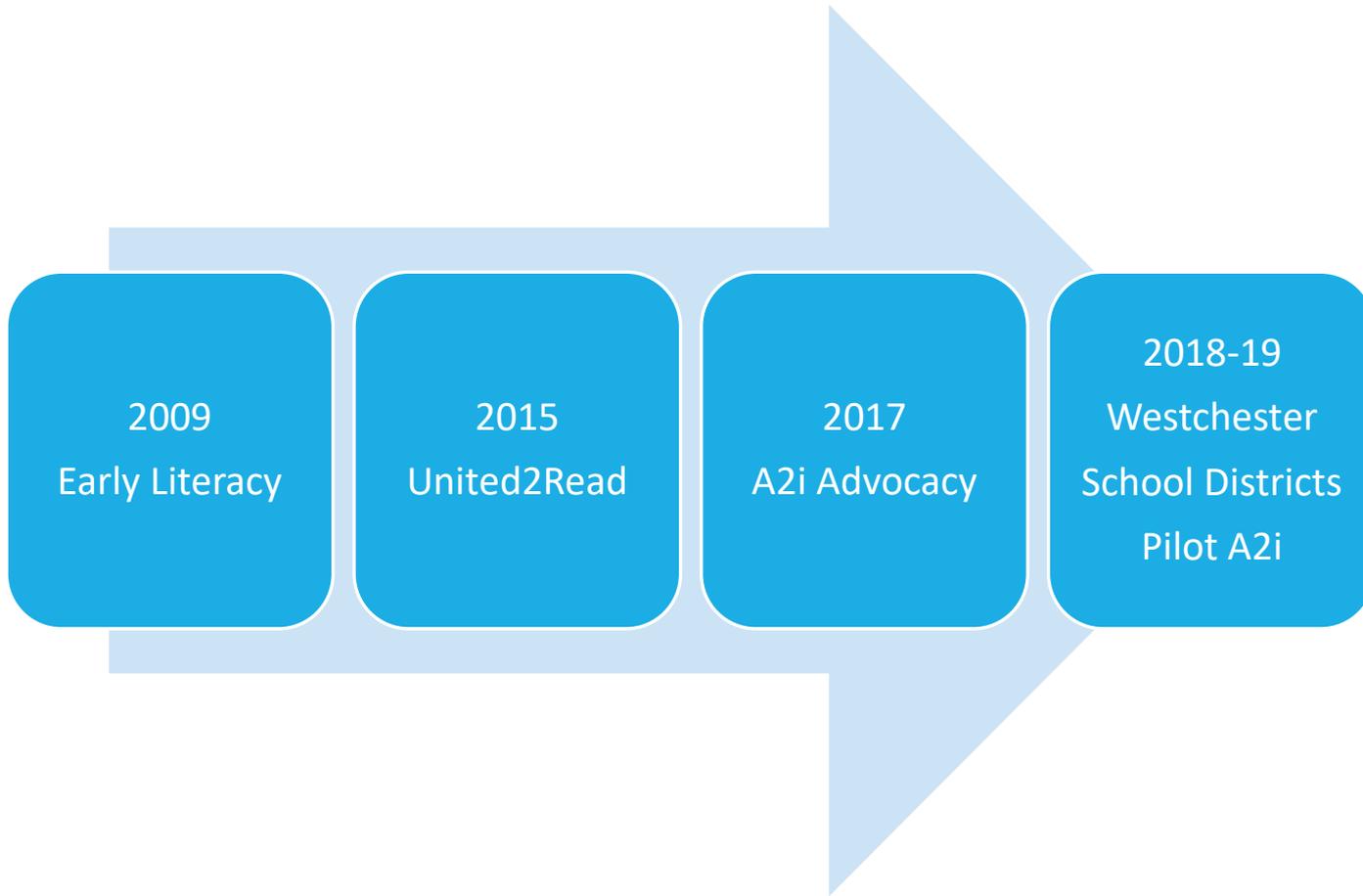
**FACEBOOK:** <https://www.facebook.com/learningovations>

**TWITTER:** <https://twitter.com/LOindividualize>

# Campaign for Grade Level Reading in Westchester

## Westchester County School District





# Year 1: 2018-19 School Year

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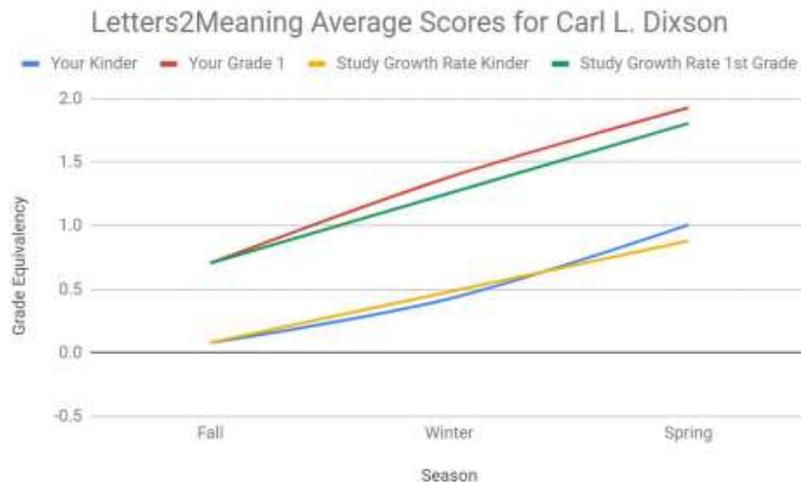


763 students  
in 32 classrooms

using the A2i tool between the  
Elmsford and Peekskill school districts  
in Westchester County

# Letters2Meaning

## Carl L. Dixon



## Woodside



# Letters2Meaning

## Carl L. Dixon

L2M GEs				
Season	Your Kinder	Your Grade 1	Study Growth Rate Kinder	Study Growth Rate 1st Grade
Fall	0.080	0.705	0.08	0.71
Winter	0.425	1.381	0.48	1.26
Spring	1.007	1.928	0.88	1.81
<b>L2M Growth</b>	0.927	1.222		

## Woodside

L2M GEs				
Season	Your Kinder	Your Grade 1	Study Growth Rate Kinder	Study Growth Rate 1st Grade
Fall	0.083	0.752	0.08	0.75
Winter	0.557	1.447	0.48	1.30
Spring	0.903	1.934	0.88	1.85
<b>L2M Growth</b>	0.820	1.183		

# Outcomes

## Word Match Games Results

Children learn new vocabulary at a relatively rapid pace, especially when experiencing new situations and academic language. Exposure to new items, more complex conversations, and high-quality texts all result in larger student vocabulary.

Due to this impact of exposure, a vocabulary score is most accurately reflected at an "age equivalency" score that more accurately captures the developmental nature of vocabulary growth. The consistent pattern of growth, based on language exposure, is in contrast to skills like decoding and other more explicitly-taught literacy skills, where growth is more directly tied to systematic skill-based instruction.

The Word Match Game scores assess these following specific skill areas: oral language processing, vocabulary, language/word knowledge. It serves as our gauge for oral language ability and we have found that this similes/matching task provides this information. We have aligned the scores of the WMG to the Woodcock-Johnson III Picture Vocabulary subtest to ensure the Age Equivalency/Grade Equivalency scores are aligned to a nationally normed sample.



United Way  
of Westchester and Putnam

## Carl L. Dixon

WMG AEs		
Season	Kinder	Grade 1
Fall	4,179	5,413
Winter	5,012	6,726
Spring	5,750	7,454
<b>WMG Growth</b>	<b>1,571</b>	<b>2,041</b>

## Woodside

WMG AEs		
Season	Kinder	Grade 1
Fall	4,414	5,192
Winter	4,679	6,107
Spring	5,568	6,718
<b>WMG Growth</b>	<b>1,154</b>	<b>1,527</b>

# Third-Party Confirmation from i-Ready

## Elmsford Union Free School District Performance Trends & Targets

Performance Measures <sup>1</sup>	2015	2016	2017	2018	2019	2022 Target
K – 2 ELA: % $\geq$ benchmark <sup>2</sup>	43	36	37	38	67	75
K – 2 Math: % $\geq$ benchmark	36	33	31	34	57	70

1. K-2 ELA & Math and i-Ready data are based on school-level enrollments; all other measures are based on district-level enrollment.
2. “ $\geq$  benchmark” is based on year-end grade-level performance measured by i-Ready mid-level view; it is indicative of being on grade level.



# Beyond Expectations

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## Most Classroom Growth in L2M:

Fabiola Diaz  
(1 year, 2 months)

## Most Classroom Growth in WMG:

Courtney Velardo  
(2 years, 1 month)



United Way  
of Westchester and Putnam



# Supporting Literacy Outside the Classroom



- School Readiness
- Chronic Absence
- Summer Learning Loss
- Successful Parents
- Health Determinants of Early School Success

# School Readiness



Born Learning Trails promote caregiver-child interactions and encourage a child's imagination

# School Readiness



United2Read provides bilingual literacy kits consisting of books, activities, and information for families to share.

# School Readiness



School supplies to help students start the year off right!

# Summer Learning

## Opt-in to Summer Fun

Elmsford School District has teamed up with United Way's 2-1-1 Helpline to have the B.E.A.R. (Be Excited About Reading) summer activities sent out to parents of Dixon Primary students daily via text.

Please fill out the form below and return it to your child's teacher.

I want to receive daily text messages about the B.E.A.R. summer activities from United Way's 2-1-1 Helpline on behalf of the Elmsford School District during the 2019 Summer Vacation.

I am giving permission for the Elmsford School District to share my cellphone number with United Way of Westchester and Putnam for this great reason.

I understand that I have the ability to opt-out of the program at any time.

\_\_\_\_\_  
First Name, Last Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

( ) -  
\_\_\_\_\_  
Cellphone Number

# Summer Learning



Teach Me to Fish

# Successful Parents



Providing basic need items through our Gifts-in-Kind program.



Promoting financial literacy through our ALICE \$ense financial technology

# Successful Parents

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United Way's 211 Helpline offers information and referrals for health and human service needs.



Teach Me to Fish teaches workforce development and job finding skills to those chronically unemployed.

# The Science of Reading, Part 2: Applying the Science in the Classroom

Orange County's Grade Level Reading Initiative  
OC Reads

Todd Hanson  
VP Center for Engaged Philanthropy  
Orange County Community Foundation



# About Orange County

**Population:** 3.2 Million

**Diversity:** No one race or ethnicity comprises a majority (41% white, 35% Latino, 19% Asian)

**Poverty:** 1 in 6 children live in poverty

**School Readiness:** 52% of OC's children are ready with the skills they need when they enter kindergarten

**Grade Level Reading:** 51% meet third grade achievement standards to literacy

# About OCCF

- We partner with generous individuals, families, foundations, and businesses to fulfill their philanthropic objectives while supporting the causes they care about most.
- Over past 30 years we have awarded more than \$690 million in grants and scholarships in Orange County, across the country, and around the world.
- We look for opportunities to lead and for leaders who make great partners.
- Our community leadership includes: OC Veterans Initiative, Giving Days, OC Promise and OC Reads

# OC Reads

In 2014, a group of funders, thought leaders, and service providers convened to create alignment of goals and targeted investment related to early grade level achievement in Orange County.

**Founding partners:** First 5 Commission, OCCF, United Way of OC

**Vision:** All children in OC are reading at grade level by third grade

**Target:** Communities in OC with children most at-risk for failing to achieve the outcome of grade level reading by third grade

**Approach:** Use two assessment tools:

- **Third Grade Smarter Balance Test Scores**
- **Early Development Index (EDI):** a population-based measure of early child development and school readiness in five key domains: physical health, social competence, emotional maturity, language and cognitive skills, and communications skills and general knowledge.

# Early Development Index

- 44% of its kindergarten population lack necessary gross and fine motor skills

## Gross and Fine Motor Skills

56%  
Ready



16%  
Somewhat  
Ready



28%  
Not Ready



- And many students are falling behind in social-emotional development, including 52% of students showing significant gaps in overall social competence and 51% of students displaying little or no prosocial and helping behavior.

## Overall Social Competence

48%  
Ready



41%  
Somewhat  
Ready



11%  
Not Ready



## Prosocial and Helping Behavior

49%  
Ready



28%  
Somewhat  
Ready



23%  
Not Ready



Early Development Index:

<http://occhildrenandfamilies.com/edi/>

The data confirmed that many Orange County children are not developmentally on-track when they enter kindergarten.

# OC Reads Funding Strategy

- RFP sent to 30 organizations that serve the six targeted communities determined by the EDI and Smarter Balance Test scores
- Applicants were required to create a collaborative model using proven evidence-based literacy programs and interventions
- Program and intervention strategies were expected to be sustainable, measureable and scalable. Four of the six communities submitted proposals and all were funded.

# OC Reads 2018 to 2020

- **i-Ready:** provides students with lessons based on their individual skill level and needs, so children can learn at a pace that is just right for them.
- **United to Read/A2i:** Combines technology and professional development to increase literacy achievement for all students in grades K-3 by equipping and empowering educators to effectively individualize instruction in grades K-3.



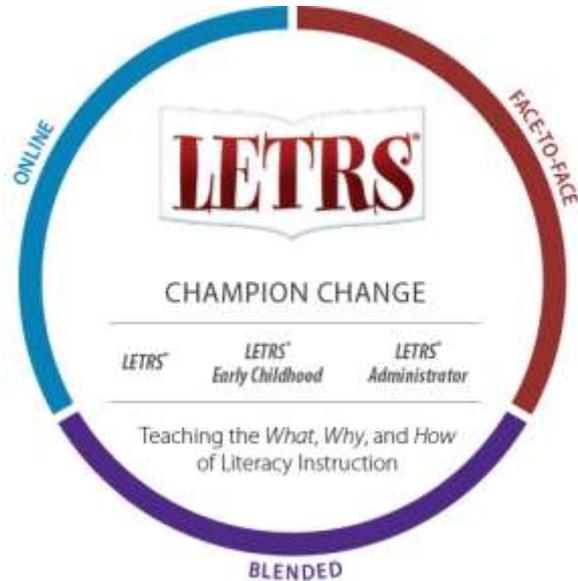
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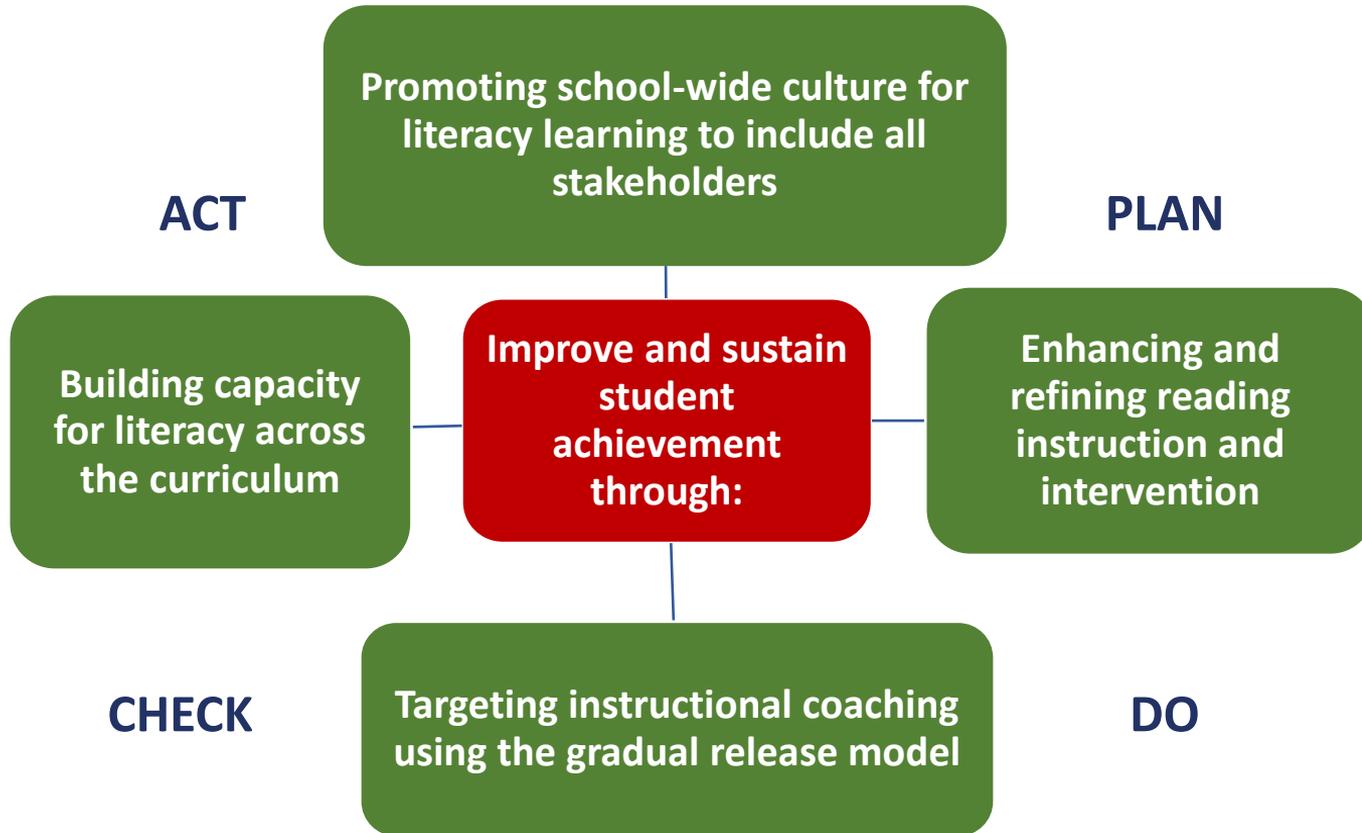
Director, Center for Excellence in Literacy Instruction  
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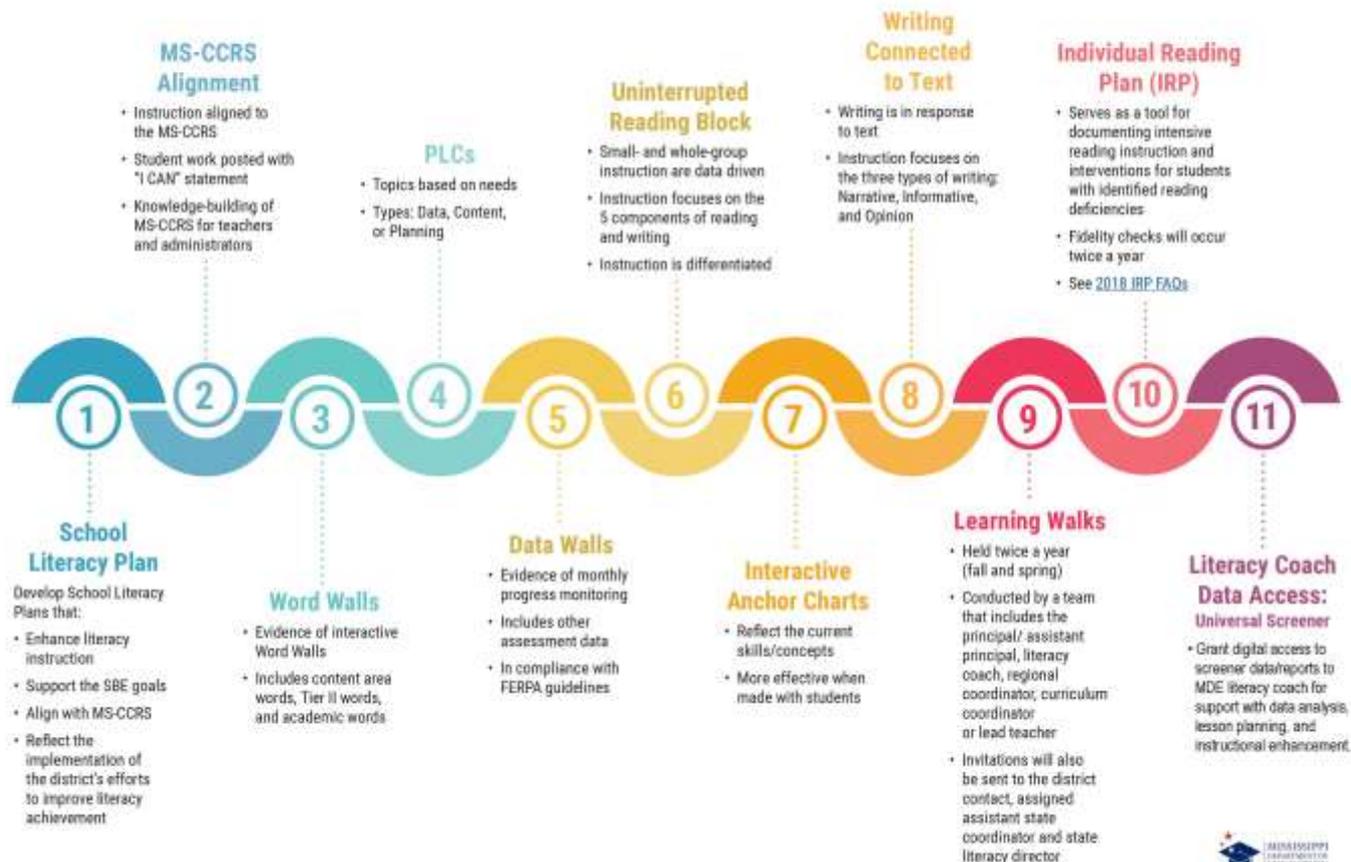
# Language Essentials for Teachers of Reading and Spelling (LETRS)

LETRS Training has been provided to over 15,000 educators to date, including K-3 general education teachers, K-8 special education teachers, elementary principals, and reading faculty from Institutions of Higher Learning.

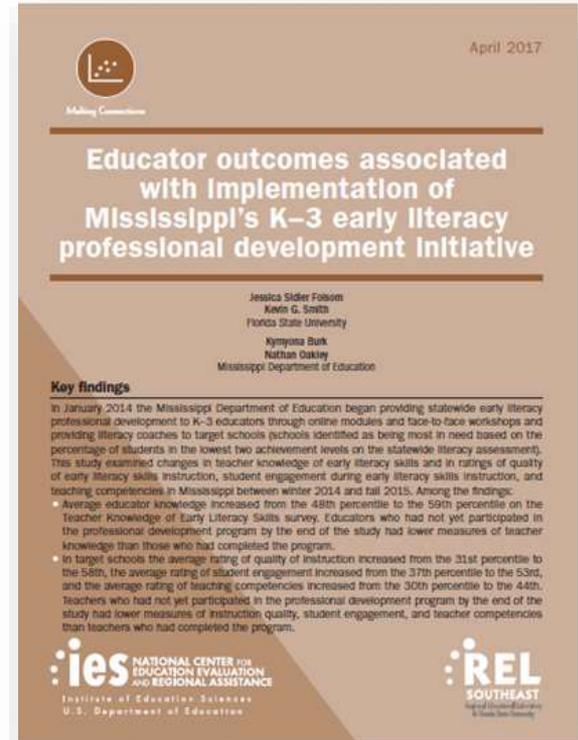


# Literacy Coach Role





# Results: Educator & Student Outcomes



# Questions & Discussion

# Upcoming GLR Learning Tuesdays Webinars

## SPECIAL WEBINAR

Protecting the Building Blocks of Early Learning: An Urgent Priority  
Tuesday, May 26, 12:30 p.m. ET/9:30 a.m. PT

## PARTNERS WEBINAR

Underconnected yet Eager to Learn: Confronting Digital Inequities  
Tuesday, May 26, 3 p.m. ET/12 p.m. PT

## PARTNERS WEBINAR

The Science of Learning Loss and Opportunities for Recovery  
Tuesday, June 2, 3 p.m. ET/12 p.m. PT

