

Mount St. Joseph University

Embracing the Science of Reading in Higher Education

Dr. Amy Murdoch and Dr. Stephanie Stollar
Mount St. Joseph University



MOUNT ST. JOSEPH
UNIVERSITY
Reading Science Program



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Reading Science Program



Doctoral
Master's Degree
Dyslexia Certificate



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UNIVERSITY
Reading Science Program



The Center for
Reading Science
MOUNT ST. JOSEPH UNIVERSITY*

STARS – HE
Stronger Together: Advancing
Reading Science in Higher Education

www.readingscience.org



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Objectives

- ❖ Briefly explore why there is an urgent need to focus on the Science of Reading in Higher Education
- ❖ Introduce the Knowledge and Practice Standards for Teaching Reading
- ❖ Highlight national efforts to enhance reading science in courses and fieldwork
- ❖ Gather input on moving forward

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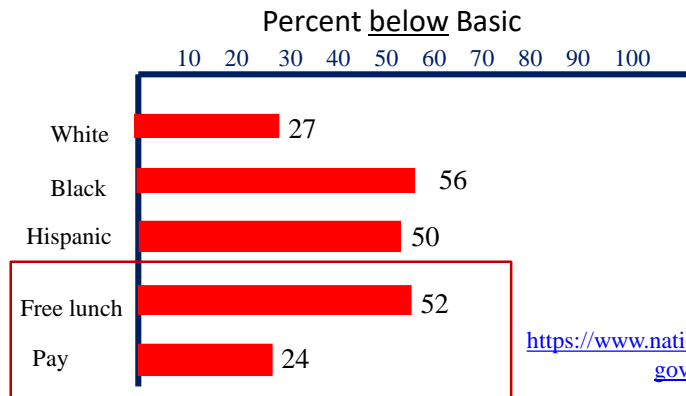
Framing the Problem

Why Focus on the **Science** of Reading in Higher Education?

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2022 results from National Assessment of Educational Progress at 4th Grade

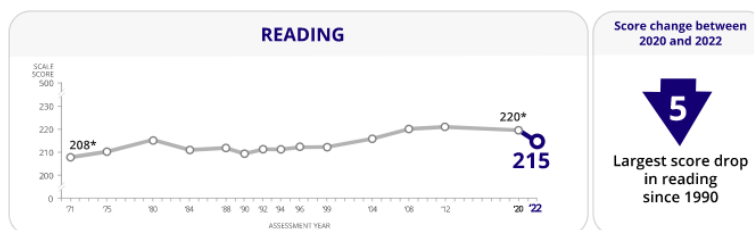
Overall, 37% of 4th graders performed below the Basic Level of Proficiency.



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Reading and mathematics scores decline during COVID-19 pandemic

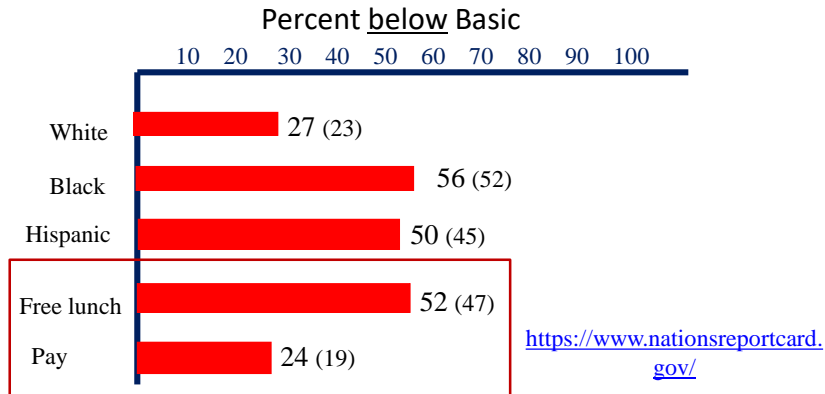
In 2022, the National Center for Education Statistics (NCES) conducted a special administration of the NAEP long-term trend (LTT) reading and mathematics assessments for age 9 students to examine student achievement during the COVID-19 pandemic. Average scores for age 9 students in 2022 declined 5 points in reading and 7 points in mathematics compared to 2020. This is the largest average score decline in reading since 1990, and the first ever score decline in mathematics.



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2022 results with (2019) from National Assessment of Educational Progress at 4th Grade

Overall, 37% (34%) of 4th graders performed below the Basic Level of Proficiency.



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However...

We know how to improve reading achievement!

“With the scientific discoveries that began over a half-century ago, we now have the good fortune of holding the keys to the locks that bar far too many children from having full access to society. It is time to put the keys in the locks and start turning them.”

- National Council on Teacher Quality, 2007, p. 17



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The Science of Reading
A Defining Movement

thereadingleague.org/what-is-the-science-of-reading

SCIENCE OF READING
DEFINING GUIDE

Heidi Beverine-Curry, Ph.D., Chief Academic Officer, The Reading League
Kymyona Burk, Ed.D., Early Literacy Policy Director, Foundation for Excellence in Education
Kelly Butler, CEO, Barksdale Institute
Mary E. Dahlgren, Ed.D., President and Founder, Tools 4 Reading
Linda Diamond, co-author "Teaching Reading Sourcebook" and "Assessing Reading Multiple Measures" and Founder, Consortium on Reaching Excellence in Education (CORE)
Melissa Farnall, Ph.D., Director for Evaluation, Stern Center for Language and Learning
Margie B. Gillis, Ed.D., Founder and President, Literacy How, Inc.
DeJenne Clark Jackson, Vice President of Program Development, The Center for Literacy & Learning; Founder, Learning Fundamentals Educational Therapy & Consulting; President of The Reading League Louisiana; State Leader, Decoding Dyslexia Louisiana
Kelli Johnson, Director of Community Education and Engagement, The Reading League
Pam Kastner, Ed.D., State Lead Consultant for Literacy, The Pennsylvania Training and Technical Assistance Network (PaTTAN) & President of The Reading League Pennsylvania
Karl Kurto, Literacy Specialist, Rhode Island Department of Education
Amy McGovern, Reading Specialist & Associate Director of Continuous School Improvement Services at CESA 9, Vice President of The Reading League WI
Louisa C. Moats, Ed.D., President, Moats Associates Consulting, Inc., Sun Valley, Idaho
Marla Murray, Ph.D., President and CEO, The Reading League
Laura Stewart, Chief Innovation Officer, The Reading League
Stephanie A. Stollar, Ph.D., Part-Time Assistant Professor, Mount St. Joseph University, Founder of The Reading Science Academy
Pamela Toman, Co-Founder & Executive Director, TX Reads
Toni Ann Walsh, Chief Marketing and Development Officer, The Reading League
Dale W. Webster, Ph.D., Chief Academic Officer, Consortium on Reaching Excellence in Education (CORE)
Tracy Weeden, Ph.D., President and CEO, Neuhaus Education Center
Liz Woody-Remington, Co-Founder of The Learning Alliance and Director of Professional Development

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The Definition

The **science of reading** is a **vast, interdisciplinary body of scientifically-based** research about reading and issues related to reading and writing.

This research has been conducted over the **last five decades across the world**, and it is derived from **thousands** of studies conducted in multiple languages. The science of reading has culminated in a **preponderance of evidence** to inform how proficient reading and writing develop; why some have difficulty; and how we can most effectively assess and teach and, therefore, **improve student outcomes** through prevention of and intervention for reading difficulties.

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The Science of Reading

Reading is HIGHLY researched by cognitive psychologists, neuroscientists, as well as educational researchers. It is one of the oldest topics in experimental psychology. **We know a great deal about how to teach reading!**

SO, What's the problem?

“There is a **profound disconnection** between the science of reading and educational practice. Very little of what we've learned about reading as scientists has had any impact on what happens in schools because **the cultures of science and education are so different.**”

- Seidenberg, 2017, p. 9

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We Can Do Better

- We know what it takes to create readers
- We can predict who may struggle with early screening
- We know the skills to teach and **how** to teach them
- We know how to prevent reading failure and intervene with struggling readers

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Changing Reading Instruction is Complex & Multi-Pronged Approach is Needed

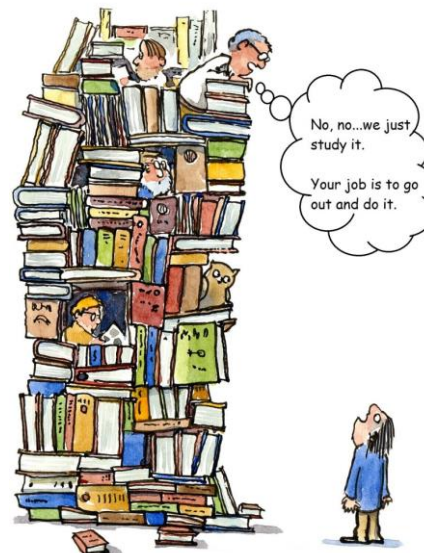
- Laws & Policy
- K – 12 Schools
- Early Childhood Services
- Family Supports
- Higher Education – How Our Teachers Are Trained at the Start

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Teacher Preparation

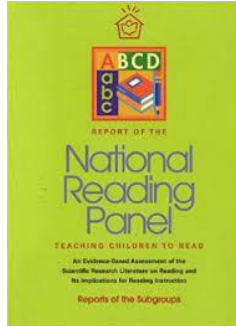
Teacher preparation in traditional initial licensure programs are not preparing teachers according to the science and research. Instead they **rely heavily on theories with little to no empirical evidence.**

HOW TWO THINGS ABOUT
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 TO LANGUAGE AT THE WO
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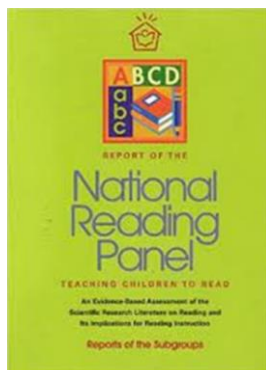
A Crucial Report



- One of the most rigorous reviews of the research.
- “Reflects 30 years of government funded and privately funded research, tens of thousands of subjects, and hundreds of scientist of various disciplines have worked to produce hundreds of well designed studies, the results of which have converged on major findings that are well accepted by reading scholars” (Moats, 2003 p. 110)

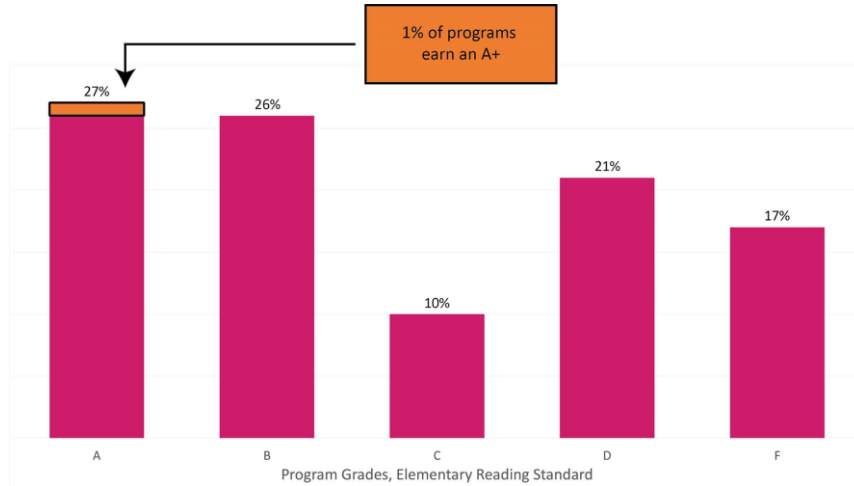
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Stand Up If...



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National Council for Teacher Quality - 2019



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However,
Exciting Changes are Occurring!

We can move higher education to the
Science of Reading



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There is new awareness of the
need to change.

Teacher preparation is being
examined and pressured to change.

HOPE

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THE Goal

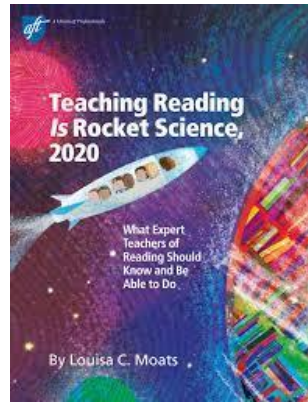
Change the culture of education to embrace
science. Eliminate the research-to-practice gap.

Prepare teachers to implement the science of
reading (and learning) so
ALL children learn to read.

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Moats, 1999



Moat, 2020

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Knowledge & Practice Standards

2010; 2018

“The KPS define the knowledge and skills that all teachers of reading should possess to teach all students to read proficiently” (p. 3).



<https://dyslexiaida.org/knowledge-and-practices/>

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KPS Standards

Standard 1 – Foundations of Literacy

Standard 2 – Knowledge of Diverse Reading Profiles, Including Dyslexia

Standard 3 – Assessment

Standard 4 – Structured Literacy Instruction

Substandard A: Essential Principles & Practice of Structured Literacy

Substandard B: Phonological & Phonemic Awareness

Substandard C: Phonics & Word Recognition

Substandard D: Automatic, Fluent Reading of Text

Substandard E: Vocabulary

Substandard F: Listening & Reading Comprehension

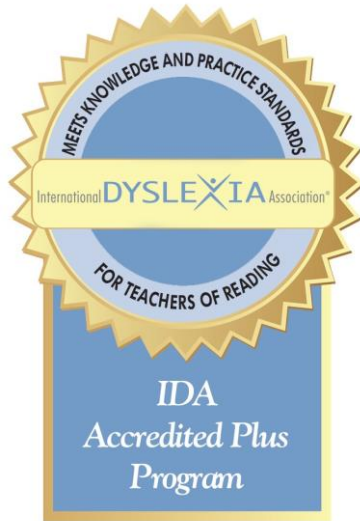
Substandard G: Written Expression

Standard 5: Professional Dispositions and Practices

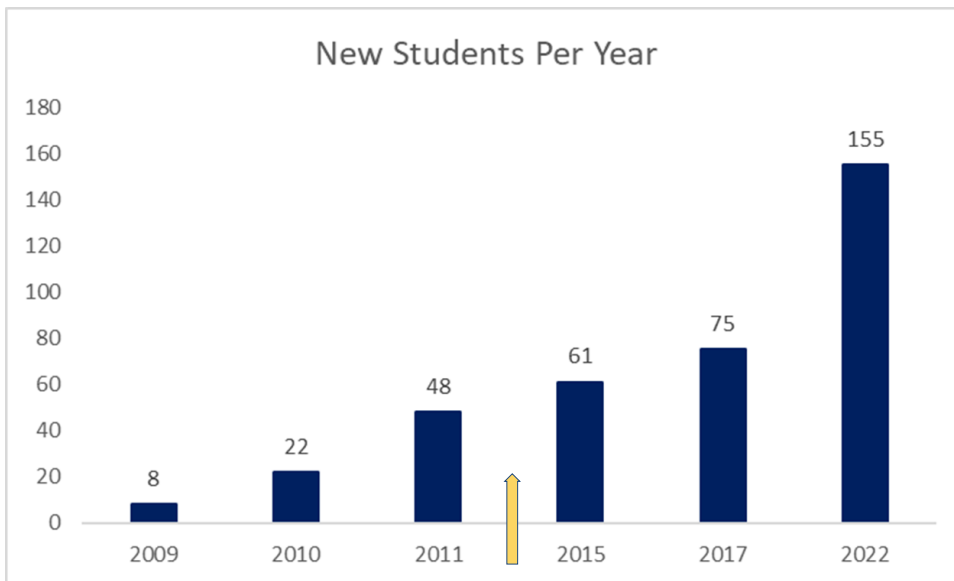
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STANDARD 4: STRUCTURED LITERACY INSTRUCTION C: PHONICS AND WORD RECOGNITION		
Substandard	Examples of Coursework Expectations	Examples of Practicum or Fieldwork Expectations
4C.1 Know/apply in practice considerations for the structure of English orthography and the patterns and rules that inform the teaching of single- and multisyllable regular word reading.	<ul style="list-style-type: none"> Define key terms (e.g., <i>grapheme, phoneme, syllable, suffix</i>), and identify examples of each. Map regular words by phoneme-grapheme (or grapheme-phoneme) correspondences. Sort single-syllable regular words according to written syllable type (closed, open, vowel-consonant-e, vowel team, r-controlled, consonant-le). Divide two-syllable words using the most useful syllable division principles (VC/CV, V/CV, VC/V, VC/CCV, VCC/CV/ consonant-le). Identify morphemes in common words, including prefixes, inflectional and derivational suffixes, roots, and combining forms. Explain why the English writing system is, in fact, highly regular and that words that are not fully regular usually differ in one phoneme/grapheme correspondence and preserve morphological information. 	<ul style="list-style-type: none"> Choose accurate examples for linguistic and orthographic concepts. Use appropriate and accurate terminology during structured literacy teaching. Correct student errors in word reading and spelling by providing insight into the language and/or orthographic structures in those words. Communicate to students that nearly all words can be read using knowledge of speech-to-print relationships and that those with an irregularity usually just differ in one grapheme.
4C.2 Know/apply in practice considerations for systematically, cumulatively, and explicitly teaching basic decoding and spelling skills.	<ul style="list-style-type: none"> Identify where any given skill fits into a scope and sequence. Order decoding concepts from easier to more difficult. 	<ul style="list-style-type: none"> Teach the system of correspondences in a logical progression (simple to complex). Use student assessment data to guide the development of a scope and sequence/where to begin instruction. Use assessment data to develop measurable, observable instructional goals and objectives. (Interventionists and specialists should develop these in line with IEP/504 expectations.)
4C.3 Know/apply in practice considerations for organizing word-recognition and spelling lessons by following a structured phonics lesson plan.	<ul style="list-style-type: none"> Use a lesson framework that includes review of a previously learned skill or concept, introduction of a new skill or concept, supported practice, independent practice, and fluent application to meaningful reading and/or writing. Describe or demonstrate each of the following word work activities and their purpose in relation to the lesson plan: <i>word sorting, word card skills, sound (phonics) boxes, etc.</i> 	<ul style="list-style-type: none"> Effectively teach all steps in an explicit phonics lesson. (For example, develop phonemic awareness, introduce sound/spelling correspondence, blend and read words, practice word chaining, build automatic word recognition, spell and write selected lesson words, and apply to decodable text reading.)

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The Trend Continues

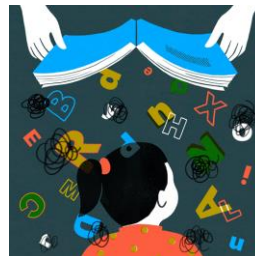
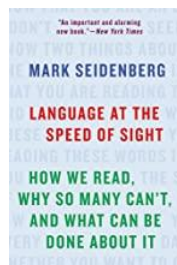
Reading Science = More Students!



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What About Teacher Preparation at MSJ?

- Part 2 of our story, changing teacher preparation... REALLY started with gusto in Spring of 2017.
- Teacher Summit at MSJ and the Superintendent of CPS
- Amy gave Dean and the Provost....Chapter 11 and Hanford's reporting.



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Good Timing

- Seidenberg, Hanford, CPS Superintendent, thriving graduate program, 090 Test of Reading became required in Ohio.
- Started having great conversation about Science of Reading AND Science of Learning in teacher prep.

Let's Revise our Reading Core – Systematic Review and Alignment to IDA Standards

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Changing the “Culture of Education” Revising the Reading Core & Beyond

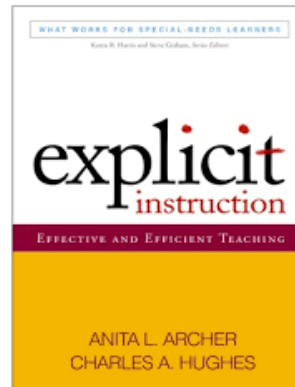
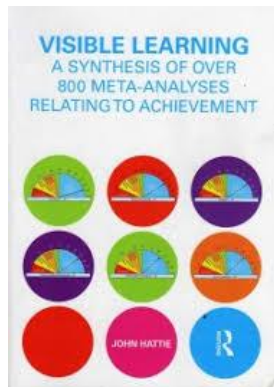
2018-2019 School Year: Collaborative Work Groups

Themes permeated across School of Ed

- HOW to deliver effective instruction
- Research rather than theory
- Rid our courses of myths
- Focus on social justice through strong instruction – closing the opportunity gap

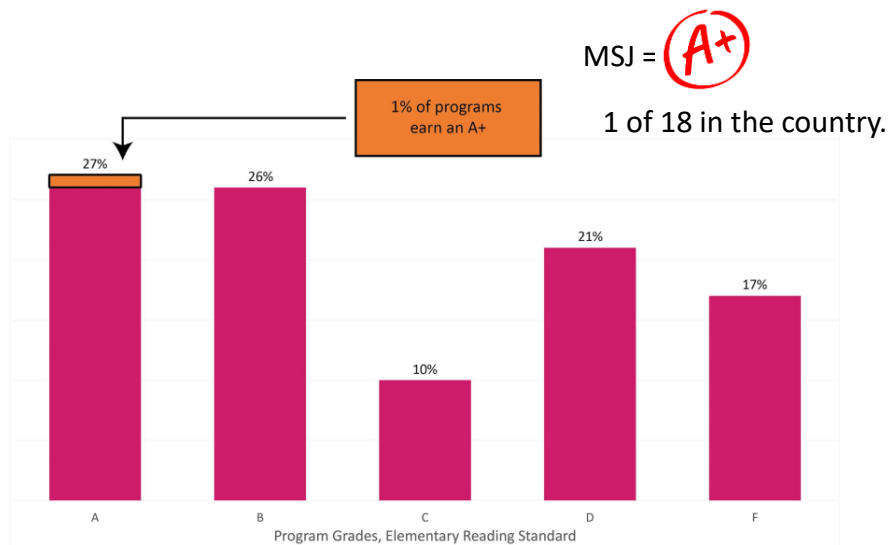
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Not Just a Problem in Reading Education



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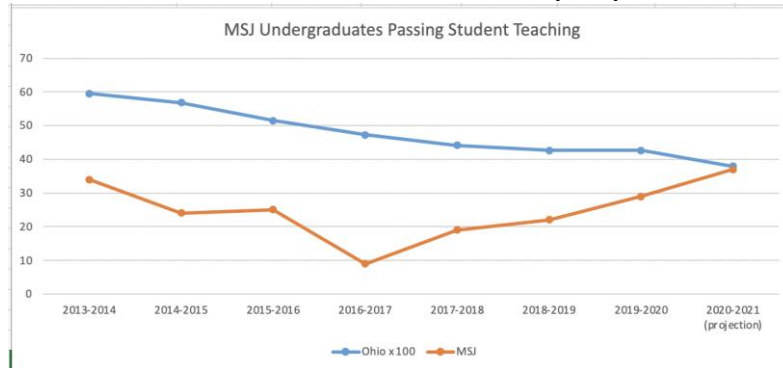
National Council for Teacher Quality - 2019



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Impacts on The School of Education

- Increased enrollment in teacher preparation



STRENGTHS

("Can be leveraged to address weaknesses and/or provides a competitive advantage.")

- Health Sciences and Education School- strong programs with strong reputations



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Stronger Together: Alliance for Reading Science in Higher Education (STARS-HE)

2019 - 2020

Shared our work at Conferences

Started a Private Facebook Group



Training Reading Rocket Scientists

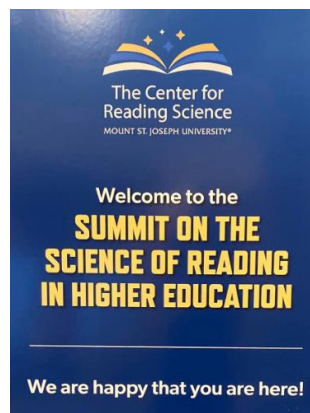
2021

Changing Course: Large Scale Implementation of the Science of Reading

The Science of Reading in Higher Education: The Creation of a Collaborative Alliance

by Stephanie Stollar, Amy Murdoch, Beth Corbo, Priscilla Nelson, Krista Erikson, and Dee Dee Cain

2022





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The Momentum Continues



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Reading Science
MOUNT ST. JOSEPH UNIVERSITY*

www.readingscience.org

STARS-HE, Stronger Together: The Alliance for Reading Science in Higher Education

Join us for a series of one-hour opportunities to connect, share resources, and get support for enhancing the alignment of educator preparation with reading research.

Register at www.readingscience.org/events

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National Projects



Educator Preparation Program Community of Practice

https://docs.google.com/document/d/15XRWUBEasYh7guLCNz1vH5dpz6XViel_7GdOq41esuA/edit



THE PATH FORWARD

<https://hunt-institute.org/programs/the-path-forward/>

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Sample State Higher Education Efforts

- Texas
- Colorado
- Alabama
- Pennsylvania
- Rhode Island
- Minnesota
- Iowa
- Indiana

VOLUME 3 ISSUE 3 SEPTEMBER/OCTOBER 2022

THE READING LEAGUE JOURNAL

Teaching the Teachers: The Role of Teacher Education and Preparation in Reading Science

by Emily Binks-Cantrell, Alida Hudson,
Erin Washburn, Valentina Contesse,
Tiffany Peltier, and Holly Lane.....20

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Sample State Higher Education Efforts

CUNY Reading Corps

In SY22-23, CUNY Reading Corps will train 900 tutors to reach more than 2,300 early readers in NYC Department of Education schools. Students make substantial gains in foundational reading skills by participating in the program.

CUNY Reading Corps serves students across NYC through the support of both public and private partners, including NYC DOE, Benedict Silverman Foundation, and other funders and stakeholders. The initiative was created by Brooklyn College in 2020 in response to learning effects of the pandemic and soon scaled university-wide.

- Started at Brooklyn College
- Being replicated on multiple CUNY campuses and by
- Canisius College in Buffalo and
- University of Buffalo
- Available for use in other teacher preparation programs

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Sample State Higher Education Efforts



<https://www.ohiodeanscompact.org/>



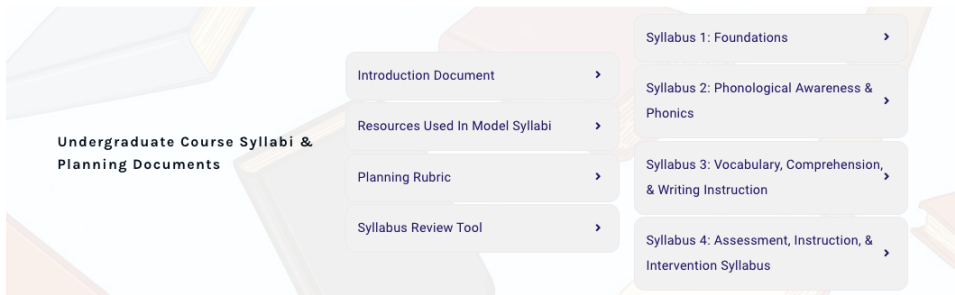
Improving Literacy in Ohio

<https://ohiop20litcollab.org/>

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The Center for Reading Science at MSJ
<https://www.readingscience.org/implementing/>

The Science of Reading in Teacher Preparation



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Get Involved

- Reach out to your local university
 - Supervise a Practicum Student
 - Book Study; Podcast Discussion; Movie Showing
 - Co-Host Professional Learning Events
- Become an adjunct
- Have the person who hires for your district reach out to the local universities to clarify the hiring requirements

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Resources

- [Center for Reading Science at MSJ](#)
- [IDA Knowledge and Practice Standards](#)
- [Rhode Island Syllabus Refinement Tool and Resource Bank](#)
- [STARS: Higher Education](#)

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Summary

- The path to better reading outcomes is known and possible for all students – it is our moral obligation
- Educator preparation programs have a responsibility to prepare candidates in the science of reading
- There are many exciting national efforts that can be leveraged and duplicated
- We invite you to get involved

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Thank You!



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