

# Research to Practice: Bridging the Gap

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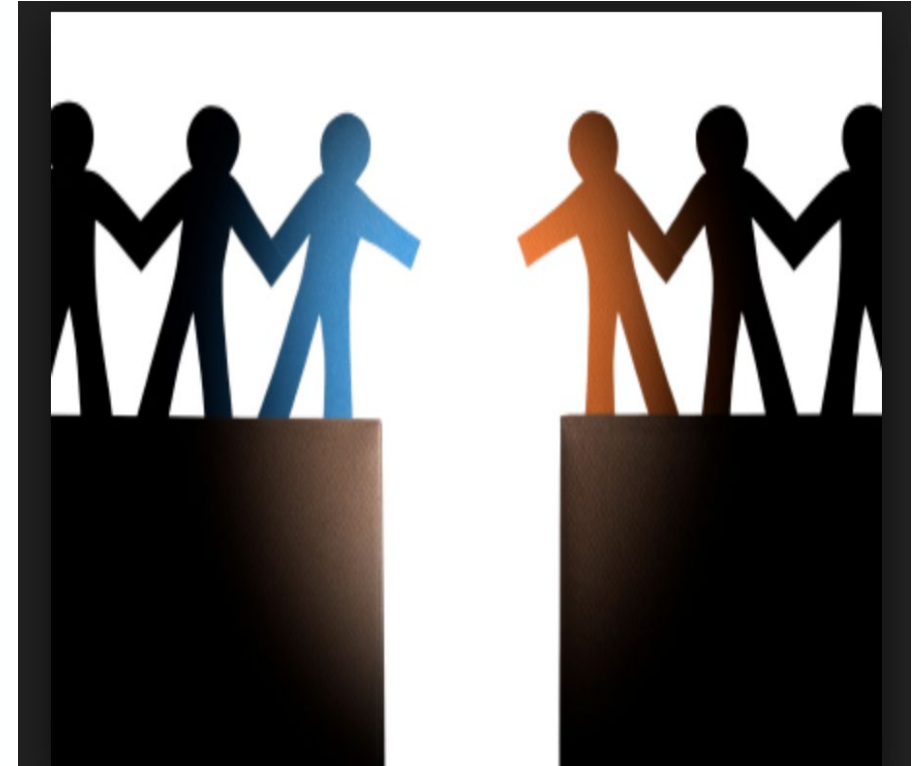
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# We Know We Have Achievement Gaps

We have achievement gaps affecting BIPOC students and in many cases for all students compared to academic proficiency standards.



# We Also Have Research to Practice Gaps

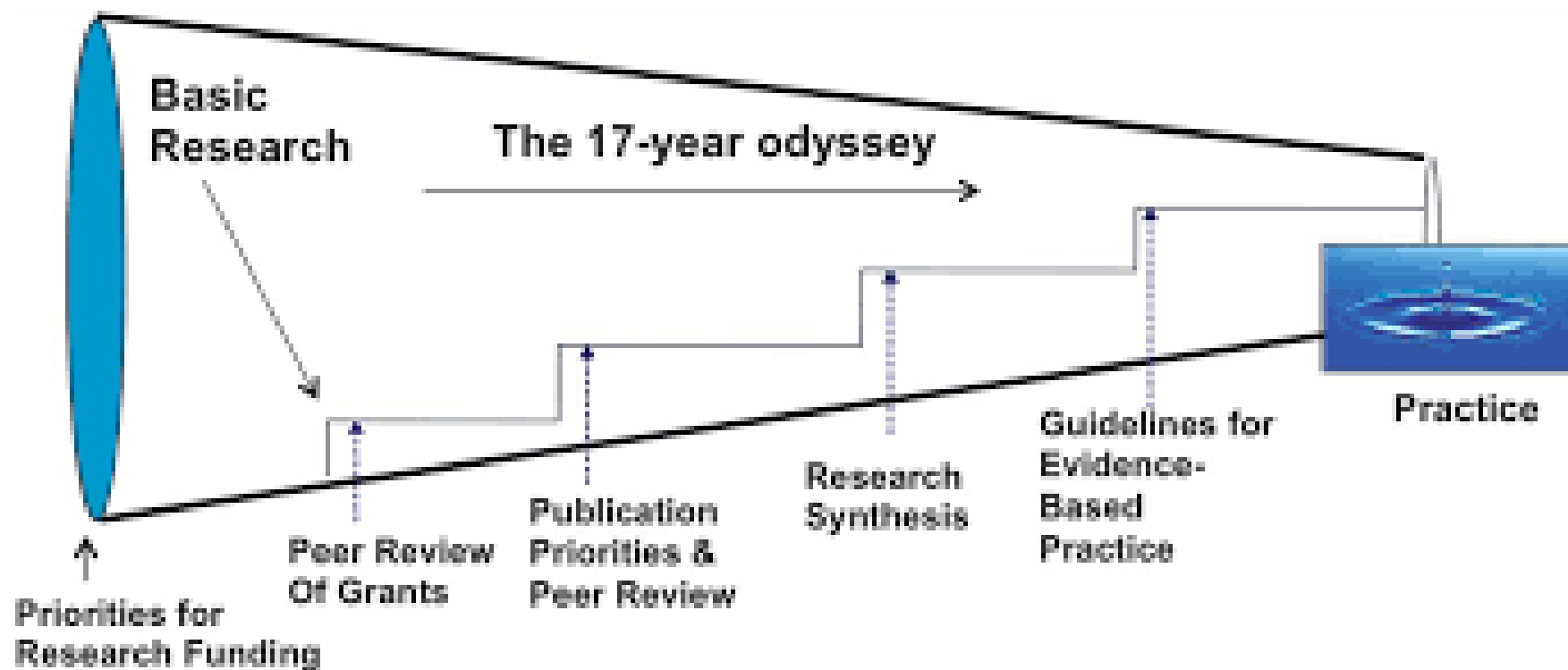
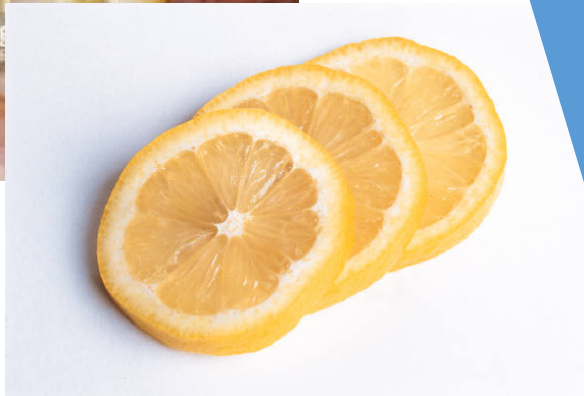


Image adapted from Green (2008) with permission, found in: [Olswang, L. B., & Prelock, P. A. \(2015, December\). Bridging the Gap Between Research and Practice: Implementation Science. \*Journal of Speech, Language and Hearing Research\*, 58, S1818-S1826.](#)

# The First Research to Practice Gap

- Lemon Juice was Shown to be Effective in Preventing Scurvy in 1601.
- Not Introduced into Sailors' Diets on Ships until 1795!!



**194 Year  
Research-  
Practice  
Gap!**



# Research to Practice: Bridging the Gap

**Goal:** To provide a reviews of research that can aid leaders in making research-informed decisions about practice.



# Agenda

- Overview of two areas that we believe stand to have significant impact on student academic outcomes and how they experience school
- Questions on these topics or others
- Seek your feedback on other topics you would like to see presented in the future

# Topics

- Literacy
  - Assessment
  - Instruction
- Diversification of the Teacher Workforce
  - Current picture of teaching
  - Research on importance of a diverse workforce
  - Pathway to diversifying the workforce



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# Literacy Assessment

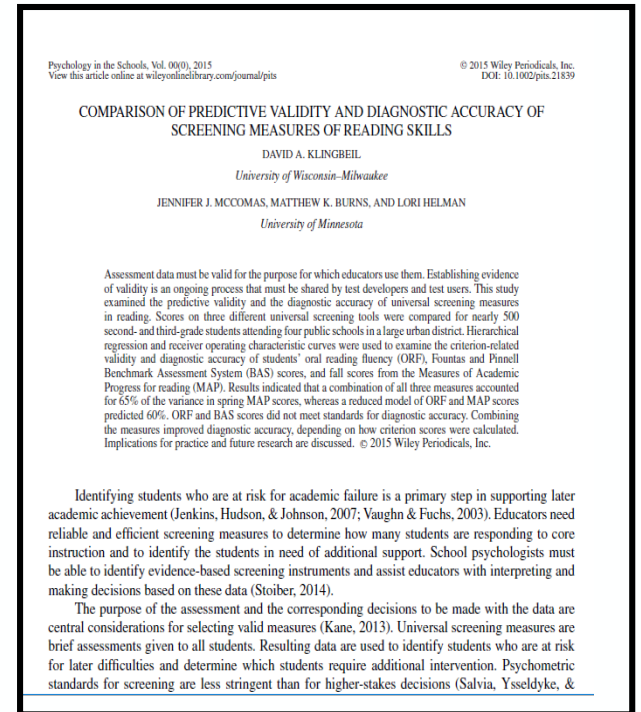


# Universal Screening in Literacy: A Definition

- Universal screening involves administering brief, **reliable** and **valid assessments** to **all students** at multiple points per year.
- Screening provides a quick way to identify which students are expected to exceed, meet, or fall below grade level standards.

**Research Brief Available at:** [https://innovation.umn.edu/mnpa/wp-content/uploads/sites/27/2019/02/Literacy-Assessments\\_Review-of-the-Research-2.19.pdf](https://innovation.umn.edu/mnpa/wp-content/uploads/sites/27/2019/02/Literacy-Assessments_Review-of-the-Research-2.19.pdf)

Klingbeil, D. A., McComas, J. J., Burns, M. K., & Helman, L. (2015). Comparison of Predictive Validity and Diagnostic Accuracy of Screening Measures of Reading Skills. *Psychology in Schools*.



# “Must Haves” for Screening Tools

## Screening tools must:

- Be reliable,
- Demonstrate strong correlations between the instruments and valued outcomes (valid), and
- Provide accurate predictions of risk status (diagnostic accuracy)

# Literacy Assessments:

## *Why think about the research?*

- Most educators are familiar with **validity** and **reliability**; however, additional considerations regarding the *diagnostic accuracy* of the measure(s) must be considered (Klingbiel, McComas, Burns, & Helman, 2015).
- The terms **sensitivity** and **specificity** are terms used to describe the diagnostic accuracy of an instrument.

# Diagnostic Accuracy

## Specificity

- The proportion of students who were truly not at risk among all students classified as as not at risk.
- If an assessment does not have adequate levels of specificity, some student who are not actually at risk may be identified as such and receive intervention.

## Sensitivity

- The proportion of truly at-risk students who were identified as at risk by the screener.
- Did the screening identify all the at-risk students in the school?
- If an assessment does not have adequate levels of sensitivity, students who need intervention may not be identified and therefore not receive intervention.

Klingbeil, D. A., McComas, J. J., Burns, M. K., & Helman, L. (2015). Comparison of Predictive Validity and Diagnostic Accuracy of Screening Measures of Reading Skills. *Psychology in Schools*. P. 502



# Popular Literacy Assessments:

## *What the research says*

- The **Fountas & Pinnell Benchmark Assessment System (FPBAS)** is a popular literacy assessment. The assessment is administered individually to each student 3X per year and takes about 20 – 40 minutes.
- There is an oral reading component and a comprehension component, which together provide an instructional level for each student (independent, instructional, frustrational).
- Independent studies examining the utility of the FPBAS as a universal screener are limited. No studies were found using the 3<sup>rd</sup> edition. Another limitation is that only 2<sup>nd</sup> and 3<sup>rd</sup> grade students were included in the studies.

# Popular Literacy Assessments:

## *What the research says*

- Recent studies underscore the important issues school districts must consider when selecting a universal screener. Time, resources, and diagnostic accuracy must all be factored into the final decision of selection of a universal screener.
- The FPBAS falls short when compared to other measures considered:
  - Curriculum Based Measures (DIBELS, Aimsweb, FastBridge, etc.)
  - Measures of Academic Progress (MAP)

# Literacy Assessments: Common Concerns

- Using the MAP 25<sup>th</sup> percentile as the criterion, ORF was more accurate at identifying the correct overall classification (.80) than the FPBAS (.54).
- ORF also had higher levels of sensitivity (.86) and specificity (.78) than did the FPBAS (.31 & .66).

## What this means:

“In a hypothetical school with 100 students needing intervention, 86 of the students who actually need an intervention based on MAP performance would be correctly identified using ORF criteria. Only 31 of those students would be accurately identified using the IRI [FPBAS] screening data” (p. 64).

Parker, D. C., Zaslofsky, A. F., Burns, M. K., Kanive, R., Hodgson, J., Scholin, S. E., & Klingbeil, D. A. (2015). A brief report of the diagnostic accuracy of oral reading fluency and reading inventory levels for reading failure risk among second- and third-grade students. *Reading & Writing Quarterly*, 31, 56-67.

# Other Concerns:

## *The Link to Guided Reading*

- The most pervasive practice in K–5 reading instruction is probably small group work in which students are grouped by reading level.
- Experts estimate that this practice is happening in 70-80% of elementary classrooms.
- It's common in guided reading and balanced literacy classrooms, as well as work with popular reading programs like Fountas & Pinnell and Teachers College Reading Workshop.



# The Problem with Guided Reading Levels: *Linkage to Assessment*

**FPBAS overestimated** the reading levels of students at or below the 25th percentile and **underestimated** reading levels for students above the 25th percentile.

- Students who were at or below the 25<sup>th</sup> percentile were reading from books that were at their frustrational level about 58% of the time.
- Students within the 26th-75th<sup>th</sup> percentile were reading materials that were too easy for them 71% of the time.
- Students above the 75th<sup>th</sup> percentile were reading materials that were too easy 67.8% of the time.

**These results call into question the accuracy of the initial reading level provided by the FPBAS.**

Burns, M. K., Pulles, S. M., Maki, K. E., Kanive, R., Hodgson, J., Helman, L. A., Preast, J. L., (2015). Accuracy of student performance while reading leveled books rated at their instructional level by a reading inventory. *Journal of School Psychology*, 53, 437-445.

# The Problem with Guided Reading Levels:

**There's nothing about a student's reading level *alone* that shows what skills they missing... i.e., what they need to grow as a reader.**

- Does a student need support with decoding or fluency? A reading level doesn't tell you. When you think about it that way, we shouldn't *expect* grouping by reading level to work, because it doesn't actually give teachers cues about how to differentiate instruction for a given group of students.
- It gives the kids in lower reading groups a steady diet of less challenging texts. Over time, this tends to become a self-fulfilling prophecy, as lower readers don't catch up to peers. Hence the common refrain, ***“Leveled texts lead to leveled lives.”***

# Why Should Superintendent's be Concerned?

## Length of Time for Assessments

- Lost instructional time: Class size of 25 x 30 minutes per assessment = 12.5 hours of assessment 3x per year (38 hours total)

## Lack of Diagnostic Accuracy

- Will likely miss students who need support

## These assessments are linked to instruction (guided reading level)

- Impacts student engagement and growth
- Behavior of students (Those at frustration level and those not challenged)

## False Sense of Security



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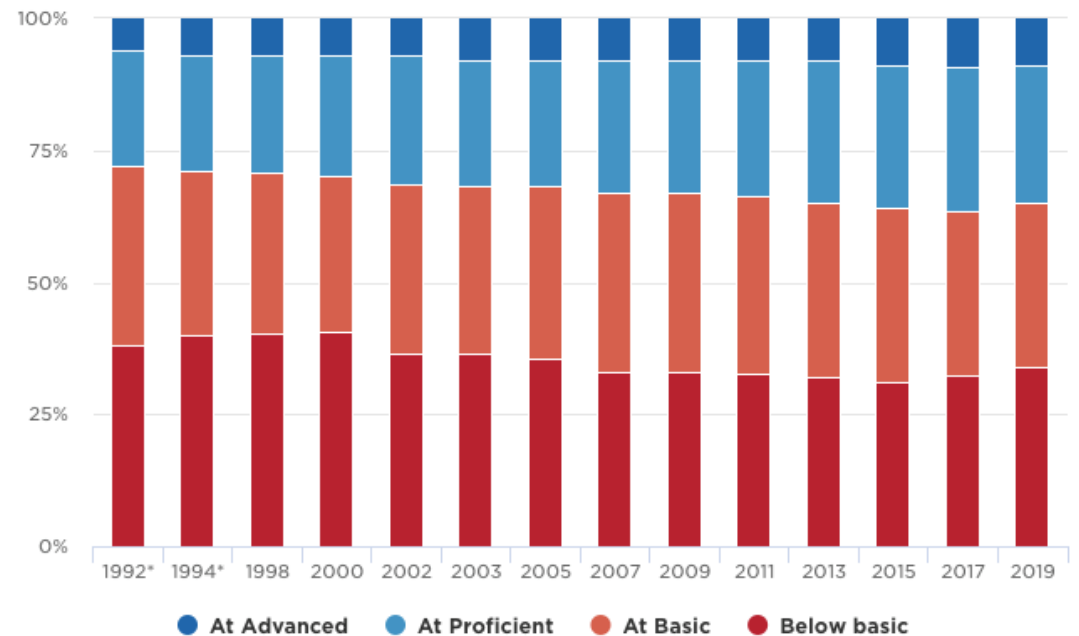
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# Literacy Instruction

# Literacy: Our Current Context


- More than 1/3 of fourth graders don't read on a basic level
- Another 1/3 are at-risk for not achieving grade level expectations
- The remaining 1/3 are most-likely kids who would learn to read no matter what type of instruction they received

U.S. fourth-graders' reading levels over time




SOURCE: The National Assessment of Educational Progress. \*In 1992 and 1994, testing accommodations were not permitted.

# The Great Debate



If kids know how the sounds in words are represented by letters, reading comprehension will follow. Teach kids decoding.



If kids are focused on the meaning of what they're reading, they can figure out what the words say. Teach kids comprehension.

# Prevailing Views on Reading Instruction



Reading instruction in many schools is based on a belief that if children are read to a lot, reading should come pretty easily for them.

The teacher's role is mainly to guide students, to create an environment that is conducive to learning how to read: setting up reading groups, reading with kids, helping them find books on their reading level.

# When this doesn't work.....

**When this approach doesn't work there are typically two responses.**

1. There must be a problem in the home. *The child wasn't read to enough.*
2. There must be a problem in the child. *He or she has a disability.*

**But usually it's neither. Most of the time, when kids can't read, it's because they weren't taught how to do it.  
(ABT)**






## The Problem with Prevailing Views



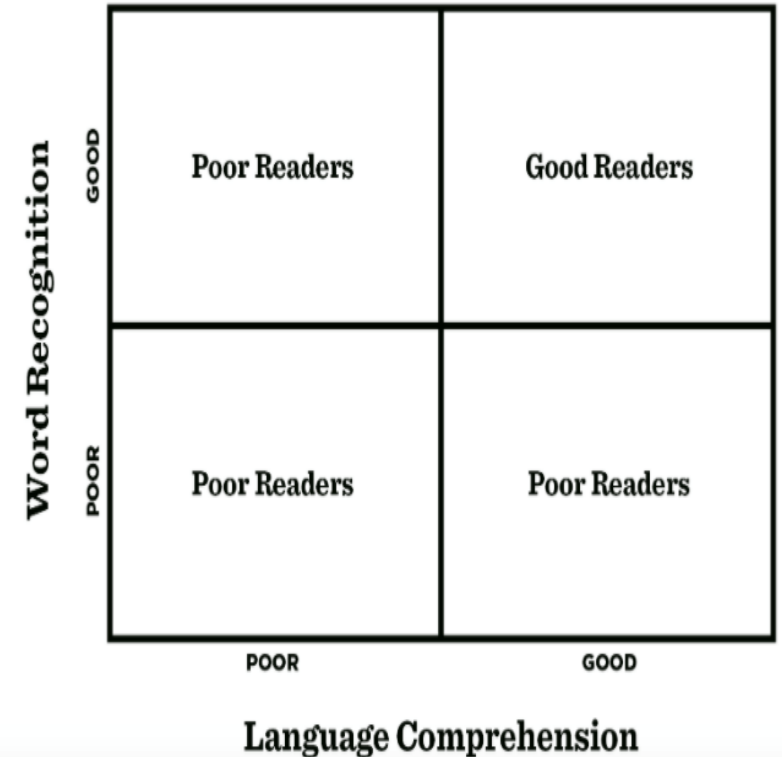
Decades of scientific research on reading shows this isn't true. Some kids learn to read easily, but many children struggle. It doesn't matter how much they are read to or the number of books in their home. They will not become good readers **unless they are taught how their written language works.**



# A Simple View of Reading

**Tested and verified in 1990 & confirmed in 150 studies since, reading comprehension can be divided into two parts:**

- ***Word recognition*** (Decoding) is our ability to read printed words quickly and accurately.
- ***Language comprehension*** is our ability to understand meaning when someone is talking or when text is read out loud to us.



Hanford, E. A. (2020, August 6). *What the Words Say*. Retrieved from APM Reports : <https://www.apmreports.org/episode/2020/08/06/what-the-words-say>

# A Common Question: Phonics

## Teacher question:

*“I keep hearing that teachers don’t know the **science of reading**. But all the teachers that I talk to say that **they teach phonics**. What’s really going on?”*

- There is a **lack of precision in how we talk about these things**. What is phonics instruction and what is a sufficient amount of phonics teaching
- When teaching the simple sound-symbol correspondences, **teachers should make sure the kids can hear those sounds and distinguish them from other sounds**; they should make sure kids can recognize these letters within words; they should make sure the kids can sound out unknown words or even nonsense words using those correspondences; and they should be able to read and write words with those elements, too.
- **Phonics teaching should provide opportunities to decode and spell words, to sort words, to recognize misspellings**, and to gain proficiency in using all this information.
- Although the numbers of phonics skills to be taught is usually pretty limited, the amount of phonics instruction kids should be receiving is considerable. **Experts usually recommend 20-30 minutes or so of daily phonics instruction in grades K-2** (in other words, about 200 hours of such teaching).

Hanford, E. A. (2020, August 6). *What the Words Say*. Retrieved from APM Reports : <https://www.apmreports.org/episode/2020/08/06/what-the-words-say>

# The Matthew Effect *In Reading*

Let's say you start school, and you get off to a good start learning how to decode words. Now you can read the words you know how to say, and through reading you begin to learn the meaning of words you've never heard before. *That's how the rich get richer.*

One study estimated that a fifth grader who reads at the 90th percentile encounters about 2 million words every year just in text they read outside of school. A reader at the 10th percentile encounters just 8,000 words.

*That's the poor getting poorer.*

# Language Comprehension

- Good word recognition skills are only half the equation.
- Research shows that once kids have mastered the basics of decoding, their ability to understand what they read is largely determined by the level of their language comprehension.
- There's a lot to language comprehension. - It's all the words you know the meaning of, and your understanding of how language works — grammar, syntax.



# Let's Try! *Read this Passage*

Australia failed to fully capitalise on the second-wicket stand of 182 between Smith and Finch, as Michael Clarke's men were stunted by the off-breaks of Ravichandran Ashwin and a curious collective failure against back-of-a-length bowling.

How many of you were able to read the **words** just fine?

**How many of you have absolutely no idea what this passage is about?**



# The Problem

- This passage is from a BBC report on Australia's victory in the 2015 Cricket World Cup semi-final. If you had no idea what the passage is about, you probably lacked background knowledge about the sport of Cricket.
- Your ability to comprehend what you read is linked to your knowledge. This is one reason there's an association between a child's reading comprehension and their family's income; more income often means more opportunity for experiences that build knowledge of the world.

# Back to the Prevailing Approaches

- Omit systematic teaching about speech sounds, spelling system, and how to read words by sounding them out. Weak or wrong when it comes to the structure of English language.
- Most popular programs are strong in literature, illustrations, cross-disciplinary thematic units, and motivational strategies.



# The Science has been Settled

**Researchers are no longer debating the importance of systematic, multi-year phonics and word analysis instruction and a large academic vocabulary.**

**By the year 2000, the scientific community achieved broad consensus on:**

- How children learn to read
- What causes reading difficulties
- The essential reading components of effective reading instruction
- How to prevent reading difficulties

**Implication:**

- Reading and language arts instruction must include deliberate, systematic, and explicit teaching of word recognition
- Develop students subject-matter knowledge, vocabulary, sentence comprehension and familiarity with the language in written texts.

# What Questions Should You Ask?

1. What does your district's **data** say?
2. What **universal screener** are we using?
  - *Are we using guided reading levels (ie., Fountas and Pinnell) as part of the universal screening process or are we using **technically validated assessment**? (ie., MAP, Aimsweb, FastBridge, DIBELS)*
3. What does **phonics instruction** look like in our district?
  - *How is it being taught? Explicit/systematic vs incidental or 3 cuing*
  - *Time allocated? 20- 30 minutes in K-2*
  - *Spelling/writing included and related to phonics instruction*
  - *Evidence based program used*
4. Do my teachers know how to teach this?
  - *If not, [LETRS](#) is an evidence-based professional development option that [MDE is offering](#).*



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# Diversification of the Teacher Workforce

# National Picture of Teaching Force



Richard Ingersoll, of the University of Pennsylvania Graduate School of Education, has been studying America's teaching force for 30 years. In his 2018 update of his longitudinal study, he and colleagues found seven trends transforming our teaching force. It is now:

1. Larger
2. Grayer
3. Greener
4. More Female

5. More Diverse, by Ethnicity

6. Consistent in Academic Ability

7. Unstable

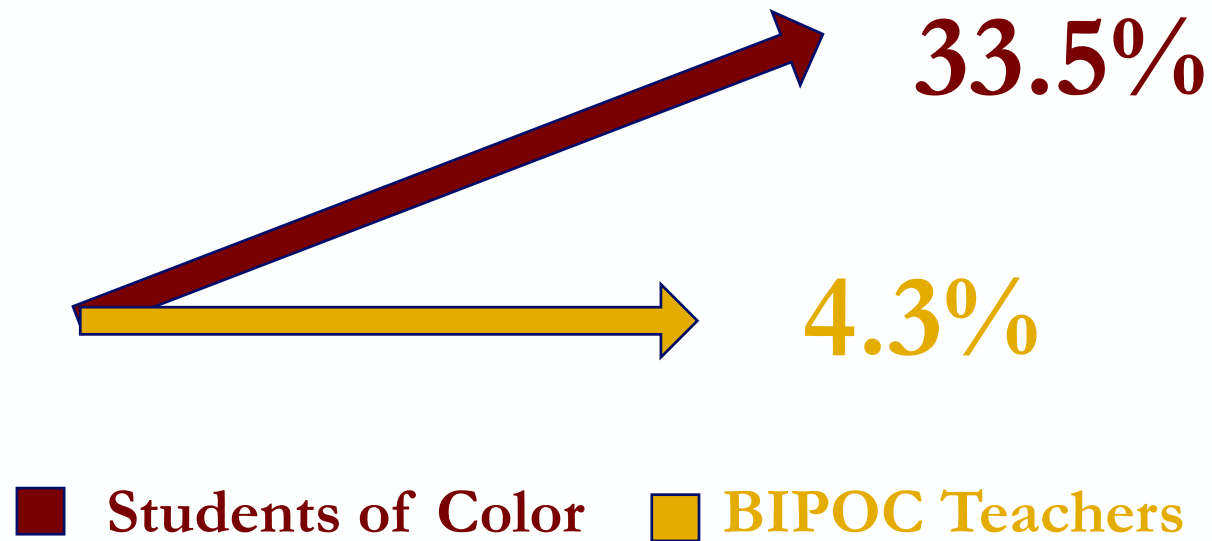
# What does that mean?



Available at: <https://www.gse.upenn.edu/news/teacher-workforce>

# Current Reality in Minnesota

BIPOC (Black, Indigenous, People of Color) teachers are not increasing at anywhere near the same rate as students of color.



# Importance of Increasing BIPOC Teachers

In an extensive review of empirical literature, Villages and Irvine (2010) identified three major arguments for diversifying the teaching force:

1. teachers of color serve as **role models for all students**;
2. the potential of teachers of color to **improve the academic outcomes and school experiences of students of color**; and
3. the workforce rationale that **teachers of color tend to stay in minoritized schools**.



# Pathway to Diversifying the Teaching Force

## Culturally Responsive School Leadership Framework

Muhammad Khalifa, University of Minnesota  
 Mark Anthony Gooden, University of Texas  
 James Earl Davis, Temple University

Critically Self-Reflects on Leadership Behaviors	Develops Culturally Responsive Teachers
<ul style="list-style-type: none"> <li>Is committed to continuous learning of cultural knowledge and contexts (Gardiner &amp; Enomoto, 2006)</li> <li>Displays a critical consciousness on practice in and out of school; displays self-reflection (Gooden &amp; Dantley, 2012; Johnson, 2006)</li> <li>Uses school data and indicants to measure CRSL (Skrla, Scheurich, Garcia, &amp; Nolly, 2004)</li> <li>Uses parent/community voices to measure cultural responsiveness in schools (Ishimaru, 2013; Smyth, 2006)</li> <li>Challenges Whiteness and hegemonic epistemologies in school (Theoharis &amp; Haddix, 2011)</li> <li>Using equity audits to measure student inclusiveness, policy, and practice (Skrla et al., 2004)</li> <li>Leading with courage (Khalifa, 2011; Nee-Benham, Maenette, &amp; Cooper, 1988)</li> <li>Is a transformative leader for social justice and inclusion (Alston, 2005; Gooden, 2005; Gooden &amp; O'Doherty, 2015; Shields, 2010)</li> </ul>	<ul style="list-style-type: none"> <li>Developing teacher capacities for cultural responsive pedagogy (Ginsberg &amp; Wlodkowski, 2000; Voltz, Brazil, &amp; Scott, 2003)</li> <li>Collaborative walkthroughs (Madhlangobe &amp; Gordon, 2012)</li> <li>Creating culturally responsive PD opportunities for teachers (Ginsberg &amp; Wlodkowski, 2000; Voltz et al., 2003)</li> <li>Using school data to see cultural gaps in achievement, discipline, enrichment, and remedial services (Skrla et al., 2004)</li> <li>Creating a CRSL team that is charged with constantly finding new ways for teachers to be culturally responsive (Gardiner &amp; Enomoto, 2006)</li> <li>Engaging/reforming the school curriculum to become more culturally responsive (Sleeter, 2012; Villegas &amp; Lucas, 2002)</li> <li>Modeling culturally responsive teaching (Madhlangobe &amp; Gordon, 2012)</li> <li>Using culturally responsive assessment tools for students (Hopson, 2001; Kea, Campbell-Whitley, &amp; Branton, 2003)</li> </ul>
Promotes Culturally Responsive/Inclusive School Environment	Engages Students, Parents, and Indigenous Contexts
<ul style="list-style-type: none"> <li>Accepting indigenized, local identities (Khalifa, 2010)</li> <li>Building relationships; reducing anxiety among students (Madhlangobe &amp; Gordon, 2012)</li> <li>Modeling CRSL for staff in building interactions (Khalifa, 2011; Tillman, 2005)</li> <li>Promoting a vision for an inclusive instructional and behavioral practices (Gardiner &amp; Enomoto, 2006; Webb-Johnson, 2006; Webb-Johnson &amp; Carter, 2007)</li> <li>If need be, challenging exclusionary policies, teachers, and behaviors (Khalifa, 2011; Madhlangobe &amp; Gordon, 2012)</li> <li>Acknowledges, values, and uses Indigenous cultural and social capital of students (Khalifa, 2010, 2012)</li> <li>Uses student voice (Antrop-González, 2011; Madhlangobe &amp; Gordon, 2012)</li> <li>Using school data to discover and track disparities in academic and disciplinary trends (Skiba et al., 2002; Skrla et al., 2004; Theoharis, 2007)</li> </ul>	<ul style="list-style-type: none"> <li>Developing meaningful, positive relationships with community (Gardiner &amp; Enomoto, 2006; Johnson, 2006; Walker, 2001)</li> <li>Is a servant leader, as public intellectual and other roles (Alston, 2005; Gooden, 2005; Johnson, 2006)</li> <li>Finding overlapping spaces for school and community (Cooper, 2009; Ishimaru, 2013; Khalifa, 2012)</li> <li>Serving as advocate and social activist for community-based causes in both the school and neighborhood community (Capper, Hafner, &amp; Keyes, 2002; Gooden, 2005; Johnson, 2006; Khalifa, 2012)</li> <li>Uses the community as an informative space from which to develop positive understandings of students and families (Gardiner &amp; Enomoto, 2006)</li> <li>Resists deficit images of students and families (Davis, 2002; Flessa, 2009)</li> <li>Nurturing/caring for others; sharing information (Gooden, 2005; Madhlangobe &amp; Gordon, 2012)</li> <li>Connecting directly with students (Gooden, 2005; Khalifa, 2012; Lomotey, 1993)</li> </ul>

- Culturally responsive leaders who develop culturally responsive and affirming environments
- Recruitment and Retention Strategies

Khalifa, M. A., Gooden, M. A., & Davis, J. E. (2016). Culturally Responsive School Leadership: A Synthesis of the Literature. *Review of Educational Research*, 1272-1311.



# Recruitment

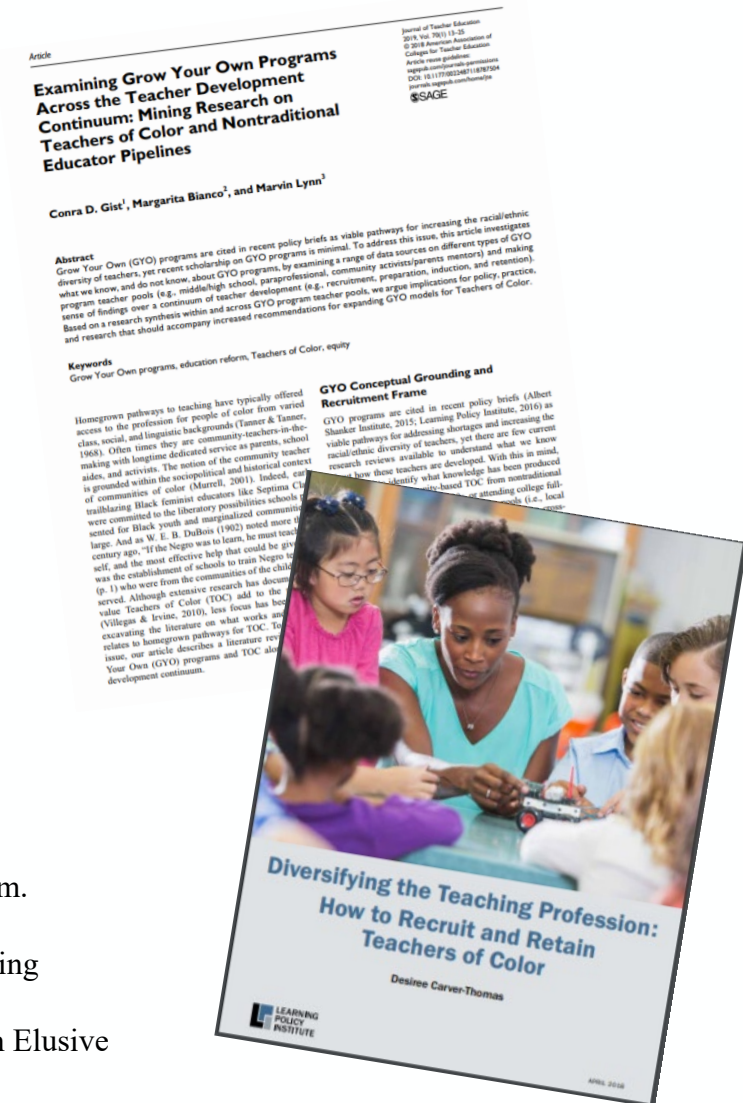
Research findings on successful recruitment strategies include:

1. Financial Incentives (i.e., scholarships, grants, loan forgiveness)
2. Grow Your Own and Residency Programs (which also lend themselves to successful retention strategies as well)
3. Alternative Licensure

Carver-Thomas, D. (2017). Diversifying the Field: Barriers to Recruiting and Retaining Teachers of Color and How to Overcome Them. Literature Review. Equity Assistance Center Region II, Intercultural Development Research Association, (April), 1–34.

Gist, C. D., Bianco, M., & Lynn, M. (2019). Examining Grow Your Own Programs Across the Teacher Development Continuum: Mining Research on Teachers of Color and Nontraditional Educator Pipelines. *Journal of Teacher Education*, 70(1), 13–25.

Villegas, Ana Maria, Strom, K., & Lucas, T. (2012). Closing the Racial/Ethnic Gap Between Students of Color and Their Teachers: An Elusive Goal. *Equity and Excellence in Education*,



# Recruitment in Minnesota

## 18. School district efforts to recruit teachers of color

	<b>N</b>	<b>Made no difference</b>	<b>Made slight difference</b>	<b>Made some difference</b>	<b>Made a very big difference</b>
Provide hiring incentives	58	69.0%	12.1%	15.5%	3.4%
Provide a competitive salary	236	59.3%	14.4%	22.9%	3.4%
Create a pipeline program (e.g., residency models, Grow Your Own)	110	50.0%	22.7%	18.2%	9.1%
Offer position postings beyond where districts usually post	210	58.6%	20.0%	18.6%	2.9%

Source. School district survey.

*From p. 20 of MN Teacher  
Supply and Demand Report*

# Retention

Research findings from Gist (2018) on successful recruitment strategies fall into 5 key values of human investment:

**Location Value:** where teachers are placed

**Use Value:** recognizing what the teacher brings to the environment

**Maintenance Value:** financial investment in support structures

**Modification Value:** ability to modify the organization for specific needs or people

**Time Value:** providing not just induction, but integrated development and supports as teachers move through the ranks of the profession

# Location Value Recommendations

- Offer preferential placement for BIPOC teachers
- Provide broad professional development opportunities that are not tied to the funding of one school
- Develop local recruitment programs. For example, recruiting teachers to return to their alma matters as a better reflection of the community.
- Develop preferential transfer tiers for BIPOC teachers overrepresented in under-resourced schools to provide teaching opportunities in other schools
- Work to eliminate LIFO layoff policies that impact newer to profession BIPOC teachers

# Use Value Recommendations

- Empowering teachers to enact culturally responsive curriculum in the classroom.
- Normalize BIPOC teachers in the hiring process including creating diverse hiring committees or compensating teachers for attending recruitment fairs.
- Include BIPOC teachers in curricular, pedagogical, and policy decisions for the school/district

# Modification Value Recommendations

- Underwriting cost of teacher preparation and loan forgiveness programs.
- Develop professional titles and positions that enable BIPOC teachers to transition to other leadership and professional roles in ways that capitalize on their experience.
- Create integrated structures of support that begin at the educator preparation level and extend to veteran teacher status that account for teaching and learning developmental changes over time.

# Time Value Recommendations

- Develop a GYO program, residency programs, and others identified for higher retention rates.
- Improve compensation packages for those teaching in “hard-to-staff” schools to retain the most resilient BIPOC teachers into the teaching profession.

# Retention in Minnesota

## 19. School district efforts to retain teachers of color

	<b>N</b>	<b>Made no difference</b>	<b>Made slight difference</b>	<b>Made some difference</b>	<b>Made a very big difference</b>
Provide mentorship programs	238	48.3%	16.0%	26.5%	9.2%
Provide professional development opportunities	262	46.2%	16.0%	29.8%	8.0%
Offer promotions or increase salaries	172	51.7%	18.0%	23.8%	6.4%
Offer Teacher on Special Assignment (TOSA) opportunities	154	68.8%	11.0%	18.2%	1.9%

Source. School district survey

*From p. 21 of MN Teacher  
Supply and Demand Report*



A photograph of a curved metal gate at the University of Minnesota. The gate has a maroon top band with the university's name and two circular emblems. The gate is surrounded by lush greenery and a bed of red and pink flowers in the foreground. The image is semi-transparent, allowing the text to be overlaid.

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## **Questions**

**Topics for Future Presentations on  
Research**



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