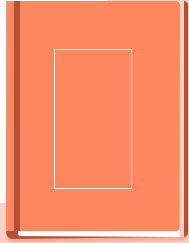# Using Data and Science of Reading to Improve K-5 Literacy Instruction

Kristie Edwards – *Randle Highlands Elementa...*
Jasmine Rogers – *Garfield Elementary*
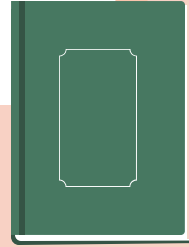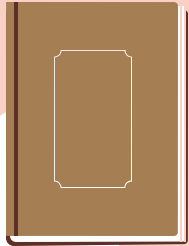
Agenda

01

Introduction

Speakers
Grounding in Equity
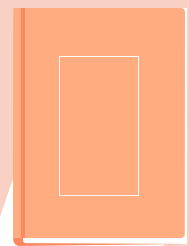
02

Garfield

Journey to Structured
Literacy

03

Randle Highlands
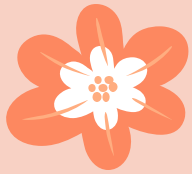
Data based

04

Q & A

Jasmine Rogers

Reading Specialist–Garfield Elementary

Kristie Edwards

Principal- Randle Highlands Element
School.

Equity

What is Equity?

What does it have to do with reading?

Used with permission from the Equity Strategy and Programming team at DCPS
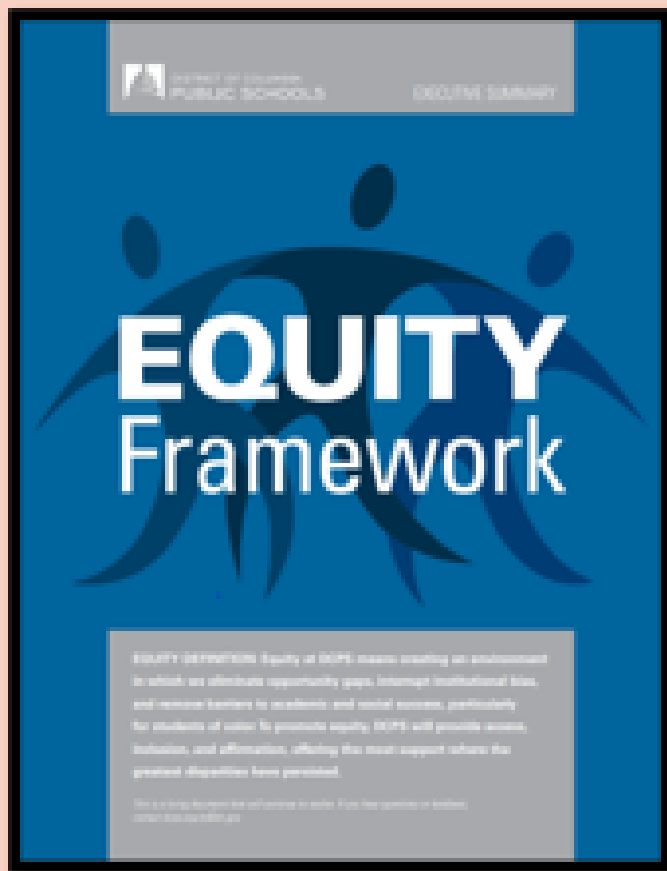
Equity at DCPS means **creating an environment in which we eliminate opportunity gaps, interrupt institutional bias, and remove barriers to academic and social success, particularly for students of color**

The Ladder of Reading & Writing

Learning to read seems effortless; challenging content likely needed (5-10%*)

Extended learning & enrichment likely essential**

Learning to read is relatively easy with broad instruction; explicit instruction for spelling & writing likely needed (35%*)

Facets of a structured literacy approach likely valuable**

Learning to read/spell/write proficiently requires code-based, systematic, & explicit instruction (40-45%*)

A structured literacy approach likely essential**

Learning to read/spell/write requires code-based, systematic, explicit, intensive instruction & frequent repetition (10-15%*)

Data informs instruction & practice: Differentiated content & process**

Linguistic processes, executive functions, psychological aspects & environmental circumstances affect learning & vary within person & group**

Art by Dean Stanton

* Percentages estimated based on available evidence
** Terms defined and references at www.nancyyoung.ca

© N. Young, 2012/2021

Nancy Young B.A., M.Ed.   Reading Spelling Writing

Used with Nancy Young's permission
www.nancyyoung.ca

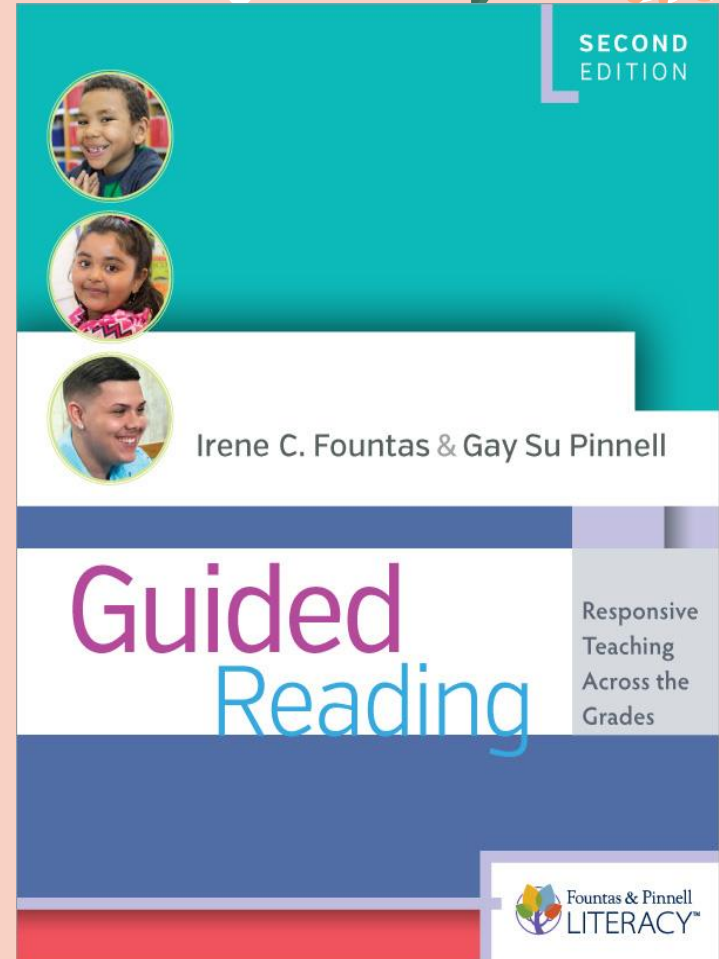# Transitioning from Guided Reading to Structured Literacy

Out with the Old

Focused on:

- Data: Text Reading Comprehension (TRC) more than DIBELS.

- Instruction: Utilized 3 Cueing System

Taught students weak reading skills focused on   pictures and context: Does that look right? Does that sound right? Does that make sense? (MSV)

- Materials: The program was found not to utilized evidence-based or research-based practices (edreports.org)

SECOND EDITION

Irene C. Fountas & Gay Su Pinnell

Guided Reading

Responsive Teaching Across the Grades

Fountas & Pinnell LITERACY™

IN WITH THE TRUE

International **DYSLEXIA** Association®

Structured Literacy instruction is the umbrella term used by the International Dyslexia Association (IDA) to unify and encompass evidence-based programs and approaches that are aligned to the Knowledge and Practice Standards (KPS; Cowen, 2016). IDA defines KPS as "the knowledge and skills that all teachers of reading should possess to teach all students to read proficiently." Structured Literacy approaches are effective at helping students with learning disabilities in the area of reading, such as dyslexia, learn to read and write (Spear-Swerling, 2019). Put simply, Structured Literacy is explicit, systematic teaching that focuses on phonological awareness, word recognition, phonics and decoding, spelling, and syntax at the sentence and paragraph levels. (https://iowareadingresearch.org/blog/structured-and-balanced-literacy)

WHY?

STRUCTURED LITERACY PRIMER

Why Structured Literacy?

Children with dyslexia are in nearly every classroom—but effective reading instruction is NOT.

←**Dyslexia**
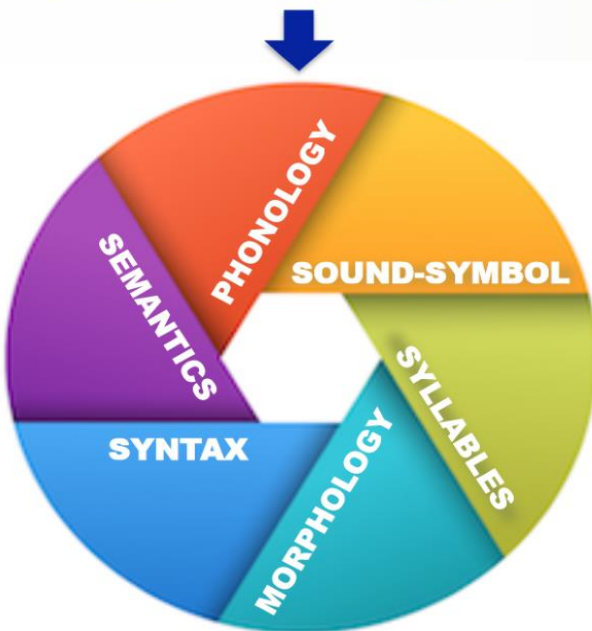Up to 15-20% of the population may have symptoms of dyslexia.
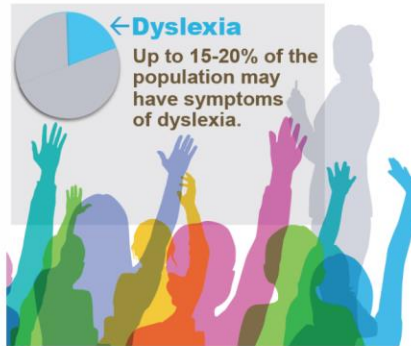
Learning to read can be a significant **challenge** for students with dyslexia. Fortunately, this challenge usually CAN be overcome with effective reading instruction. Unfortunately, if not overcome, lifelong consequences can be harsh.

Popular reading approaches (e.g., Guided Reading or Balanced Literacy) are not effective for students with dyslexia because these approaches do not focus on the **decoding** skills struggling readers need to succeed.

Structured Literacy explicitly teaches systematic word-identification/decoding strategies. These benefit most students and are *vital* for those with dyslexia.

Source: https://dyslexiaida.org/what-is-structured-literacy/

STRUCTURED LITERACY PRIMER

Structured Literacy's ELEMENTS work together.

⬇️

PHONOLOGY
SOUND-SYMBOL
SYLLABLES
MORPHOLOGY
SYNTAX
SEMANTICS

Structured Literacy's
Evidence–Based Elements

Phonology (study of sound structure of spoken words) is a key element of Structured Literacy Instruction. **Phonemic awareness** (ability to distinguish / segment / blend / manipulate sounds relevant to reading/spelling) is central to phonology.

Sound-Symbol Association Once students develop phoneme awareness, they must learn the **alphabetic principle**—how to map phonemes to letters (**graphemes**) and vice versa.

Syllables Knowing the six syllable / vowel grapheme types helps readers associate vowel spellings with vowel sounds. Syllable division rules help readers divide / decode unfamiliar words.

Morphology A **morpheme** is the smallest unit of meaning in language. Studying base elements and affixes helps readers decode and unlock the meanings of complex words.

Syntax—the set of principles that dictate the sequence and function of words in a sentence— includes grammar, sentence structure, and the mechanics of language.

Semantics Semantics is concerned with meaning. The Structured Literacy curriculum (from the start) includes instruction in the comprehension and appreciation of written language.

Source: https://dyslexiaida.org/what-is-structured-literacy/

STRUCTURED LITERACY PRIMER

These PRINCIPLES guide how Structured Literacy's elements are taught.

↓

SYSTEMATIC & CUMULATIVE

EXPLICIT

DIAGNOSTIC
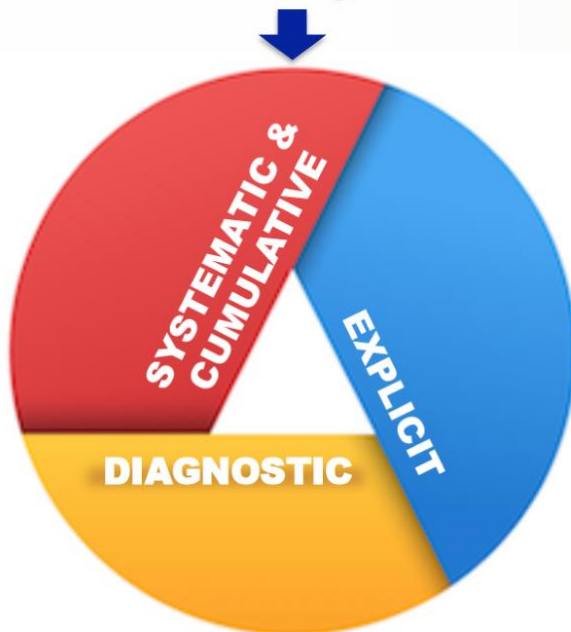
Structured Literacy's
Evidence-Based Teaching Principles
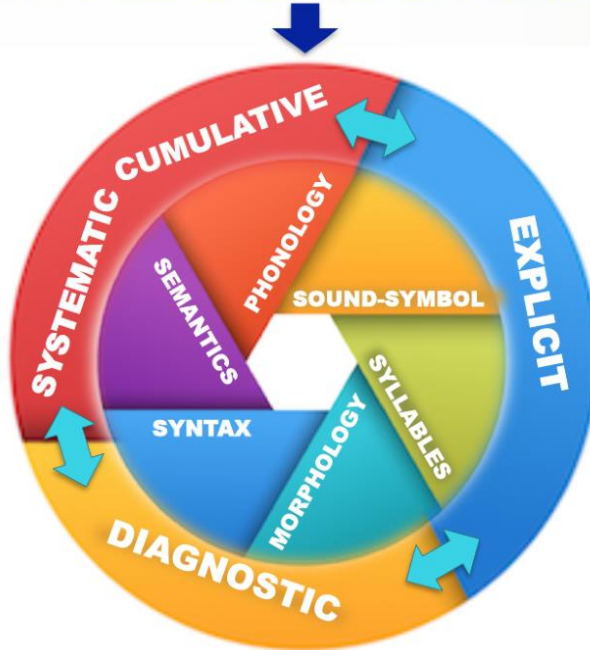
Systematic & Cumulative

Structured Literacy teaching is systematic and cumulative. **Systematic** means that organization of material follows the logical order of language. The sequence begins with the easiest and most basic concepts and elements and progresses methodically to the more difficult. **Cumulative** means each step is based on concepts previously learned.

Explicit Structured Literacy instruction requires direct teaching of concepts with continuous student-teacher interaction and does not assume students deduce concepts. (While **multisensory teaching** lacks the extensive research that validates Structured Literacy's other teaching principles, decades of clinical results support efficacy of simultaneous association of auditory, visual, kinesthetic-motor modalities for enhancing memory and learning in students with dyslexia.)

Diagnostic Teachers must be adept at individualizing instruction (even within groups) based on careful and continuous assessment, both informal (e.g., observation) and formal (e.g., with standardized measures). Content must be mastered to the degree of automaticity needed to free attention and cognitive resources for comprehension and oral/written expression.

Source: https://dyslexiaida.org/what-is-structured-literacy/

STRUCTURED LITERACY PRIMER

Effective reading instruction for most children incorporates *all* this.

Inner Circle: Elements
Outer Circle: Teaching Principles

SYSTEMATIC CUMULATIVE · EXPLICIT · DIAGNOSTIC

PHONOLOGY · SOUND-SYMBOL · SYLLABLES · MORPHOLOGY · SYNTAX · SEMANTICS

To ensure that *all* children have access to effective reading instruction, we must ensure that their teachers have BOTH the …

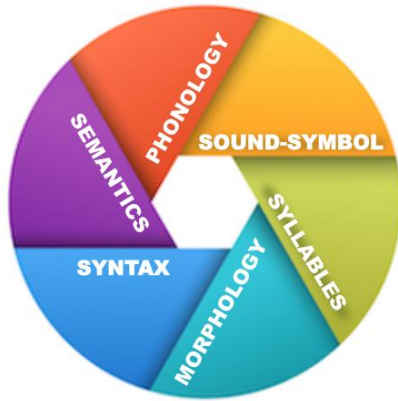✔ deep content knowledge
and
✔ specific teaching expertise needed …

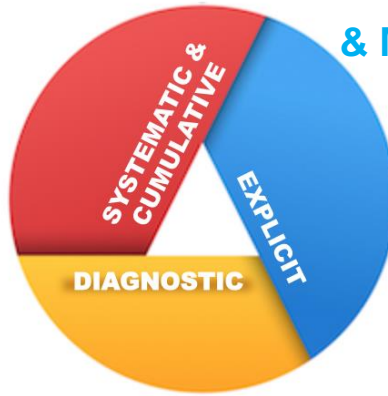to teach these **elements** according to these **principles.**

Source: https://dyslexiaida.org/what-is-structured-literacy/

Structured literacy

Explicit teaching of systematic word identification
and decoding strategies

& Multisensory

Evidence-based
elements

Evidence-based
teaching principles
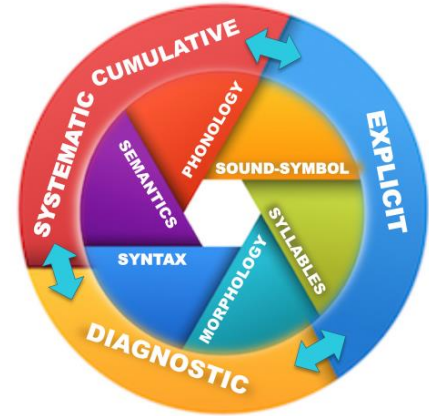
Effective reading
instruction

Literacy Block Changes

#1
Engaged in data analysis to determine areas of strength and gaps within literacy block

#2
Aligned master schedule with elements essential for structured literacy instruction

#3
Purchased materials to support instruction and made investments in human capital

#4
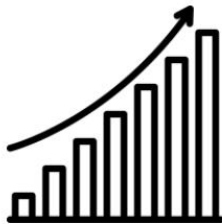Built systems and structures to support initiative

Shared Vision

At Garfield we will use a structured literacy approach to instruction that is systematic and cumulative (follows a scope and sequence), explicit (planned for based off of student data and is multi-sensory), and diagnostic (continual assessment that informs instruction).
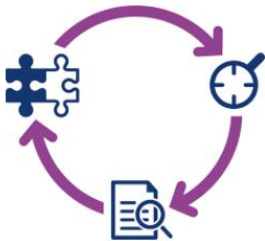
Systematic

Cumulative

Explicit

Multi-Sensory

Diagnostic

Academics

Refine the instructional program and develop the faculty to deliver quality programming and acceleration.

Goal(s):

- **Special Education – Reading Inventory - By EOY, 70% of students with IEPs will meet their growth expectations ranges**
- *ANet ELA (English Language Arts)* and Math- Percentage of Students Scoring at or Above Proficient – ANet 1, 2, and 3 – 80% of students earn a score of 80 – 100%
- *PARCC ELA* and Math - Decrease the percentage of L1 students by at least 10%
- *PARCC ELA* and Math- Increase the percentage of L4 and L5 students by at least 10%
- **DC Science** – Percentage of students scoring at or above a level 3 – 80% of students score a level 3 or 4 for the 2021-2022 assessment.
- **Social Studies**
  - Increase the percentage of proficient students by 10% percentage points after each RCT is administered
  - 90% of students earn a score of 80-100% on their final RCT
- **Pre-K** Garfield created early literacy skills assessment (% Prof - at least 80%)
- K-2 DIBELS (Dynamic Indicators of Basic Early Literacy Skills) (% Prof and Adv – at least 80%)
- K-1 TRC (Text & Reading Comprehension) (% Prof and Adv – at least 70%)

Focus 1: MTSS

This includes:

- Full implementation
- weekly data meetings
- tier 1-3 instruction
- progress monitoring

Focus 2: Acceleration Academies

This includes

- accurate and consistent progress monitoring
- robust instructional opportunities

Focus 3: Early Literacy

This includes:

- implementation of the Science of Reading
- consistent and effective implementation of Fundations and Heggerty

Cluster 1 Foci

Needs Based Group

Data
LEA assessments, LTRs, RGR, Phonemic Awareness

A

Student Needs
Social skills, Personality, Time of Day, ACE's

B

Additional Supports
Specialized Instruction, Literacy Lab, HIT

C

Collaboration
All stakeholders share resources

D

How do we develop groups and best support our students?

Evidence

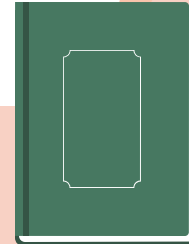# Putting it all together: Hitting your target!

Data at Randle Highlands
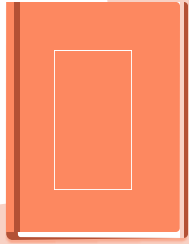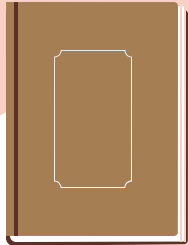
01

Objectives

Provide an overview for connecting data with student plans.
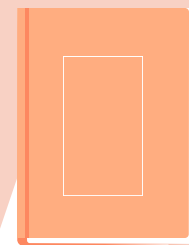
02

Methodology

The use of aggressive monitoring to capture in the moment student responses.

03

Analysis

The participants will have an opportunity to review the data and correlation between data collection and student outcome.

04

Conclusion

Putting it all together! Providing a last look at why it is important to be intentional about data collection and aligning it to student plans.

Objectives

By the end of the session, participants will be able to discuss why they use data and implement a data tool that will allow them to create instructional plans for student support and understand data and the use of aggressive monitoring supports student planning by collecting in moment data.

What skillset do you have?

"Data adds concrete information to a teacher's observation and intuition, but it will never replace experience, personal relationships,, and cultural understanding."

—Jose Ferreira

Why do you use data?

Drop your answer in the chatbox

In order for data analysis techniques to be implemented with fidelity, the evaluator must see the relevance in why it is used.

(You will only get out what you put in)

What are you talking about?

In education many talk about being driven by data, but how do you get there?

- We must be driven by data dialogue!!!
- We must be ok with being uncomfortable with not understanding data, but willing to develop that skill.
- We must be able to build capacity in those that will have a direct impact on students (teachers, instructional aides, administration, coaches)

Now that you know, where do you go?

Making Words Count:
What programs are you using?
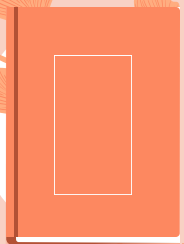
Click to add text
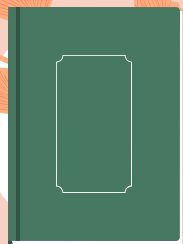
Heggerty

The Heggerty Curriculum includes explicit instruction in the following phonological and phonemic awareness skills: **Rhyming. Onset Fluency. Blending. Isolating final and medial phonemes (sounds)**

Dibels

A series of short tests that assess K-8 literacy. It is a set of procedures and measures for assessing the acquisition of a set of K-8 literacy skills, such as **phonemic awareness, alphabetic principle, accuracy, fluency, and comprehension**.

A picture is worth a thousand words

Schedule

	Monday	Tues	Wed	Thu	Fri
Heggerty	10 mins	10 mins	10 mins	10 mins	10 mins

	Window 1	Window 2	Window 3
Dibels	Aug-Oct	Nov-Jan	Feb-Apr

Progress Monitoring	4 weeks	6 Weeks

Methodology

Screening

Diagnostic

A

B

Progress
Monitoring

C

D

Aggressive
Monitoring

Let's see it in action!!

Take a minute to view the 2 short videos and share your thoughts in the chat.

What do you see?

Small Group

Whole Group

What was used?

Heggerty Phonemic Awareness
Group Data Collection Sheet

Week, _____

WEDNESDAY 3/9/27									
Student Name	Lesson #	Rhyme Recognition (# correct out of 7 words selected)	Onset Fluency (# correct out of 5 words selected)	Blending (# correct out of 10 words selected)	Isolating (# correct out of 5 words selected)	Segmenting (# correct out of 10 words selected)	Adding (# correct out of 5 words selected)	Deleting (# correct out of 5 words selected)	Substituting (# correct out of 5 words selected)
Paige									
Myka									
Dmitri									
Josiah									
Jade									

THURSDAY									
Student Name	Lesson #	Rhyme Recognition (# correct out of 7 words selected)	Onset Fluency (# correct out of 5 words selected)	Blending (# correct out of 10 words selected)	Isolating (# correct out of 5 words selected)	Segmenting (# correct out of 10 words selected)	Adding (# correct out of 5 words selected)	Deleting (# correct out of 5 words selected)	Substituting (# correct out of 5 words selected)

Why was this tool used?

A **Designed to be used with the program**
Although designed for the program there are options for redesign.

B **Ease of use for data collection**

C Transferrable
This information allows a quick response and reteach

When you change the way you look at things, the things you look at will change

Wayne Dwyer

Intellectual Prep: Now What?

Data Dialogue

- What did you see?
- What are the implications for instruction?
- What patterns do we see?

We see numbers

Assessing what they know

Now its time to assess- Dibels

2 DIBELS® First Sound Fluency
Grade K/Benchmark 2

Test Items	Correct/2 points	Correct/1 point			Incorrect
1. land	/l/	/la/			0
2. gift	/g/	/gi/			0
3. snail	/s/	/sn/	/snai/		0
4. stove	/s/	/st/	/stoa/		0
5. mild	/m/	/mie/			0
6. stream	/s/	/st/	/str/	/strea/	0
7. pairs	/p/	/pe/			0
8. flare	/f/	/fl/	/fle/		0
9. peace	/p/	/pea/			0
10. sly	/s/	/sl/			0
11. plate	/p/	/pl/	/plai/		0
12. thank	/th/	/tha/			0
13. sweet	/s/	/sw/	/swea/		0
14. life	/l/	/lie/			0
15. blank	/b/	/bl/	/bla/		0
16. doll	/d/	/do/			0
17. sling	/s/	/sl/	/sli/		0
18. stairs	/s/	/st/	/ste/		0
19. knees	/n/	/nea/			0
20. peek	/p/	/pea/			0
21. cream	/k/	/kr/	/krea/		0
22. clang	/k/	/kl/	/kla/		0
23. bag	/b/	/ba/			0
24. ride	/r/	/rie/			0
25. fruit	/f/	/fr/	/froo/		0
26. porch	/p/	/por/			0
27. flour	/f/	/fl/	/flow/		0
28. race	/r/	/rai/			0
29. chin	/ch/	/chi/			0
30. steam	/s/	/st/	/stea/		0

2-pt responses: _____

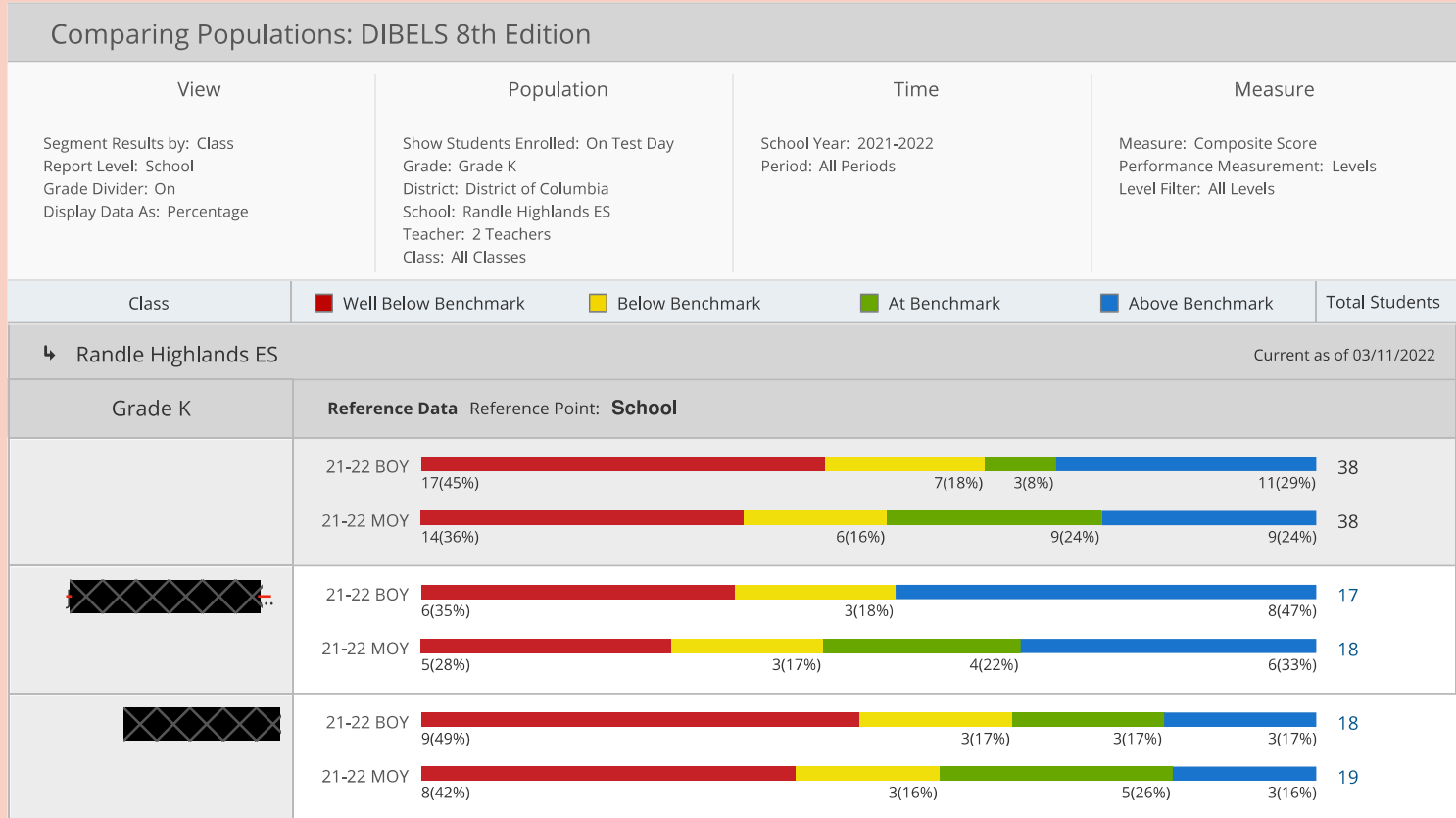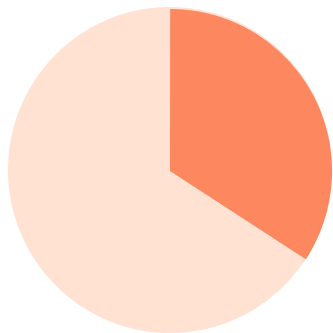x 2: _____ + 1-pt responses: _____ = Total: _____
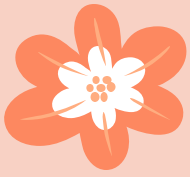
Assessment in action

This is an example of what you will see when implementing this assessment. The goal is for the students to be able to complete this task in 1 minute.
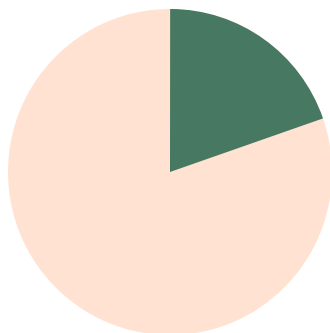
Outcome...

Comparing Populations: DIBELS 8th Edition

View	Population	Time	Measure
Segment Results by: Class Report Level: School Grade Divider: On Display Data As: Percentage	Show Students Enrolled: On Test Day Grade: Grade K District: District of Columbia School: Randle Highlands ES Teacher: 2 Teachers Class: All Classes	School Year: 2021-2022 Period: All Periods	Measure: Composite Score Performance Measurement: Levels Level Filter: All Levels

Class	Well Below Benchmark	Below Benchmark	At Benchmark	Above Benchmark	Total Students

↳ Randle Highlands ES — Current as of 03/11/2022

Grade K — Reference Data Reference Point: **School**

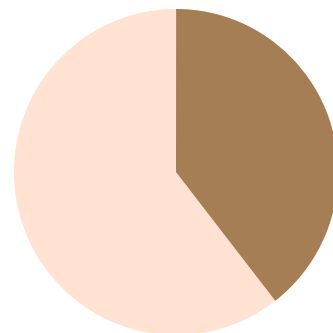|	Period		Total Students
	21-22 BOY	17(45%) 7(18%) 3(8%) 11(29%)	38
	21-22 MOY	14(36%) 6(16%) 9(24%) 9(24%)	38
✗✗✗✗✗✗✗✗	21-22 BOY	6(35%) 3(18%) 8(47%)	17
	21-22 MOY	5(28%) 3(17%) 4(22%) 6(33%)	18
✗✗✗✗✗	21-22 BOY	9(49%) 3(17%) 3(17%) 3(17%)	18
	21-22 MOY	8(42%) 3(16%) 5(26%) 3(16%)	19

37%

At BOY there were 14 students on or above grade level.

48%

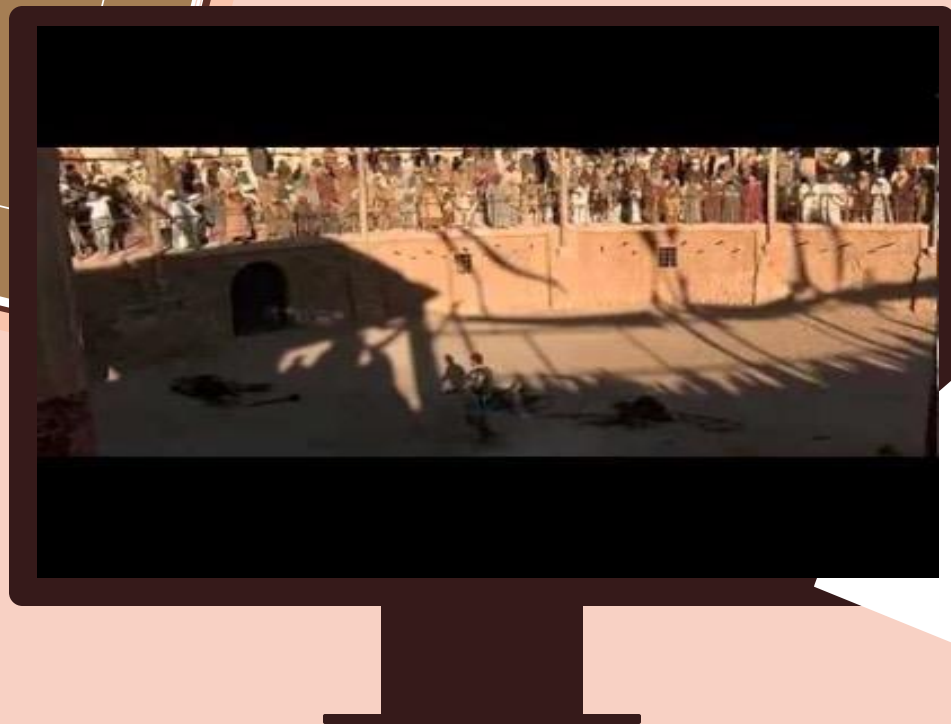At EOY there were 18 students on or above grade level

70%

By EOY we need 26 students to be on or above grade level.

Begin with the end in mind: What is your goal?

Give them a show!

Let your data and your progress speak volumes. Be happy with the quick wins!

Conclusions

Conclusion #1

Create a culture around open dialogue as structure around data is being implemented.

Conclusion #2

Make sure the use of data is ongoing and met with urgency.

Conclusion #3

Be willing to change your process if it doesn't meet your collective needs or expected outcome.

Questions?

Resources:

https://www.nancyyoung.ca/

https://dcps.dc.gov/equity

https://dibels.uoregon.edu/about-dibels

https://www.edreports.org/reports/overview/fountas-pinnell-classroom-2020

https://dyslexiaida.org/what-is-structured-literacy/

https://iowareadingresearch.org/blog/structured-and-balanced-literacy

https://dyslexia.yale.edu/

https://www.thereadingleague.org/wp-content/uploads/2021/05/Article-for-May-2021-TRLJ.pdf

Thank you!

Keep in Touch!

Kristie.Edwards@k12.dc.gov
@kedwardsnc

Jasmine.Rogers@k12.dc.gov
@futuredrjasmine
www.linkedin.com/in/jasminerogers