



Pathways of Progress™

DIBELS® Pathways of Progress™

Roland H. Good III, Ph.D.
Kelly Powell-Smith, Ph.D.
Ruth A. Kaminski, Ph.D.
Elizabeth N. Dewey, M.S.
Dynamic Measurement Group, Inc.

DIBELS®, DIBELS Next®, DIBELS AD™, and Pathways of Progress™ are trademarks of Dynamic Measurement Group, Inc.

Module 1 Agenda

Introductions

Part I: DIBELS® Next Overview

- ▶ Purpose
- ▶ Prevention
- ▶ Technical Adequacy
- ▶ Benchmark Goals

Part II: The Need for Pathways of Progress

- ▶ Goals and purpose
- ▶ Role of Pathways in DIBELS AD
- ▶ Classroom Progress Percentiles
- ▶ DIBELS AD Reports
- ▶ Classroom Pathways Reports

Pathways of Progress™ ©2015 Dynamic Measurement Group

2




Pathways of Progress™

Part I

DIBELS® NEXT OVERVIEW

Purpose
Prevention
Benchmark Goals

What Are DIBELS®?

- ▶ Dynamic Indicators of Basic Early Literacy Skills
- ▶ A set of measures used to assess early literacy and reading skills for students from kindergarten through sixth grade that can be used to:
 - ▶ Identify students who may be at risk for reading difficulties
 - ▶ Help teachers identify areas to target instructional support
 - ▶ Monitor progress of students
 - ▶ Examine the effectiveness of instructional support

Pathways of Progress™ ©2015 Dynamic Measurement Group

4



Important Features of DIBELS®

To be useful for screening and progress monitoring of early literacy skills, the measures must:

- ▶ Measure Basic Early Literacy Skills
- ▶ Be efficient and economical
- ▶ Use standardized procedures
- ▶ Be repeatable
- ▶ Be sensitive to small changes in growth over short periods of time
- ▶ Have technical adequacy
- ▶ Have research-based goals and cut points for risk

Pathways of Progress™

©2015 Dynamic Measurement Group

5



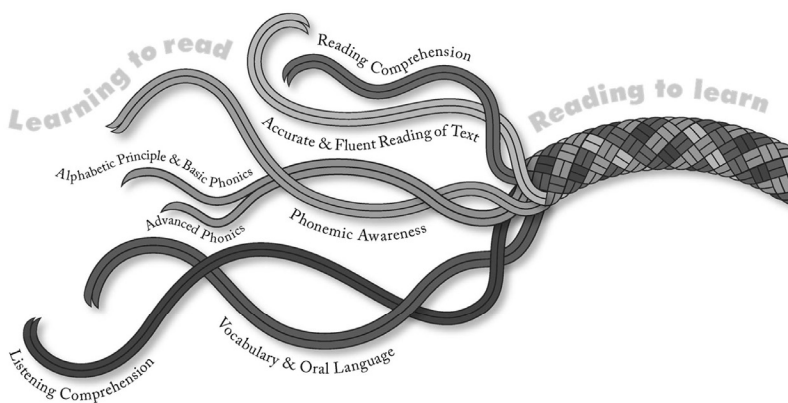
Basic Early Literacy Skills are The Big Ideas

Basic Early Literacy Skill	The Big Idea
Vocabulary and language skills	Using knowledge of words, word meanings, and grammar to understand and express meaning.
Phonemic awareness	The understanding that spoken words are made up of sequences of individual speech sounds or phonemes.
Alphabetic principle and basic phonics	1. <u>Alphabetic Understanding</u> : Knowledge of letter-sound correspondences and the understanding that letters represent sounds in spoken words. 2. <u>Phonological Recoding (blending)</u> : The use of alphabetic understanding to decode or read unknown words
Advanced phonics and word attack	Knowing and applying letter-sound patterns to read known and unknown words with automaticity and confidence.
Accurate and fluent reading of connected text	Reading that is accurate (without too many miscues), at a reasonable rate, and prosodic (read with enough expression that it sounds like language).
Reading comprehension	The process of drawing meaning from text.

6



Basic Early Literacy Skills: Strands woven together become reading



Adapted from Scarborough, 2001 and Kame'uli, Simmons, Coyne, & Harn, 2003

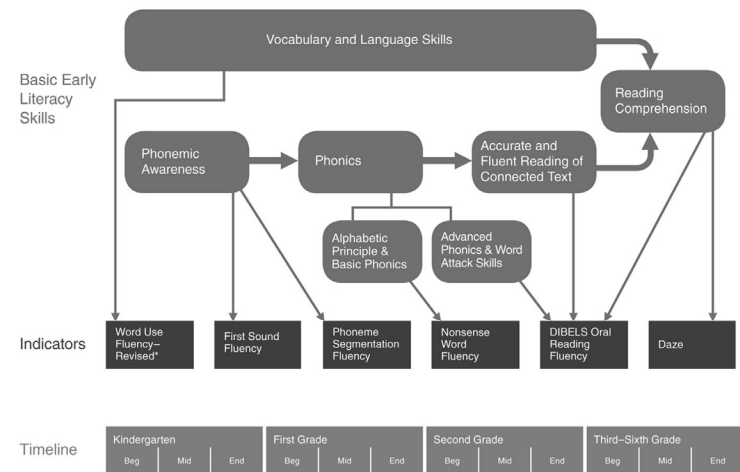
Pathways of Progress™

©2015 Dynamic Measurement Group

7



Basic Early Literacy Skills Timeline

*Word Use Fluency—Revised (WUF-R) is available as an experimental measure from <http://dibels.org/>.

Pathways of Progress™

©2015 Dynamic Measurement Group

8



Benchmark Goals Provide Three Levels of Performance

If a student achieves a Benchmark Goal, the odds are in favor of that student achieving later reading outcomes.

- ▶ **At or Above Benchmark:** Odds are generally 80% to 90% of achieving subsequent benchmark goals and important reading outcomes. **Student is likely to make adequate progress with effective core instruction.**
- ▶ **Below Benchmark:** Odds are generally 40% to 60% of achieving subsequent benchmark goals and important reading outcomes. **Student is likely to need strategic support to make adequate progress.**
- ▶ **Well-Below Benchmark:** Odds are generally 10% to 20% of achieving subsequent benchmark goals and important reading outcomes. **Student is likely to need intensive support to make adequate progress.**

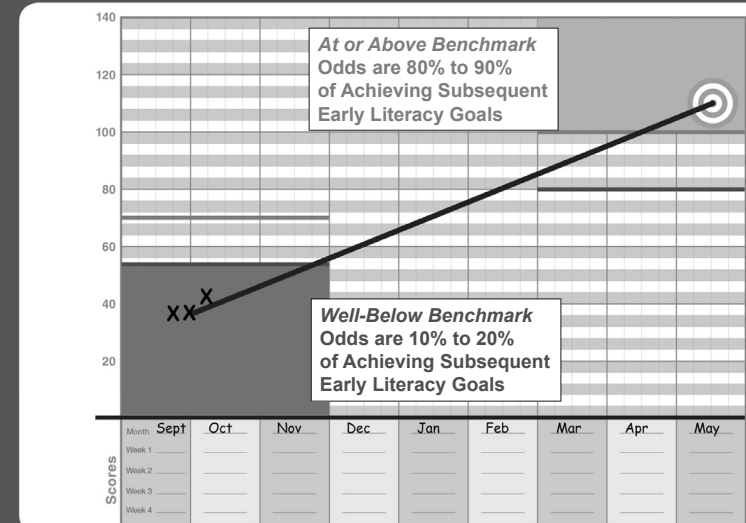
Pathways of Progress™

©2015 Dynamic Measurement Group

© 2015 Dynamic Measurement Group



Benchmark Goals and Need for Support



10

© 2015 Dynamic Measurement Group



DIBELS Next Technical Manual www.dibels.org (p. 157)

Table B.9 First-Grade Odds of Meeting Selected Later Important Reading Outcomes from Benchmark Goal Research

Measure	Score Level	Odds of being on track on the Middle-of-Year DIBELS Composite Score based on the Beginning-of-Year DIBELS Composite Score	Odds of being on track on the End-of-Year DIBELS Composite Score based on the Middle-of-Year DIBELS Composite Score	Odds of being on track on the End-of-Year DIBELS Composite Score based on the End-of-Year DIBELS Composite Score
		Composite Score	Composite Score	Composite Score
DIBELS Composite Score	At or Above Benchmark	84%	90%	90%
	Below Benchmark	35%	34%	48%
	Well Below Benchmark	26%	12%	10%
PSF	At or Above Benchmark	75%		
	Below Benchmark	56%		
	Well Below Benchmark	39%		
NWF-CLS	At or Above Benchmark	83%	85%	83%
	Below Benchmark	40%	42%	50%
	Well Below Benchmark	20%	26%	35%
NWF-WWR	At or Above Benchmark	81%	85%	83%
	Below Benchmark	36%	42%	59%
	Well Below Benchmark		21%	32%
DORF Words Correct	At or Above Benchmark		88%	90%
	Below Benchmark		34%	42%
	Well Below Benchmark		7%	10%
DORF Accuracy	At or Above Benchmark		87%	89%
	Below Benchmark		39%	36%
	Well Below Benchmark		20%	13%

Pathways of Progress™

©2015 Dynamic Measurement Group

11

© 2015 Dynamic Measurement Group



High Technical Adequacy: Reliability

Single- and Three-Form Reliability Estimates for DIBELS Measures

DIBELS Measure	Type of Reliability					
	Inter-Rater		Alternate-Form		Test-Retest	
	Single-Form	Three-Form	Single-Form	Three-Form	Single-Form	Three-Form
First Sound Fluency	.94	.98	.82	.93	--	--
Letter Naming Fluency	.99	1.00	.86	.95	--	--
Phoneme Segmentation Fluency	.96	.99	.44	.70	--	--
NWF: Correct Letter Sounds	.99	1.00	.71 - .85	.88 - .94	.76	.90
NWF: Whole Words Read	.99	1.00	.90 - .92	.96 - .97	.70	.88
DORF Single Passage: WC/Min	--	--	.83 - .95	.92 - .97	--	--
DORF Triad: WC/Min	--	--	--	.95 - .98	--	.97 - .99
DORF Triad: Accuracy	--	--	--	.76 - .88	--	.80 - .98
DORF Triad: Retell	--	.92 - .99	--	.65 - .81	--	.27 - .69
Daze Adjusted Score	.98 - .99	.99 - 1.00	.66 - .81	.85 - .93	--	--
DIBELS Composite Score	.97 - .99	--	.66 - .97	--	.81 - .94	--

Note: All correlations significant at $p < .001$. PSF kindergarten reliability reported.

Pathways of Progress™

©2015 Dynamic Measurement Group

12

© 2015 Dynamic Measurement Group



High Technical Adequacy: Validity

Predictive Validity Coefficients for DIBELS Measures with GRADE Total Test Raw Score

Beginning of Year DIBELS Measure	GRADE Total Test raw scores by grade						
	K	1	2	3	4	5	6
First Sound Fluency	.52	-	-	-	-	-	-
Letter Naming Fluency	.39	.54	-	-	-	-	-
Phoneme Segmentation Fluency	-	.33	-	-	-	-	-
NWF: Correct Letter Sounds	-	.43	.51	-	-	-	-
NWF: Whole Words Read	-	.39	.51	-	-	-	-
Oral Reading Fluency Words Correct	-	-	.69	.66	.77	.69	.64
Oral Reading Fluency Accuracy	-	-	.75	.68	.62	.53	.55
Retell	-	-	.53	.48	.56	.61	.55
Daze Adjusted Score	-	-	-	.65	.67	.56	.60
DIBELS Composite Score	.50	.55	.75	.73	.80	.76	.71

Note. All correlations significant at $p < .001$.

Pathways of Progress™

©2015 Dynamic Measurement Group

13



Group Reading Assessment and Diagnostic Evaluation

DIBELS Composite Score explains more variance in reading outcomes than DORF Words Correct alone.

Median 9% more, range 3% to 17%.

DORF Words Correct alone is good, DIBELS Composite Score is better.

Grade and Time of Year	DORF Words Correct Predicting GRADE Total	DIBELS Composite Score Predicting GRADE Total	Additional Variance Explained by DIBELS Composite Score
Grade 1 Middle of Year	0.64	0.70	8%
Grade 1 End of Year	0.75	0.77	4%
Grade 2 Beginning of Year	0.69	0.75	8%
Grade 2 Middle of Year	0.76	0.80	5%
Grade 2 End of Year	0.73	0.75	3%
Grade 3 Beginning of Year	0.66	0.73	10%
Grade 3 Middle of Year	0.67	0.78	15%
Grade 3 End of Year	0.66	0.75	13%
Grade 4 Beginning of Year	0.76	0.80	5%
Grade 4 Middle of Year	0.76	0.80	6%
Grade 4 End of Year	0.75	0.80	8%
Grade 5 Beginning of Year	0.69	0.76	11%
Grade 5 Middle of Year	0.64	0.76	17%
Grade 5 End of Year	0.66	0.77	17%
Grade 6 Beginning of Year	0.64	0.71	9%
Grade 6 Middle of Year	0.59	0.68	12%
Grade 6 End of Year	0.61	0.73	16%

Pathways of Progress™

©2015 Dynamic Measurement Group

14



California Standards Test (CST) Replication District

DIBELS Composite Score explains more variance in reading outcomes than DORF Words Correct alone.

Median 6% more, range 0% to 15%.

DORF Words Correct alone is good, DIBELS Composite Score is better.

Grade and Time of Year	DORF Words Correct Predicting CST	DIBELS Composite Score Predicting CST	Additional Variance Explained by DIBELS Composite Score
Grade 2 Beginning of Year	.74	.75	1%
Grade 2 Middle of Year	.76	.76	0%
Grade 2 End of Year	.75	.76	2%
Grade 3 Beginning of Year	.68	.71	4%
Grade 3 Middle of Year	.69	.71	3%
Grade 3 End of Year	.69	.73	6%
Grade 4 Beginning of Year	.70	.78	12%
Grade 4 Middle of Year	.72	.77	7%
Grade 4 End of Year	.71	.76	7%
Grade 5 Beginning of Year	.71	.74	4%
Grade 5 Middle of Year	.69	.73	6%
Grade 5 End of Year	.67	.74	10%
Grade 6 Beginning of Year	.67	.74	10%
Grade 6 Middle of Year	.66	.75	13%
Grade 6 End of Year	.63	.74	15%

Pathways of Progress™

©2015 Dynamic Measurement Group

15



Reading Comprehension Convergence of Information

Beginning of Year Benchmark

DORF Words Correct = _____ [1]
 Retell Score _____ x 2 = _____ [2]
 Daze Adjusted Score _____ x 4 = _____ [3]
 DORF Accuracy Percent: _____ %
 $100 \times (\text{Words Correct} / (\text{Words Correct} + \text{Errors}))$
 Accuracy Value from Table = _____ [4]

DIBELS Composite Score (add values 1–4) =

If DORF is below 40 and Retell is not administered, use 0 for the Retell value only for calculating the DIBELS Composite Score. Do not calculate the composite score if any of the values are missing.

1. Reading at an appropriate rate
2. Reading orally with understanding
3. Reading silently for meaning in context
4. With a high degree of accuracy

Students who are at or above benchmark on the DIBELS® Composite Score are **reading for meaning** at an **adequate rate** and with a **high degree of accuracy**.

Pathways of Progress™

©2015 Dynamic Measurement Group

16



Common Core Reading Standards: Foundational Skills (K–5)

Grade 1 to 5 Students

Fluency

4. Read with sufficient accuracy and fluency to support comprehension.
 - a. Read on-level text with purpose and understanding.
 - b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings
 - c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

http://www.corestandards.org/assets/CCSSI_ELA%20Standards.pdf

Pathways of Progress™

©2015 Dynamic Measurement Group

17



How Do We Make Educational Decisions with DIBELS®?

Use DIBELS within an *Outcomes-Driven Model*: An overarching framework comprised of decision-making steps designed to answer specific questions for specific purposes.

Outcomes-Driven Model Steps:

1. Identify need for support
2. Validate need for support
3. Plan and implement support
4. Evaluate and modify support
5. Review outcomes



Pathways of Progress™

©2015 Dynamic Measurement Group

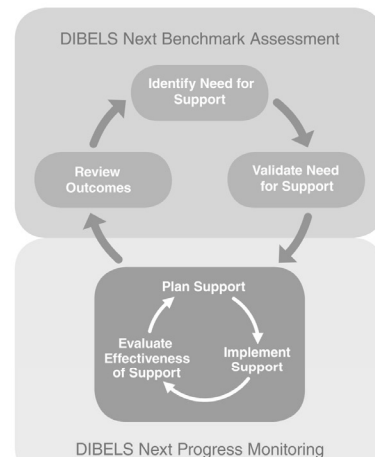
18



Outcomes-Driven Model

Outcomes Driven Model Steps:

1. Identify need for support
2. Validate need for support
3. Plan and implement support
4. Evaluate and modify support
5. Review outcomes



Pathways of Progress™

©2015 Dynamic Measurement Group

19



Outcomes-Driven Model

ODM Step	Questions: Student	Questions: Systems
1. Identify Need for Support	Which students may need support?	Are there students who may need support? How many students may need support?
2. Validate Need for Support	Are we reasonably confident that the identified students need support?	Are we reasonably confident in the accuracy of our data overall?
3. Plan and Implement Support	What are the student's skills and needs? What is the plan of support for the student, including goals and plan for progress monitoring?	At what grade levels and/or in what areas may support be needed? What are our system-wide goals? What is our system-wide plan for support?
4. Evaluate and Modify Support	Is each student making adequate progress? Is the support effective for individual students?	Are we making progress toward our system-wide goals? Is our system of support effective?
5. Review Outcomes	Has the support been effective for individual students? Has the student met his/her goal? Which students may need support?	Have we met our system-wide goal? Is our system of support effective? Are there students who may need support? How many students may need support?

Pathways of Progress™

©2015 Dynamic Measurement Group

20

