### Beginning Reading Core Components

**#1. Phonemic Awareness:** The ability to hear and manipulate sound in words.

**#2. Phonics:** The ability to associate sounds with letters and use these sounds to read words.

**#3. Fluency:** The effortless, automatic ability to read words in isolation (orthographic reading) and connected text.

**#4. Vocabulary Development:** The ability to understand (receptive) and use (expressive) words to acquire and convey meaning.

**#5. Reading Comprehension:** The complex cognitive process involving the intentional interaction between reader and text to extract meaning.


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### DIBELS Nonsense Word Fluency

Here are some more make-believe words (point to the student probe). **Start here** (point to the first word) and go across the page (point across the page). **When I say, “begin”, read the words the best you can.** Point to each letter and tell me the sound or read the whole word. **Read the words the best you can.** Put your finger on the first word. Ready, begin.

- **kik woj sig faj yis**
- **kaj fek av zin zez**
- **lan nul zem og nom**
- **yuf pos vok viv feg**
- **bub dij sij vus tos**
- **wuv nij pik nok mot**
- **nif vec al boj nen**
- **suv yig dit tum joj**
- **yaj zof um vim vel**
- **tig mak sog wot sav**
Reading First:
Four Kinds/Purposes of Reading Assessment

An effective, comprehensive, reading program includes reading assessments to accomplish four purposes:

- **Outcome** - Assessments that provide a bottom-line evaluation of the effectiveness of the reading program.
- **Screening** - Assessments that are administered to determine which children are at risk for reading difficulty and who will need additional intervention.
- **Diagnosis** - Assessments that help teachers plan instruction by providing in-depth information about students’ skills and instructional needs.
- **Progress Monitoring** - Assessments that determine if students are making adequate progress or need more intervention to achieve grade level reading outcomes.

Source: Reading First Initiative; Secretary’s Leadership Academy

1. Identifying Need for Support

Key Decision for **Screening Assessment**:
- Which children **may** need additional instructional support to attain important reading outcomes?

Data used to inform the decision:
- Compare individual student’s performance to **local normative context** or **expected performance** to evaluate need for additional instructional support.

- **Local normative context**: First, choose a percentile cutoff. 20th percentile seems a good place to start, but a district could choose 15th percentile or 25th percentile or other cutoff depending on resources.

- **Expected performance**: A deficit in a foundation skill is a strong indicator that instructional support will be needed to attain later benchmark goals.

2. Validate Need for Support

Key Decision:
- Are we reasonably confident the student needs instructional support?
  - Rule out easy reasons for poor performance: Bad day, confused on directions or task, ill, shy, or similar.
  - More reliable information is needed to validate need for support than for screening decisions.

Data used to inform the decision:
- Repeated assessments on different days under different conditions
- Compare individual student’s performance to local normative context or expected performance to evaluate discrepancy.

Decision Utility of DIBELS Fall of 1st

- LNF >= 37, DIBELS PSF >= 35, DIBELS NWF >= 24
  Instructional Recommendation: Benchmark - At grade level. Effective core curriculum and instruction recommended,
  - Odds of reading 40 or more words correct per minute at the end of first grade: 84%
- LNF < 25, DIBELS PSF < 10, DIBELS NWF < 13
  Instructional Rec: Intensive - Needs substantial intervention:
  - Odds of reading 40 or more words correct per minute at the end of first grade: 18% (unless given intensive intervention)

Value of knowing the instructional recommendation and the goal early enough to change the outcome: Priceless.

Validating Need for Support

- Verify need for instructional support by retesting with alternate forms until we are reasonably confident.
3. Planning and Implementing Instructional Support

Key Decisions for Diagnostic Assessment:

- What are the Goals of instruction?
  - Where are we? Where do we need to be? By when? What course do we need to follow to get there?
- What skills should we teach to get there?
  - Focus on the beginning reading core areas: Phonological Awareness, Alphabetic Principle, Accuracy and Fluency with Connected Text
  - Specific skills based on error analysis or additional diagnostic assessment (e.g., CTOPP).
- How much instructional support is needed?
  - Intensive Instructional Support
  - Strategic Instructional Support
  - Benchmark Instruction

Instructional Goals for Core Components of Beginning Reading

Benchmark Goals to be On Grade Level:

- **Middle K: Phonological Awareness** with 25 - 35 on DIBELS
- **End K: Phonemic Awareness** with 35 - 45 on DIBELS
- **Middle 1st: Alphabetic principle** 50 - 60 on DIBELS
- **End 1st: Fluency** with 40 - 50 on DIBELS
- **End 2nd: Fluency** with 90 + on DIBELS
- **End 3rd: Fluency** with 110 + on DIBELS

Instructional Goals

- Establish an Instructional Goal for *Alphabetic Principle* that will change odds of being a reader

Instructional Support Levels:

- **Intensive Instructional Support**
- **Strategic Instructional Support**
- **Benchmark Instruction**

Mid-year cutoff for low risk and at risk levels:

- **Mid-year cutoff low risk**
- **Mid-year cutoff at risk**
Oregon Reading First Review of Supplemental and Intervention Programs

- OR Reading First developed review criteria for supplemental and intervention programs and reviewed 106 programs for the percent of criteria met. http://oregonreadingfirst.uoregon.edu/SIreport.php
  - Phonemic Awareness:
    - Early Reading Intervention 96%
    - Road to the Code 80%
    - Phonemic Awareness in Young Children 75%
  - Phonics or Alphabetic Principle:
    - Reading Master Fast Cycle 96%
    - Read Well 94%
    - Voyager Passport 92%
    - Early Reading Intervention 81%
  - Fluency with Connected Text:
    - Read Naturally 92%
    - Great Leaps 66%
    - Headsprout 61%

4. Evaluating and Modifying Instructional Support

Key Decision for **Progress Monitoring Assessment:**

- Is the intervention effective in improving the child's early literacy skills?
- How much instructional support is needed?
  - Enough to get the child on trajectory for Benchmark Goal.
- When is increased support needed?
  - Monitor child’s progress during intervention by comparing their performance and progress to past performance and their aimline. *Three consecutive assessments below the aimline* indicates a need to increase instructional support.

Progress Monitoring

- Repeated, formative assessment to evaluate progress toward important goals for the purpose of modifying instruction or intervention.
- Frequency of Progress Monitoring
  - 3 times per year for students at low risk (All Students)
    - *Benchmark*
  - 1 per month for students with some risk
    - *Strategic*
  - 1 per week for students at risk
    - *Intensive*

Research on Progress Monitoring

- Progress monitoring has been extensively researched in Special Education
- With Reading First, progress monitoring is not just for special education any more.
Effects of Progress Monitoring

- Fuchs and Fuchs (1986) found the average effect size associated with progress monitoring was:
  - +0.70 for monitoring progress
  - +0.80 when graphing of progress was added
  - +0.90 when decision rules were added
- A student at the 50th percentile would be expected to move to the 82nd percentile (i.e., a score of 100 would move to a score of 114)
- Perhaps more important, a student at the 6th percentile would be expected to move to the average range (25th percentile) (i.e., a score of 76 would move to a score of 90)

Progress Monitoring Tools

- Meaningful and important **goals**, waypoints, or benchmarks representing reading health or wellness.
  - Meaningful and Important
  - Public and Measurable
  - Ambitious
- Brief, repeatable, formative assessment of progress toward benchmark goals that is sensitive to intervention.
  - Brief and Efficient
  - Repeatable - weekly or monthly
  - **Reliable and Valid** indication of risk and growth

Is Progress is Related to Outcomes?

- The logic of the Evaluating and Modifying Support step relies on evidence that amount of progress toward goals is related to important reading outcomes.
- **Given or controlling for initial skills, is slope of progress on NWF in the Fall of first grade related to first grade reading outcomes for at risk students?**
  - Evaluations of the relation between slope of progress and outcomes must consider the student’s initial skills.

Progress GIVEN initial skills.

- Nora has a slope twice that of Nick, but substantially lower reading outcome because her initial skills are so much lower.

Slope, by itself without considering initial skills is not enough to predict outcomes.
Similar Initial Skills – Slope is related to outcomes

- Nora and Nell have similar initial skills – Nell’s higher slope predicts higher skills in middle of first grade and higher reading outcomes.

Consideration Initial Skills, Does Slope Add to Predictions of Outcomes?

- Students with complete data from 2002-2003 in the DIBELS Data System were examined for level of risk, slope of progress, and reading outcomes.

<table>
<thead>
<tr>
<th>Group</th>
<th>Beginning NWF</th>
<th>NWF Slope</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>At Risk 0 to 12</td>
<td>20739</td>
<td>5.46</td>
</tr>
<tr>
<td>Some Risk 13 to 23</td>
<td>20606</td>
<td>18.08</td>
</tr>
<tr>
<td>Low Risk 24 to 49</td>
<td>38082</td>
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<tr>
<td>Hi AP 50 to 255</td>
<td>12288</td>
<td>70.32</td>
</tr>
<tr>
<td>Total</td>
<td>91715</td>
<td>29.09</td>
</tr>
</tbody>
</table>

Utility of Initial NWF Risk Categories

- Initial skills on NWF are a very strong predictor of reading outcomes.

<table>
<thead>
<tr>
<th>Group</th>
<th>Ending ORF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds of Achieving Benchmark Goal</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>At Risk NWF 0 to 12</td>
<td>20739</td>
</tr>
<tr>
<td>Some Risk NWF 13 to 23</td>
<td>20606</td>
</tr>
<tr>
<td>Low Risk NWF 24 to 49</td>
<td>38082</td>
</tr>
<tr>
<td>Hi AP NWF 50 to 255</td>
<td>12288</td>
</tr>
<tr>
<td>Total</td>
<td>91715</td>
</tr>
</tbody>
</table>

Does Slope Add to the Prediction of Reading Outcomes After Risk Level and Initial Skills?

- Rules for evaluating effects:
  1. Significance. With N > 20,000 everything is significant.
  2. Percent of variance explained. More than 10% of variance explained is a good indication of a strong effect. Greater percent is stronger.
  3. Educationally meaningful effects. Analysis of outcomes to see if the predicted differences would be educationally important to teachers, students, parents.
Does Slope Add to the Prediction of Reading Outcomes After Risk Level and Initial Skills?

- Sequential model predicting first grade DORF reading outcomes from (1) risk category, (2) initial NWF skill given risk, and (3) slope given risk and initial skill.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>R² change</th>
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</thead>
<tbody>
<tr>
<td>NWF Risk Category</td>
<td>3</td>
<td>0.40</td>
</tr>
<tr>
<td>Initial NWF Skill Given Risk</td>
<td>1</td>
<td>0.08</td>
</tr>
<tr>
<td>Slope Given Risk, Initial Skill</td>
<td>1</td>
<td>0.11</td>
</tr>
<tr>
<td>Total</td>
<td>91714</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Risk category, initial skills, and slope combined explain 59% of reading outcomes.

Variance Explained by Slope for Each Risk Category

- A separate analysis was conducted for each risk category.

<table>
<thead>
<tr>
<th>Group</th>
<th>NWF Initial Skills</th>
<th>NWF Slope Given Initial Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Risk NWF 0 to 12</td>
<td>8%</td>
<td>26%</td>
</tr>
<tr>
<td>Some Risk NWF 13 to 23</td>
<td>2%</td>
<td>21%</td>
</tr>
<tr>
<td>Low Risk NWF 24 to 49</td>
<td>8%</td>
<td>21%</td>
</tr>
<tr>
<td>Hi AP NWF 50 to 255</td>
<td>25%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Rate of progress in alphabetic principle is especially important for students who are at risk for low reading outcomes.

Variability in Slope for At Risk Students

- About 68% of At Risk student’s trajectories are between the low slope and the high slope.

Are Differences in Slope Educationally Meaningful for At Risk Students?

- Yes. Predicted reading outcomes are substantially different.

But, is the variance explained by slope (given risk and initial skills) educationally important?
Conclusions:
Validity of DIBELS NWF Slope

- Initial risk status and initial skills on DIBELS Nonsense Word Fluency are very important in predicting reading outcomes in first grade, explaining 48% of variance in outcomes.
- An increasing pattern of scores through the first semester of first grade on DIBELS Nonsense Word Fluency appears to be a very important predictor of reading outcomes for students who are at risk, and indeed for each risk category.
- We can be confident that increases in DIBELS Nonsense Word Fluency reflect improved performance on alphabetic principle skills that contribute to important end-of-year reading outcomes.

5. Reviewing Outcomes

Key Decisions for Outcome/Accountability Assessment:
- Does the child have the early literacy skills predictive of successful reading outcomes?
- Does the school have core curriculum and instruction as well as a system of effective instructional support so their students achieve literacy outcomes?

Data used to inform the decision:
- Evaluate individual student’s performance with respect to benchmark goals that with the odds in favor of achieving subsequent literacy goals.
- Compare school/district outcomes to goals and outcomes from previous year.
- Evaluate core curriculum and system of additional support for each step to identify strengths and areas for improvement.

Case Example: “Rick”

Results at School #2
Year 3: 2001-2002
Kindergarten Benchmark Scores Across 2 Years: Initial Sound Fluency

Kindergarten Benchmark Scores Across 2 Years: Phoneme Segmentation Fluency

Kindergarten Benchmark Scores Across 2 Years: Nonsense Word Fluency

1st Grade Benchmark Scores Across 2 Years: Phoneme Segmentation Fluency
1st Grade Benchmark Scores Across 2 Years: Nonsense Word Fluency

Red = 2000-01 School Year
Blue = 2001-02 School Year

Reading First in Cincinnati Public: The Multi-Tiered Model of Intervention Support

Data-based decision making at all levels!

Special Education

Intensive Individualized Intervention Efforts: Collab. Prob Solving

Targeted Interventions for Struggling Readers:
Voyager’s In School and Extended Day Interventions
DIBELS Weekly Progress Monitoring
Effective School and Class-wide Reading Instruction Rooted in Scientifically Based Reading Research:
Voyager Universal Literacy System
DIBELS Benchmarking

Model of Big Ideas, Indicators, and Timeline

Adapted from Good, R. H., Simmons, D. C., & Kame'enui, E. J. (2001). The importance and decision-making utility of a continuum of fluency-based indicators of foundational reading skills for third-grade high-stakes outcomes. Scientific Studies of Reading, 5, 257-288.

Reviewing Outcomes: Effectiveness of Benchmark Instruction (Core Curriculum)

- For each step toward literacy outcomes, a school with an effective core curriculum and instruction supports students who are on track (i.e., low risk or benchmark) to achieve the goal.
- For students with the odds in favor of achieving literacy goals, it is the job of the core to teach the core components so that all students (100%) achieve the goals.
Beginning First to Middle First

Middle of first grade outcomes for students with benchmark, strategic, and intensive instructional recommendations in the beginning of first grade.

A typical (middle) school had 68% of children with a beginning first grade benchmark recommendation achieve the middle of first grade goal, and 0% of children with intensive support recommendation.

Reviewing Outcomes: Effectiveness of Strategic and Intensive Intervention

- For each step toward literacy outcomes, a school with an effective system of effective interventions supports students who are not on track (i.e., at some risk or at risk of difficulty achieving literacy goals) to achieve the goal.

- For students with the odds against achieving literacy goals unless we provide an effective intervention, it is the job of the system of additional support to augment the core curriculum so that all students (100%) achieve the same benchmark goals.

School is the primary level of analysis

- Students can be placed with different interventionists than their classroom teacher.

- Students with similar and challenging needs are sometimes assigned to the same classroom.

- Decisions about how intervention is structured and delivered are made at a school level, and the school, at a systems level, needs to plan for and evaluate the instructional support that is provided.

- The classroom or intervention group level of analysis can inform school level discussions when appropriate.

Evaluation of Effectiveness is Component by Component, Step by Step, Year by Year

- Component by component
  - Phonemic Awareness
  - Phonics/Alphabetic Principle
  - Accuracy and Fluency with Connected Text
  - Vocabulary and Reading Comprehension

- Step by Step
  - First half of kindergarten – Beg to Mid
  - Second half of kindergarten – Mid to End
  - First half of first grade – Beg to Mid
  - Second half of first grade – Mid to End
  - First half of second grade – Beg to Mid
  - Second half of second grade – Mid to End

- Year by year
  - Kindergarten – Beg to End
  - First Grade – Beg to End
Evaluating Effectiveness

I. Outcomes Criterion
95% of students achieve the early literacy goal.

II. Adequate Progress Criteria
- Core: Benchmark students make adequate progress
- Strategic Support: Strategic students make adequate progress
- Intensive Intervention: Intensive students make adequate progress

I. Outcomes Criterion
- Strength – The schoolwide instructional system is a strength, including research-based effective reading core curriculum and delivery of that curriculum, strategic support, and intensive intervention.

Absolute Standard: 95% or more of students achieve the next literacy goal.

If outcomes criterion is not met, evaluate the effectiveness of core curriculum, strategic support, and intensive interventions using the Adequate Progress Criteria.

II. Adequate Progress – Benchmark Students
Core Curriculum and Instruction
- Strength – Research-based effective reading core curriculum and delivery of that curriculum.

Logic: The core curriculum and instruction should support benchmark students to achieve literacy goals.

Absolute Standard: 95% of benchmark students achieve the next literacy goal.

Relative Standard: Upper third of effectiveness of core curriculum and instruction compared to other schools.

Meet either the absolute standard or the relative standard and the effectiveness of the core is a strength for the school.

Needs Support

Core Curriculum and Instruction
- Needs Support – School (a) does not meet the Outcome Criterion, (b) does not meet the absolute standard for adequate progress and (c) the school is in the middle third of effectiveness compared to other schools.

The school needs support in terms of professional development, curriculum materials, integrity of delivery, or time investment to increase the effectiveness of the core.
Needs Substantial Support
Core Curriculum and Instruction

- **Needs Substantial Support** – School (a) does not meet the Outcome Criterion, (b) does not meet the absolute standard for adequate progress and (c) the school is in the lower third of effectiveness compared to other schools.

- Schoolwide priority for professional development, curriculum materials, integrity of instruction, and time investment.

II. Adequate Progress – Strategic Students
Effective Strategic Support

- **Strength** – Research-based effective reading strategic support and delivery of that support.

- Logic: Strategic support should be sufficient to change the odds of achieving literacy goals. If students are improving, but not enough to achieve benchmark goals, it isn’t enough to change the odds.

- **Absolute Standard**: 80% of strategic students achieve the next literacy goal.

- **Relative Standard**: Upper third of effectiveness of strategic support compared to other schools.

- Meet either the absolute standard or the relative standard and the effectiveness of the strategic support is a strength for the school.

II. Adequate Progress – Intensive Students
Effective Intensive Support

- **Strength** – Research-based effective reading strategic support and delivery of that support.

- Logic: Intensive support should be sufficient to change the odds of achieving literacy goals. If students are improving, but not enough to change the odds, they are not making adequate progress.

- Move from intensive to some risk or emerging

- Move from intensive to low risk or established

- **Absolute Standard**: 80% of intensive students achieve the some risk or low risk levels on the next goal.

- **Relative Standard**: Upper third of effectiveness of intensive support compared to other schools.

- Meet either the absolute standard or the relative standard and the effectiveness of the intensive support is a strength for the school.

Evaluating Effectiveness Worksheet

- First, clarify the primary goal for the first half of first grade.

- **Core Component**: Phonics or Alphabetic Principle

- **DIBELS Indicator**: Nonsense Word Fluency (NWF)

- **Goal Skill Level**: 50 letter sounds correct per minute with recoding

- **Timeline**: by the middle of first grade.
Next, examine the initial skills of students in the school using Distribution Report

- Benchmark: 36 students or 61% of students
  - Odds in favor of achieving goal with effective core curriculum and instruction
- Strategic: 12 students or 20% of students
  - Odds are 50 – 50 of achieving the goal ➔ unless we provide effective intervention.
- Intensive: 11 students or 19% of students
  - Odds are against achieving the goal ➔ unless we provide effective intervention.

Examine the outcomes

- Outcomes Criterion:
  - 95% Established on DIBELS NWF then
    - Core curriculum and instruction is effective
    - System of additional interventions is effective
  - Established: 42% of students
  - Emerging: 43% of students
  - Deficit: 15%

Examine Outcomes

- 15% Deficit
- 42% Established
- 43% Emerging
Examine progress of Benchmark Students – Are benchmark students reaching goal?

- Effective core curriculum and instruction should support benchmark students to achieve essential early literacy goals.
- Use Effectiveness Report
  - Focus on schoolwide summary
  - Classroom report illustrates individual children
  - 67% of Benchmark students are reaching the middle of first grade goal.

Schoolwide Summary of Effectiveness

Beginning First to Middle First Phonics/Alphabetic Principle Instruction

<table>
<thead>
<tr>
<th>District: Test District</th>
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</thead>
<tbody>
<tr>
<td>School: McKinley</td>
</tr>
<tr>
<td>Date: September, 2001-2002</td>
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<tr>
<td>Step: Beginning of 1st Grade to Middle</td>
</tr>
</tbody>
</table>

Schoolwide Summary of Effectiveness

<table>
<thead>
<tr>
<th>Students at Benchmark at Beginning of Year</th>
<th>Beginning NWF Score</th>
<th>Middle NWF Score</th>
<th>Check If Reached Middle NWF Goal of 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>School: McKinley</td>
<td>Count: 22 / 33</td>
<td>Percent: 67%</td>
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</tr>
<tr>
<td>School-wide</td>
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</tbody>
</table>

Dynamic Indicators of Basic Early Literacy Skills

Summary of Effectiveness

Effectiveness of Core Curriculum and Instruction

<table>
<thead>
<tr>
<th>Students at Benchmark at Beginning of Year</th>
<th>Beginning NWF Score</th>
<th>Middle NWF Score</th>
<th>Check If Reached Middle NWF Goal of 50</th>
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</thead>
<tbody>
<tr>
<td>E, Tonya</td>
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<td>140</td>
<td>√</td>
</tr>
<tr>
<td>G, Alicia</td>
<td>25</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>M, MATTHEW</td>
<td>26</td>
<td>40</td>
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<td>S, Noble</td>
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<td>T, Taz</td>
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<td>√</td>
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<td>W, CARMEN</td>
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<td>37</td>
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<tr>
<td>W, Miranda</td>
<td>35</td>
<td>60</td>
<td>√</td>
</tr>
</tbody>
</table>

School: McKinley Class: McKinley 1st #4

Count: 4 / 7 Percent: 57%

Compare to Decision Rules and Other Schools to evaluate effectiveness

- Effective core curriculum and instruction supports 95% of benchmark students to achieve the goal.
  - Note met.
- Compared to other schools, the school is in the
  - Upper Third - Strength
  - **Middle Third - Support**
  - Lower Third – Substantial Support
Beginning First to Middle First
Middle of first grade outcomes for students with benchmark, strategic, and intensive instructional recommendations in the beginning of first grade.

A typical (middle) school had 68% of children with a beginning first grade benchmark recommendation achieve the middle of first grade goal, and 0% of children with intensive support recommendation.

Step by Step, Core and Intervention

<table>
<thead>
<tr>
<th>Step</th>
<th>Effectiveness of Core</th>
<th>Effectiveness of Strategic Support</th>
<th>Effectiveness of Intensive Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Phonemic Awareness</td>
<td></td>
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<tr>
<td>Step 2: Phonemic Awareness and Phonics</td>
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<tr>
<td>Step 3: Phonics and Fluency</td>
<td>Support</td>
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<tr>
<td>Step 4: Fluency and Comprehension</td>
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<td>Step 5a: Fluency and Comprehension</td>
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<tr>
<td>Step 6b: Fluency and Comprehension</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Strength – Effectiveness is at goal or upper third of other schools
Support – Effectiveness is less than goal, middle third of other schools.
Substantial Support – Effectiveness is lower third of other schools.

Themes

- Don’t loose track of the bottom line. Are we getting closer to important and meaningful outcomes?
- Monitor Progress on -- and teach -- what is important: Phonemic Awareness, Alphabetic Principle, Accuracy and Fluency with Connected Text
- Oral Reading Fluency is an important instructional goal and target of progress monitoring.
- Use progress monitoring to make decisions that change outcomes for children.
- Progress monitoring should be efficient and purposeful.
- Start early! Trajectories of reading progress are very difficult to change.
Beginning First Grade Evaluating Effectiveness Report Worksheet

1. Goal: What is the primary instructional goal for the first half of first grade?
   - Core Component or Big Idea: ________________________________
   - DIBELS Measure: ________________________________
   - Goal Skills Level: ________________________________
   - Goal Timeline to Achieve: ________________________________

2. Initial Skills: At the beginning of first grade, how many students are
   - Benchmark: ________________________________
   - Strategic: ________________________________
   - Intensive: ________________________________

3. Adequate Progress: Of the students who were Benchmark at the beginning of the grade, what percentage achieved the primary instructional goal for the first half of the grade? _________

4. Compared to other schools, how effective is the core curriculum and instruction?
   - Lower Third  Middle Third  Upper Third

5. How would you rate the effectiveness of the core curriculum and instruction?
   - Strength – 95% - 100% of benchmark achieve goal or in upper third
   - Support – Less than 95% and in middle third of effectiveness
   - Substantial Support – Less than 95% and in lower third of effectiveness

6. If effectiveness of core curriculum and instruction is Support or Substantial Support, what does the early literacy team plan to improve the effectiveness of core curriculum and instruction or to supplement the core curriculum and instruction?
Table 3

School-Based Normative Context for Evaluating the Effectiveness of Core Curriculum and Intensive or Strategic Intervention in the First Half of First Grade in Achieving the Middle of First Grade DIBELS NWF Goal

<table>
<thead>
<tr>
<th>School-Based, Percentile</th>
<th>Percent of Students in Instructional Recommendation Category who Achieve Mid First NWF Goal</th>
<th>Effectiveness of Core Curriculum and Intensive or Strategic Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intensive</td>
<td>Strategic</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>15</td>
<td>0</td>
<td>7</td>
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<td>20</td>
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<td>10</td>
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<td>25</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>30</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>40</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>45</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>50</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>55</td>
<td>4</td>
<td>27</td>
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<tr>
<td>60</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>65</td>
<td>8</td>
<td>31</td>
</tr>
<tr>
<td>70</td>
<td>11</td>
<td>33</td>
</tr>
<tr>
<td>75</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td>80</td>
<td>17</td>
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<td>50</td>
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<tr>
<td>95</td>
<td>36</td>
<td>60</td>
</tr>
<tr>
<td>99</td>
<td>67</td>
<td>81</td>
</tr>
</tbody>
</table>

*Note.* Based on 382 schools with at least 40 participating first grade students in 2001 – 2002.
## Dynamic Indicators of Basic Early Literacy Skills
### Summary of Effectiveness of Core Program

- **District:** Test District
- **School:** Adams
- **Date:** September, 2001-2002
- **Class:** Adams 1st #1

### Effectiveness of Core Curriculum

<table>
<thead>
<tr>
<th>Students at Benchmark at Beginning of Year</th>
<th>Beginning NWF Score</th>
<th>Middle NWF Score</th>
<th>Check If Reached Middle NWF Benchmark of 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>B, Kelly</td>
<td>49</td>
<td>105</td>
<td>✓</td>
</tr>
<tr>
<td>B, PAGE</td>
<td>33</td>
<td>57</td>
<td>✓</td>
</tr>
<tr>
<td>B, Savannah</td>
<td>26</td>
<td>41</td>
<td>✓</td>
</tr>
<tr>
<td>C, TAYLOR</td>
<td>98</td>
<td>87</td>
<td>✓</td>
</tr>
<tr>
<td>H, Cole</td>
<td>57</td>
<td>135</td>
<td>✓</td>
</tr>
<tr>
<td>J, Austin</td>
<td>25</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>K, Trevor</td>
<td>27</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>M, Ivan</td>
<td>24</td>
<td>52</td>
<td>✓</td>
</tr>
<tr>
<td>M, Kiersten</td>
<td>62</td>
<td>91</td>
<td>✓</td>
</tr>
<tr>
<td>W, Sarah</td>
<td>68</td>
<td>136</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Effectiveness of Strategic Support Program

<table>
<thead>
<tr>
<th>Students at Strategic at Beginning of Year</th>
<th>Beginning NWF Score</th>
<th>Middle NWF Score</th>
<th>Check If Reached Middle NWF Benchmark of 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>B, Erin</td>
<td>28</td>
<td>45</td>
<td>✓</td>
</tr>
<tr>
<td>C, Shandra</td>
<td>15</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>H, RAENA</td>
<td>19</td>
<td>66</td>
<td>✓</td>
</tr>
<tr>
<td>J, KYLE</td>
<td>20</td>
<td>67</td>
<td>✓</td>
</tr>
<tr>
<td>P, Mckenzie</td>
<td>24</td>
<td>67</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Effectiveness of Intensive Support Program

<table>
<thead>
<tr>
<th>Students at Intensive at Beginning of Year</th>
<th>Beginning NWF Score</th>
<th>Middle NWF Score</th>
<th>Check If Reached Middle NWF Benchmark of 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>B, KAESY</td>
<td>0</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>C, Tasiai</td>
<td>6</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>H, Cassandra</td>
<td>8</td>
<td>34</td>
<td></td>
</tr>
</tbody>
</table>

- **Count:** 7 / 10
- **Percent:** 70%
- **Count:** 3 / 5
- **Percent:** 60%
- **Count:** 0 / 3
- **Percent:** 0%

Summary of Effectiveness Report, 09/16/2003, 1
Using DIBELS Data to Guide Decision-making: Implementation of Reading First Ohio in Cincinnati Public Schools

Amy Murdoch, Ph.D.
Reading First District Coordinator
Cincinnati Public Schools

Overview of Presentation
- Components of Reading First Ohio
- Overarching CPS Model: Three-Tiered Model of Instructional Support
- Insuring reliability of data collection
- Monitoring Implementation
- Family Events and Programs
- First Year Results
- Challenges, Successes, and Collaborations

Components of Reading First Ohio
- First Year of a 3 year Grant
- On-going Professional Development and Technical Assessment Meetings
- Implementation of Research-Based Core Curriculum and Interventions
- Required Assessments
  - Screening: TPRI and DIBELS
  - Diagnostic: TPRI
  - Progress Monitoring 3 times a year: DIBELS
  - Outcomes: Terra Nova
- RF Personnel
  - Building Trio
  - Support Personnel

Reading First In Cincinnati Public Schools
- The Schools: 11 Schools
  - High poverty: 70%-100%
  - Low performance
  - Neighborhood Schools
  - Largely African-American
  - Schools chose to be part of RF
- Key Components of CPS RF
  - Three Tiered Model
  - Family Involvement and Education
  - Inclusionary Practices
  - Community Involvement and Collaborations
Model Used In CPS RF Project: Three Tiered Model of Support

- **Tier I:** effective school-wide and preventive approaches for academics and behavior
- **Tier II:** targeted interventions for students with demonstrated need for intervention
- **Tier III:** individualized, more intensive interventions, including eligibility consideration as indicated by data

### Three Tiered Model of Intervention Support

- **Intensive/Individualized Intervention Efforts:**
  - Tier III: Collaboration, Problem Solving, TPRI Inventory

- **Targeted Interventions for Struggling Readers:**
  - Voyager’s In School and Extended Day Interventions
  - DIBELS Weekly Progress Monitoring

- **Effective School and Class-wide Reading Instruction Rooted in Scientifically Based Reading Research:**
  - Voyager Universal Literacy System
  - DIBELS Benchmarking, K-2 TPRI Screener, Terra Nova

### Tier 1: Core Curriculum

- **Voyager Universal Literacy System**
  - "Voyagers"
    - Theme Based
      - Kindergarten = Tree House
      - First Grade = Sea Castles
      - Second Grade = Hiding Places
      - Third Grade = Wild Rivers
    - Cooperative Learning and Systematic Explicit Teacher Instruction
    - Small Group Instruction = Differentiated Instruction

### Tier 1: Assessments

- **Reading First Assessments**
  - **Screening:** All children given TPRI and DIBELS (K-2) or DIBELS (3rd) at the beginning of the year
  - **Progress Monitoring:** All children receive DIBELS Benchmark assessment 3 times
  - **Outcomes:** All children receive Terra Nova (1-3 grades) at the end of the year
Tier 2: Intervention Support and Weekly Progress Monitoring

- Targeted Interventions for students with demonstrated need for intervention.

- "Demonstrated need" is determined through screening assessment and benchmarking data and then validated through baseline assessment.

- Individual weekly progress monitoring graphs are set up for each child who receives intervention support.

Example of Voyager DIBELS Class List Used to Determine Who Needs Intervention

<table>
<thead>
<tr>
<th>Kindergarten Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter Naming Fluency</td>
</tr>
<tr>
<td>Student</td>
</tr>
<tr>
<td>Jane Smith</td>
</tr>
<tr>
<td>Brian Green</td>
</tr>
<tr>
<td>Jamie Jones</td>
</tr>
<tr>
<td>Ronald Blue</td>
</tr>
<tr>
<td>Jose Purple</td>
</tr>
<tr>
<td>Katie Jones</td>
</tr>
<tr>
<td>Ryan Red</td>
</tr>
</tbody>
</table>

Student Graph
Kindergarten Student’s Initial Sound Fluency Weekly Progress Monitoring Graph

"James": DIBELS Initial Sound Fluency Scores

Goal = 25 by 2/27/04

 Tier 2: Intervention For Struggling Readers

- Research tells us that children who are struggling with reading need more opportunity to practice the skills taught in the classroom AND that additional services should compliment/support classroom instruction—Coordination of services is KEY!
Tier 2: Intervention For Struggling Readers

- The interventions we are using are directly related to the reading instruction children are receiving in the classroom—extra dose of key instructional activities.
  - Voyager’s In-School Intervention: Done daily for 15-30 minutes each day by classroom teacher (3rd grade), trained IAs, support staff, and/or trained volunteers.
  - Voyager’s After-School tutoring (1st-3rd grade): Done 4 days a week for 1 hour each day.

Student Level
Kindergarten Student’s Initial Sound Fluency Weekly Progress Monitoring Graph

“James” Reading Graph

Tier 2: Organizing Intervention Efforts

- Careful Scheduling of Interventions
- Intervention Binder with Logs and Materials
- Careful training and monitoring of volunteers and instructional assistants
- Progress Monitoring Binder in Each Classroom
Tier 3: Collaborative Problem Solving

- This is implemented when children continue to struggle
  - Examine progress monitoring graph
    - Decision rules for the data: enough data, trend of data, 3 consecutive points below the aim line.
  - Examine Implementation
    - Was the Tier 2 interventions done as planned: high integrity, child attendance
- Purpose: To plan a more intensive intervention plan for an individual child

Tier 3: The Collaborative Problem-Solving Process

- Problem Identification
  - What is the Problem?
- Problem Analysis
  - Why is it Happening?
- Plan Implementation
  - What can be done to resolve the current problem situation?
- Plan Evaluation
  - Is the intervention plan working or does it need to be changed?

“Jane’s” Reading Graph

“Jane”: 3rd Grade DIBELS Oral Reading Fluency Scores

Goal = 110 by Spring of 3rd Grade
Three Tiered Model of Intervention Support

Data –based decision making at all levels!

Intensive
Individually
Tailored
Intervention Efforts:
Collab. Prob Solving
TPRI Inventory

Targeted Interventions for Struggling Readers:
Voyager’s In School and Extended Day
Interventions
DIBELS Weekly Progress Monitoring

Effective School and Class-wide Reading Instruction
Rooted in Scientifically Based Reading Research:
Voyager Universal Literacy System
DIBELS Benchmarking, K-2 TPRI Screener, Terra Nova

District DIBELS Results After Year 1

Benchmark 1:  9/19/03
Benchmark 2:  11/21/03
Benchmark 3:  2/27/04
Benchmark 4:  4/30/04

District Level:
KG Phoneme Segmentation Fluency

Goal = 35 by Spring
District Level:
First Grade Reading Connected Text

District Level:
First Grade Phoneme Segmentation Fluency

District Level:
KG Phoneme Segmentation Fluency

Good News for Next Year’s 1st Grade Teachers
District Level: Second Grade Reading Connected Text

**Oral Reading Fluency**

- Goal = 90 by Spring

- 25th percentile
  - B1 = 12
  - B4 = 43

---

District Level: Third Grade Reading Connected Text

**Oral Reading Fluency**

- Goal = 110 by Spring

---
**Range in School Performance**

- **School and Classroom Examples**
  - What was happening at schools that made the greatest growth?
    - High level of implementation
    - Full implementation of interventions—all who needed it got it
    - Community Involvement
    - Progress Monitoring done weekly
    - Flexible service delivery: Collaboration across general and special education

**School Level Example**

**Kindergarten**

- **Baseline 1:**
  - 42% Struggling
  - 8% On Track
  - Average ISF score = 3
  - Average LNF score = 1

- **Baseline 4:**
  - 11% Struggling
  - 77% On Track
  - 54 Children

**Classroom Level:**

**Kindergarten Class**

100% Literacy!

**B1:**
- 41% Struggling
- 0% On Track
- Average ISF score = 6
- Average LNF score = 5

**B4:**
- 0% Struggling
- 100% On Track
- 17 students

**Classroom Level Example:**

1st Grade Reading Connected Text

![Graph showing oral reading fluency with benchmark and goal]

- Goal = 40 by Spring
School Level Example:
2nd Grade Reading Connected Text

Oral Reading Fluency

Goal = 90 by Spring

50th percentile
B1 = 60
B4 = 94

25th Percentile
B1 = 20
B4 = 60

Increasing the Reliability of Our Data

- DIBELS Certificate prior to being allowed to collect data
  - Use U. of Oregon Integrity check and inter-rater reliability score
- Review prior to each benchmark
- “Spot check” at each benchmark
- Reliability Study at Benchmark 4
  - Randomly chose 3 children from each classroom and re-assessed them

School Level Example:
3rd Grade Reading Connected Text

Oral Reading Fluency

Goal = 110 By Spring

50th percentile
B1 = 42
B4 = 93

25th Percentile
B1 = 31
B4 = 65

DIBELS Reliability Study: PSF

Phoneme Segmentation

n=11 schools
Range: .99 to .17
DIBELS Reliability Study: 1st Reading
Connected Text

First Grade Oral Reading Fluency

Schools n=11 schools
Range: 1 to .89

DIBELS Reliability Study: 2nd Reading
Connected Text

Second Grade Oral Reading Fluency

Schools n=11 schools
Range: .99 to .85

DIBELS Reliability Study: 3rd Reading
Connected Text

Third Grade Oral Reading Fluency

Schools n=11 schools
Range: .99 to .79

Monitoring Implementation—Keeping Us All On Track

- Classroom Fidelity Index
- Intervention Integrity
- Implementation of the grant activities: Innovation Configuration
Family Involvement

- Home Connection
- Family Events
- Tier 3: Problem Solving
- “Our Home Puts Reading First”

Challenges, Successes, and Collaboration

- Challenges
  - Late start
  - Major shift in some schools
  - High mobility

- Successes
  - All schools are providing interventions to struggling children
  - Family Involvement!
  - Move to Inclusive practices—Big Change for some
  - Schools are Excited for Next Year, Speak Very Passionately About RF. We have schools who want to join!

- Collaboration
  - Within the district
  - University of Cincinnati
  - OhioReads—CincinnatiReads
  - Southwest SERRC