The Role of the School Psychologist within Effective Grade-Level Teams
Teams in Schools!

“I’m confident that with the right mix of role-playing exercises and prescription medication we’ll make a cohesive team.”
Multi-Tiered Academic Interventions
(Burns, Jimerson, & Deno, 2007)

Tier I: Universal screening and progress monitoring:
All students

Tier II: Standardized interventions delivered in an
efficient manner (small groups):
15% to 20% of students at any time

Tier III: Individualized interventions developed
through in-depth problem analysis:
5% of students at any time
Big Questions?

• School psychologists should address systems issues (Shapiro, 2000).

• School psychologists are uniquely qualified to facilitate effective teaming given their training in consultation, problem analysis, and educational systems (Ysseldyke et al., 2006).
Path to Reading Excellence in School Sites
Grade-Level Teams

• Many GLTs adopt the professional learning community model (PLC; DuFour, Eaker, DuFour, 2005).

• Collaboration without structured reporting of student achievement does not lead to insights into how to achieve higher gains (Vescio, Ross, & Adams, 2008).

• Many GLTs struggle to identify common assessments, criteria with which to judge student proficiency, and a process to collaboratively analyze data (DuFour et al., 2005; Love, 2009).
<table>
<thead>
<tr>
<th>PLC Meetings:</th>
<th>Agenda</th>
</tr>
</thead>
</table>
| **PLC: 1st weekly meeting of the month (Content Focus)** | • Grade level teams and coaches with additional personnel as appropriate  
• School-site established PLC focus on various topics (e.g., math, STEM, behavior, environment, or other school topical initiatives) |
| **PLC: 2nd weekly meeting of the month RTI (Core Instruction Literacy Focus)** | • Grade level teams and coaches with additional personnel as appropriate  
• Examine various formal and informal data to drive core instruction  
• Agenda will include embedded professional development on topics that address opportunities and challenges for core instruction |
| **PLC: 3rd weekly meeting of the month (Content Focus)** | • Grade level teams and coaches with additional personnel as appropriate  
• School-site established PLC focus with schools studying varied topics |
| **PLC: 4th weekly meeting of the month RTI (Data Analysis)** | • Grade level teams and coaches with additional personnel as appropriate (data management team)  
• Analyze screening/benchmark data  
• Analyze progress monitoring data  
• Discuss, monitor and adjust tiered interventions. |
Screening/Benchmark Data

• Is there a classwide need?

• Who needs Tier 2?

• Did we miss anyone?

• What should we do for Tier 2?

• Should we go to Tier 3?
Screening/Benchmark Data

1. What is the median score for each classroom? Does the median score fall below the criterion?

2. Which students fall within the at-risk range (e.g., score below the 25th percentile, below benchmark criterion)?

3. Are there any surprises or students that we missed?

4. Among students identified as needing a Tier 2 intervention, what is the category of the problem (phonemic awareness, decoding, fluency, vocabulary, comprehension)?
   - Are there kids who need support in one area as part of core instruction?
   - How will we monitor those kids?

5. Is there anyone that needs Tier 3 right now?
   - Classroom data
   - Screening data so severe

2. Students below criterion? (WRC < 42)

1. Median below criterion? (WRC < 42)
Student Intervention Progress

1. Which students are making adequate progress in tier 2 or tier 3 interventions?
2. Which students are NOT making adequate progress?
3. Are there any students that were not identified as needing tier 2 interventions that we should talk about?
DETERMINING CLASSWIDE NEEDS

Kathrin E. Maki
What is the **class median** for oral reading fluency and comprehension?

- **Below in fluency, below in comprehension**
  - Fluency Practice with Comprehension

- **At Criterion Fluency, below in Comprehension**
  - Comprehension Strategies with Vocabulary Building

- **At Criterion Comprehension, below in fluency**
  - Fluency

**Assess individual student**
### 3rd Grade Seasonal Benchmarks

<table>
<thead>
<tr>
<th>Season</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>70</td>
</tr>
<tr>
<td>Winter</td>
<td>91</td>
</tr>
<tr>
<td>Spring</td>
<td>109</td>
</tr>
</tbody>
</table>

### Class 2 Winter Benchmark Data

<table>
<thead>
<tr>
<th>Student</th>
<th>WRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1</td>
<td>48</td>
</tr>
<tr>
<td>Student 2</td>
<td>122</td>
</tr>
<tr>
<td>Student 3</td>
<td>126</td>
</tr>
<tr>
<td>Student 4</td>
<td>82</td>
</tr>
<tr>
<td>Student 5</td>
<td>102</td>
</tr>
<tr>
<td>Student 6</td>
<td>77</td>
</tr>
<tr>
<td>Student 7</td>
<td>51</td>
</tr>
<tr>
<td>Student 8</td>
<td>84</td>
</tr>
<tr>
<td>Student 9</td>
<td>80</td>
</tr>
<tr>
<td>Student 10</td>
<td>102</td>
</tr>
<tr>
<td>Student 11</td>
<td>83</td>
</tr>
<tr>
<td>Student 12</td>
<td>38</td>
</tr>
<tr>
<td>Student 13</td>
<td>104</td>
</tr>
<tr>
<td>Student 14</td>
<td>152</td>
</tr>
<tr>
<td>Student 15</td>
<td>143</td>
</tr>
<tr>
<td>Student 16</td>
<td>115</td>
</tr>
<tr>
<td>Student 17</td>
<td>142</td>
</tr>
<tr>
<td>Student 18</td>
<td>114</td>
</tr>
<tr>
<td>Student 19</td>
<td>13</td>
</tr>
<tr>
<td>Student 20</td>
<td>75</td>
</tr>
<tr>
<td>Student 21</td>
<td>141</td>
</tr>
<tr>
<td>Student 22</td>
<td>87</td>
</tr>
<tr>
<td>Student 23</td>
<td>49</td>
</tr>
<tr>
<td>Median</td>
<td>87</td>
</tr>
</tbody>
</table>
Responding to the Data

• Partner Reading with Comprehension
  – Classwide Intervention
  – Implemented in response to class ORF median below seasonal benchmark
  – Winter benchmark served as Pre-test score
  – Conducted post-test following intervention
Participants

- Two third grade classes
  - Both experimental
  - Both in need of a classwide intervention

- Two second grade classes
  - One experimental
  - One control
Intervention

• Partner reading with comprehension
  – Developed based on PALS (Fuchs & Fuchs, 2008)

• Modified PALS to fit class needs
  – Shortened length of intervention
  – Partner Reading (Fluency) and Paragraph Shrinking (Comprehension)
Partner Reading with Comprehension

• Partners
  – Students matched based on benchmark ORF score
  – Class ordered from highest ORF to lowest ORF
  – Split in half creating two groups-lower 50% and higher 50%
  – Partners created by matching top reader in upper 50% with top reader in lower 50%, second reader in upper 50% with second reader in lower 50%, etc.
### What we modified: **Procedure**

<table>
<thead>
<tr>
<th>Partner Reading</th>
<th>Paragraph Shrinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stronger reader reads aloud for 5 minutes (error correction as needed)</td>
<td>1. For 5 minutes the stronger read continues reading new text in the story, stopping after each paragraph to summarize</td>
</tr>
<tr>
<td>2. The weaker reader reads aloud the SAME text for 5 minutes (error correction as needed)</td>
<td>2. For 5 minutes the weaker reader continues with the new text, stopping after each paragraph to summarize</td>
</tr>
<tr>
<td>3. Weaker readers sequence the major events of what has been read for 1 minute</td>
<td></td>
</tr>
</tbody>
</table>
**P A L S**

**Peer Assisted Learning Strategies**

**Objectives**

- Increase students opportunity to read
- Includes tasks that all students can perform successfully
- Motivates students to become better readers
- Involves all students; creates opportunities for lower functioning students to assume an integral role in a valued activity
- Provides for positive and productive peer interaction

**Overview**

**Partner Reading**

1. Stronger reader reads aloud for 5 minutes
2. The weaker reader reads aloud the SAME text for 5 minutes
3. Weaker readers sequence the major events of what has been read for 1 minute

**Paragraph Shrinking**

1. For 5 minutes the stronger read continues reading new test in the story, stopping after each paragraph to summarize
2. For 5 minutes the weaker reader continues with the new text, stopping after each paragraph to summarize

**Set Up Procedures**

<table>
<thead>
<tr>
<th>Pairs/Teams</th>
<th>Points</th>
<th>Selecting Text</th>
<th>Materials to Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pair the top ranked higher performing student with the top ranked lower performing student, keep going until you have all your pairs. Students will remain with their partner the entire time.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students earn points by:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Reading accurately</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Summarizing what they have read</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Working cooperatively with their partners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Transitions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Both members of a pair will read for the weaker reader’s book.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Students should make no more than 10 errors per 100 words of text</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• PALS rules</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Types of Misread errors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Word recognition Correction Procedures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Pairs and Teams Chart</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Score Board</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Collect Data: PreTest (fluency and comprehension)

- **Day 1**: Train Students on Set Up Procedures and Partner Reading, Practice Reading for 10 minutes, Error Correction
- **Day 2**: Train Students on Paragraph Shrinking, Practice Reading for 10 minutes
- **Day 3-10**: Partner Reading, Paragraph Shrinking 15 minutes every day

Collect Data: PostTest (fluency and comprehension)
## Results

<table>
<thead>
<tr>
<th>Third Grade Benchmark</th>
<th>91 Words Read Correctly (WRC)</th>
<th>Pre Intervention Class Median (WRC)</th>
<th>Post Intervention Class Median (WRC)</th>
<th>Slope (WRC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td></td>
<td>81</td>
<td>104</td>
<td>11.5</td>
</tr>
<tr>
<td>Class 2</td>
<td></td>
<td>87</td>
<td>115</td>
<td>14</td>
</tr>
</tbody>
</table>
Partner Reading: What we Found

Third Grade Class 1 Partner Reading

Words Read Correctly Per Minute (WRC)

Pre Intervention Median
Post Intervention Median

Pre and Post Intervention
Partner Reading: What we Found

Third Grade Class 2 Partner Reading

Words Read Correctly Per Minute (WRC)

Pre and Post Intervention

Pre Intervention Median

Post Intervention Median
## Results

<table>
<thead>
<tr>
<th></th>
<th>Students Below Benchmark Pre Intervention</th>
<th>Students Below Benchmark Post Intervention</th>
<th>Total Students in Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third Grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 1</td>
<td>10</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Class 2</td>
<td>13</td>
<td>5</td>
<td>23</td>
</tr>
</tbody>
</table>
## 2nd grade Class Wide Intervention Table

### Progress Monitoring:
- Use a CBM for fluency
- At least once per month, per student

<table>
<thead>
<tr>
<th></th>
<th>Whole Class</th>
<th>ORF and MAP</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>What is the class median for oral fluency and comprehension?</td>
<td>&lt;42 and &lt;156</td>
<td>Fluency and Comprehension Strategies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;42 and &lt;156</td>
<td>Comprehension Strategies with Vocabulary practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;42 and &gt;156</td>
<td>Fluency</td>
</tr>
<tr>
<td><strong>Winter</strong></td>
<td>What is the class median for oral fluency and comprehension?</td>
<td>&lt; 73 and &lt; 166</td>
<td>Fluency and Comprehension Strategies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 73 and &lt; 166</td>
<td>Comprehension Strategies with Vocabulary practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt; 73 and &gt; 166</td>
<td>Fluency</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td>What is the class median for oral fluency and comprehension?</td>
<td>&lt; 90 and &lt; 171</td>
<td>Fluency and Comprehension Strategies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 90 and &lt; 171</td>
<td>Comprehension Strategies with Vocabulary practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt; 90 and &gt; 171</td>
<td>Fluency</td>
</tr>
</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th>Second Grade</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre Intervention</td>
<td>Post Intervention</td>
<td>Slope</td>
</tr>
<tr>
<td></td>
<td>Class Median (WRC)</td>
<td>Class Median (WRC)</td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>107</td>
<td>120</td>
<td>6.5</td>
</tr>
<tr>
<td>Control</td>
<td>108</td>
<td>114</td>
<td>3</td>
</tr>
</tbody>
</table>
Partner Reading: What we Found

Second Grade Partner Reading

Words Read Correctly per Minute (WRC)

- Experimental
- Control

Pre Median  | Post Median
---|---
Pre and Post Intervention
Discussion

• Classwide Partner Reading Intervention led to growth for the classrooms overall as well as all individual students
• The number of students who needed a tier 2 intervention after the classwide intervention became much more manageable for most K-12 schools and approximated the common recommendation of 20% (Batsche et al., 2005).
• What about those that were still low?
Limitations

• There was no control classroom used for the two third grade classes receiving intervention.

• No treatment fidelity data were collected during the two weeks of intervention.

• The intervention lasted only 2 weeks. Other studies have implemented PALS for longer periods of time (Fuchs, & Fuchs, 2005; Fuchs, Fuchs, Mathes, Simmons, 1997).
WHAT SHOULD WE DO FOR TIER II?

Sandra Moran & Alisha Anderson
Background

• **Tier II Problem Solving**: Identify individual discrepancy, category of problem and assign small group solution.

• Tier II is effective with evidence based interventions in small groups (Burns et al., 2006)
Background

- Strong evidence that Tier II interventions are effective for decoding and comprehension in reading (Gersten et al., 2009)

- Focus on National Reading Panel (NRP, 2000) objectives in literacy interventions
Methods
GLT Question

1. Is there a classwide problem?
2. Which students fall within the at-risk range and need a tier 2 intervention?
3. Are there any surprises or students that we missed?
4. Among students identified as needing an intervention, what is the category of the problem (phonemic awareness, decoding, fluency, vocabulary, comprehension)?
5. Are there any students for whom we should immediately develop a tier 3 intervention?
Assess 4 NRP Areas

- Phonemic Awareness
  + Phoneme segmentation fluency
  + Quick Phonemic Awareness measure (Rhyming, Segmenting, Blending)

- Phonics
  + Nonsense word fluency (accuracy)
  + Words their Way
  + Decoding Inventory

- Fluency
  + Oral reading fluency

- Vocabulary/Comprehension
  + Measure of Academic Progress (MAP)
Tier 2 Interventions

• Small group
  – 2-5 students

• 15-30 minutes
  – 15 for Kindergartners; 30 for 3rd graders

• 4-5 times per week
  – Throughout entire school year
Transitional Interventions

• Abbey
  – 2nd grade student
  – Benchmark data and teacher referral

• Determine Appropriate Intervention
  – Assess Phonetic Skills (LSF or WTW)
    • Can he/she decode?
  – Assess Phonemic Awareness (Blend/Seg)
    • Does he/she have PA?

• Phonics Intervention Sequence
  – Decoding Inventory
Acquisition Beginning P-3

• When to use
  – Demonstrated PA but not mastered letter sounds, working on CVC words

• What to teach
  – Letter sounds and CVC words

• Objective
  – Demonstrate letter sound correspondence
  – Build CVC words

• Materials
  – Magnetic boards for letterboxes, letters, markers, prepared words
Intervention Effectiveness

Abbey's Nonsense Word Fluency Data

Correct Letter Sounds per Minute vs. Sessions
Proficiency Beginning P-4

• When to use
  – High accuracy of sounds, need practice putting sounds together to make words

• What to teach
  – Beginning and ending diagraphs and blends

• Objective
  – Accurately put letters together to make words
  – Build fluency and decoding at word level

• Materials
  – Letter cards, target word flashcards, sentence strips, whiteboards
Intervention Effectiveness

Abbey's Diagraph Data

Diagrams Read Correctly per Minute

Sessions
Acquisition & Proficiency
Transitional

• When to use
  – Have PA, letter sounds and blend
  – Need work on long vowels

• What to teach
  – Endings, long vowels

• Objective
  – Accurately demonstrates targeted phonics skills

• Materials
  – Whiteboards, markers, erasers, word cards
  – Word sort cards
Intervention Effectiveness

Abbey’s Silent E Data

Words Read Correctly per Minute

Sessions
Fluency Interventions

• When to use
  – Adequate phonetic skills but struggle applying those skills to reading connected text.
  – Students who read less than 93% of words accurately from grade level text. Fluency not decoding

• Objective
  – Read more accurately through extensive modeling

• Materials
  – Copy of connected text for student and interventionist
Abbey's General Outcome Measure
(Oral Reading Fluency)
Results
### Mean (SD) For Curriculum-Based Measurement of Oral Reading Fluency (CBM-R) and Growth

<table>
<thead>
<tr>
<th></th>
<th>Fall CBM-R</th>
<th>Spring CBM-R</th>
<th>CBM-R WRCM per Week Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tier 1</td>
<td>Tier 2</td>
<td>Tier 1</td>
</tr>
<tr>
<td><strong>Second Grade</strong></td>
<td>74.19 (35.50)</td>
<td>26.66 (19.55)</td>
<td>103.03 (47.54)</td>
</tr>
<tr>
<td></td>
<td>n = 219</td>
<td>n = 169</td>
<td>n = 219</td>
</tr>
<tr>
<td><strong>Third Grade</strong></td>
<td>93.42 (37.01)</td>
<td>44.93 (21.50)</td>
<td>128.58 (41.15)</td>
</tr>
<tr>
<td></td>
<td>n = 192</td>
<td>n = 140</td>
<td>n = 192</td>
</tr>
</tbody>
</table>

Tier 2 Intervention $F(1, 719) = 5.29, p < .05$

Grade $F(1, 719) = .78, p = .38$

Interaction of Intervention and Grade $F(1, 719) = 3.21, p = .07$
Seasonal Benchmark Curriculum-Based Measurement Scores for Students Receiving Tier 2 Interventions and Tier 1 Instruction

Word Read Correctly Per Minute

Fall  Second Grade
Spring

Fall  Third Grade
Spring

Tier 1
Tier 2
Tier 1
Tier 2

Second Grade
Third Grade
Effect Sizes

- Students in tier 2 started significantly lower than students in tier 1
  - 2nd grade: $d = -1.66$
  - 3rd grade: $d = -1.59$
- Tier 2 students made more growth across grades
  - 2nd Grade: $d = .46$
  - 3rd Grade: $d = .58$
Discussion
Discussion

• Higher growth rate for students receiving tier 2 interventions
  – Decreased the gap

• Students in tier 2 interventions were still below benchmark
  – Had faster growth rate
Discussion

• Previous tier 2 intervention small ($d = .16$, Vaughn et al., 2010) to moderate ($g = .52$, Piasta & Wagner, 2010), to large ($g = .95$, Scammacca et al., 2007) effects.

• The effects in the current data were moderate ($d = .46$ and $d = .58$)

• Perhaps larger effects than what Vaughn et al. (2010) found because the interventions were more targeted than what was used in the previous research.
Limitations

• Study occurred in an urban school setting
• Intervention was implemented by graduate students
• Data was aggregated across two conditions (Tier 1 vs. Tier 2)
Future Research

• Examine the effectiveness on various student groups
  – Race
  – SES
  – Language
  – Disability
Questions?

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- Alisha Anderson: macdo189@umn.edu
- Sandra Moran: moran122@umn.edu