Academic Progress Monitoring: Technical and Practical Challenges to Implementation

325-T Webinar Series
April 19, 2013
Today’s webinar

• Two aspects of *progress monitoring* (with some inevitable overlap)

1. **Technical issues** that present challenges in *progress monitoring* implementation – primarily related to aspects of the tools used

2. **Application issues** for *progress monitoring* in teacher preparation programs – using the tools in practice
Technical challenges: Tool alignment

- **Problem**: Screening and *progress monitoring* tools do not align
- **Solution**: Keep in mind that...
  - Screening and *progress monitoring* are “close cousins.”
  - Often, the same measures are used; screening is sometimes described as a *type* of *progress monitoring*.
  - Within RTI it is important to differentiate:
    - Universal screening, which is for all students
    - *Progress monitoring*, which is for some students who have been identified as at-risk for poor academic or behavioral outcomes
Technical challenges: Tool characteristics

- **Problem**: Tools are not reliable, valid, or sensitive to change.
- **Solution**:
  - Review tools for technical characteristics, and alternatives
    - NCII: http://www.intensiveintervention.org/resources/tools-charts
Quick snapshot

**Mastery Measure vs. General Outcome Measure**

[Graph showing progress in Multidigit Addition, Multidigit Subtraction, and Multiplication Facts over weeks.]

[Progress Monitoring Chart showing Words Correct Per Minute with different lines representing different progress models.]
Keep in mind—

*Progress monitoring* v. *Monitoring progress*

- Not the same thing!
- **Progress Monitoring**: *Standardized, validated* approach to looking at change over time; ideally, measures are comparable to one another
- **Monitoring progress**: Informal information about student learning
Discussion questions

• What are some common *progress monitoring* tools used in schools in your area?
• What are some advantages and disadvantages of these tools?
Technical challenges: Skill level mismatch

- **Problem:** *Progress monitoring* assessments are not a good match, given the student’s skill level
- **Solutions:**
  - Use age and grade-appropriate measures
  - Consider whether off-level assessment is needed
  - Augment data
    - for older students
    - to collect additional information
# Common reading measures

<table>
<thead>
<tr>
<th>Measures</th>
<th>Recommended Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Letter Naming Fluency (LNF)</td>
<td>K</td>
</tr>
<tr>
<td>• Letter Sound Fluency (LSF)</td>
<td></td>
</tr>
<tr>
<td>• Phoneme Segmentation Fluency (PSF)</td>
<td></td>
</tr>
<tr>
<td>• Nonsense Word Fluency (NWF)</td>
<td>Late K - 1</td>
</tr>
<tr>
<td>• Word Identification Fluency (WIF)</td>
<td>1</td>
</tr>
<tr>
<td>• Passage Reading Fluency (PRF), also called Oral Reading Fluency (ORF)</td>
<td>Late 1-4</td>
</tr>
<tr>
<td>• Maze or Maze Fluency</td>
<td>4+</td>
</tr>
</tbody>
</table>
## Common math measures

<table>
<thead>
<tr>
<th>Domain</th>
<th>Measures</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Numeracy</td>
<td>• Missing Number</td>
<td>K-1</td>
</tr>
<tr>
<td></td>
<td>• Number ID</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Oral Counting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Quantity Discrimination</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Next Number</td>
<td></td>
</tr>
<tr>
<td>Computation</td>
<td>• M-CBM</td>
<td>1-8</td>
</tr>
<tr>
<td></td>
<td>• Math Computation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Number Facts</td>
<td></td>
</tr>
<tr>
<td>Concepts and Applications</td>
<td>• Math Concepts and Applications</td>
<td>2-8</td>
</tr>
<tr>
<td></td>
<td>• Concepts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Concepts/ Applications</td>
<td></td>
</tr>
</tbody>
</table>
Should we ever assess off-level? Consider the purpose of the assessment...

**Screening**
- Should always occur at grade level in order to assess students’ response to core instruction and performance relative to grade level expectations

**Progress Monitoring**
- Should be done at grade level when possible, but must also match the student’s instructional level
- If student’s performance is well below grade-level expectations, grade-level probes are unlikely to be sensitive to growth; off-level assessment may be warranted in these cases.
How can we augment *progress monitoring*?

- In some cases—particularly when working with older students—it may be worthwhile to augment traditional *progress monitoring* tools.
- For example:
  - As reading rates plateau, Passage Reading Fluency (PRF) loses its usefulness as a *progress monitoring* tool for older students.
  - In math, we may want to investigate strategy use to understand students’ errors, math thinking, or low fluency.
- Brief interviews about students’ use of math or reading strategies can help corroborate *progress monitoring* data or gain new information.
Project RTI introduction

- 325T Program Improvement Grant
  - 2010 cohort
- Uses partner schools
- Aligns coursework and internship in partner schools
- Consists of residency year and induction year
Characteristics of partner schools

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>2011-12</th>
<th>2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average percent of children receiving FRPM</td>
<td>65% (30-91%)</td>
<td>79% (61-91%)</td>
</tr>
<tr>
<td>Bilingual</td>
<td>17%</td>
<td>23%</td>
</tr>
<tr>
<td>Ethnic diversity: Non-White</td>
<td>52%</td>
<td>67%</td>
</tr>
<tr>
<td><strong>Schools of Distinction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2011 Central Avenue</strong></td>
<td></td>
<td><strong>2012 Central Avenue, Gildo Rey, Pioneer</strong></td>
</tr>
</tbody>
</table>
Applications and challenges: Using *progress monitoring*

- Use of *progress monitoring* in teacher preparation
- Use of *progress monitoring* for program evaluation
- Problems of trying to use *progress monitoring* for teacher evaluation
- Implementation challenges
Application: Inclusion of progress monitoring in teacher preparation

- Summer assessment measurement course
- Fall benchmarking in partner schools
- Methods courses
  - Reading
  - Math
  - Writing
- Partner school RTI teams
Discussion Questions

• How are you incorporating *progress monitoring* in your teacher preparation program?

• Do students observe (or do you teach) how to use *progress monitoring* data for decision-making?

• Have you had challenges with *progress monitoring* as part of teacher preparation?
Application: Using progress monitoring for program evaluation

Comparison of two school groups within one district
- Demographics related to FRLM for the two groups of schools were not significantly different.
- Achievement in the two groups of schools in early literacy as measured by AIMSweb were not significantly different in the fall of 2011 when the placement of interns in partner schools started.
- When measured near the end of the school year, three of four AIMSweb early literacy measures were significantly higher in the partner schools compared to the non-partner schools.
Challenge: Trying to use *progress monitoring* for teacher evaluation

- Tools not designed or validated for teacher evaluation
- No comparison group generally available
- Instruction is frequently team implemented rather than by individual teachers
Application: Implementation challenges

• Experience during internship period
  – Some partner schools use *progress monitoring* for reading only

• First-year teaching challenges
  – Some districts do not have *progress monitoring* implemented
  – Normed data for goal-setting is limited for older students
  – Limited experience as interns with goal-setting and decision-making
Discussion Questions

• What are other challenges that you or your students have encountered when implementing progress monitoring?
Contact information

• American Institutes for Research
  – Rebecca O. Zumeta, PhD: rzumeta@air.org

• Project RTI (UWT)
  – Marcy Stein, PhD: mstein@uw.edu
  – Diane Kinder, PhD: dkinder@uw.edu
  – Sondra Perdue, DrPH: stperdue@uw.edu