



Field-testing a Test of Teacher RTI Knowledge and Skill

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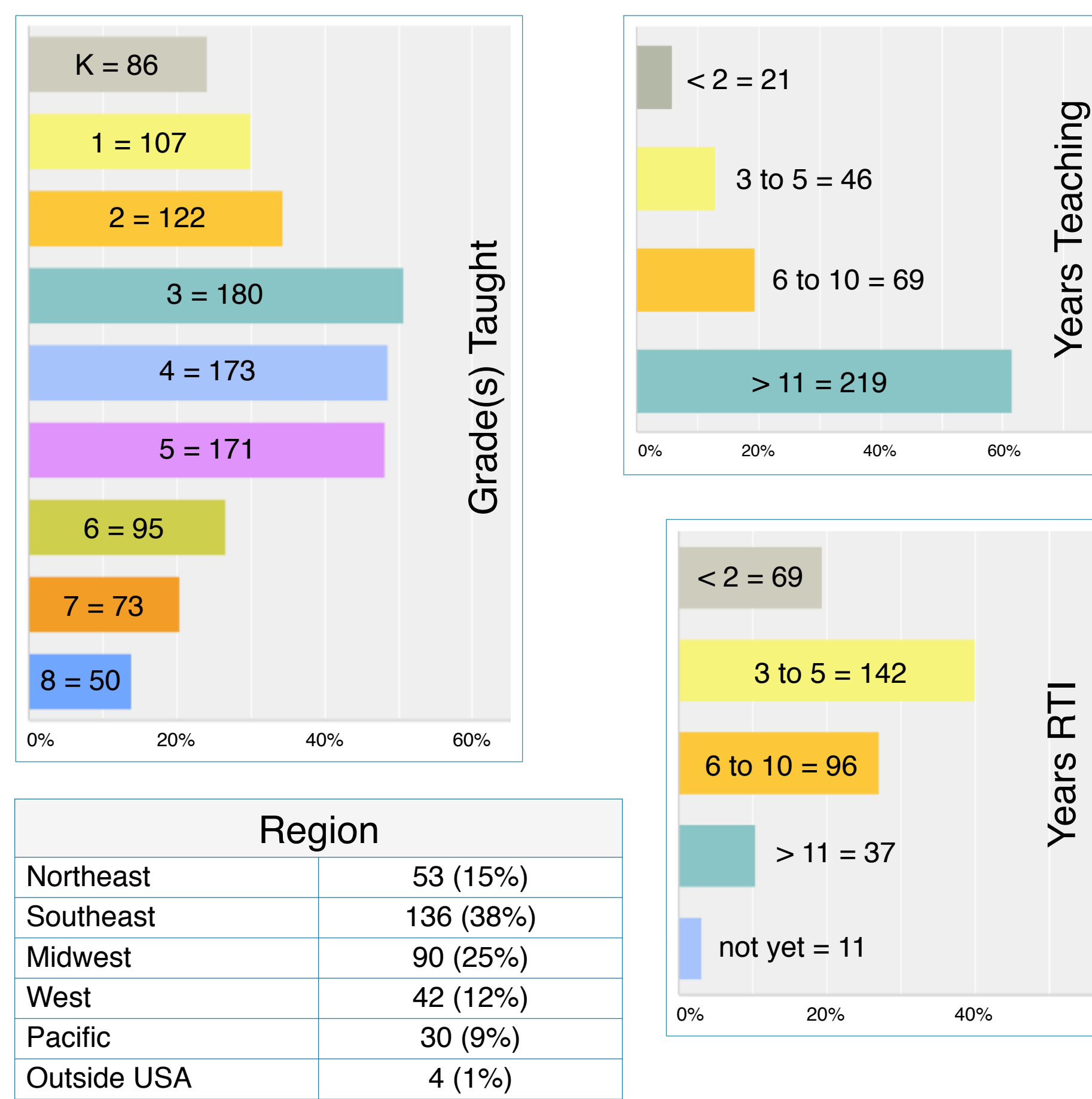
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Background

Within Response to Intervention (RTI), instruction and assessment should coincide to yield honed decision-making, and thus, improved student outcomes (Fuchs & Fuchs, 2006). Recent findings reveal inconsistencies in their co-application (e.g., Alonzo & Tindal, 2016; Sáez, 2012), suggesting gaps in teacher understanding and a need for targeted professional development (PD) support.

We present field-test results for the Test of Teacher RTI Knowledge and Skill (T-RTI) – designed to evaluate the effects of individualized, web-based PD on instructional and assessment practices and student reading achievement in Grades 3-5.

Participants ($n = 355$, active users of easyCBM® interim-formative assessment system)



Research Questions

1. What is the internal consistency of the T-RTI (RQ1)?
2. What is the level of teachers' RTI knowledge and skill overall and by key domain (RQ2)?
3. What are teachers' perceptions of the T-RTI as a tool for evaluating practices (RQ3)?

Funding Source & Disclaimer

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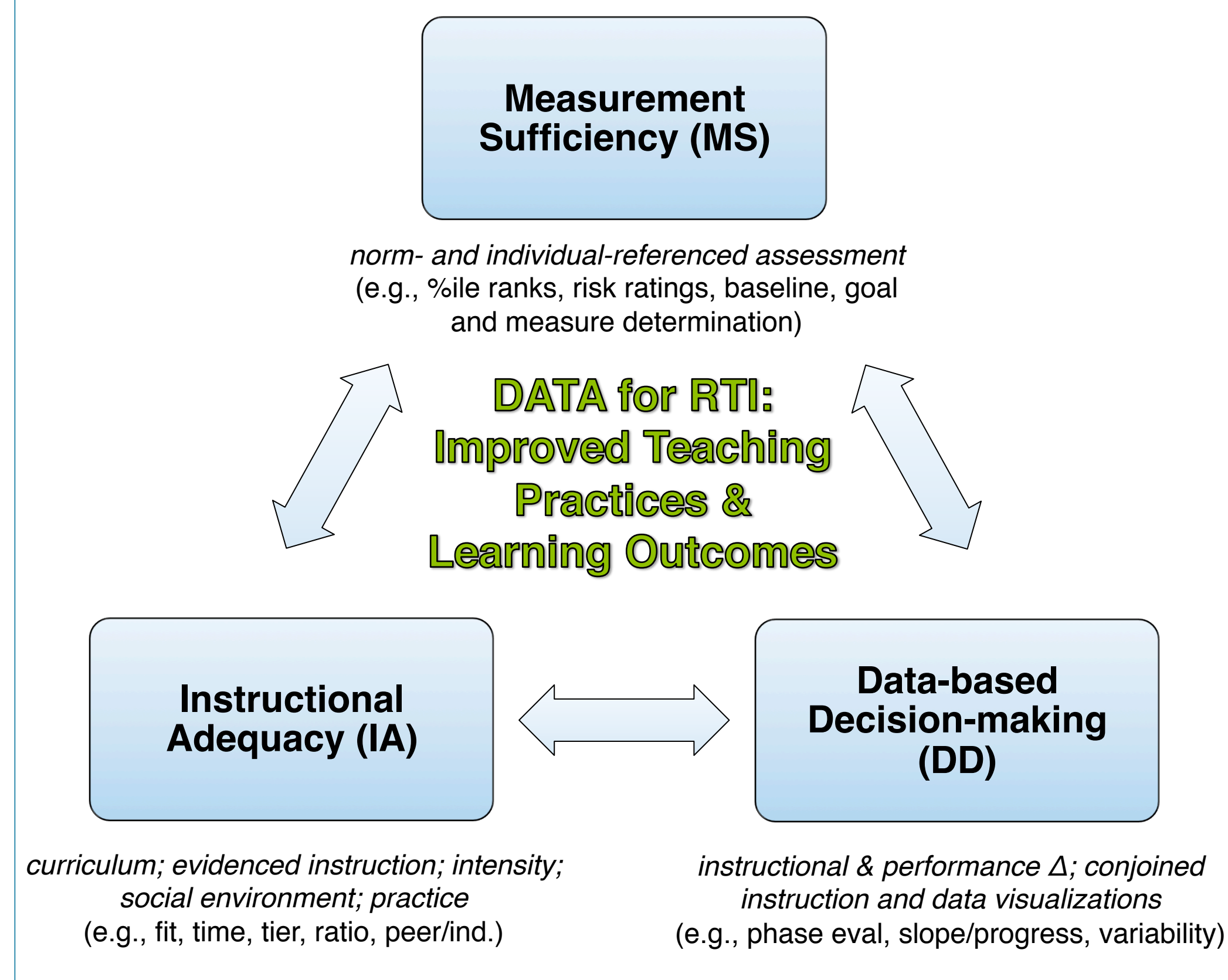
T-RTI Measure

Comprised of:

- 10 selected-response items
- 2 performance tasks:
 - PT1 Student & Class-level Analysis (8)
 - PT2 Data Team Analysis (5)

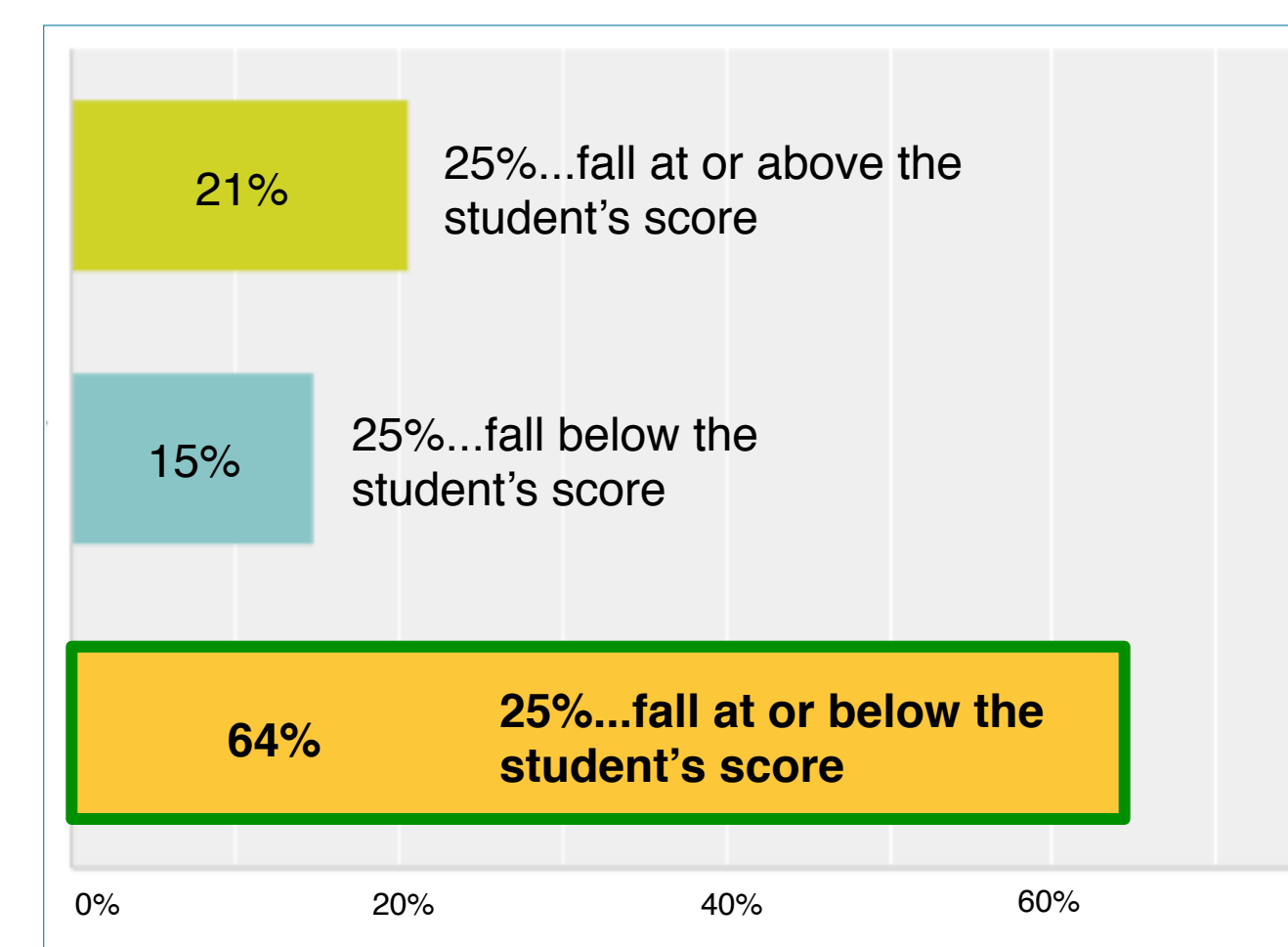
In addition, we requested feedback on items and T-RTI content during the field test (to guide refinement).

Content targets three key RTI domains:



Results (RQ2 & RQ3)

SRQ1 (MS) – A student achieves a percentile rank of 25 based on their passage reading fluency rate on the fall benchmark assessment. Which accurately represents what this percentile rank of 25 means?



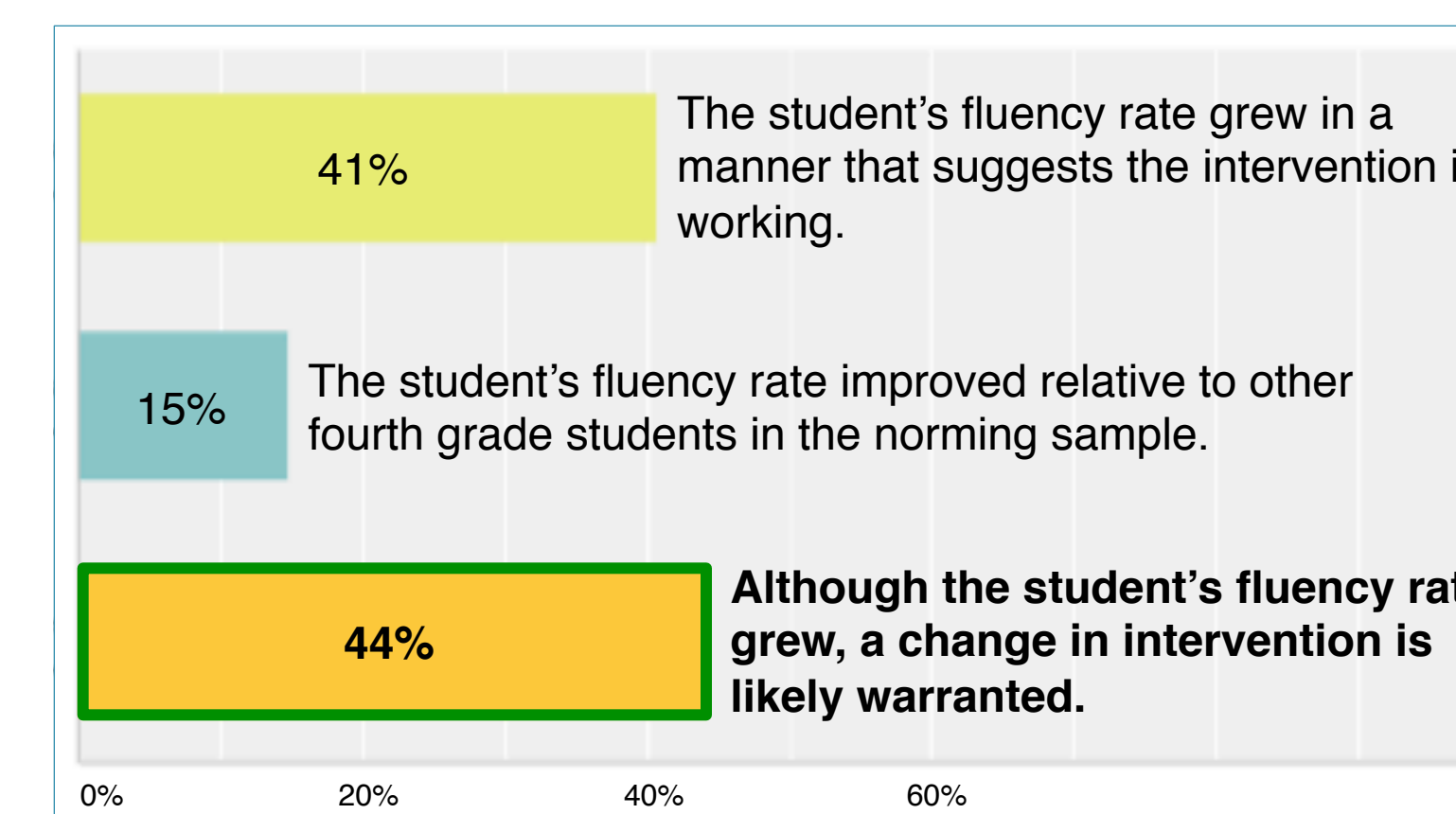
- Fundamental misunderstanding? (RQ2, i.e., 1 in 5 not close)
 - “Q1 talks about a student at the 25th percentile, but all the answers talk about what that means for the rest of the students...”
- Item clarity? (RQ3, e.g., emphasize key options, simplify wording, higher-resolution graphics)
 - “...underline the words “above” and “below.” I did not pick up on the difference of those two words. Also, I did not like the wording of that question...it was not easy for me to decipher.”

∴ T-RTI (PD) content and skill targets must be clear and have “reach” across knowledge/skill continuum

Results (RQ2 & RQ3 cont.)

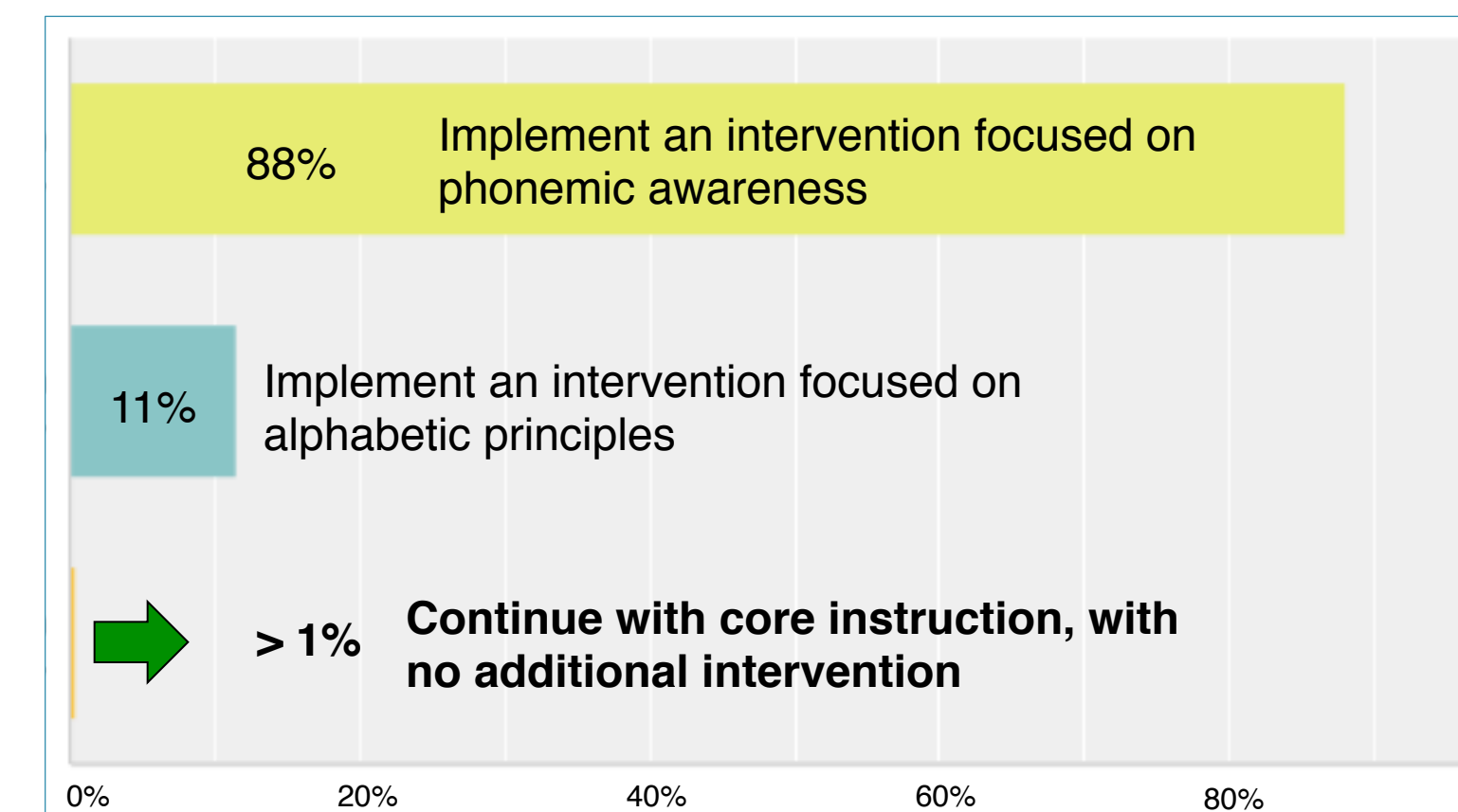
SRQ3 (DBDM) – A 4th-grade student reads 86 wcpm on the fall benchmark. The student is given a reading intervention...and is progress monitored every 3 weeks...and on the winter benchmark she reads 111 wcpm. Which best characterizes this student's performance over the first quarter of the school year?

Percentile Rank	Seasonal Passage Reading Fluency Benchmark Assessment		
	Fall	Winter	Spring
10 th	69	85	87
25 th	87	112	112
50 th	107	138	138
75 th	132	159	167
90 th	156	181	193



- Change in raw score vs. percentile? (RQ2, i.e., grasping “growth”)
 - 41% thought growth in raw score superseded flat percentile
 - 15% thought student improved relative to peers based on raw growth
 - Capitalize on professionalism? (RQ3, e.g., resolve to solve)
 - “The embedded norms for grade 3 fluency on question 3...did not show up...I was able to look at my norms from easyCBM to answer.”
- ∴ T-RTI (PD) must focus on utilizing and co-analyzing instruction and individual performance/norm data

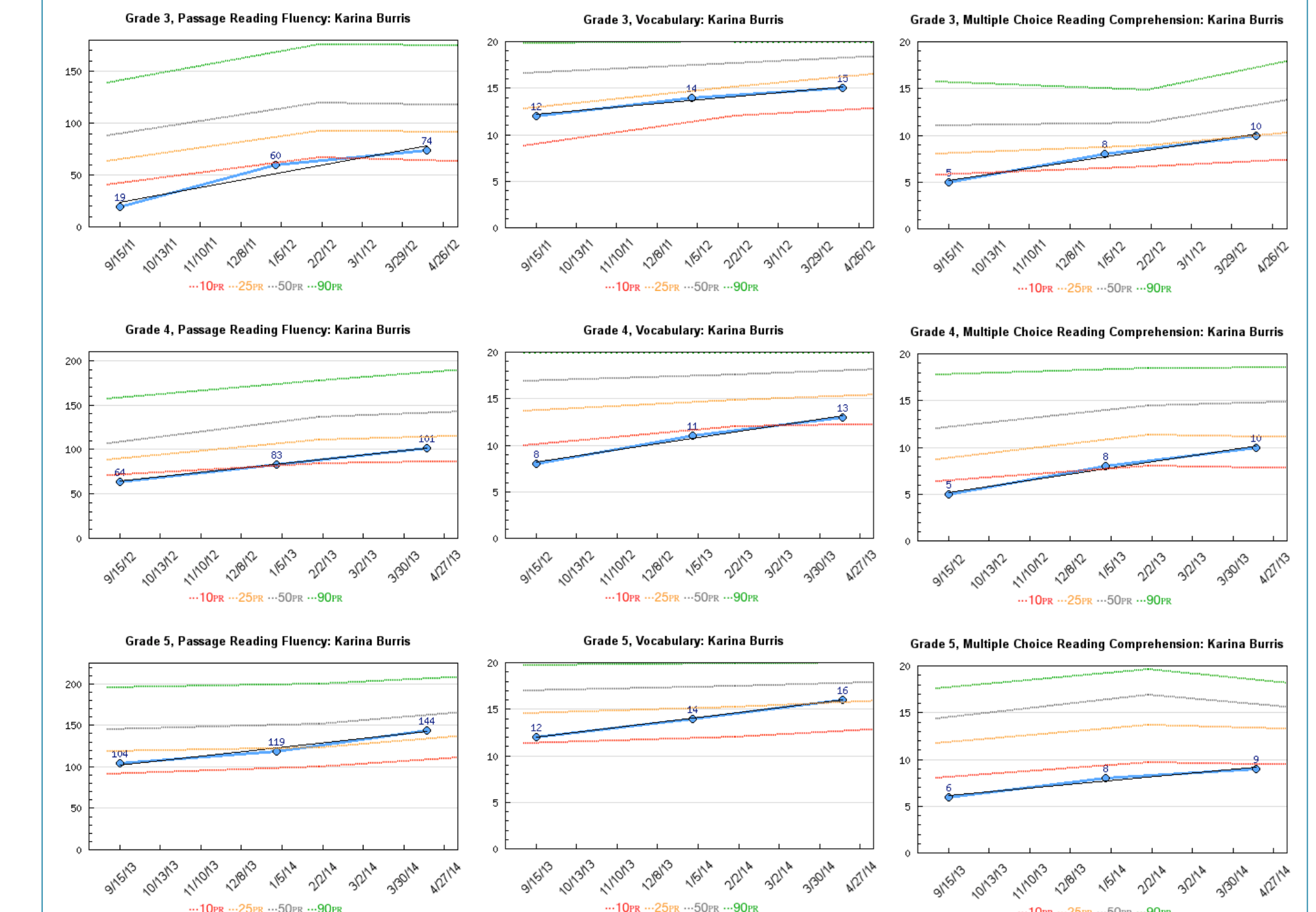
SRQ8 (IA) – A kindergarten student's winter benchmarks show *high risk* in phoneme segmenting, *some risk* in letter names fluency, and *low risk* in letter sounds fluency. Which instructional recommendation should be made?



- Essential pedagogical content? (RQ2, i.e., literacy development)
 - 99% expend additional resources when core is sufficient
 - “On #8 I would add something about letter names to the second answer that includes phoneme segmentation.”
- Item intent? (RQ3, e.g., jargon, include relevant information – data visualization, %iles, intervention)
 - “Many of the answers will depend on the student and the deficiency, nothing is textbook.”
 - “Are these answers consider to be right or wrong. Some of my responses are basic, because [there is] not enough information, even though some charts and information is presented. Need more clarity.”
 - “An understanding of the interventions used would have been helpful.”

∴ T-RTI (PD) should incorporate data routinely available to and used by teachers

Results (RQ2 & RQ3 cont.)



PT2-CR1 & 2 (MS, IA, DBDM) – You are part of a middle school data team... characterize Karina's fifth grade reading performance...What is concerning about her performance by the end of the fifth grade school year? ...describe what is concerning about the instructional and assessment decision-making for Karina over the fifth grade school year? Explain your reasoning.

- Balance between appropriate length and depth in constructed responses? (RQ2, i.e., accuracy grounded in item intent)
 - ~30% inappropriately short answers; ~16% quite long
 - ~35% focused on too general conclusions
- T-RTI inappropriate length? (RQ3, e.g., time is crucial, ~20 mins)
 - “I have been working 30 minutes on this. I'm done. You said 25 minutes.”
 - “A little too time consuming, overall; either [fewer] questions or more mc.”

∴ T-RTI (PD) must hone attention w/out losing it; measure what it purports to measure

T-RTI Next-steps

1. Critique summary – both test- and item-based.
2. Revise and Refine.
3. Present to DATA for RTI (Practitioner) Leader Development Team for further feedback for revision and refinement.
4. Pilot in Year 2.

Literature Cited

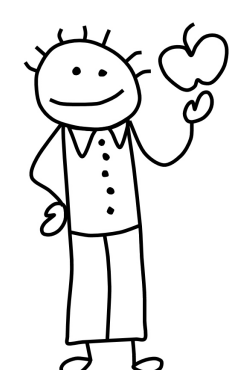
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Fuchs, D., & Fuchs, L. S. (2006). Introduction to response to intervention: What, why and how valid is it? *Reading Research Quarterly*, 41, 93-99. doi:10.1598/RRQ.41.1.4

Sáez, L. (February, 2012). Instructional responsiveness: What are teachers doing? In G. Tindal (Chair), Validating progress monitoring in the context of RTI. Paper presented at the Pacific Coast Research Conference (PCRC), Coronado, CA.

Contact Information

Please contact P. Shawn Irvin at pshawn@uoregon.edu for more information and discussion. Additional information on this and related research projects at BRT and the University of Oregon can be obtained at: brtprojects.org.



“I think the questions were well thought out and thought provoking.” -- “I would love to know how I performed. This will help me become a better teacher. -- I would love to see the “correct” answers for these questions to see if I understand RTI.” -- “They are good classroom scenarios.” -- “... as a teacher this really made me think a lot about my analysis of students.” (RQ3)