Progress Monitoring and Response to Intervention in an Outcomes-Driven Model

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Overview

Progress monitoring is a critical component to implementing Response to Intervention (RtI), and RtI represents a target of opportunity for improving the efficacy, utility, and defensibility of special education eligibility decisions. Even more important is using a *prevention-oriented* response to *effective* intervention approach within an Outcomes-Driven Model. The purpose of this poster presentation is to highlight ways that school personnel might organize their formative assessment data to promote an RtI approach that maximizes learning for all students.

What is Response-to-Intervention?

RtI has recently become more commonly known as an approach to document a child's eligibility for special education services. However, we argue that a focus on RtI as solely a determinant of eligibility misses an important opportunity to target effective instruction and maximize student learning (c.f. NASDSE, 2006).

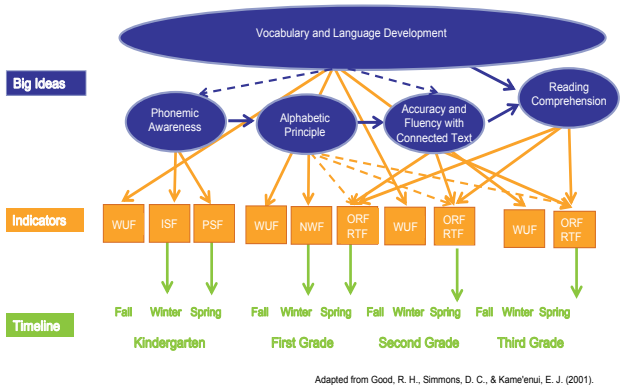
Underlying assumptions of RtI

Eligibility Approach	*Maximize Learning Approach*
Disabilities are due to within child factors and are intractable.	Most children can learn when provided with effective instruction.
There are children who are "non-responders" or "treatment resistors."	There are children for whom we have not yet found an effective intervention.
Starting point of RtI is when the student is referred for special education evaluation.	Starting point of RtI is before there are serious learning problems.
Goal/end point of RtI is a special education eligibility decision.	Goal of RtI is to find the match, i.e., the instructional approach or strategies that are effective for the individual student.

When RtI is operationalized using the approach of maximizing student learning, it becomes clear that referral for evaluation because of academic difficulty is not an appropriate starting point. In the same vein, eligibility based on lack of adequate progress would not be a defensible endpoint. RtI implemented within a prevention-oriented system of generally effective instruction (e.g., a three-tier model) would be a defensible means to maximize student learning and progress.

Reliability & Validity

Model of Big Ideas, Indicators, and Timeline



Adapted from Good, R. H., Simmons, D. C., & Kame'enui, E. J. (2001).

Data on DIBELS®

Measure	*Alternate Form Reliability*	*Criterion-Related Validity*
Phoneme Segmentation Fluency	1 probe: .88 3 probes[a]: .96	.73 – .91
Initial Sound Fluency	1 probe: .65 5 probes: .90	.44 – .60
Nonsense Word Fluency	1 probe: .92 3 probes: .98	.84
Word Use Fluency	1probe: .65 5 probes: .90	.42 – .71
Oral Reading Fluency	1 probe: .90	.70 – .80
Retell Fluency	.68 – .72	.73 – .81
Letter Naming Fluency	1 probe: .93 3 probes: .98	.72 – .98

Reliability & Validity, Figures 1 & 2; (Good & Kaminski, 2002; Rouse & Fantuzzo, 2006)

Common Elements of RtI

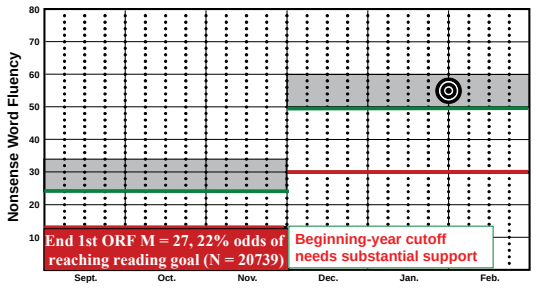
Regardless of the underlying assumptions regarding special education eligibility, there are certain key components of RtI that are highlighted below. These steps include:

1. Providing students with generally effective instruction by the classroom teacher.
2. Monitoring the progress of all students receiving general education instruction(e.g. benchmark assessment).

Treatment Utility

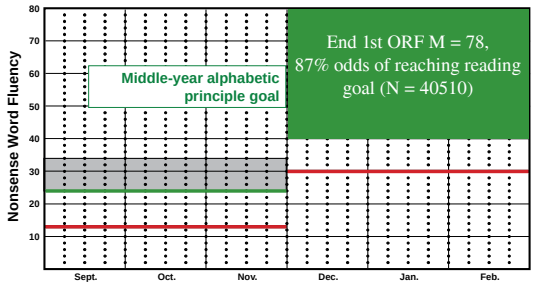
Accurately Identify Need for Support Early

- *Students with low skills are likely to need substantial support to achieve adequate first grade reading outcomes.*



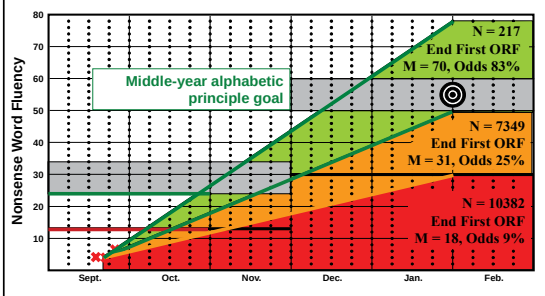
Provide Meaningful and Important Goals

- *Most students reaching alphabetic principle goal in mid first grade achieve adequate first grade reading outcomes.*



Evaluate Adequate Progress toward Goals

- *Adequate progress toward instructional goals has a meaningful impact on first grade reading outcomes and the odds of reaching the end of first grade reading goal.*



Treatment Utility, Figures 3, 4 & 5; (i.e. provides meaningful and important goals; Knutson, Simmons, Good, & McDonagh, 2004; Runge & Watkins, 2006)

3. Identifying students who are not making progress *early*.
4. Providing something else or something more to students who need something more than general education instruction. This additional support may be provided either by the regular classroom teacher, or from someone else.
5. Monitoring the progress of students receiving something else/more *more frequently*. Adjust their instruction according to the assessment data that are gathered.

As educators begin to engage in the process of RtI implementation, they must have access to high-quality, formative assessment tools. In addition to documenting students' progress, it is equally important for these tools to provide the capability **to evaluate the overall effectiveness of the system of support *and* the quality of instruction.**

Consideration of Appropriate Formative Assessment Tools

The use of formative assessment tools for instructional planning in special education has a relatively long history (c.f. E. Deno, 1970; S. Deno, 1986). However, their recent popularity as general education tools to provide universal screening (Good, Simmons, & Kame'enui, 2001), prediction of performance on high stakes tests (Shapiro, Keller, Lutz, Santoro, & Hintze, 2006; Silberglitt & Hintze, 2005), and decisions regarding special education eligibility (Fuchs & Fuchs, 1998; Ardoin, Witt, Connell, & Koenig, 2005), have launched such tools to the forefront of the educational forum.

In addition to meeting rigorous professional and ethical standards for reliability and validity, we agree with a recent article by Barnett et al. (2006) that highlights the need for formative assessment tools to provide evidence *beyond* the static reliability and validity data found in traditional assessment tools. Particularly, these authors note the need for formative assessment tools that are linked with a well-defined, decision-making model. We note that in order for formative assessment tools to be effectively used within an RtI framework they must also (a) accurately identify risk early, (b) provide meaningful and important goals, (c) evaluate adequate progress toward those goals, and (d) provide a way to evaluate both the overall system of support as well as the students' response to that support.

Dynamic Indicators of Basic Early Literacy Skills (DIBELS®) Link with RtI

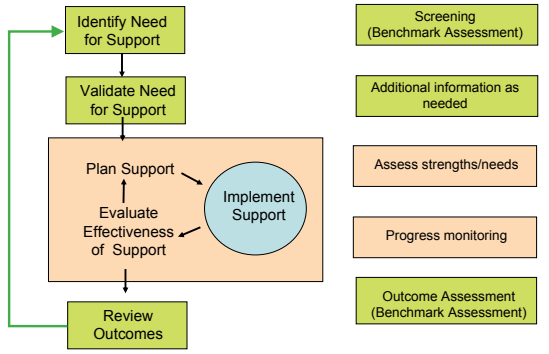
DIBELS were designed to be formative assessment tools that could be used to identify children experiencing difficulty in the acquisition of basic early literacy skills in order to provide support early and prevent the occurrence of later reading difficulties. As part of the formative assessment process, DIBELS were designed to evaluate the effectiveness of interventions for those children receiving support in order to make changes when necessary to maximize student learning and growth. Initial research on DIBELS focused on examining the technical adequacy of the measures for these primary purposes (Kaminski & Good, 1996), which remain the intended uses of DIBELS to this date (Good, Kaminski, Simmons, & Kame'enui, 2001; Kaminski, Cummings, Powell-Smith, & Good, in-press).

Link to a Decision Making Model

Outcomes Driven Model for RTI Decisions

ODM Step	Decisions/Questions	Data
1. Identify Need	Are there students who may need support? How many? Which students?	Screening data (DIBELS Benchmark data)
2. Validate Need	Are we confident that the identified students need support?	Diagnostic assessment data and additional information as needed
3. Plan and Implement Support	What level of support for which students? How to group students? What goals, specific skills, curriculum/program, instructional strategies?	Diagnostic assessment data and additional information as needed
4. Evaluate and Modify Support	Is the support effective for individual students?	Progress Monitoring data (DIBELS progress monitoring data)
5. Evaluate Outcomes	As a school/district: How effective is our core (benchmark) support? How effective is our supplemental (strategic) support? How effective is our intervention (intensive) support?	Outcome Assessment information(DIBELS Benchmark data)

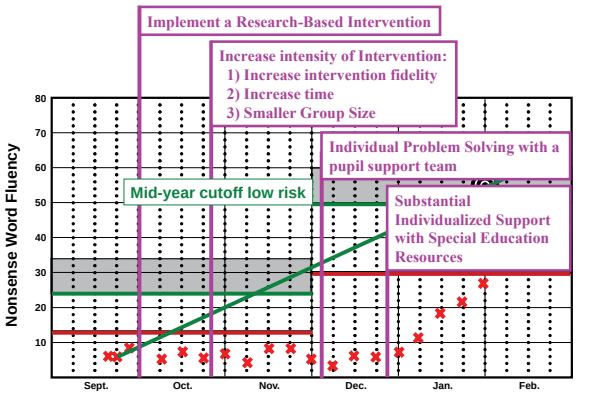
Outcomes Driven Model



Link to a DMM, Figures 6 & 7; (Kaminski, Cummings, Powell-Smith, & Good, in-press)

Evaluate Students' Response to Instruction

Outcomes Driven Model and RTI



Way to evaluate overall system of support, Figure 8; (Good, Kaminski, Smith, Simmons, Kame'enui, & Wallin, 2003; Kaminski & Cummings, 2007)

DIBELS have established reliability and validity, are linked to a decision making model, and provide a way to accurately identify a student's need for support *early* (see Figures 1–2, 6–7, and Figure 3, respectively). The measures can be used to monitor individual progress toward important goals (see Figures 4–5, and Figure 8). Data from the DIBELS measures may also be aggregated at the systems level to provide an index of treatment integrity (see Figure 9).

One way to evaluate the continuum of support is to examine benchmark data within and across years to determine the percent of students who meet or exceed goals as well as the percent of students who make adequate progress (see Figure 10 and the sample *Summary of Effectiveness Worksheet*, retrieved June 27, 2007, from https://dibels.uoregon.edu/data/reports/effectiveness_worksheet.pdf)

The effectiveness of the overall system of support, or the "overall procedural adherence" (Barnett et al. 2006, p. 22), provides the foundation by which RtI is evaluated. Without this piece, student response to instruction is not interpretable.

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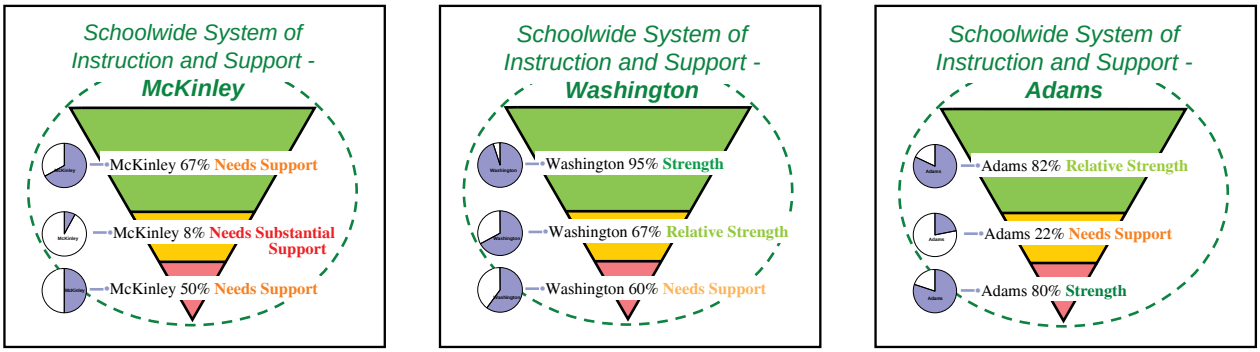
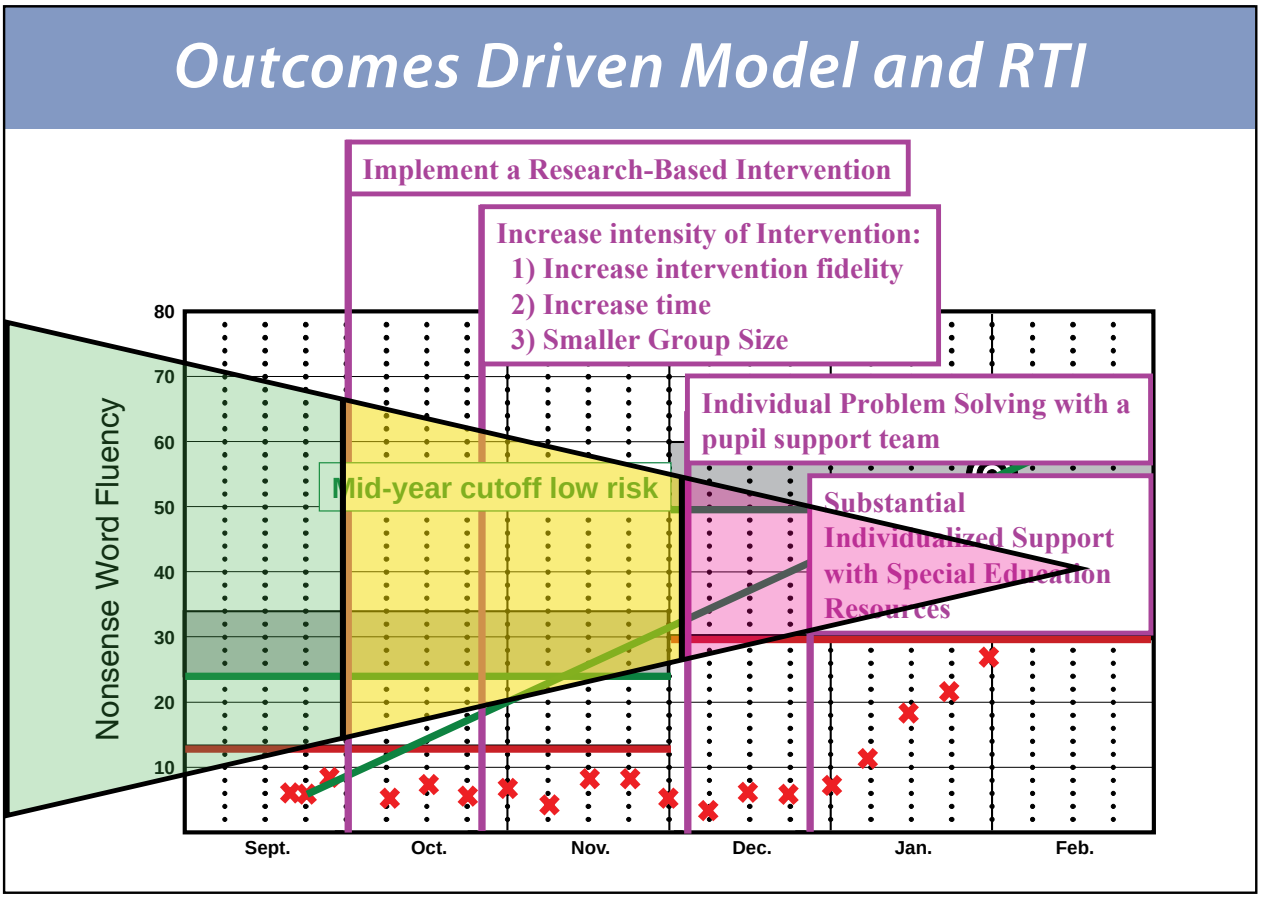
*Evaluate the **Overall** System of Support*





Way to evaluate students' RtI, Figures 9 & 10; (Good, Simmons, & Kame'enui, 2001; Knutson, Simmons, Good, & McDonagh, 2004, Cummings, Atkins, Allison & Cole, 2007; Good, Baker, & Peyton, 2006)

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