RTI Model Uses Data to Improve Instruction "Here & Now"

By Helen Apthorp

For years, schools and teachers have been urged to become more data-driven—that is, to use student performance and other data to guide decisions about instructional programs and school improvement efforts.

The reality is that statewide assessments drive most accountability systems, and it often takes months before schools and teachers receive this achievement data. By then, students have already moved into different classrooms, if not different schools. While the data may still be informative, using it to make decisions about a new group of students can be a little like trying to steer a car by looking through the rear-view mirror.

Intervening early

One way for educators to make data-driven decisions in real time is to apply the principles of Response to Intervention (RTI), an early intervention model that targets students who are falling behind, allowing schools and teachers to move quickly to close learning gaps (See sidebar). Unlike the more traditional "wait and see" approach, in which students often fall behind before schools intervene, RTI "allows educators and parents to immediately provide students with targeted and much needed intervention, rather than waiting for extensive, time-consuming assessments that offer little or no information to inform instruction" (Fletcher, Coulter, Reschly & Vaughn, 2004, p. 312).

Monitoring progress

Monitoring progress is the core of RTI. For example, teachers might use a set of assessments to identify children at-risk for not making benchmarks. A reading coach interprets the results and leads grade-level team discussions about providing children with interventions such as supplemental practice, different groups for reading instruction, tutoring, or small group or individualized instruction with a specially trained teacher.

What is Response to Intervention?

Response to Intervention (RTI), also known as the Problem Solving Model (PSM) is an early intervention and prevention model that blends special and general education. With RTI or PSM, students who show signs of learning difficulty receive the benefit of team problem solving, changes in instruction, increased intensity of instruction, and progress monitoring. These components typically comprise RTI or PSM:

1. **Clear benchmarks and early assessment**. Clear academic and behavioral benchmarks and system-wide screening help identify students at-risk for or not making one or more benchmarks.
2. **Problem identification**. Teams of teachers use multiple data sources to ascertain why students are not meeting benchmarks.
3. **Tiered research-based interventions**. Schools or teachers apply scientific, research-based interventions of varying intensity, starting with the initial general education instruction tier. With each tier, instruction is more systematic and explicit, more frequent and/or lasting longer, and occurs in smaller groups and/or with more experienced teachers (Fuchs & Fuchs, 2006).
4. **Progress monitoring**. With each intervention, a student's learning rate and performance are measured and analyzed by teachers or building assistance team members.
5. **Data-based decision making**. When the data indicate that progress is inadequate in relation to normative rates of learning or a reasonable goal, teachers increase instructional intensity, applying the appropriate tier of intervention.

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An example

Here's an example of how RTI works in practice. Imagine, Ricky, a third grader, who is new to his school. At the beginning of the year, teachers review screening results and identify Ricky as performing below benchmark and in the at-risk category. Ms. Harrison, the reading coach, shows his teacher some ways to engage Ricky in repeated readings of his group's passages. Ricky needs to read the passages two or three more times during the day and again with an adult or older sibling at home every night. Ms. Harrison also shows his teacher how to administer weekly curriculum-based measurements and together with Ricky, chart his goal line and progress.

Ricky's teacher notifies his parents about the plan, and over the next five weeks, the number of words he reads per minute increases steadily but not at the typical third-grade rate. Ricky's teacher reviews his progress with his mother and decides to involve afterschool program staff in supervising his reading.

At eight weeks, the RTI team reviews Ricky's progress data again, and although his learning rate has increased, his progress still isn't enough to meet the goal. The RTI team transfers him into a Tier 2 intervention, a smaller third-grade class using reading instruction more suited to his instructional level and needs, and Ricky's teacher discusses the change with his parents.

The next eight weeks of CBM data show a steeper slope indicating Ricky's positive response to the Tier 2 intervention, which pleases his parents. The team extends his progress line throughout the remainder of the year, and Ricky's teacher and the RTI team continue to monitor the effectiveness of the intervention in helping Ricky meet his goal of reaching benchmark fluency by year's end.

Using RTI effectively

RTI is not the fix-all solution, but research does suggest that in the area of beginning reading, it helps to ameliorate the problem of over-identification of students needing special education (Ikeda & Allison, 2004; Kamps & Greenwood, 2005; Marston, Muyskens, Lau & Canter, 2003). The best advice for RTI adopters is to study emerging research; use a trial-and-error, reflective approach to making adjustments; and refine and strengthen pilot procedures. CS

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Helen Apthorp, McREL Principal Researcher, can be reached at 303.632.5622 or hapthorp@mcrel.org. Bryan Goodwin, Vice President of Communications & Marketing, can be reached at 303.632.5602 or bgoodwin@mcrel.org.