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Study: RTI Practice Falls Short of Promise

First Graders Who Were Identified for More Help Fell Further Behind

By Sarah D. Sparks

Response to intervention has become ubiquitous as a framework to teach students to read in elementary schools, but the most comprehensive federal evaluation of the approach to date finds that it may hold back some of the children it was originally designed to support.

First graders who received reading interventions actually did worse than virtually identical peers who did not get the more targeted assistance, according to the study released last week by the National Center for Education Evaluation and Regional Assistance. The study focused on schools that were using RTI for literacy. Students who read just below grade level at the start of the year had been referred to RTI intended to catch them up with the rest of the class.

Moreover, students who were already in special education and those who were older than average for their grades (suggesting they had either entered late or failed a grade) performed particularly poorly if they received interventions.

The study, involving more than 20,000 students in 13 states, does not look at how students with more severe learning problems fare under RTI. But it raises questions about the evolution of a model originally designed to target students as soon as they started to struggle, and prevent their difficulties from escalating to the need for a special education evaluation.

Now, with more than 70 percent of school districts across the country incorporating RTI in at least some classrooms, it has become more of a general education approach, with all of the trade-offs that entails.

"We're looking at this framework that has developed over the years and how it has really played out in classrooms... We weren't expecting to see this pattern," said Fred

Doolittle, a study co-author and a vice president of MDRC. "We don't want to have people say that these findings say these schools aren't doing RTI right; this turns out to be what RTI looks like when it





plays out in daily life."

Changes Tier to Tier

Response to intervention involves early identification of students' learning problems and the use of focused lessons, or interventions—usually thought of as progressively more-intensive "tiers" of instruction—to improve learning. Tier 1 calls for all students to receive consistent, research-based, high-quality instruction in a chosen subject, coupled with ongoing monitoring to spot emerging problems.

While a large majority of students are expected to learn the content based only on this first tier, some portion of students—often estimated at 20 to 30 percent—need additional supports, called Tier 2. Students identified for the second tier are given specific interventions—in reading, this might mean instruction in small groups to beef up foundational skills like phonics or reading fluency—and monitored more frequently. Students who continue to struggle move up to Tier 3, with more-intensive interventions and potential evaluation for special education.

RTI can be used for a number of instructional purposes. In the study, investigators from the research firms MDRC, SRI International, the University of Washington, and the Instructional Research Group found that across the 13 states, a majority of the schools studied used RTI for reading instruction in grades 1 to 3.

The researchers focused their impact study on more than 140 schools that had been implementing RTI for at least three years, and that used four key elements of the framework: at least three tiers of increasingly intense reading instruction; screening all students for progress at least twice a year; regularly using data to place students in Tiers 2 or 3; and using more-frequent progress monitoring for students in Tier 2 and above to gauge whether the interventions are working.

The researchers found that in practice, even the schools "fully implementing" RTI didn't always have a bright line between core instruction and intervention.

In 1st grade, 45 percent of the schools provided Tier 2 interventions to groups of students at all reading levels, not just for students reading below grade level. Moreover, 67 percent of schools provided Tier 2 interventions during the core reading instruction, not just in addition to it.

"It raises the question then, what is the extent of the contrast and differences in services provided to students below grade levels?" said Rekha Balu, an MDRC research associate and a co-author of the study.

That blurring of the lines between core instruction and intervention is worrisome, said Karen K. Wixson, a reading and literacy professor and a dean emeritus of education at the University of North Carolina Greensboro.

"Core instruction is supposed to be aligned with Tier 2, but Tier 2 is singling out a particular component and approaching it in a different manner. The core instruction is broader and covers a much broader range of skills students need to be exposed to," Wixson said.

If interventions that are focused on a few skills take up more of the Tier 1 instruction, she said, "Students are missing a lot of broader things that are going to make a difference in their ability to put

it all together in functional reading."

Comparing Students

The researchers were not able to randomly assign students to participate in the RTI framework or not, so they used a statistical quirk to compare students.

For RTI, or any other system that uses a cut score to screen students, those who perform 1 point above or below the cut score are statistically identical. A student who scores 19 on a reading test with a cut score of 20 will look very similar, day to day, to a student who scores 21, but may have very different learning opportunities because he missed that benchmark. Balu and her colleagues tracked the reading performance of 24,000 1st, 2nd, and 3rd grade students who barely made or missed the cutoffs for Tier 2 interventions in schools.

From fall to winter of the 2011-12 school year, 1st graders who had been identified for Tier 2 interventions in the fall performed 11 percent lower, significantly worse, on a test of overall reading ability used by the federal Early Childhood Longitudinal Study that winter, in comparison to students who barely missed being identified for interventions in the fall.

"It was the equivalent of losing one-tenth of a year of learning," Balu said. There were no significant differences in the results for students of different income levels, racial groups, or native languages.

Students in 2nd and 3rd grades who were identified for Tier 2 had no significant reading benefits either, though unlike 1st graders, they saw no significant negative effects from the interventions. Of the 119 schools studied for 1st grade implementation, only four found benefits for the students who were identified for Tier 2 interventions, while 15 schools had negative effects for students in the interventions.

"This analysis is simpatico with what the original intent of RTI was: preventative, not remedial, getting kids at risk, on the cusp, trending toward problems and gaps," said Douglas Fuchs, a professor and chair of special education and human development at Vanderbilt University who was not connected to the study but who is a longtime proponent of RTI.

But, he argued, such students with "mild and relatively mild learning problems" are not representative anymore of the students targeted for Tier 2 interventions. "Over time, in many places what's happened is RTI has been deliberately used as a kind of general education substitution for special education. My strong sense is that over time, more and more kids with greater and greater severity of learning problems are being served in an RTI framework."

Pinpointing the Problem

However, Wixson, who also was not part of the study, said she wasn't surprised by the negative findings, which she suggests point instead to problems both in the screening tools used to identify students for Tier 2 interventions and in the array of interventions available for them.

"The most common implementation of RTI is fairly rigid," she said, with schools often using a single test to identify students for Tier 2 and a standard set of interventions once they get there. For example, she noted that the study found that small group instruction and interventions in RTI schools were more likely to focus on phonics for students below grade level than at grade level.

"Right there you have a clue that the interventions are focused on these foundational skills and not as much on comprehension," she said. The negative results could be explained if the screening tools used to identify students did not provide a comprehensive picture of what skills they fell short on, or if the interventions available were not focused on those needs.

"I think these data also reflect the gap between research and practice, because for so many schools to have such negative effects at [1st grade], it's pretty surprising," Fuchs said. "It goes to the question of why can't we scale up... demonstrably effective Tier 2 interventions in schools?"

Both Doolittle and Wixson suggested that school leaders using RTI for early-grades reading should reexamine how they identify students and what interventions they provide to them.

Fuchs, however, argued that researchers need to know more about the differences in the quality of instruction, the types of interventions, and the progress-monitoring systems used in each of the schools studied.

"For all the schools together, we get a statistically significant negative effect for RTI interventions. That's something that should raise eyebrows, partly because it's counterintuitive," Fuchs said, "but the point that shouldn't be lost here is, if we look at the range of performance in the 119 schools [in the 1st grade sample] we get tremendous variation."

More details about the RTI practices are needed, Fuchs argued, for school leaders to draw lessons from the study.

Those details may soon be in the offing.

Jonathan Jacobson, the project officer for the study at NCEE, said the research agency also plans to make data from the study available to other researchers who want to dig into differences in teaching practice or other issues to understand more about what was going on in the elementary schools that found benefits for students from RTI interventions and the schools where students performed worse in them.

The study also did not look at the effects of the RTI
framework on students who had more significant reading difficulties, but the researchers are
considering a follow-up study to look at the effects of students near the threshold for Tier 3.

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