RTI hits adolescence—Will it make it to adulthood? A case for cautious optimism

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Today’s Presentation

1. Does Response to Intervention (RTI) work? What can (and can’t) we learn from the Institute of Education Sciences’ (IES) recent evaluation of RTI?
2. Is “Does RTI Work?” even the right question?: Lessons from 15 years of implementation
3. What can schools do to maximize their chances of positive impact when they implement RTI?
Big Idea #1: Adequate Tests of RTI’s Overall Efficacy Have Not Yet Been Conducted

What We Can and Cannot Conclude from the 2015 IES Evaluation of RTI

Lynn Fuchs
Vandebilt University
Response to Intervention

- Response to Intervention (RTI) integrates assessment and intervention within a multi-level prevention system to identify and reduce risk for poor learning outcomes.

- The purpose of RTI is to reduce risk for the long-term, negative consequences associated with exiting school without the skills needed to succeed in life.
“Evaluation of Response to Intervention Practices for Elementary School Reading”

- Authors: MDRC, SRI, University of Washington, IRG
- Commissioned by IES, National Center on Education Evaluation (NCEE)
- Part of the National Evaluation of IDEA
Some of what you may have heard…. Is it true?

- “RTI for literacy may not improve performance, study finds” (ASCD)
- “New Study finds RTI results underwhelm” (Education Drive)
- “RTI practice falls short of promise” (Education Week)
Study Features to Keep in Mind: #1

- This quasi-experimental evaluation only involved a set of “Impact” schools: schools that self reported they were fully implementing RTI.
- “Reference” schools also are discussed in the report, but they were not part of the evaluation study.
- The report describes similarities and differences in the RTI practices of Impact vs. Reference schools.
- So… it’s easy to be confused and think that the evaluation compared results for these 2 groups of schools.
- The IES evaluation study did not compare results for Impact vs. Reference schools.
Study Features to Keep in Mind: #2

- The independent variable was the use of screening tools to designate students in need of intervention.
- The independent variable was not whether students received intervention.
- The evaluation compared students in the same schools whose screening scores placed them just above the screening cut point against students whose screening scores placed them just below the screening cut point.
Study Features to Keep in Mind: #3

- The IES study does *not* include data about *which* students actually received intervention.

- But the report does indicate that their analysis included:
  - Some students who were *below* the screening cut-point but did *not* receive intervention
  - Some students *above* the screening cut-point but *did* receive intervention.
The IES document states that, to be included in the analysis, Impact schools had to report they had at least one student at Tier 1, one at Tier 2, and one at Tier 3.

Only 89 of 143 schools met this criterion at 1st grade (report doesn’t say how many at other grades, but it does say this pattern was similar at all three grades).

Given the inclusion criterion of 1 student at each tier, it’s not clear how many Impact schools in the analysis adhered to their screening rules and actually provided intervention to students whose screening scores indicated need for intervention.
Study Features to Keep in Mind: #5

- Only one piece of information about RTI practice was verified: Impact schools did apply a screening cut-point to their reading screening data.
- This was the study’s independent variable.
- So conclusions are about
  - The effects of conducting screening and applying a cut-point to designate students with vs. without need for intervention
- Conclusions are not about
  - The effects of delivering intervention to students who, according to the screening system, require it.
What We Can and Cannot Conclude: #1

On the basis of this evaluation…

- CAN conclude that screening for the purpose of designating students for intervention does not appear to improve reading outcomes.

- CANNOT conclude anything about
  - The effects of actually providing intervention or
  - The effects of RTI as a system that integrates the use of assessment data with intervention.
What We Can and Cannot Conclude: #2

- We can draw conclusions only about students at or around the 40th percentile. We cannot draw conclusions about students much below the 40th percentile.
- This is because:
  - RDD only included students just above and just below the schools’ screening cut-point for designating students in need of intervention.
  - The functional screening cut-point across the Impact study schools was the 41st percentile (i.e., according to the schools’ screening cut-points, 41% of students in the Impact schools met criteria for Tier 2 or Tier 3).
- By contrast, most RTI models and most RTI school-based research, reserve Tiers 2 & 3 intervention for the lowest 20-25th percentile of students.
- So, results cannot be used to determine whether RTI is effective for the students that many researchers, practitioners, and policymakers believe RTI is meant to help.
What We Can and Cannot Conclude: #3

- We can draw conclusions about students with IEPs whose reading performance is around the 40\textsuperscript{th} percentile.

- We cannot draw conclusions about students with IEPs whose reading performance is below the 40\textsuperscript{th} percentile.

- At grade 1, students with IEPs in the RDD analysis (i.e., students with IEPs who scored just above or below the screening cut-point – at or around 41\textsuperscript{st} percentile) did more poorly at the end of the year if they were below rather than above that screening cut-point. But students with IEPs who perform around the 40\textsuperscript{th} percentile are highly unusual. Thus, this finding has poor generalizability to students with IEPs.
Summary

- Since the release of the IES evaluation, many in the media (e.g., Sarah Sparks of *Education Week*) have accepted it as an evaluation of RTI.
- Yet, there is broad agreement among virtually all researchers and many practitioners and policymakers that RTI refers to a multi-dimensional system of service delivery: at the least, the combined use of a screening measure, assessments of responsiveness to instruction, and multiple tiers of increasingly intensive and evidence-based interventions at each tier.
Summary

- By contrast, the IES evaluation focused on something much narrower. It asked the relatively simple question, “Does the application of a screening measure that produces a continuous distribution of scores, and a cut-point to distinguish those who perform above and below it, result in 2 groups that perform reliably differently from each other at year’s end?”

- At first grade, the answer was “yes.” Children whose screening scores were just below the 40th percentile ended the year below students whose screening scores were just above that percentile.

- At second and third grades, there were no between-group differences.

- Such findings should have little bearing on how we think about RTI, at least for those of who think RTI is more than the use of a screening measure and cut-point.
In Closing

- We’re glad IES sponsored an ambitious (and no doubt challenging) evaluation of RTI.
- Because of RTI’s popularity, and RTI’s potential importance to the lives of children and youth, RTI’s value should be evaluated. It should be evaluated comprehensively, rigorously, and fairly.
- For whatever reasons, the IES evaluation, in our view, did not perform a comprehensive evaluation.
- If results from the evaluation are wrongly interpreted to mean that “RTI doesn’t work,” the hard work of practitioners, researchers, and policymakers to make RTI effective may stop.
- If this evaluation is viewed as evidence that RTI isn’t effective, the 10-15 years of research on related assessments and interventions, much of it funded by IES, may also be seen incorrectly as not effective.
- The point here is that we must all be very clear on what we can and cannot conclude from this evaluation.
Big Idea #2: Better Questions to Ask about RTI Than, “Does It Work?”

Lessons from 15 Years of Implementation

Doug Fuchs
Vanderbilt University
But, Let’s Start with, “Does It Work?”

- That’s why you came to this webinar, right?
- You (understandably) wanted to know whether RTI works.
- OK, let’s consider the question.
Why It’s Wrong to Say, “RTI Doesn’t Work”

“Micro Reasons”

• Researchers have developed universal screens with validated cut-points for practitioners to use to identify “at-risk” students.

• Progress monitoring systems permit teachers to see if children identified by screens are not sufficiently responsive to classroom instruction, and require more intensive intervention.
Why It’s Wrong to Say RTI Doesn’t Work

- There are stronger core reading and math textbooks today than 15 years ago: texts based on research-validated principles of instruction.
- Teachers may choose from an array of validated supplemental instructional programs (e.g., TAI, CWPT, PALS) that give students an opportunity to practice basic skills; that give teachers a means of differentiating instruction.
Why It’s Wrong to Say RTI Doesn’t Work

- Stronger texts and supplemental instructional programs together represent a better tool kit than previously: a better chance to make classrooms more accommodating of greater academic diversity.
- Researchers have developed and validated effective Tier 2 programs to be used with progress monitoring systems for students who are not sufficiently responsive to classroom instruction.
Why It’s Wrong to Say RTI Doesn’t Work

“Macro” Reasons

- More teachers, administrators, policymakers recognize many children and youth are performing poorly; many SWD are performing abysmally (NAEP, SEELS, NLTS, state report cards)
- Growing recognition classrooms need strengthening and multi-tiered systems of support—RTI—are necessary.
Why It’s Wrong to Say RTI Doesn’t Work

- Accountability (for better and worse) has sharpened a focus on student achievement.
- Micro and macro considerations together are a reasonable basis to be hopeful about RTI.
- There is considerable anecdotal evidence that hardworking educators around the country have succeeded with parts of RTI (e.g., screening or benchmarking or small-group instruction).
BUT...
It’s Also Wrong to Say, “RTI Works”

- No experimental studies or quasi-experimental studies of the efficacy of RTI as a comprehensive, integrated system.

- There are a handful of state- or district-run evaluations of RTI:
  - Instructional Support Teams in Pennsylvania
  - Intervention-Based Assessments in Ohio
  - Building Assessment Teams, Heartland, IA
  - Problem-Solving Model, Minneapolis, MN
Why It’s Wrong to Say, “RTI Works”

- Evaluators of such programs (some of which were pre-referral interventions, not RTI) should be commended for their efforts.
- But… they infrequently collected achievement or fidelity data. Rather, they tracked:
  - Referrals
  - Special education placements
  - Subjective judgments about student behavior.
- Results may not be seen as supportive of RTI effectiveness, or its overall purpose.
Quiz

- True or False: RTI Doesn’t Work?
Quiz

- True or False: RTI Works!
Quiz

- For 100 bonus points, “If RTI isn’t a failure and isn’t a success, what is it?”
Should We Be Optimists or Pessimists about RTI/MTSS?

- **Cause for optimism:** We have the knowledge and tools to make at least part of RTI work. We have the way if not the will.

- **Cause for pessimism:** Evidence suggests many practitioners *do not*:
  - Consistently choose correct tools
  - Implement RTI with fidelity
  - Know what to do with students who require most intensive supports
  - Have the resources for intensive intervention.
Big Idea #3: Successful RTI Requires Thoughtful Implementation

How high-quality resources can support strong design and implementation of RTI

Allison Gandhi
AIR
Essential components of RTI
Essential components of RTI: Screening

Screening is the process of identifying or predicting which students may be at risk for poor learning outcomes.

Universal screening assessments are conducted for all students in a grade level, to determine who may be at risk, followed by additional testing or short-term progress monitoring.

Important to focus on selection of evidence-based tools and fidelity of implementation.
Essential components of RTI: Progress Monitoring

Progress monitoring is used to assess students’ academic performance, to quantify a student rate of improvement, or responsiveness to instruction, and to evaluate the effectiveness of instruction.

Important to focus on selection of evidence-based tools and fidelity of implementation.
Essential components of RTI: Multi-level prevention system

Primary prevention (Tier 1 or universal) refers to high-quality core instruction.

Secondary prevention (Tier 2 or remedial/supplemental) includes evidence-based interventions of moderate intensity.

Tertiary prevention (Tier 3 or intensive) includes individualized intervention of increased intensity for students who show minimal response to secondary prevention.
Essential components of RTI: Data-based decision making

Data analysis and decision making occur at all levels of RTI implementation and all levels of the multi-level prevention system.

Teams use screening and progress monitoring data to make decisions about instruction, movement within the multi-level prevention system, and disability identification (in accordance with state law).
Success Story:
Using the RTI implementer series in a train-the-trainer model, one state has been able to support a shared understanding of RTI throughout the state and use limited resources to offer professional development on RTI to a broad range of districts.

<table>
<thead>
<tr>
<th>Decision Making</th>
<th>Progress Monitoring</th>
<th>Multi-level Prevention System</th>
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</thead>
<tbody>
<tr>
<td>Decision Making (58:32)</td>
<td>Using Progress Monitoring Data for Decision Making (52:05)</td>
<td>IDEA and the Multi-level Prevention System (10:57)</td>
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<td>Establishing Processes</td>
<td>Establishing a Screening Process (12:40)</td>
<td>Selecting Evidence-based Practices (53:46)</td>
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## Resources:
### Screening tools chart

<table>
<thead>
<tr>
<th>Tool</th>
<th>Area</th>
<th>Classification Accuracy Rating</th>
<th>Generalizability</th>
<th>Reliability</th>
<th>Validity</th>
<th>Disaggregated Reliability, Validity, and Classification Data for Diverse Population</th>
<th>Administration</th>
<th>Administration &amp; Scoring Time</th>
<th>Scoring Key</th>
<th>Benchmarks / Norms</th>
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</thead>
<tbody>
<tr>
<td>Acuity</td>
<td>English Language Arts</td>
<td>![Circle]</td>
<td>![Circle]</td>
<td>![Circle]</td>
<td>![Circle]</td>
<td></td>
<td>Group</td>
<td>50 Minutes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Acuity</td>
<td>Mathematics</td>
<td>![Circle]</td>
<td>![Circle]</td>
<td>![Circle]</td>
<td>![Circle]</td>
<td></td>
<td>Group</td>
<td>50 Minutes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>AIMSweb</td>
<td>Mathematics - Curriculum-Based</td>
<td>![Circle]</td>
<td>![Circle]</td>
<td>![Circle]</td>
<td>![Circle]</td>
<td></td>
<td>Group</td>
<td>2 Minutes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Success Story:
Using the screening and progress monitoring tools charts, one district replaced its data system with a new one that was a better fit for their needs. With a stronger data system in place, they improved their ability to screen kids in need and assess responsiveness to intervention. Overall, the percentage of students considered at or above target increased.
## Resources:

### Interventions tools chart

<table>
<thead>
<tr>
<th>Study Type</th>
<th>Title</th>
<th>Design</th>
<th>Fidelity of Impl</th>
<th>Measures (Targeted)</th>
<th>Measures (Broader)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Academy of MATH</td>
<td></td>
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<tr>
<td></td>
<td>Tovraković (2011)</td>
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<td></td>
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<tr>
<td>Group</td>
<td>Academy of READING</td>
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<td></td>
<td>Fiedorowicz &amp; Trites (1987)</td>
<td></td>
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</table>
Success Story:
Using the RTI fidelity rubric, one school focused regular “RTI spotlight” staff development sessions on the essential components of RTI implementation. These sessions helped all staff come to a common understanding of what RTI was and why all components were necessary, and helped them come to agreement on where they needed improvement.
In Conclusion

- To date, RTI has not been rigorously and comprehensively evaluated.
- It is, however, a framework that comprises evidence-based instruction, intervention, and assessment.
- There are many useful tools and resources and many schools have experienced success, but we still have a lot to learn.
- Implementers must develop clinical decision-making skills to effectively integrate elements of RTI for their context.
The Center on Response to Intervention (RTI Center) at AIR provides technical assistance to build the capacity of states and districts in implementing and evaluating proven frameworks for response to intervention (RTI). We help local educational agencies learn how to develop a delivery system with multiple tiers of instruction for reading and mathematics and then coordinate that tiered system within a data-based framework for monitoring student progress and determining which students need more intensive or individualized instruction. We work closely with each state or district to develop a flexible plan for technical assistance that will best meet their identified needs.