Response to Intervention

- We have always known that some individuals take longer than others to learn particular things:
  - Technological society demands broad literacy and numeracy.
    - It used to be OK to not read and write and/or do math well.
  - Children who do not learn easily and/or those who begin their schooling with limited literacy skills need more expert and intensive instruction – they are not necessarily learning disabled.
  - Children who are not meeting grade level expectations need instruction that meets them where they are - not where we think they should be.

IDEIA Reauthorization

- The 2004 reauthorization of the Individuals with Disabilities Education Improvement Act (IDEIA) implicitly calls for:
  - Rethinking the causes of learning difficulty
  - Rethinking our responses to such difficulties
  - Rethinking what it means to be a disabled learner

- The process of LD determination has been controversial from the beginning
  - It has always focused on unexpectedly low achievement.
  - The new approach differs primarily in how expectations are set.
  - Age/grade level norms are the standard in RTI.

Definition: Responsiveness to Intervention (RTI)

- RTI is an approach to preventing learning difficulties and to determining whether students should be classified as learning disabled. It involves:
  - Identifying students who are not meeting or are at risk of not meeting grade level expectations in a particular academic area.
  - Providing intervention that is intensified in a tiered fashion.
  - Assessing students’ gains to determine whether they are progressing rapidly enough to meet grade level expectations.
  - Adjusting the qualities and intensity of instruction based on student performance.

How did RTI Emerge as a New Approach to LD Classification?

- Many studies indicated that interventions for young struggling readers helped many catch up with their peers. For example:
  - Brown, Denton, Kelly, Outhred, & McNaught, 1999
  - Gomez-Bellenge, Rogers, & Fullerton, 2003
  - O’Connor, 2000
  - Torgesen et al., 2001
  - Vellutino et al., 1996

- Over two decades of research undermined the use of the IQ-achievement discrepancy to define learning disabilities. Examples include studies showing that:
  - IQ-achievement discrepant poor readers were found to be no different than non-discrepant poor readers on measures of reading-related cognitive abilities (Fletcher et al., 1994; Stanovich and Siegel, 1994).
  - Some average and good readers demonstrate a discrepancy between IQ and achievement
  - The magnitude of the discrepancy between IQ and achievement did not predict response to intensive intervention (Vellutino, Scanlon & Lyon, 2000)
How did RTI Emerge as a New Approach to LD Classification?

- There were rising concerns about the numbers of children who were being identified as learning disabled.
  - In some schools 20% or more of the children were being identified as learning disabled.
  - Disproportionate numbers of culturally and linguistically diverse students are/were identified as learning disabled (Donovan & Cross, 2002).

Other problems with the IQ-Achievement discrepancy approach

- Did not consider pre-school and out of school experience and instruction
- Provided no direction for instruction
- Gave little or no consideration to the quality and/or characteristics of in-school instruction
- Resulted in low expectations for achievement
  - The "wait to fail" model

Basic Premises of Response to Intervention

- RTI is, primarily, a general education initiative
  - Responding to the needs of struggling learners begins at the classroom level
- Prevention of long term difficulties is the goal
- Some children will need a great deal of support to meet grade level expectations
- Most RTI approaches involve a "tiered" approach – with instructional interventions being gradually intensified in accord with student response.

What is the Evidence for a Tiered RTI Approach?

- To date,
  - Several studies have demonstrated that one-to-one and small group interventions for at risk and struggling readers in the primary grades are effective in reducing the incidence of reading difficulties.
  - There are few studies that explicitly test the efficacy of a "staged" tiered model as compared to a model in which more intensive forms of intervention are implemented from the beginning.
  - There is very little research demonstrating the effectiveness of reading interventions for older struggling readers.
Potential of RTI:  
Represents new hope for struggling learners…

Æ Encourages early and, if need be, intensive intervention
Æ Eliminates the “wait to fail” effect of the IQ – Achievement discrepancy approach to learning disability designation
Æ Should reduce the number of children who are inappropriately identified as learning disabled

Areas of concern in RTI implementation

Æ Practices not supported by research
  Æ Frequent progress monitoring of isolated skills
  Æ Implementation of distinct programs at different tiers of instruction
    Æ Likely to confuse the children
  Æ Emphasis on fidelity of implementation
    Æ May result in lack of teacher responsiveness and failure to match instruction to the students’ current abilities.
  Æ Emphasis on isolated skills
    Æ May limit the amount of reading children do.
    Æ May confuse children about the purposes of reading
  Æ Emphasis on fluency
    Æ May lead some children to be ‘word callers’ – inattentive to the meaning-making purpose of reading.

What teachers do matters!

Æ Instructional decision making should be guided by:
  Æ Teacher knowledge and skills
  Æ Student knowledge and skills
  Æ Curriculum materials

Research on the impact of classroom instruction on outcomes for children who are at risk for early reading difficulties.

Scanlon, Gelzheiser, Vellutino, Schatschneider, & Sweeney, 2008

Æ Compared characteristics of kindergarten classroom teachers classified as more vs. less effective based on growth in literacy skills demonstrated by students identified as being at risk for reading difficulties at kindergarten entry.
Æ Compared the effectiveness of kindergarten classroom teachers before and after involvement in professional development based on the Interactive Strategies Approach (ISA).

Comparison of more vs. less effective classroom teachers at the kindergarten level – extreme groups design

Note: Effectiveness was determined by changes in the number of children who qualified as At-Risk based on the Phonological Awareness Literacy Screening (PALS) administered at the beginning and end of the school year.

Effect Sizes Comparing More Effective and Less Effective Teachers on Responses to Questionnaire Items Assessing Theoretical Constructs Thought to Effect Literacy Development

Note: Small effect sizes indicate that teachers in the two groups responded similarly. Large effect sizes indicate that teachers in the more effective group indicated greater support for the belief or greater use of the practice.
Changes in the Percentage of Children Scoring Below Benchmark from Beginning to End of Year Before Professional Development (Baseline), during PD (Implementation), and after PD (Maintenance)

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Baseline</th>
<th>Implementation</th>
<th>Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Scoring Below Benchmark</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>May</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comparison of the effectiveness of classroom teachers before and after professional development based on the Interactive Strategies Approach.

The two first grade intervention programs differed in terms of the amount of time that was devoted to the components of the daily lesson

<table>
<thead>
<tr>
<th>Component</th>
<th>Phonological Skills Emphasis</th>
<th>Text Emphasis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading and re-reading</td>
<td>5 minutes</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Phonological skills</td>
<td>15 minutes</td>
<td>5 minutes</td>
</tr>
<tr>
<td>High Frequency Words</td>
<td>5 minutes</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Writing</td>
<td>5 minutes</td>
<td>5 minutes</td>
</tr>
</tbody>
</table>

Beginning of First Grade - the 6 Groups Were Equal and Substantially Below Grade-Level Expectations on Measures of Reading Skill

Research on the impact of small group and one-to-one instruction for struggling literacy learners

Scanlon, Vellutino, Small, Fountas & Sweeney (2005)

- Identified children who were at risk for reading difficulties at kindergarten entry.
- Randomly assigned children to small group intervention or to a control/comparison group in kindergarten.
- Identified children who remained at risk at the beginning of first grade.
- Randomly assigned at risk first graders to one of two intervention conditions or to a comparison group.
  - Text Emphasis (TE) – half of each lesson devoted to supported reading of appropriately challenging text.
  - Phonological Skills Emphasis (PSE) – half of each lesson devoted to developing phonological skills.
  - Comparison (Comp) – School provided instruction

Note: Tier 2 (kindergarten intervention) effects were still evident at the end of first grade. Those who had intervention in kindergarten were less likely to demonstrate severe reading problems.

Note: Tier 2 Effects were still evident in first grade. Those who had intervention in kindergarten were more likely to be reading above the 50th percentile – even though they showed limited growth in kindergarten.
In general the Scanlon et al. (2005) study demonstrated:

- Small group intervention in kindergarten can:
  - Substantially reduce the number of children who qualify for intervention in subsequent grades.
  - Substantially reduce the number of children who demonstrate severe reading difficulties in subsequent grades.

- One-to-one intervention in first grade can:
  - Substantially reduce the number of children who demonstrate severe reading difficulties.
  - Substantially increase the number of children who achieve at or above grade level expectations.

Intervention teachers in the Scanlon et al. studies did not use packaged/published programs –

- They taught with the purpose of supporting and enhancing the children’s learning relative to their classroom program.

- Instruction was determined by
  - An overarching set of goals for early literacy development.
  - The characteristics of the classroom language arts program.
  - The children’s status relative to the goals and program.

- The major purpose of professional development for both classroom and intervention teachers in the Scanlon et al. studies was to enhance teacher knowledge of literacy development so teachers could effectively
  - Identify what children were ready to learn, and
  - Teach them what they were ready to learn.