RESPONSE TO INTERVENTION

AN INTRODUCTION TO RESPONSE TO INTERVENTION (RTI)

Teachers and parents expect children to learn when they attend school. But what does a teacher do when a child in their classroom is falling behind in learning to read or other core subject areas? What does a teacher do when half of his or her class is having a hard time keeping up? Traditionally, the children who have struggled the most in the classroom have been referred for an evaluation to determine if they need special education services. This practice usually provided needed support for a portion of the struggling learners, but often left many other struggling students behind.

IS THIS CHILD LEARNING?

Some new federal laws have directed schools to focus more on helping all children learn by addressing problems earlier, before the child is so far behind that a referral to special education services is warranted. These laws include the No Child Left Behind Act of 2001 and the Individuals with Disabilities Education Improvement Act (IDEA) of 2004. Both laws underscore the importance of providing high quality, scientifically based instruction and interventions, and hold schools accountable for the progress of all students in terms of meeting grade level standards. (Klotz & Canter, 2007)

Some educators, parents, and administrators see Response to Intervention (RTI) as the transformative initiative that allows teachers to drive achievement for all students, and ideally, delivering the desired results of these new laws, thus enabling teachers to answer an important question for every child in their class—is this child learning?

RTI is an improvement framework designed for all students. The National Center on Response to Intervention provides a good definition of this framework:

Response to Intervention integrates assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavior problems. With RTI, schools identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student’s responsiveness, and identify students with learning disabilities.
This definition provides a good high-level view of what makes up the RTI framework. Implementing the RTI process in a school or district takes time—planning, commitment, and resources by the school or district’s leadership. A lot can be learned from the districts that have been practicing the RTI framework for many years, educational leaders who have published numerous research papers on key elements of the practice, and national organizations who work diligently to help make RTI not just another new thing in their district but instead a framework that will help all children learn.

A number of leading national organizations and coalition groups, including the National Research Center on Learning Disabilities and the 14 organizations forming the 2004 Learning Disabilities Roundtable coalition, have outlined the core features of an RTI process as follows.

- High-quality, research-based instruction and behavioral support in general education.
- Universal (school-wide or district-wide) screening of academics and behavior in order to determine which students need closer monitoring or additional interventions.
- Multiple tiers of increasingly intense scientific, research-based interventions that are matched to student need.
- Use of a collaborative approach by school staff for development, implementation, and monitoring of the intervention process.
- Continuous monitoring of student progress during the interventions, using objective information to determine if students are meeting goals.
- Follow-up measures providing information that the intervention was implemented as intended and with appropriate consistency.

(http://www.nasponline.org/advocacy/2004LDRoundtableRecsTransmittal.pdf)

Developing a system-wide RTI process provides an opportunity to the state or district to systematically evaluate instructional and assessment practices for all of their children.

- Are they using a simple, universal screening tool to quickly identify which students are progressing and which students are falling behind?
- Are they using universal screening tools to measure the efficacy of instruction across Core and Tiered instruction? Enriched instruction?
- Are they able to easily and efficiently monitor every child’s progress?
- Do the curriculum materials provide multiple ways to present information?
- Do they respond to culturally diverse and English Language Learners?
- Do classroom teachers know how to assess student performance and regularly monitor progress?
- Are they supporting their teachers’ efforts in the classroom with professional development offerings that are designed to improve student outcomes for all students, especially diverse student populations?

(Ralabate, P., 2009)
If the district’s or state’s answers to any of these important questions are “no,” consideration of a strategic RTI process for their schools is warranted.

While the practice of RTI is still evolving at the school, district, and state level, it’s important to better understand current practices and concerns. The following sections of this paper will provide a more complete overview of RTI—its history, laws, opportunities, and key issues to consider as the practice of RTI grows across the United States.

**RTI**

**Improved Learning for All Students**

Although RTI has its roots in special education, it is an integrated general education approach that includes special education, English Language learners (ELL), gifted and talented, and Title I programs. It is first and foremost an initiative to be used with all students and in the general education classroom. (Howell, Patton, & Deoitte, 2008)

In a recent survey of all 50 states, results indicated that at least 46 states have some form of RTI in practice or in development at the school building, district, or state level. (Hoover, Baca, Wexler-Love, & Saenz, 2008) While RTI practices have been utilized by schools since the 1980s, its growing use in recent years has been driven in large part by both the tenets of NCLB (requiring adequate yearly progress of all students) as well as the federal government’s support of using IDEA funding for strategies to identify learning problems early in a student’s school life. Prior to NCLB, students with special needs and English Language Learners (ELL) were treated often as exceptions to both traditional learning methodology as well as assessment expectations. For example, special needs students were sometimes taught “life skills” and were assessed on lower cognitive demands. Gifted and talented students were sometimes identified as standing out from the general education population via single normative measures. ELL students were “taught content” in their native language while they learned English as if learning was culture- and context-free.

One of the most positive aspects of NCLB and the IDEA is that the focus of learning and high attainment is now for all students. A key purpose of both of these laws is to produce better outcomes for all children and to apply procedures with strong scientific bases to a wide range of decisions, including determination of eligibility for special education in the category of specific learning disabilities. (Batsche, Elliot, Graden, Grimes, Kovaleski, Prasse, Rescley, Schrag, & Tilly, 2008)
But with growing diversity, accountability pressures, and reduced classroom resources, even the most devoted classroom teacher struggles on her or his own to evaluate each child’s needs and apply the right resources in a timely manner to each student. According to Jack O’Connell, California Superintendent of Public Instruction, “Too often, the struggles of the African American student, the English learner, and the learning disabled student were hidden by overall school achievement gains. RTI offers educators no- or low-cost strategies, especially needed in these dire economic times, to improve education for these and all students.”

(http://pubs.cde.ca.gov/tcsii/ch2/responsetointerven.aspx, California Dept of Education web site, 9/20/09)

HOW DOES RTI CHANGE THINGS?

RTI changes how teachers decide what instruction should be delivered next to their students. Teachers receive valuable information from the student data about each child in his or her class—based on his or her student’s specific results, the teacher selects what instruction will work best for each group of students. Rather than looking at labels, the emphasis shifts to what can be done on a day-to-day basis to ensure children’s academic growth. When it’s done well, it keeps track of all students. Kids who are falling behind can get some help early on.

“Instead of asking ‘What’s wrong with this student?’ we ask ‘How can we support the learning of all students, no matter what barriers may exist for them?’ This is why I feel RTI is transformative when implemented effectively.”

Dr. Patti Ralabate, NEA Senior Policy Analyst on Special and Gifted Education

RTI
An All-Encompassing Approach to Education

RTI strategies often rely on data to assess how each student is progressing so that students who aren’t making progress are given access to small group instruction and additional assessments targeted to assess their specific learning needs. If the child catches up, they no longer need additional support. If the child continues to require additional support, they may begin to receive more intensive instruction and comprehensive assessment.
A Brief History

The Individuals with Disabilities Education Improvement Act (IDEA) was reauthorized by Congress in 2004 and the new provision reflected a fundamental paradigm shift that potentially closes the gap between instruction and assessment. The 2004 language allowed a new way for educators to identify struggling students. Before 2004, the law required educators to use a discrepancy model.

The Discrepancy Model

Before the new law in 2004, federal law required evidence of a severe discrepancy between intellectual ability and achievement in at least one important domain of academic functioning, usually reading. The states developed discrepancy formulas that included the use of I.Q. and academic achievement tests. Students demonstrating severe discrepancies between intelligence and reading performance (the most common deficit) usually qualified for special education services. Some believed that discrepancy formulas essentially dictated a “wait to fail” process because it usually took time, often between 1–3 years, for students to demonstrate severe discrepancies. These discrepancies were not only a result of a disability, but also the result of a lack of strategic intervention. (Howell, Patton, Deoitte, 2008) The new law allows the use of the discrepancy model as well as a RTI framework, and a processing strengths and weaknesses model. States can now utilize the method or methods that best serve their particular students.

IDEA 2004

The reauthorized Individuals with Disabilities Education Act (IDEA) was signed into law on Dec. 3, 2004, by President George W. Bush. The final regulations were published on Aug. 14, 2006.

The overview of IDEA 2004 Regulations below was prepared by the Office of Special Education and Rehabilitative Services (OSERS) in the U.S. Department of Education to bring together the regulatory requirements related to those topics to support constituents in preparing to implement the new regulations.

**IDEA 2004 Regulations: New procedures for identifying children with specific learning disabilities.**

A State must adopt, consistent with 34 CFR 300.309, criteria for determining whether a child has a specific learning disability as defined in 34 CFR 300.8(c)(10).

In addition, the criteria adopted by the state:

(A) Must not require the use of a severe discrepancy between intellectual ability and achievement for determining whether a child has a specific learning disability, as defined in 34 CFR 300.8(c)(10);

(B) Must permit the use of a process based on the child’s response to scientific, research-based intervention; and

(C) May permit the use of other alternative research-based procedures for determining whether a child has a specific learning disability, as defined in 34 CFR 300.8(c)(10).
The 2004 IDEA also allows states to take up to 15% of the money they receive from the federal government for special education and use it for what is deemed “coordinated, comprehensive early-intervening services.” Early intervening services can be directed at students of all ages, though the particular focus has been on pupils from kindergarten to grade 3. The rationale for RTI originates in advances in the scientific basis for intervention and improved measurement technology that is useful for guiding instruction and goal setting and problem-solving methods that guide interventions and important educational decisions, including eligibility for special programs. (Batsche, 2008)

While RTI is not mandated at a federal level, the federal education law does require that before any student is placed in special education, the school must ensure that his or her learning problem is not linked to inadequate instruction. “The data crunching element of RTI is a way to do that,” said George M. Batsche, a professor of school psychology at the University of South Florida in Tampa and the co-director of its Institute for School Reform. “The law says before we ever think about special ed, we have to look at general ed,” he said. “Support services can’t fix the basic service.” The promise is that general education teachers will be able to accurately identify the problems that students are having, and nip those in the bud before they lead to entrenched difficulties, or referral to special education. (Samuels, 2008)

Defining Special Education

Although special education was once thought of as a “place,” IDEA 2004 clearly states that special education is “a service for such children rather than a place where such children are sent.” (20 U.S.C. 1400(c)(5)(C)). (Hale, 2008) The federal definition of special education provides further insight to the role of RTI in helping identify struggling learners. Federal special education mandates since P.L. 94-142 have all defined special education as “Individualized instruction, at no cost to the parents or guardians, to meet the unique needs of a child with a disability.” Assessing student needs and designing instructional modifications to meet those needs is at the very core of special education. Special education law has always included the provision that prior to consideration for special education it must be demonstrated that “the child was provided with appropriate instruction in regular education settings” (300.309, Individuals with Disabilities Education Act (IDEA), 2004). Until the broader use of RTI in states, this provision was often overlooked in many classrooms.
THE ROLE OF RTI
in Specific Learning Disability Identification

Specific Learning Disabilities (SLD) is often difficult to define and measure. Traditionally, SLD has been defined through exclusions—accepting or eliminating factors for low-achievement and then presuming remaining difficulties must be a SLD. For the past 30 years, the prominent idea has been unexpected underachievement, or the discrepancy between the child’s IQ and achievement.

While there are differing views on the relationship between the RTI system and the best way to identify a student’s specific learning disabilities, there is general agreement that RTI, per se, does not diagnose specific learning disabilities. Many see RTI services and a comprehensive student evaluation as complementary steps in a process, with RTI serving as the first step on a continuum of evaluative services that may extend to an individual student’s comprehensive evaluation. Many supporters of the RTI service model believe that with RTI, there is a conceptual shift from the notion of unexpected underachievement to the idea that a specific learning disability is a persistent inability to master an academic skill. With RTI’s base of high-quality instruction and ongoing assessment, it’s much easier to assist those children who are not responding as hoped. Ideally, how well a child responds to instruction is a part of the evaluation for special education services. (Deschler, Fletcher, & Wagner, 2008) Once a child is identified as low achieving, and the team has demonstrated that the low performance is not due to limited English proficiency, problems at home or other factors, there is a need to move beyond the skill-based measure.

At this point, it is important that the team look at the child in a broader sense—exploring the child’s cultural influences, cognitive and information-processing capabilities, physical and emotional health. The child’s teaching team may recommend additional evaluation steps, including both cognitive measures and psychological processes evaluation. Such a comprehensive evaluation process provides important information about the student required to make sound instructional decisions. It’s important to remember the primary purpose of the Individuals with Disabilities Education Act (IDEA 2004), which is “to ensure that all children with disabilities have available to them a free appropriate public education . . . designed to meet their unique needs and prepare them for further education, employment, and independent living” (20 USC 1400(d)(1)(A)) and “economic self-sufficiency.” (20 USC 1400(c)(1))

Objective cognitive and neuropsychological testing offer additional ways to reveal these unique individual characteristics and help design specialized instruction so all children can succeed, including those with SLD. In addition, we know that not every child with a reading or math SLD has the same type of problem, or responds to the same type of intervention. Researchers
have discovered different types of brain-based deficits that cause different types of SLD (called subtypes) within particular academic areas (reading, math, writing).

Identifying the “deficit in the basic psychological processes” can help pinpoint the cause of the child’s academic problem. This information can also help us develop appropriate interventions to help that child. (Hale, 2008; Kaplan, 1998)

There are several different research-based models which are consistent with the third method of SLD identification under IDEA 2004. (Hale & Fiorello, 2004; Naglieri, 1999; Flanagan, Ortiz, & Alfonso, 2007, & Berninger, 2007) These models are based on an analysis of patterns of cognitive strengths and weaknesses and are designed to identify the deficit in the basic psychological process responsible for the suspected learning disability. Each of these models involves an:

- Analysis of the relationship between deficient cognitive processes and difficulties with academic skill acquisition and demonstration as well as the
- Identification of cognitive processing strengths not associated with the area of disability.

AN OVERVIEW of the RTI Service Delivery Model

Response to Intervention refers to an integrated, school-wide method of service delivery across the general and special-needs population that promotes successful school outcomes for every student; in essence, RTI is a two-fold system of reliable high-quality instruction and frequent assessment of student progress. (Mellard, Byrd, Johnson, Tollefson, & Boesche, 2004) RTI involves systematically evaluating the cause–effect relationship between an academic intervention and a student’s response to that intervention. (Brown-Chidsey & Steege, 2005) RTI practices are rooted in well-documented special education practices and early reading intervention research. (Graner, Faggella-Luby, & Fritschmann, 2005)

ESSENTIAL COMPONENTS OF RTI

Successful implementation of RTI requires three essential components:

I. Multiple tiers of intervention
II. Data-based decision making
III. An integrated data collection/assessment system to inform decisions at each tier of service delivery
I. Multiple tiers of intervention

RTI uses a multi-tier model of educational resource delivery. Each tier represents an increasing intensity of services matched to the level of current student need. Student intervention outcomes drive decision making at every tier of the model.

In many systems, RTI has three levels of intensity, with instruction provided based on students’ individual needs. It is important to note that some systems implement an RTI process with more than 3 levels. However, a commonality is that embedded in each tier is a set of unique support structures or activities that help teachers implement research-based curriculum and instructional practices designed to improve student achievement. Ongoing assessment of students’ proficiency on critical academic skills is an essential part of the system.

Multi-tier models (e.g., Donovan & Cross, 2002; Sugai, Horner, & Gresham, 2002) provide the resource deployment strategies for efficient school-wide or system-wide implementation of RTI practices.

The RTI system is usually represented graphically by a pyramid showing three levels or tiers of service levels.
An Overview of Each Tier:

**Tier One: Universal Screening & Benchmarking of All Students**

The school uses universal screenings in key academic areas to identify a student’s level of proficiency (usually fall, winter, and spring). The resulting data needs to be organized in formats that allow for review of both group and individual performance.

The resulting system-wide data answers two important questions:

- Are we using the right curriculum and instructional processes in our schools?
- What students need further intervention?

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**TEACHER: MRS. PIERCE STUDENT: TYLER ANGEL**

Benchmark Scores for 2009-2010 School Year

Washington School District - Jefferson Elementary School / Tyler Angel (Grade 2)
Compared To: Jefferson Elementary School / Reading - Curriculum Based Measurement

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![Diagram showing benchmark scores for 2009-2010 School Year.](Diagram.png)
Sample Tier One Report: Is Tyler At Risk?

The above report tells the teacher how Tyler Angel (represented by a white dot) compares to other 2nd graders in the school (yellow box) during the school year. His progress is measured three times—Fall, Winter, and Spring—with a Benchmark Assessment. Tyler is not at risk because he is performing above the benchmark target and performing well compared to his classmates.

Tier Two: Identifying Specific Strengths and Weaknesses and Progress Monitoring

When students are identified as needing further intervention, they will progress to Tier Two strategies. Starting in Tier Two, those students not progressing in basic skills must have even more discrete and sensitive measures provided more frequently. (Howell, Patton, Deoitte, 2008) Most educational researchers agree that curriculum-based measurement (CBM) is helpful as individual, classroom, and district assessments. (Deno, Espin, & Fuchs, 2002) CBM is dynamic in that the measures are designed to be sensitive to the short-term effects (i.e., 4–6 weeks) of instructional interventions; they are designed to assess change. Because they are sensitive to improvement, they make excellent tools for progress monitoring, whether it is required by an IEP annual goal, a short-term goal as part of RTI, or as will be shown, as part of progress monitoring of all general education students. Because the tests are short (i.e., 1–4 minutes) in addition to being sensitive to improvement, they can be administered frequently, even one to two times per week, to allow learning to be assessed on a routine basis without a significant loss of instructional time or personnel resources. (Shinn, 2002) Tier Two allows teachers to deliver small group interventions and regular monitoring to students who are not progressing as expected through Tier One progress monitoring. Consequently, students in Tier Two are receiving slightly more intensive intervention and progress monitoring than those in Tier One.

<table>
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<th>Outcome Measure</th>
<th>Year</th>
<th>Grade</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
<th>Level of Skill</th>
<th>Instructional Recommendation</th>
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<td>Reading - Curriculum Based Measurement (R-CBM)</td>
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<td>2</td>
<td>64.0</td>
<td>87.0</td>
<td>105.0</td>
<td>Average</td>
<td>Continue Current Program (Jefferson Elementary School Spring Percentiles)</td>
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Tyler Angel improved from 64 Words Read Correct (WRC) from Grade 2 Passages at the Fall Benchmark to 105 Words Read Correct (WRC) at the Spring Benchmark. The rate of improvement (ROI) from the Fall Benchmark is 1.1 WRC per week. Currently, Tyler Angel’s score is Average compared to Jefferson Elementary School Spring Percentiles. This was a score at the 67 percentile compared to other students in the Jefferson Elementary School Spring Percentiles.
**TEACHER: MRS. PIERCE STUDENT: CHLOE BERG**

**Benchmark Scores for 2009-2010 School Year**

Washington School District - Jefferson Elementary School / Chloe Berg (Grade 2)
Compared To: Jefferson Elementary School / Reading - Curriculum Based Measurement

**Benchmark Comparison:** Jefferson Elementary School

**Strategic Monitor Comparison:** Jefferson Elementary School

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**Outcome Measure** | **Year** | **Grade** | **Sep** | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Level of Skill** | **Instructional Recommendation**
--- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---
Reading - Curriculum Based Measurement (R-CBM) | 2009-2010 | 2 | 34.0 | 39.0 | 46.0 | 59.0 | 65.0 | 71.0 | 82.0 | 87.0 | 99.0 | Average | Continue Current Program (Jefferson Elementary School Spring Percentiles)

Chloe Berg improved from 34 Words Read Correct (WRC) from Grade 2 Passages at the Fall Benchmark to 99 Words Read Correct (WRC) at the Spring Benchmark. The rate of improvement (ROI) from the Fall Benchmark is 1.8 WRC per week. Currently, Chloe Berg’s score is Average compared to Jefferson Elementary School Spring Percentiles. This was a score at the 56 percentile compared to other students in the Jefferson Elementary School Spring Percentiles.

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**Sample Tier Two Report: Is Chloe Making Progress Over the School Year?**

Chloe Berg’s teacher has decided that Chloe may be at risk so she is increasing the number of assessments that Chloe will receive to one per month, often called Strategic Monitoring, to regularly monitor if the new interventions are helping Chloe improve her performance. Chloe’s final May assessment indicates that her performance has moved into the average range.
**Tier Three: Diagnostic Testing and Intensive Progress Monitoring**

In Tier Three, a smaller group of students that continues to struggle, despite the scientifically based instruction provided in Tier Two, is served. Tier Three continues to utilize CBMs as a part of an intensive monitoring and intervention process, working towards specific goals for at-risk students. These services can include Title I, district remediation programs or special education programs. Individual assessments may also be given, including achievement, cognitive abilities, and processing skills assessments to determine individual plans for each student.

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**PROGRESSIVE MONITORING IMPROVEMENT REPORT FOR MICHAEL MARTIN from 09/01/2009 to 05/14/2010**

Michael Martin (Grade 5) / Grade 5: Reading - Standard Progress Monitor Passages

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**Goal Statement**

In **36.4** weeks, Michael Martin will achieve **115** Words Read Correct with **5** Errors from grade 5 Reading - Standard Progress Monitor Passages. The rate of improvement should be **1.86** Words Read Correct per week. The current average rate of improvement is **3.73** Words Read Correct per week.

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Sample Tier Three Report: Intensive Interventions and Assessments for At-Risk Student Michael Martin

Michael Martin’s teacher has decided that the best plan for Michael will include frequent assessments towards goals using goal-level assessments. The resulting data will tell the teacher and Michael if the interventions are having the desired impact on Michael’s learning. If the student doesn’t progress as desired, the intervention can be changed. Michael’s teacher translates his annual IEP goals into expected rates of progress (aim lines) allowing her to monitor his progress (trend lines) toward his goals. These reports provide a document that can be used for periodic and annual reviews of Michael’s progress.

II. Data-based decisions based on student response to intervention

Decisions in RTI practice are based on professional judgment informed directly by student performance data. This principle requires both that ongoing data collection systems are in place and that resulting data are used to make informed instructional decisions. The resulting data needs to be easily accessible, understandable, relevant, current, and accurate, presented in formats and reports that can be understood by teachers, administrators, and parents.

III. An integrated data/assessment system to inform decisions at each tier of service delivery

Assessing the student’s performance at each tier of the RTI program is central to improving the student’s progress. There are systems available today to support RTI programs in the classroom. The advantage of these systems is their extensive support to practitioners in assessing progress, displaying data, and applying decision rules about improving instruction, changing goals, or extending/discontinuing specialized services. (Batsche 2008) The National Center for Response to Intervention has launched an annual evaluation of Screening and Progress Monitoring Tools. Their evaluation can be found at www.rti4success.org.

KEY ELEMENTS Needed to Create a Successful RTI Service Delivery System

Driving change in any organization is never easy. A successful RTI effort requires change in curriculum, instruction, assessment, and specialty programs and involves everyone in a student’s learning process—principals, instructional aides, parents, students, administrators, and the central office staff. The following five elements have been found to be critical in the successful implementation of many RTI programs.

1. **Leadership** at the state, district, and building level is crucial to the fidelity of RTI implementation. RTI is a significant change that affects the entire educational system. Initially, district-level administrators must understand and embrace the essential components
and supports needed to effectively implement RTI. Superintendents, curriculum directors, principals, special education administrators, etc. must guide the implementation of RTI by developing leadership roles and expectations for district and building administrators. Because of the broad impact of RTI and its impact on the entire educational system, significant systemic changes will need to occur to execute implementation with fidelity. These changes must be championed and monitored by leaders at all levels. (http://www.cde.state.co.us/RtI/Leadership.htm 10/8/09)

2. FIDELITY OF IMPLEMENTATION—both in the delivery of curriculum and in the RTI monitoring activities—is critical to the delivery of a successful RTI program. Fidelity here means that every teacher has been trained to deliver the instruction and the RTI processes as they were designed to be delivered. This level of consistency is only possible with extensive organizational training as well as the development of RTI program manuals and the development of formal best practices. Without these key pieces, the validity of RTI is greatly reduced.

In an RTI model, fidelity is important at both the school level (implementation of the process) and the teacher level (implementation of instruction and progress monitoring).

When school staffs administer a standardized assessment, the assumption is that the test is administered according to the directions in the test’s accompanying manual and that the examiner is qualified. Implementation of RTI must meet the same standard.

Direct and frequent assessment of an intervention for fidelity is considered to be best practice. When researching the effectiveness of an intervention, it is critical to be able to report the fidelity with which it was implemented so that any resulting gains in student achievement can be accurately attributed to the intervention under scrutiny and so that the intervention may be replicated. When implementing an intervention, it is critical to know whether it is being implemented as planned, so that if the intervention is initially unsuccessful, schools can take appropriate measures to remedy the deficiency rather than abandoning the entire reform. (http://www.rti4success.org/index.php?option=com_content&task=view&id=733&Itemid=2, 10/08/09)

3. ENSURING PARENTAL INVOLVEMENT IN RTI SERVICE DELIVERY SYSTEMS

The best implementations of a RTI service delivery system include parental communication and involvement in their implementation manual. Ideally, each district will:

- Include parents in all levels of decision making—advisory, district, and school-level planning
- Provide guidance on parent participation and decisions for their children
- Develop materials and resources for parents

(Jimerson, Burns, VanDerHeyden, 2007)

The best RTI schools take specific steps to create ongoing dialogues with parents and provide parents with mechanisms that they can use to engage with schools on an ongoing basis. (Deshler, Fletcher, & Wagner, 2008)
4. AN ASSESSMENT SYSTEM THAT HAS BEEN ENDORSED BY THE CENTRAL ADMINISTRATION
that supports curriculum-based measurement with user-friendly data management. This
system is aligned with district assessments used to measure benchmarks and high-stakes
student outcomes. Central administration also supports building-level skill development in
data analysis and outcome application. (Howell, Patton, & Deiotte, 2008)

5. ONGOING PROFESSIONAL DEVELOPMENT FOR TEACHERS, PRINCIPALS, ADMINISTRATORS,
AND SCHOOL BOARDS. A considerable amount of professional development needs to be pro-
vided in the beginning stages of establishing RTI systems for capacity building. Continuing
training and technical assistance for all staff is critical to any type of systems change and
movement toward improvement because accountability for positive outcomes for all students
is a shared responsibility of all personnel.

To develop consistency across programs, it is beneficial if state departments of education, as
well as local educational agencies or districts, offer three or more opportunities for professional
development throughout the year. It is important that continuing training opportunities be
offered to parents, as well as educators, to help maximize the achievement of all students,
including students with disabilities.

(http://www.nrclid.org/rti_practices/collaboration.html#, 10/08/09)

KEY AREAS OF RESEARCH

There is a lot of research and analysis available on RTI—its history, its use, and practice today.
Much of the research so far has focused on elementary school implementation and the first
two tiers of service delivery. The topics below are ones that many believe are critical to the
further development and success of RTI nationally.

Gathering of district RTI implementation data, state by state, to develop
a better understanding of current practice on a national level.

Information about RTI implementation within individual states remains incomplete, which
must be addressed to best understand RTI on a national level. Information dissemination and
data collection are critical to ensure implementation fidelity to best understand a national RTI
perspective. (Hoover, 2008)

Use and effects of using culturally Responsive instruction

In the report, National Implementation of Response to Intervention (RTI):
Research Summary (Hoover, Baca, Wexler-Love, & Saenz, 2008), the authors discovered that
“among all states, culturally responsive instruction was reported as the least emphasized
objective in statewide RTI training efforts. This finding suggests that, although the school population is becoming increasingly more diverse, with a minority population estimated at one-third of the total United States’ population (U.S. Census, 2006), culturally responsive instruction is not yet a priority in statewide RTI efforts. Many have argued that culturally responsive instruction is a necessary component in providing culturally and linguistically diverse students with equal educational opportunities (Gay, 2002; Hoover, 2009; Villegas & Lucas, 2002; Wlodkowski & Ginsberg, 1995). Although less emphasized in state-wide trainings, several respondents requested assistance to incorporate culturally responsive RTI in their trainings.

**RTI in middle and high school**

While RTI is in practice in almost all 50 states, most of the implementations are still focused on the elementary grades. Some districts are using this service model for middle and high school, although there is very little research or best practices available to guide them. Focused research is needed to develop the model further for middle school and high school utilization.

**RTI & LD diagnosis: Role and policy implications of RTI in the identification of a learning disability on a national as well as state level**

What does Tier 3 look like? Some are concerned that a number of RTI implementations fundamentally alter and erode the concept of Learning Disability as a disability residing within the child by the elimination of an evaluation of cognitive abilities and psychological processes, reverting to a one size fit mentality where it is naively assumed that all children fail for the same reason. (Reynolds, 2009).

**WHAT’S NEXT?**

As suggested above, it is important that further research continue on the RTI framework, but the need for additional research, data gathering, and process development doesn’t mean that schools or districts should stop using the RTI framework. In its many district and state implementations, RTI shows promise in helping every child learn. Many educators and parents believe that RTI is the general education strategy that will actually help close the achievement gap.

“Response to Intervention (RTI) offers the best opportunity of the past three decades to ensure that every child, no matter how gifted or challenged, will be equally valued in an education system where the progress of every child is monitored and individualized interventions with appropriate levels of intensity are provided to students as needed. Far too much attention has been focused on the different approaches to RTI by education leaders, researchers, and implementers. It’s time to look to what is common in our work and unite together so this opportunity is not wasted.”

*Bill East, Executive Director*

*National Association of State Directors of Special Education (NASDSE)*
GLOSSARY OF TERMS

This Response to Intervention Glossary of Terms presents definitions for commonly used terms related to response to intervention.

A

Accommodation
Accommodations are changes in instruction that enable children to demonstrate their abilities in the classroom or assessment/testing setting. Accommodations are designed to provide equity, not advantage, for children with disabilities.

Accommodations might include assistive technology as well as alterations to presentation, response, scheduling, or settings. When used appropriately, they reduce or even eliminate the effects of a child’s disability, but do not reduce or lower the standards or expectations for content. Accommodations that are appropriate for assessments do not invalidate assessment results.

Aim Line
The aim line is also referred to as the goal line. It is the line on a graph that connects the intersection of the student’s initial performance level and date of that initial performance level to the intersection of the student’s year-end goal and the date of that year-end goal. It represents the expected rate of student progress over time.

AYP – Adequate Yearly Progress
AYP is a statewide accountability system mandated by the Elementary and Secondary Education Act. It requires each state to ensure that all schools and districts make Adequate Yearly Progress as defined by states and as approved by the US Department of Education.

C

Coordinated Early Intervening Services
Coordinated early intervening services are the preventative components of the Elementary and Secondary Education Act and the Individuals with Disabilities Education Act of 2004. Early intervening services are implemented to benefit students who manifest risk for poor learning outcomes but have not been identified as needing special education or related services.

Core Curriculum
The core curriculum is the course of study deemed critical and usually made mandatory for all students of a school or school system. Core curricula are often instituted at the elementary and secondary levels by local school boards,
Departments of Education, or other administrative agencies charged with overseeing education. As mandated by No Child Left Behind, core curricula must represent scientifically based practice.

**Criterion-Referenced Assessment**
Criterion-referenced assessment measures what a student understands, knows, or can accomplish in relation to a specific performance objective. It is typically used to identify a student’s specific strengths and weaknesses in relation to an age or grade-level standard. It does not compare students to other students.

**Curriculum-Based Assessment (CBA)**
CBA is a broader term than Curriculum-Based Measurement (CBM), as defined by Tucker (1987). CBM meets the three CBA requirements: (1) measurement materials are aligned with the school’s curriculum; (2) measurement occurs frequently; and (3) assessment information is used to formulate instructional decisions.

**Curriculum-Based Measurement (CBM)**
CBM is an approach to measurement that is used to screen students or to monitor student progress in mathematics, reading, writing, and spelling. With CBM, teachers and schools can assess individual responsiveness to instruction. When a student proves unresponsive to the instructional program, CBM signals the teacher/school to revise that program. CBM is a distinctive form of CBA because of two additional properties: (1) Each CBM test is an alternate form of equivalent difficulty; and (2) CBM is standardized, with its reliability and validity well documented.

**Data-Based/Data-Driven Decision Making**
A process of collecting, analyzing, and summarizing information to answer a question and to guide development, implementation, and evaluation of an action. Data-based decision making is continuous and regular, and most importantly linked to educational/socially important decisions.

**Data Point**
A data point is one score on a graph or chart, which represents a student’s performance at one point in time.

**Differentiated Instruction**
Differentiated instruction refers to educators tailoring the curriculum, teaching environments, and practices to create appropriately different learning experiences for students in order to meet each student’s needs. To differentiate instruction is to recognize students’ varying interests, readiness levels, and levels of responsiveness to the standard core curriculum and to plan responsively to address these individual differences. There are four elements of the curriculum that can be differentiated: content, process, products, and learning environment.

**Disproportionality**
Disproportionality is the over- or under-representation of racially, culturally, ethnically, or linguistically diverse groups of students in special education, restrictive learning environments, or school disciplinary actions (e.g., suspensions and expulsions) in comparison to other students.
Early Intervening Services (EIS)

Early intervening services are the preventive components of No Child Left Behind and the Individuals with Disabilities Education Act of 2004.

From NCLB: An LEA will provide training to enable teachers to teach and address the needs of students with different learning styles, particularly students with disabilities, students with special learning needs (including students who are gifted and talented), and students with limited English proficiency; and to improve student behavior in the classroom and identify early and appropriate interventions to help these students.

From IDEA: An LEA may use up to 15% of its IDEA Part B funds in any fiscal year, less any funds reduced from its local fiscal effort, to develop and implement coordinated, early intervening services. Coordinated early intervening services may include interagency financing structures (for students in K–12 with a particular emphasis on students in K–3) who have not been identified as needing special education or related services but who need additional academic and behavioral support to succeed in a general education environment. When it has been determined that there is significant disproportionality with respect to the identification of children as children with disabilities, or the placement in particular educational settings of such children, the SEA shall require the LEA to reserve the maximum 15% of IDEA Part B funds to provide comprehensive coordinated early intervening services to serve children in the LEA, particularly children in those groups that were significantly over-identified.

EIS activities could include:

- Professional development for teachers and other school staff to deliver scientifically based academic instruction and behavioral interventions, including scientifically based literacy instruction, and, where appropriate, instruction on the use of adaptive and instructional software; and

- Providing educational and behavioral evaluations, services, and supports, including scientifically based literacy instruction.

ESEA/NCLB

Elementary and Secondary Education Act/No Child Left Behind

The Elementary and Secondary Education Act (ESEA) [original passage in 1965], renamed the “No Child Left Behind” (NCLB) Act of 2001; federal statute relative to K–12 public education.

Evidence-Based Practice

Evidence-based practices are educational practices and instructional strategies that are supported by scientific research studies.

F

Fidelity of Implementation

Fidelity refers to the accurate and consistent provision or delivery of instruction in the manner in which it was designed or prescribed according to research findings and/or developers’ specifications.
Formative Assessment
Formative assessment is a form of evaluation used to plan instruction in a recursive way. With formative assessment, student progress is systematically assessed to provide continuous feedback to both the student and the teacher concerning learning successes and failures. With formative assessment, teachers diagnose skill, ability, and knowledge gaps, measure progress, and evaluate instruction. Formative assessments are not necessarily used for grading purposes. Examples include (but are not limited to): CBM, CBA, pre/post tests, portfolios, benchmark assessments, quizzes, teacher observations, and teacher/student conferencing.

Goal Line (sometimes referred to as an aim line)
The goal line on a graph connects the intersection of the student’s initial performance level and date of that initial performance level to the intersection of the student’s year-end goal and the date of that year-end goal. It represents the expected rate of student progress over time.

IDEA
IDEA stands for Individuals with Disabilities Education Improvement Act of 2004, also referred to as IDEA 2004. It was originally passed in 1975 with the latest reauthorization in 2004. It is a federal statute related to providing a free, appropriate, public education and early intervening services to students with disabilities ages birth through 21.

Inclusion
Inclusion is a service delivery model where students with identified disabilities are educated with general education age/grade-level peers.

Intensive Intervention
Intensive academic and/or behavioral interventions are characterized by their increased focus for students who fail to respond to less intensive forms of instruction. Intensity can be increased through many dimensions including length, frequency, and duration of implementation. Within RTI, intensive is sometimes referred to as tertiary intervention.

Learning Disability
The IDEA 2004 definition of a Learning Disability/Specific Learning Disability is: The child does not achieve adequately for the child’s age or to meet state-approved grade-level standards in one or more of the following areas, when provided with learning experiences and instruction appropriate for the child’s age or state-approved grade-level standards.

(i) Oral expression
(ii) Listening comprehension
(iii) Written expression  
(iv) Basic reading skill  
(v) Reading fluency skills  
(vi) Reading comprehension  
(vii) Mathematics calculation  
(viii) Mathematics problem solving

**Local Education Agency (LEA)**

Refers to a specific school district or a group of school districts in a cooperative or regional configuration.

**M**

**Modifications**

Modifications are alterations that change, lower, or reduce learning expectations. Modifications can increase the gap between the achievement of students with disabilities and expectations for proficiency at a particular grade level.

**N**

**Norm-Referenced Assessment**

Norm-referenced assessment compares a student’s performance to that of an appropriate peer group.

**O**

**Over-Identification**

Refers to the over-representation of students in special education programs/services that is above state and national averages; identification of more students for services through special education than the proportion of that population in the general population.

**Over-Representation**

Refers to the over-representation of students in specific disability-related categories that is above state and national averages.

**P**

**Primary Level of Intervention**

Primary intervention is the universal core program that all students receive.

**Problem-Solving Approach within RTI**

Within RTI, a problem-solving approach is used to individually tailor an intervention. It typically has four stages: problem identification, problem analysis, plan implementation, and plan evaluation.
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. Progress monitoring can be implemented with individual students or an entire class.

Remediation
Instruction intended to remedy a situation; to teach a student something that he or she should have previously learned or be able to demonstrate; assumes appropriate strategies matched to student learning have been used previously.

Response to Intervention (RTI)
Practice of providing high-quality instruction and interventions matched to student need, monitoring progress frequently to make changes in instruction or goals, and applying child response data to important educational decisions.

Scaffolding
Scaffolding is an instructional technique in which the teacher breaks a complex task into smaller tasks, models the desired learning strategy or task, provides support as students learn the task, and then gradually shifts responsibility to the students. In this manner, a teacher enables students to accomplish as much of a task as possible without assistance.

Scientific, Research-Based Instruction
Curriculum and educational interventions that have been proven to be effective for most students based on scientific study.

Screening
Universal screening is conducted, usually as a first stage within a screening process, to identify or predict students who may be at risk for poor learning outcomes. Universal screening tests are typically brief; conducted with all students at a grade level; and followed by additional testing or short-term progress monitoring to corroborate students’ risk status.

Secondary Level of Intervention
Secondary intervention supplements primary intervention (i.e., the universal core program) such that students receive additional research-based preventative treatment. Secondary level interventions are often short-term, implemented in small group settings, and may be individualized.

Specific Learning Disability
The IDEA 2004 definition of a Learning Disability/Specific Learning Disability is: The child does not achieve adequately for the child’s age or to meet state-approved grade-level standards in one or more of the following areas, when provided with learning experiences and instruction appropriate for the child’s age or state-approved grade-level standards.
(i) Oral expression  
(ii) Listening comprehension  
(iii) Written expression  
(iv) Basic reading skill  
(v) Reading fluency skills  
(vi) Reading comprehension  
(vii) Mathematics calculation  
(viii) Mathematics problem solving

**Standard Treatment Protocol (also called standard protocol intervention)**  
Standard protocol intervention relies on the same, empirically validated intervention for all students with similar academic or behavioral needs. Standard protocol interventions facilitate quality control.

**State Education Agency (SEA)**  
Refers to the department of education at the state level.

**Students At Risk for Poor Learning Outcomes**  
At-risk students are students whose initial performance level or characteristics predict poor learning outcomes unless intervention occurs to accelerate knowledge, skill, or ability development.

**Summative Assessment**  
Summative assessment is a form of evaluation used to describe the effectiveness of an instruction program or intervention, that is, whether the intervention had the desired effect. With summative assessment, student learning is typically assessed at the end of a course of study or annually (at the end of a grade).

**Systematic Data Collection**  
Planning a time frame for and following through with appropriate assessments to set baselines and monitor student progress.

**Systemic Reform**  
Change that occurs in all aspects and levels of the educational process and that impacts all stakeholders within the process—students, teachers, parents, administrators, and community members—with implications for all components, including curriculum, assessment, professional development, instruction, and compensation.

**Tertiary Levels of Intervention**  
Interventions that relate directly to an area of need; are supplementary to and are different from primary and secondary interventions; are usually implemented individually or in very small group settings; may be individualized; are often connected to the narrowest tier of a tiered intervention model.

**Tiered Instruction**  
Levels of instructional intensity within a tiered model.
**Tiered Model**
Common model of three or more tiers that delineate levels of instructional interventions based on student skill need.

**Trendline**
Line on a graph that connects data points; compare against aim line to determine responsiveness to intervention.

**Universal Design for Learning (UDL)**
Process of designing instruction that is accessible by all students; UDL includes multiple means of representation, multiple means of expression, and multiple means of engagement; the focus in creation of UDL curricula is on technology and materials.

**Universal Screening**
A process of reviewing student performance through formal and/or informal assessment measures to determine progress in relation to student benchmarks; related directly to student learning standards.

**Validated Intervention**
Intervention supported by education research to be effective with identified needs of sets of students.

**Validity**
An indication that an assessment instrument consistently measures what it is designed to measure, excluding extraneous features from such measurement.

This glossary is a modified compilation of RTI terms compiled from documents produced by The National Center on Response to Intervention, the RTI Network, and Pearson Education.
BIBLIOGRAPHY


