IMPLEMENTING RESPONSE TO INTERVENTION:
PRACTICES AND PERSPECTIVES FROM FIVE SCHOOLS

Frequently Asked Questions
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INTRODUCTION

One question frequently arises in the work of the Regional Comprehensive Centers: “What are states, districts, and schools doing about RTI?” This document addresses that question, with particular focus on instruction and the implementation of effective practices. It uses a frequently asked questions (FAQs) format, with answers based on the collective experience, to date, of five (three elementary and two middle) public U.S. schools\(^1\) that are implementing elements of Response to Intervention\(^2\) (RTI), including evidence-based instruction, progress monitoring, structures for regulating the intensity of intervention, and professional development.

Information was gathered by phone interviews and site visits during Spring 2007 with the five participating sites.\(^3\) Questions were submitted by Regional Comprehensive Centers and answers developed by the Center on Instruction (COI) in collaboration with key individuals from the visited sites. Before addressing the questions, this document provides a broad overview of Response to Intervention.

The primary audiences for the material presented here are the Regional Comprehensive Centers and their client state departments of education. The information may also be of interest to persons working in schools and school districts that are considering RTI or working on its implementation. Readers are encouraged to consider the following:

- This document focuses on RTI implementation, particularly effective instruction. The elements of RTI (effective instructional strategies, progress monitoring, etc.) are well documented by substantive research; information on that body of work is available in Appendix A. The emphasis here is on strategies that may be effective for organizing, introducing, and managing the research-based practices that together constitute RTI.

- The document may be useful in fostering discussion about decisions or practices related to RTI in local schools, districts, or states. However, it is not a “how-to” manual. RTI is too sophisticated and its successful implementation too dependent on the unique strengths, needs, and capacities of local schools, districts, and states to be adequately addressed in “cookbook” fashion.

\(^1\)The RTI models highlighted in this document are not the only, nor necessarily the most effective, ways of implementing RTI, nor are they endorsed by the U.S. Department of Education.

\(^2\)See Appendix A for information regarding RTI.

\(^3\)See Appendix B for information regarding site selection and site visits.
• Many of the FAQs around which this document is organized do not lend themselves to randomized or quasi-experimental designs; therefore, making research-based recommendations is not an option. The information, however, does reflect the collective wisdom of individuals working in school settings, which can be a useful, albeit provisional, source of evidence for improving practice (see Whitehurst, 2002). The Center on Instruction (COI) plans to follow these five schools over the next several years, and regular updates on their progress will be available at www.centeroninstruction.org. As more is learned about what works from the five sites, answers to many of the FAQs in this document may become increasingly sophisticated to reflect a more nuanced understanding of RTI’s application. Answers may also change in more substantive ways if, for instance, a previously described practice proves less effective than a recently employed alternative. Even the questions may change, as the field begins to better understand the critical features of effective implementation.

• Readers who work in a school or at the district level and are interested in learning more about RTI or strategies for tailoring its implementation to their school or district needs are encouraged to contact their state department of education for technical assistance related to RTI. Readers who work in state education agencies (SEAs) are encouraged to contact their Regional Comprehensive Center for assistance (Comprehensive Center contacts are listed at www.ccnetwork.org/where.html). Information about state-level implementation can be found in Conversations with Practitioners: Current Practice in Statewide RTI Implementation. Recommendations and Frequently Asked Questions, available at www.centeroninstruction.org.

• Examples of many of the tools (sample schedules, fidelity checklists, etc.) that participating sites have found useful will be posted on the Center on Instruction website, www.centeroninstruction.org.
PURPOSE OF RTI

RTI implementation can be conceptualized in one of two ways: as a framework for enhancing instruction and improving student outcomes, often discussed as a tiered prevention model in which students receive increasingly intense interventions based on need, and as a means of identifying students with specific learning disabilities.

As an instructional framework, RTI is driven by individual student need as determined by ongoing performance on efficient and easily administered progress-monitoring measures. These measures provide an estimate of students’ response to effective instruction. For students who respond less than adequately, increasingly intense instruction is available within the tiered model of resource organization and allocation.

All students receive a primary level of prevention through the teaching of a research-based core curriculum in the general education classroom. If the primary level of prevention (commonly referred to as Tier I) is effective, the majority of students will be able to maintain appropriate progress in reading and meet academic benchmarks with little to no additional support.

However, it is likely that a percentage of students will require a more intense level of instruction, or a secondary intervention, often labeled Tier II. In Tier II, students who require additional support receive instruction in addition to that offered in Tier I. It is important to note that Tier II supplements Tier I; it does not replace Tier I instruction for students who require more intense interventions.

A smaller percentage of students may require an even more intense level of intervention than that offered in Tier II. This tertiary level of prevention, or Tier III, provides more intense support for these students. Instruction may be intensified in terms of content, group size, and duration (Stecker, 2007). Students in Tier III are not able to progress in Tier I and Tier II without additional support.

Occasionally, a school’s RTI implementation model will contain more or fewer tiers; the specific number of tiers is not critical, as long as the tiers provide increasingly intensive interventions to a smaller proportion of students.

The second way that RTI implementation is commonly conceptualized is as a more formal, diagnostic tool to assist in special education eligibility decisions. This purpose is aligned with the legal definition of RTI, in which the determination of a learning disability (LD) may be made when students do not
make sufficient progress in the context of scientifically based instruction and intervention.

All five schools included in this project use RTI as an instructional framework, and the primary purpose of the document is to describe this use of RTI. Three of the five schools also use RTI, in part or completely, to determine whether students are eligible for special education services under the category of learning disabilities. In the other two schools, decisions about learning disabilities are still essentially based on a traditional approach, which entails analyzing the difference between ability and achievement (the conceptual definition of LD); severe discrepancies between the two constitute a learning disability. However, to reiterate, the focus of this document is on RTI as an instructional framework, not how RTI is used to make eligibility decisions.
DESCRIPTIONS OF PARTICIPATING SITES

The identity of the five implementation sites will not be disclosed, per their request. Instead, sites will be referred to by their location (e.g., Oregon Elementary School). Together, the five sites span grades K–8, serve approximately 3,000 students, and represent five distinct geographic regions (see Appendix D for information regarding demographics for each site).

Table 1. Summary of Participating Sites

<table>
<thead>
<tr>
<th>School</th>
<th>Grades</th>
<th>RTI Content Areas</th>
<th>Free or Reduced-Price Lunch Eligible Students</th>
<th>English Language Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon Elementary School</td>
<td>K–5</td>
<td>Reading, writing, math, behavior, and attendance</td>
<td>56%</td>
<td>38%</td>
</tr>
<tr>
<td>Wisconsin Intermediate School</td>
<td>5–6</td>
<td>Reading and math</td>
<td>13%</td>
<td>1%</td>
</tr>
<tr>
<td>Pennsylvania Elementary School</td>
<td>K–4</td>
<td>Reading and math</td>
<td>44%</td>
<td>1%</td>
</tr>
<tr>
<td>Florida Elementary School</td>
<td>K–5</td>
<td>Reading</td>
<td>56%</td>
<td>3%</td>
</tr>
<tr>
<td>California Middle School</td>
<td>6–8</td>
<td>Reading</td>
<td>50%</td>
<td>22%</td>
</tr>
</tbody>
</table>

Currently, all schools use multi-tiered instruction in reading; three schools also use an RTI framework in other academic or behavior areas. Most of the schools view RTI as a general concept applicable across academic or behavior domains.

The following paragraphs describe each school in terms of (1) recent performance on state-administered achievement tests, (2) basic demographics, and (3) other features related to the context in which RTI is being implemented. Student data from state-administered tests are reported to provide context for each site; the impact of RTI’s implementation on test scores in these schools is not known at this point.

**Oregon Elementary School** serves 608 students in grades K–5. A majority of students are eligible for free or reduced-price lunch, and approximately 40% of the students are English language learners (ELLs). Oregon Elementary School uses a three-tier model for reading, writing, mathematics, behavior, and attendance. In the 2006–2007 school year, approximately 85% of third-graders met or exceeded the state-determined standard (i.e., “passed”) on the reading section of the test; 70% exceeded the standard on the math section.
Wisconsin Intermediate School serves 529 fifth- and sixth-graders. It is structured like a middle school, however, with classes organized into periods and grades divided into teams, three at fifth grade and two at sixth grade. Wisconsin Intermediate School serves a small percentage of students eligible for free or reduced-price lunch and a small number (1%) of English language learners. This school implements a four-tier model for reading and a three-tier model for math. Nearly 90% of fifth-graders and 92% of sixth-graders passed the 2006 state tests in reading and math.

Pennsylvania Elementary School serves 500 students in grades K–4. Approximately 40% of students are eligible for free or reduced-price lunch; 1% are designated as ELLs. Pennsylvania Elementary implements a three-tier model for reading and math. In 2006–2007, 63% of third- and fourth-graders scored in the “proficient” range or above on the reading test, and 76% scored at or above proficient on the math test.

Florida Elementary School serves 480 students in grades K–5. More than half (56%) of the students are eligible for free or reduced-price lunch, and 2.5% are designated as ELLs. Florida Elementary implements a four-tier model in reading. In 2006, 86% of third-graders passed the reading portion of the state test and 74% passed the math portion.

California Middle School serves 870 students in grades 6–8. Approximately half of the students are eligible for free or reduced-price lunch; a quarter are designated as ELLs. California Middle School implements a three-tier model in reading and is beginning implementation in math. On the state test at the end of the 2006–2007 school year, more than 80% of students in all grades passed the English language arts test; a similar percentage passed the mathematics test.
As indicated before, this document merely offers glimpses of what five sites are currently doing, what they believe is working, and what they have found to be less effective. Their selection of strategies for implementing RTI and the success of those strategies are influenced by local circumstances, which may or may not be similar to those of the schools or districts with which readers may work. Furthermore, some of the described practices may, over time, be subject to more rigorous types of investigation (although many do not lend themselves to formal types of inquiry), and as evidence from more compelling sources becomes available, the need for documents such as this one will diminish. Until then, we offer the following as a means of advancing the discussion about RTI’s implementation.

Practices were selected for highlighting based on their utility and contributions to the overall knowledge base for RTI implementation. For the sake of brevity and clarity, not all sites are highlighted in every response; where sites used similar practices, duplication was avoided. For example, practices at only two of the five sites are highlighted in response to question 8 regarding screening practices. The other sites use procedures similar to one of the two practices highlighted. For information on a specific site’s practices, see Appendix E.
Why did the sites decide to begin implementing RTI?

All five sites began implementing RTI after deciding that their current structures and processes were not meeting their students’ academic or behavioral needs. In several schools, a number of RTI-related practices predated implementation. For example, Oregon Elementary School had a well-established framework for preventing and resolving behavior difficulties, and the administration wanted a similar data-driven system to support students who were struggling academically. RTI fit into the school’s existing behavior framework, and school officials felt that RTI encouraged all teachers to take responsibility for all students’ progress. The school began implementing RTI by incorporating academic instruction into its tiered behavior framework approximately nine years ago.

Similarly, Florida Elementary School began implementing an individual problem-solving model approximately eleven years ago. As teachers grew more familiar with and adept at problem-solving, they became overwhelmed by the number of individual interventions being offered. The standard treatment protocol approach to RTI seemed like a natural solution to make this process more systematic.

For definitions of RTI-related terms, such as individual problem-solving model and standard treatment protocol, please see the glossary, Appendix C.
What were the key steps for implementing RTI?

Two main themes were evident across the five sites. First, prior to implementation, all of the sites examined their current practices in order to determine which components of RTI, such as progress monitoring, were already in place on their campuses and the degree to which those practices were effective. Second, all of the schools began implementing RTI in phases; no site attempted a schoolwide implementation of all RTI elements simultaneously at the beginning of Year 1.

Schools differed in the ways they “rolled out” RTI. Wisconsin Intermediate School began offering Tier III intensive interventions in reading as part of a districtwide initiative. In Year 2, the school added Tier II interventions in reading. Tiered interventions and progress monitoring in math were added later. Currently, Wisconsin Intermediate School is looking at specific RTI practices such as progress monitoring and several of their adopted interventions that need to be fine-tuned at the campus level.

Pennsylvania Elementary School’s principal implemented RTI in a small number of kindergarten, first-, and second-grade classrooms during the first year to determine what worked, what did not work, and what resources were needed. The principal believes that piloting RTI in several classrooms before schoolwide implementation provides a balance between moving too slowly, which might minimize RTI’s impact and negate teacher buy-in, and moving too quickly, which might overwhelm teachers and students. Pennsylvania Elementary School devoted the first (i.e., after the pilot) year of its schoolwide implementation to developing and fine-tuning Tier II and III interventions. The focus shifted in the second year (2006–2007) to Tier I instruction; the principal wanted to strengthen instructional delivery in the general education classes in order to prevent RTI from becoming a variation of the school’s existing service-delivery process.

While these two themes were consistent across the five campuses, the highlighted steps for implementing RTI are not the only, nor necessarily the most effective, ways of implementing RTI, nor are they endorsed by the U.S. Department of Education.
Florida Elementary School’s district office assists its schools with RTI implementation through both special education services and district-level curriculum and instruction departments. District-established criteria have to be met for an interested school to qualify as a pilot site. A school must commit to (1) weekly progress monitoring, (2) flexible grouping, (3) purchase of recommended resources, and (4) dedicated time for professional development and the discussion of data. A new pilot begins by focusing on a single grade level, and the district RTI support team explicitly models every step for participating teachers and instructional support personnel. The pilot schools select the grade level; thus far, most schools have started with third grade.

Florida Elementary School’s district is also flexible about which district-adopted curricula are used and which staff members are responsible for their implementation. The district RTI support team stressed the importance of recognizing that schools differ in their needs, resources, and circumstances and that RTI implementation should reflect those differences. The district has closely managed the expansion of RTI, which has allowed the district team to monitor schools’ progress, intervene where necessary, and troubleshoot where additional support is needed. The district team feels that this managed rollout is one reason for its successful districtwide implementation.

One district established criteria that have to be met for an interested school to qualify as an RTI pilot site. A school must commit to:
1. weekly progress monitoring
2. flexible grouping
3. purchase of recommended resources, and
4. dedicated time for professional development and the discussion of data.
Research examining the implementation of schoolwide initiatives has found that strong campus leadership is critical to the success of the initiative (e.g., Simmons, Kuykendall, King, Cornachione, and Kame’enui, 2000). At the five sites under discussion, RTI implementation is led by RTI leadership teams, whether formal or informal. Team membership varies according to the school’s demographics (e.g., Oregon Elementary School’s team includes a teacher who specializes in working with ELLs) and the content areas in which RTI is being implemented (e.g., most schools have a literacy specialist on the RTI team). The principal plays a key role in the implementation at most of the sites; at Wisconsin Intermediate School, however, the lead special education teacher and reading specialist lead implementation. While Wisconsin Intermediate School’s principal is supportive, understands the structure and principles of RTI, and gives staff the time to implement RTI, she is not part of the school’s formal RTI leadership team, an arrangement that seems suited to Wisconsin Intermediate School’s strengths and needs.

Oregon Elementary School and Pennsylvania Elementary School include at least one general education teacher from each grade level on the RTI leadership teams as a way of increasing teacher buy-in. The principal at Pennsylvania Elementary School selected teachers based on their willingness “to do whatever necessary to ensure student success.” He was quick to point out that these teachers are not necessarily “yes” people; rather, they are individuals who challenge decisions they feel are not in the best interest of the students.
What kind of professional development on RTI was offered to the staff?

Successful RTI implementation often relies on the ability of teachers and school leaders to implement RTI practices with fidelity; this ability depends at least partly on the quality of professional development offered to school staff on the overall RTI model and its individual components (National Association of State Directors of Special Education [NASDSE], 2005). Most of the schools follow a “train the trainers” model in educating their staff members about RTI’s principles and practices. In this model, selected staff members, typically members of the school’s RTI leadership team, attend externally provided trainings, such as those provided by the district or the state, and then disseminate that information at their local campus. These teachers often formally or informally adopt the role and responsibilities of a coach and work with other teachers to improve their understanding and implementation of RTI. At Wisconsin Intermediate School, the special education teacher and reading specialist have conducted most of the professional development for teachers, usually during team meetings or academic excellence days, which are days set aside for professional development.

As the RTI implementation at these schools has grown more sophisticated, professional development has increasingly focused on specific practices. For instance, at Oregon Elementary School, formal professional development is offered three times a year; topics include progress monitoring, data analysis, and refreshers on the overall RTI model. Florida Elementary School offers regular refreshers on effective implementation of its intervention programs, and also at teachers’ requests, or when a new program is adopted. The district is also beginning to videotape program implementation so that “struggling” and interested teachers have a ready resource for improving practice.
How do sites determine which students receive interventions?

All five schools use a data-driven process to determine which students require intervention. Because of scheduling constraints, the two middle school sites make schoolwide decisions about student placement at the outset of each school year, while the elementary schools typically do not begin placing students in interventions until several weeks into the school year at the earliest.

Pennsylvania Elementary School schedules four half-days each year for grade-level teachers to examine students’ screening data, make instructional decisions, and allocate necessary resources. They focus on specific areas of need such as phonics, comprehension, or math computation and on the extent of individual students’ needs.

Oregon Elementary School’s RTI team reviews students’ instructional plans at monthly team meetings where data are presented and options discussed. In general, newly enrolled Tier II students receive an initial month-long intervention, during which progress is carefully monitored. Those who sufficiently accelerate their progress are graduated from Tier II, while students making inadequate progress are moved to Tier III where they receive another two months of service in two different interventions, if necessary. Referral to special education is an option for students who make inadequate progress in Tiers II and III.

At Florida Elementary School, the assistant principal, reading coach, student support specialist, school psychologist, speech pathologist, and grade-level teachers meet every six weeks (more often if necessary). They discuss student data from a variety of sources, including benchmark assessments, district assessments, and classroom observations; identify students who may be at risk; and identify adjustments necessary to protect or enhance the integrity of their interventions. Students are considered at risk if three consecutive data points fall below the “aim line” (benchmark), and their cases are discussed with the aforementioned team. Decisions about intensity and setting for students already receiving interventions can range from “tweaks” (minor instructional modifications) in the curriculum or setting to more substantial changes, such as increasing the amount of intervention time or reducing instructional group size (e.g., from Tier II to Tier III) to accelerate student progress and get the student “back on track.” In addition, weekly meetings are

5The processes highlighted in this document for determining which students receive intervention are not the only, nor necessarily the most effective, ways of determining student need, nor are they endorsed by the U.S. Department of Education.
held to analyze assessment data (such as oral reading fluency) and to consider ongoing instructional plans for these students.

Because their schedules are determined before the school year begins, the two middle schools use data from the previous school year to identify student needs and to inform student placement before school starts. At Wisconsin Intermediate, a team of teachers for each block assigns students who perform below grade level to intervention prior to the start of the school year. Students with no history of delays according to their previous standardized test results but who are currently performing slightly behind their grade-level peers are placed in Tier II interventions. If a student has critically low scores on the screening measures or a history of low performance on state standardized tests, the problem-solving team may place him or her directly in Tier III or IV interventions (see Appendix E for details of Wisconsin Intermediate School’s RTI model). In addition, students who score in the “minimal” range on the state test in reading or math are automatically placed in Tier III interventions. Students may exit interventions or move between levels of interventions when their progress-monitoring results improve to a preset level (e.g., grade level for students in Tier II). Students in Tier II may exit or enter interventions at any time in the semester. Due to the prescribed scope and sequence of the program used, students in Tier III or Tier IV reading are typically not moved except at semester breaks. Students may enter Tier III math at the end of any unit. Students do not exit intervention services without the approval of their general education teacher.

Before the school year begins, California Middle School’s principal, assistant principal, interventionist, and other teacher leaders place students in instructional tiers based on results from multiple measures, including state and local test scores. If there are concerns about a student’s progress, referral to the Student Study Team and possible placement in an intervention program are considered only after the general education teacher has tried at least two interventions in the classroom (an intervention toolkit is easily accessible to all the teachers). The Student Study Team uses the problem-solving method at Tier II, relying on student data to make appropriately informed decisions; for example, a student with low fluency may be assigned to an evidence-based fluency intervention. At Tier III, however, all eligible students receive the same standardized intervention.
Who provides the interventions?

A 2007 report by Scammacca and colleagues that synthesized 12 high-quality research studies on extensive reading interventions found that interventions can be effective when delivered by a variety of school personnel, as long as the personnel are adequately trained to deliver the intervention. The five schools reported on here vary intervention personnel, with staff capacity, scheduling, and student need as major factors influencing schools’ decisions. At Oregon Elementary School, paraprofessional educational assistants (EAs) administer all of the interventions in all of the tiers. The EAs generally rotate the intervention they deliver and where they deliver it according to student needs and space availability (e.g., one EA may deliver a Tier II intervention outside of the third-grade rooms and then switch to a Tier III intervention for first-graders in an empty classroom). The EAs are trained in the interventions they deliver.

At Wisconsin Intermediate School, all interventions, regardless of level and subject, are taught by an array of instructional personnel, including an ELL specialist, speech and language pathologist, special education teacher, and the reading specialist. The special education teacher and the reading specialist teach the Tier III and IV interventions.

Florida Elementary School’s Tier II interventions are offered by classroom teachers in the general education classroom. Students are grouped homogeneously within grades for these interventions; students not in Tier II work independently during intervention. A variety of instructional personnel (e.g., reading specialist, behavior specialists, speech and language pathologist, and some general education teachers) provide Tier III interventions. Florida Elementary School’s special education teachers teach Tier IV interventions; however, Tier IV interventions are not regarded as special education at this school. Rather, these interventions are administered to one or two students for a set duration either to: (1) provide a boost so the student can succeed in Tiers I, II, and/or III or (2) help determine a student’s potential eligibility for referral to special education.

The RTI models highlighted in this document are not the only, nor necessarily the most effective, ways of implementing RTI, nor are they endorsed by the U.S. Department of Education.
In order to minimize challenges at Pennsylvania Elementary School, all students participate in Extended Learning Opportunities, daily 30-minute periods led by the classroom teachers. Students who perform above grade level may receive an enrichment activity such as Reader’s Theater in a group of 25 students with one teacher or with an EA and a parent volunteer. Students performing on grade level typically receive additional grade-level instruction, which may include activities extending the core curriculum, in smaller groups. Students performing below grade level typically receive a Tier II intervention in groups of fewer than eight students based on their skill needs. Tier III reading interventions are offered daily for 30–60 minutes, depending on student need. The reading specialist offers Tier III interventions to groups of four or fewer.

While this model typically adds to their lesson planning time, teachers at Pennsylvania Elementary find extending the tiered approach across the achievement spectrum increases their instructional effectiveness with all students, not only with those performing at the lower end of the continuum.

Tier IV interventions are not regarded as special education at Florida Elementary School. Rather, these interventions are administered to one or two students for a set duration either to: (1) provide a boost so the student can succeed in Tiers I, II, and/or III or (2) help determine a student’s potential eligibility for referral to special education.

At Oregon Elementary School, paraprofessional educational assistants (EAs) administer all of the interventions in all of the tiers. The EAs generally rotate the intervention they deliver and where they deliver it according to student needs and space availability (e.g., one EA may deliver a Tier II intervention outside of the third-grade rooms and then switch to a Tier III intervention for first-graders in an empty classroom). The EAs are trained in the interventions they deliver.
When do interventions occur?

All of the schools saw scheduling as a significant challenge and repeatedly cited creativity as vital to successful scheduling. Schedules are dynamic and subject to ongoing adjustment according to the changing needs of students and the capacity of faculty and staff.

Pennsylvania and Florida Elementary School offer interventions in the general education classroom. Students at both schools are grouped homogeneously within grade levels for interventions; all interventions must be offered at the same time to permit fluid movement among groups. While this may make scheduling more difficult, teachers at Florida Elementary report that offering interventions gradewide is more time efficient (some teachers had up to 12 students requiring interventions and others had two or three) and helps build the grade-level team’s camaraderie as it discusses “our kids.”

At the two middle schools, intervention classes meet for one period. At Wisconsin Intermediate School, in Tier II interventions, material introduced in the core curricula is either pre-taught or re-taught, as necessary, meaning that interventions cannot be scheduled at times that conflict with core reading or math instruction. Tier III interventions offer intensive instruction with a highly structured, separate program not tied to the core curriculum. As in the elementary schools, the interventions are all scheduled for the same period, so that students can be easily transitioned.
How frequently do sites screen, and who administers these measures?

Universal screening is used in an RTI model to determine which students are in need of interventions and which students’ needs are being adequately met within the Tier I (general education) setting (Mellard, 2004). Screening measures are administered between three and six times a year, depending on the school. The frequency of screening seems to depend on the core curriculum (some core curricula contain embedded screening measures) and on district-level requirements.

Table 2. Summary of Screening Measures

<table>
<thead>
<tr>
<th>School</th>
<th>Grades</th>
<th>Screening Measures</th>
<th>Frequency of Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon Elementary School</td>
<td>K–5</td>
<td>DIBELS – Reading&lt;br&gt;CBM – Math&lt;br&gt;State-Developed Prompts – Writing</td>
<td>4 times a year&lt;br&gt;4 times a year&lt;br&gt;4 times a year</td>
</tr>
<tr>
<td>Wisconsin Intermediate School</td>
<td>5–6</td>
<td>Maze Passages – Reading&lt;br&gt;Oral Reading Fluency – Reading&lt;br&gt;CBM – Math</td>
<td>3 times a year&lt;br&gt;3 times a year&lt;br&gt;3 times a year</td>
</tr>
<tr>
<td>Pennsylvania Elementary School</td>
<td>K–4</td>
<td>DIBELS – Reading&lt;br&gt;CBM – Math&lt;br&gt;4Sight Assessments – Math and Reading (for 3rd- and 4th-graders only)</td>
<td>3 times a year&lt;br&gt;4 times a year&lt;br&gt;5 times a year</td>
</tr>
<tr>
<td>Florida Elementary School</td>
<td>K–5</td>
<td>State Assessments – Reading and Math&lt;br&gt;Oral Reading Fluency – Reading&lt;br&gt;Maze Passages – Reading</td>
<td>3 times a year&lt;br&gt;3 times a year&lt;br&gt;3 times a year</td>
</tr>
<tr>
<td>California Middle School</td>
<td>6–8</td>
<td>Oral Reading Fluency – Reading&lt;br&gt;San Diego Quick Assessment – Reading&lt;br&gt;Scholastic Reading Inventory – Reading&lt;br&gt;CBM – Reading</td>
<td>3 times a year&lt;br&gt;3 times a year&lt;br&gt;3 times a year&lt;br&gt;3 times a year</td>
</tr>
</tbody>
</table>

Notes. DIBELS: Dynamic Indicators of Basic Early Literacy Skills. CBM: Curriculum-based measurement.

The general purpose of the screening is to determine student placement in tiers, although the process varies from school to school and exactly how it works is not clear at each site. We highlight two strategies for managing screening.

In the first year of RTI implementation at Pennsylvania Elementary School, a district team of special education teachers, a school psychologist, and a literacy coach administered the screening measures. While this model was efficient, the principal felt that teachers did not take ownership of the data and made
excuses for students who did not perform well, blaming factors such as the lack of a relationship between the student being tested and the tester. To address these concerns, teachers received training to administer the screening measures and participated in the Year 2 test administration with the district team. This collaborative approach has increased the data’s value and validity for teachers, in the principal’s view.

California Middle School screens all students three times a year, hiring substitute teachers to administer both the decoding and reading fluency measures. The school tries, usually successfully, to use the same substitute teachers for each screening administration to protect the data’s validity and reduce the need for constant training. (At the beginning of each school year, selected substitutes are given the screening dates and are asked to reserve those times.) The principal and a retired, veteran former California Middle School teacher trains substitutes in test administration and manages additional training as well as day-to-day administration of the screening measures. Substitute teachers screen one grade at a time and appear to be fairly efficient. The principal prefers using substitute teachers to avoid losing instructional time.
How frequently do sites progress monitor, and who administers these measures?

In an RTI framework, frequent monitoring of student progress is essential, because progress monitoring is the “only method to determine if a student is improving” or benefiting from an intervention (NASDSE, 2005, p. 20). Students at all five sites who receive interventions are progress monitored either weekly or every other week, typically by the intervention teachers. Students in more intensive tiers are generally progress monitored more frequently than are students enrolled in less intensive tiers. At Wisconsin Intermediate School, students are actively involved in charting their progress-monitoring data, setting goals, and engaging in regular conferences with their intervention teachers about their progress.

Pennsylvania Elementary School is the only site where classroom teachers administer the progress-monitoring measures for Tier II students, which they may do at any point during each two-week period. They are encouraged to administer the measures during times when instruction is not occurring, such as right before and after lunch and recess. In addition, Pennsylvania Elementary School employs a schoolwide substitute teacher every day. If the substitute is not assigned to a classroom, he or she often helps manage the class while the teacher administers progress-monitoring measures. Pennsylvania Elementary School students in need of intensive interventions (Tier III) are monitored weekly by their intervention teachers.
How do sites monitor fidelity?

Identified as a necessary element within RTI (Gresham, 2002), fidelity is also perceived as the RTI element that is least frequently implemented. Indeed, all of the sites identified monitoring implementation fidelity as an area in need of improvement.

Oregon Elementary School has formal fidelity checks at all intervention levels in reading. The literacy coach observes core curriculum implementation and conducts “component meetings” every other week, where effective strategies for instruction in one core reading component (such as vocabulary or fluency) are discussed. The literacy coach also observes EAs once a year as a means of checking on fidelity and provides program-specific refreshers to EAs who are not implementing the programs effectively; she conducts as many informal observations as necessary for those EAs. The principal would like to formalize the fidelity checks in math.

The district RTI support team is developing fidelity checklists for Florida Elementary School. These checklists will be used to identify areas where additional coaching may be necessary. Currently, the principal, assistant principal, and reading coach monitor implementation fidelity, reviewing student data and counseling teachers who are not implementing interventions with fidelity.
How do sites manage screening and progress-monitoring data?

All of the sites use some type of electronic data-management system. While several schools use programs provided by the commercial developers of their progress-monitoring measures, two use Microsoft Excel to track screening and progress-monitoring data. All five schools are able to generate and share regular reports with teachers.

At Oregon Elementary School, grade-level teachers meet weekly to plan instruction, analyze data, and prepare for the monthly RTI team meetings; members of the RTI leadership team (e.g., the principal, literacy coach, ELL teacher) do not attend these meetings. At the grade-level meetings, teachers use a form developed by the RTI leadership team to indicate students who are performing in the bottom 20% in mathematics, writing, reading, behavior, or attendance in each grade and to identify any interventions each student currently receives. Students who make inadequate progress in either the core curriculum or interventions are discussed at the monthly meeting; approximately 12 students per grade are discussed each month.

Oregon Elementary School uses an electronic management system provided by the local state university. All staff members have access to the data. Classroom-level and individual student reports are created, disseminated to the RTI team and classroom teachers, and discussed at the monthly team meetings. Students in Tier III are assigned a case manager (a member of the RTI leadership team) to assist the general education teacher in collecting data and the EA in implementing the interventions.
All sites follow their state and or district guidelines in terms of making special education eligibility decisions. For example, Oregon Elementary School is in a state that has provided guidance to districts and schools interested in using RTI as part of identification, while Wisconsin Intermediate School and Florida Elementary School continue to use an IQ-achievement discrepancy\(^7\) in their identification process while they wait for their states to finalize guidelines for integrating RTI. It is important to note that the campus leadership at all of the participating sites responded that they view RTI primarily as a comprehensive school reform rather than as a special education initiative.

Oregon Elementary School uses RTI to determine special education eligibility in grades K–5. The referral process begins after unsuccessful participation in one Tier II and two Tier III interventions. To determine eligibility, the school considers data derived from the interventions, assessment data, a student’s developmental history, and information in his or her cumulative file. The multidisciplinary team can also request additional testing such as measures of behavior or attention, with parental consent. The special education director feels that the process has been streamlined and made more transparent since the implementation of RTI.

Oregon Elementary School’s district no longer uses IQ testing in its LD eligibility decisions. The numbers of students served in special education (10%) and identified with LD (5%) have remained stable since implementing RTI districtwide. District officials see this trend as supporting their position that RTI does not eliminate the LD construct but instead provides a more reliable framework for accurately identifying students who in fact have LD. According to the principal, there have been fewer referrals to special education overall and she is more confident than in the past that referrals that have been made “have been on target for identifying a true learning problem.”

\(^7\)See www.nrcld.org for information on specific learning disability determination under IDEA 2004; see Appendix C for a glossary of RTI-related terms.
Pennsylvania Elementary School also uses RTI to help determine LD eligibility at all grade levels. Data from screening and progress monitoring are used along with parent input, classroom observation data, and standardized test data. Although an abbreviated IQ test is administered to students during the qualifying process, the IQ score serves merely as another data source and is not used to calculate an ability-achievement discrepancy. Students are still being identified at Pennsylvania Elementary School as having LD; however, the principal is confident that as the implementation of RTI becomes more sophisticated, identification will become more accurate. As one teacher noted, “we are no longer identifying students [as having] disabilities because we did not know what to do with them.” At present, students are generally referred to special education after 20–24 weeks in Tier III. Pennsylvania Elementary School is establishing guidelines for regulating the length of different interventions and their relationship to the referral process.

Oregon Elementary School’s district no longer uses IQ testing in its LD eligibility decisions. …According to the principal, there have been fewer referrals to special education overall and she is more confident than in the past that referrals that have been made “have been on target for identifying a true learning problem.”
What challenges do sites report having in implementing RTI?

Along with scheduling, teacher buy-in was identified as a key challenge to implementing RTI schoolwide by four of the sites. (California Middle School did not identify teacher buy-in as a challenge.) The four sites did find that teachers’ support for RTI seems to have increased as they saw their students begin to make progress.

Teachers at Oregon Elementary School were initially resistant, believing that the time required to provide interventions and administer assessments would diminish their effectiveness in teaching the core curriculum. Many were also reluctant to assume responsibility for teaching struggling students and believed that RTI would delay services to these students. The RTI leadership team asked teachers to take “a leap of faith,” pointing out that the current model was not meeting the needs of all students.

At Wisconsin Intermediate School, teachers of elective courses (choir, woodshop, etc.) initially worried that offering interventions concurrently with their class times would mean falling enrollment. Those concerns faded as these teachers saw students making progress in reading and math achievement. The administration found that sharing student data from progress-monitoring and screening measures with the elective teachers and including them in data retreats increased their support for RTI.

The principal at Pennsylvania Elementary School reported that initially, teachers believed that a student having difficulty was a student with LD. The principal introduced RTI slowly and framed it as a way of helping students, not as a mechanism for school reform. Once the teachers began to see their students’ increased achievement and their own confidence in using the data, their buy-in increased. Acknowledging the challenges that the school faced in implementing RTI, he nevertheless feels that “RTI puts the burden on the school, which is exactly where it should be.”
implementing RTI, he nevertheless feels that “RTI puts the burden on the school, which is exactly where it should be.”

At Florida Elementary School, the district team meets weekly with the school-based team during the pilot stage in order to solve problems together and reported that once teachers began to implement RTI and saw their students succeed, their resistance faded.

Resources were a challenge for Pennsylvania Elementary School. To implement RTI fully, the school had to change the job roles of some existing staff members, a process that required no small amount of creativity. For example, the teacher who used to conduct observations, collect data, coordinate meetings with teachers and parents, and serve as a coach when working with teachers now provides Tier III interventions. The school psychologist’s role evolved away from managing eligibility meetings and conducting evaluations and toward greater involvement in instruction. She now spends time providing instructional recommendations, collecting data, serving on the RTI leadership team, and facilitating data collection and decision-making.

Many teachers at Oregon Elementary School were also reluctant to assume responsibility for teaching struggling students and believed that RTI would delay services to these students. The RTI leadership team asked teachers to take “a leap of faith,” pointing out that the current model was not meeting the needs of all students.
What are the perceived benefits of implementing RTI?

All of the sites reported that RTI has enabled them to better serve all of their students. Oregon Elementary School and California Middle School cited the variety of available interventions and the focus on matching each with students’ needs as benefits of RTI. They have gathered and, in some cases, developed a repertoire of programs that they believe meet the needs of all students, minimizing the possibility that students who need intervention will be overlooked. The teachers at Pennsylvania Elementary School commented specifically on RTI’s usefulness in efficiently and effectively serving the full range of students—those working to catch up with their peers, those struggling to keep up, and those who are well ahead of their classmates.

Another often-cited benefit of implementing RTI is increased collaboration among teachers and between teachers and instructional support personnel. Several sites noted that implementing RTI successfully is a schoolwide undertaking that requires a sense of shared responsibility for all students by all teachers. Wisconsin Intermediate and Pennsylvania Elementary Schools discussed the importance of having all school personnel work collaboratively to plan instruction and implement curriculum, noting that RTI strengthened local communities of practice by providing a more clearly defined purpose and structure. RTI’s focus on prevention has also fostered a more collaborative spirit in several of the schools; the past tendency of immediately referring a student having difficulties to special education has been replaced by an increased awareness of the possibility and benefits of prevention. Teachers are no longer immediately referring struggling students to special education but are instead asking, “What can we do better to help these students?” A teacher at Pennsylvania Elementary School summed it up nicely: “RTI has allowed all students to benefit from all teachers.”

Wisconsin Intermediate School staff members felt that students’ motivation was on the rise, due in part to RTI’s implementation. Students are actively involved with their own progress-monitoring data (primarily through ongoing discussion with their teachers), providing them with opportunities to identify their strengths and areas needing improvement. Wisconsin Intermediate School’s intervention teachers have found this practice highly motivating for students and teachers alike. The goal-setting inherent to progress monitoring has also had a motivating effect, say Wisconsin Intermediate School teachers. Students understand what is required to “graduate” from an intervention and are able to work actively toward that goal.
What funds (local, state, or federal) are being used to implement RTI?

The sites use a range of funding sources in RTI implementation; broadly, they have not received substantial new funding to implement RTI. While Oregon and Pennsylvania Elementary Schools received district or state funds specifically for RTI implementation, all of the schools indicated that they rely primarily on the reallocation of existing funds to provide a multi-tiered system of intervention delivery.

Oregon Elementary School benefits from state and district funds earmarked for RTI implementation, with a focus on interventions. Pennsylvania Elementary School participated in a state-sponsored pilot program that included funds for materials and staff development during the first two years of RTI implementation. When this funding ended, Pennsylvania Elementary School secured local funds for staff development, while also broadening the focus of its professional development to include instruction at all tiers. Florida Elementary School used district-provided special education funds to support the salaries of three staff members to work one day a week and one staff member to work three days a week on the districtwide implementation of RTI. Materials and extra personnel at Florida Elementary School were provided for by the school’s discretionary state funds.

Wisconsin Intermediate and California Elementary received no additional funding to implement RTI. As the reading specialist at Wisconsin Intermediate noted, “The primary driver for implementing RTI has been the reallocation of resources.” Wisconsin Intermediate School has redirected district funds from other areas to support the development of interventionists.

For more guidance on the use of federal, state and local funds to implement RTI, please contact the Federal Program Coordinator at the appropriate State Education Agency.
What types of support do districts provide?

In addition to the financial funds described above, all sites also received district support in the form of “permission” to implement flexible schedules and align teacher roles and responsibilities within an RTI framework. At Wisconsin Intermediate School the RTI effort has received support in the form of time for reviewing student data, planning and scheduling instruction, and opportunities for ongoing staff development for interventionists.

District support for California Middle School came in the area of program design. Schools in California Middle School’s district were expected to provide intensive-level students with additional instructional time as necessary to close achievement gaps. The district supported suspending science and social studies classes for students who required two to three hours of daily reading intervention and supported the use of special educators to provide intervention, regardless of participating students’ category (e.g., special education, general education, ELL).

The RTI effort at Wisconsin Elementary School has received district support in the form of time for reviewing student data, planning and scheduling instruction, and opportunities for ongoing staff development for interventionists.
What sources of information and assistance about RTI implementation have schools accessed?

Schools consulted a wide variety of sources in gathering information about and securing assistance for RTI, motivated largely by geographical location, the level of state and district support and involvement, and the unique needs and capacities of each site. In Oregon Elementary School’s district, a staff member coordinated with the state on RTI, disseminating information and offering district- and school-level training and support. Wisconsin Intermediate School’s staff was aware of national efforts to implement RTI and found Response to Intervention: Policy Considerations and Implementation (NASDSE, 2006) useful as it considered implementation in the school. A member of the RTI leadership team also served on the state task force that is developing recommendations and guidelines related to RTI’s implementation and use.

Pennsylvania Elementary School was helped by its state-level technical assistance network, and the principal adopted a leading role, “reading everything about RTI that [he] could get his hands on.” Staff from Florida Elementary School relied on the support of national and state organizations, attending annual meetings of the National Association of School Psychologists and the National Association of State Directors of Special Education, and staying current with related publications.

Pennsylvania Elementary School’s and California Middle School’s participation as RTI implementation sites in their states have led to a variety of supports, including information and training from scholars and professionals who consult with these projects and increased collaboration with other schools and school-level professionals participating in state-level RTI projects.
SUMMARY

Four core RTI components are evident across the five schools: 1) screening to determine which students are at risk; 2) progress monitoring of students in Tiers II and III (and IV, if applicable); 3) a common core instructional program in Tier I; and 4) increasingly intense instructional interventions in the higher tiers for students not making sufficient progress. There is a great deal of conceptual consistency across the five schools in how these components are organized. Fidelity of instruction is a concern at all sites.

Screening

All schools administer at least three and as many as six screening assessments each year. The general purpose of the screening is to determine student placement in the tiers. Screening data are also the catalyst that prompts schools to meet about schoolwide data, discuss how well things are working, adjust interventions, and make decisions about moving students from one tier to another. This process varies from school to school. For example, major decisions about instructional tiers in the two middle schools are made when schedules for the next year are determined.

Progress Monitoring

In addition to universal screening, progress of all students beyond Tier I is monitored regularly, either weekly or every other week. As with the screening assessments, all schools have established procedures for collecting progress-monitoring data. While the procedures differ, the general idea is that students who are not making adequate progress for a sufficient period of time move within the multi-tiered system so that they receive more intense instruction. The general approach is to review progress-monitoring data to determine whether progress is sufficient.
**Core Instruction**

All students receive Tier I instruction in the general education setting. In Tier I, the core curriculum used and the amount of instructional time are highly specified. Generally, elementary school-level reading instruction is 60–90 minutes and math instruction is about 40 minutes; in middle schools, time is organized by the length of the instructional period.

**Tiered Levels of Instruction**

In the context of RTI as an instructional framework, all five schools have a clear focus on multiple tiers of instruction as the major component of RTI implementation. All five also share an orientation toward how tiers of instruction are organized and used. Tiers II and higher are for students receiving interventions, the major purpose of which is to accelerate students’ progress so that they can achieve grade-level academic and behavioral goals. Three schools have three tiers of instructional support; two schools have four tiers.

**Scientifically Based Instruction**

An essential feature of a multi-tiered RTI framework is that all instruction in all tiers is scientifically based, implemented with fidelity, and delivered with high quality. When that is the case, a lack of student progress can be attributed to internal learning difficulties rather than to the quality of instruction.

How these five schools ensure that their instruction in Tier I or their interventions in Tiers II–IV are scientifically based is not clear. This does not mean that schools do not have procedures for identifying scientifically based interventions, only that such procedures are not spelled out in this report.

**Fidelity of Implementation**

The schools appear to recognize the importance of providing effective instruction within each tier by implementing programs as intended and using effective instructional principles to teach the program. However, monitoring fidelity is a challenge for all of the schools, and all name fidelity of implementation as an area that needs improvement. Some schools use or are developing forms or checklists for monitoring fidelity. One elementary school
addresses fidelity concerns through school meetings, fidelity checks by the literacy coach, and program-specific “refreshers” for instructional assistants. However, none of the schools seems to have an integrated system wherein instruction is actually ruled out as a possible cause of low progress, either through low implementation fidelity or poor instructional delivery. In addition, it does not appear that schools are moving toward this level of sophistication. Rather, their goals are more modest. Schools appear to see a strong need to develop and use fidelity checklists to monitor basic program implementation. Ideally, fidelity data will be used for teacher professional development and to prompt a schoolwide focus on high-quality implementation of interventions in Tiers II–IV.

**NEXT STEPS**

As noted at the beginning, this report is an attempt by the Center on Instruction to further discussion in the field about what schools are doing in terms of RTI implementation. While these schools use elements of RTI (e.g., effective instructional strategies, progress monitoring) that have been well-documented by substantive research, the specific implementation models described above have not been proven effective in terms of raising student achievement or accurately identifying students with learning disabilities. Rather, these practices are the schools’ attempts to implement RTI in a field-based context. COI will continue to follow these schools as their RTI implementations mature and are refined.

For more information on implementing RTI at the school level, please consult the list of resources in Appendix A.
REFERENCES


APPENDIX A: RESPONSE TO INTERVENTION

For the purposes of this document, Response to Intervention (RTI) is defined as a systematic way of measuring student progress, using the resulting data to make important educational decisions, and providing increasingly intensive educational interventions. The RTI framework has two purposes: to prevent future educational difficulties and remediate existing ones. Some states and districts may also use RTI as a data source for identifying students with learning disabilities.

Prior to the 2004 reauthorization of the Individuals with Disabilities Education Act (IDEA), states could require local education agencies (LEAs) to use an aptitude-achievement discrepancy as part of the specific learning disability (SLD) identification process. Since then, states are no longer permitted to require LEAs to use a discrepancy formula in the identification process; instead, states must allow LEAs to consider a student’s response to scientifically based instruction to identify him or her as having an SLD. This second option is commonly operationalized by states, LEAs, and schools as RTI, even though RTI is not specifically mentioned in the law (Johnson, Mellard, Fuchs, & McKnight, 2006).

RTI is not a specific curriculum or program; rather, it should be viewed as an approach based on the public health prevention model, with primary, secondary, and tertiary interventions responsive to students’ needs. RTI provides states, districts, and schools with a framework for allocating instructional services and resources in response to students’ needs. Critical elements of RTI include universal screening; continuous progress monitoring; a multi-tiered intervention model; the use of high-quality, scientifically based curricula in core instruction; and the use of high-quality, scientifically based curricula in intensive interventions (Mellard, 2004).

RTI is commonly conceptualized as consisting of three tiers of increasingly intense interventions. Occasionally, a school’s RTI implementation model contains more or fewer tiers; the specific number is not critical as long as the tiers differ in terms of intensity (e.g., duration and group size). The following description of an RTI model is simplified for the sake of brevity; a more thorough description of RTI is beyond both the scope and purpose of this document.
Typically, Tier I is defined as the core curriculum provided in the general education classroom; all students receive Tier I instruction. Approximately 80% of students are able to meet benchmarks with this level of instruction; therefore, it is critical that the school uses a research-based core curriculum that meets the needs of the majority of its students.

In addition, all students are consistently screened using a skills-based assessment in order to identify students who may be at risk for academic or behavior difficulties. Students identified by the screening measures as needing additional intervention receive supplementary instruction in Tier II. These students continue to participate in Tier I instruction and also receive Tier II instruction. Approximately 15% of the student population will require this supplemental instruction in order to be successful in the core curriculum.

Approximately 5% of students will require more intensive interventions. A student is typically identified as requiring Tier III interventions after receiving a specific amount of instruction in Tier II and not making adequate progress. Some schools conceptualize Tier III as special education, while others view Tier III as within general education.

It is important to note that the percentages identified above are merely proposals for the proportion of the student population that should be represented in each tier, and are based on extrapolations from the public health literature; they are not the result of research studies. However, these percentages do represent frequently cited targets for success at the individual tiers.

Students in Tiers II and III (and possibly in Tier I) receive regular progress monitoring using skills-based assessments. The data collected from these assessments are used to make educational decisions such as the need for more or less intense interventions through movement between tiers.

As noted, the description of RTI in this appendix is overly simplified. The following websites provide more in-depth and specific information regarding RTI:

- Center on Instruction—www.centeroninstruction.org
- IDEA Partnership—www.ideapartnership.org
- The IRIS Center for Faculty Enhancement—www.iris.peabody.vanderbilt.edu
- National Association of State Directors of Special Education—www.nasdse.org
• National Center for Learning Disabilities—www.nclld.org
• National Center on Student Progress Monitoring—
  www.studentprogress.org
• National Research Center on Learning Disabilities—www.nrclld.org
• National Center on Response to Intervention—www.rti4success.org
• The National Technical Assistance Center on Positive Behavior and
  Intervention Supports—www.pbis.org
• Regional Resource and Federal Center Network—www.rrfcnetwork.org
The Center on Instruction collaborated with five national experts on RTI implementation to identify schools and school districts that were working, in any capacity, on aspects of RTI. Nineteen schools were nominated. General information about each site’s RTI-related efforts was collected during 60-minute phone interviews with a school representative. The following questions are typical of those asked during these calls:

1. Describe your RTI model.
2. Why did you decide to implement an RTI framework?
3. How does your school identify children who are at risk?
4. Describe the professional development that occurred related to RTI.

This information was summarized and presented to a steering committee composed of COI staff, officials from the U.S. Department of Education’s Office of Special Education Programs (OSEP), and several scholars and practitioners working in RTI-related areas. This group trimmed the pool of 19 schools down to five, which was the target number of sites for this activity given the available resources. The selection process was driven by three basic considerations (stated here as questions):

- Does the available evidence suggest that this school is developing or implementing an RTI model that is consistent with the preponderance of research (e.g., universal screening, progress monitoring, evidence-based instruction)?
- Does the available evidence suggest that this school is capable of successful schoolwide change, such as that suggested by the implementation of RTI?
- Does this school represent settings where RTI might be particularly helpful (e.g., high poverty, high risk, ELL, etc.)?

Selection of the five sites was unanimous; all members of the steering committee endorsed the five choices.
Collaborating with Implementation Sites

In Spring 2007, a Center on Instruction staff member visited the five sites with three general purposes:

- Introduce the Center on Instruction and begin building collaborative relationships with key school officials and personnel;
- Describe the project more fully and answer questions;
- Begin gathering information about each school’s RTI-related practices, beliefs, and attitudes.

The Center on Instruction adopted a flexible approach, recognizing that each school is unique, with its own “story” to tell. At the same time, a “standard protocol” was implemented across the five visits as a way of maintaining the comparability across the five sites of the information collected at each. The standard protocol included: 1) principal/RTI leadership team interviews, 2) teacher interviews, and 3) classroom observations. These components are described in more detail in the following sections.

Principal/RTI Leadership Team Interview
The Center on Instruction staff member met with the principal, school psychologist, and other members of the school’s RTI leadership team for approximately 60 minutes. The following questions are typical of those asked during these interviews:

1. What are your top two goals for your school related to RTI?
2. Tell me about the steps involved in “rolling out” RTI at your school.
3. What are your next steps in terms of RTI implementation?

Some questions included in the interview were asked in the screening interview; in those cases, the school’s answers were used to gather more information about these particular topics. Additional questions may have been asked to clarify the answers received during the screening interview.

Teacher Interviews
A 60-minute focus group was conducted with general education teachers, special education teachers, and intervention teachers. When appropriate,
educational assistants also participated. The following questions are typical of those asked during these interviews:

1. What do you see as your role in your school’s RTI model?
2. Tell me how you use student assessment data.
3. Tell me about the professional development you have received related to RTI, including formal and informal support.

**Classroom Observations**

A COI staff member conducted 30-minute observations of instruction at all levels of the multi-tiered interventions. Observations were coded according to group size (whole-class, small-group, paired, or individual), instructor (general education teacher, special education teacher, specialist, educational assistant, or other), location (general education classroom, special education classroom, hallway, or other) and duration of instructional time.
APPENDIX C: RTI GLOSSARY


**Aim Line:** Line on a graph that represents expected student growth over time.

**Curriculum-Based Measurement (CBM):** Tools for measuring student competency and progress in the basic skill areas of reading fluency, spelling, mathematics, and written language.

**Data Points:** Points on a graph that represent student achievement or behavior relative to a specific assessment at a specific time

**Discrepancy:** Difference between two outcome measures; IQ-achievement discrepancy refers to the difference between scores on a norm-referenced intelligence test and a norm-referenced achievement test.

**Fidelity of Implementation:** Implementation of an intervention, program, or curriculum according to research findings or developers’ specifications.

**Individuals with Disabilities Education Act (IDEA) of 2004:** Federal statute relative to public education and services to students with disabilities ages 3 through 21. Originally passed in 1975; latest reauthorization in 2004.

**Integrity of Intervention Implementation:** See Fidelity of Implementation.

**Intensive Interventions:** Academic and/or behavioral interventions characterized by increased length, frequency, and duration of implementation for students who struggle significantly; often associated with the narrowest tier of an RTI tiered model; also referred to as tertiary interventions

**Learning Disability/Specific Learning Disability (SLD):** [from federal regulation §300.309(a)(1)] 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  

**Primary Levels of Intervention:** Interventions that are preventive and proactive; implementation is schoolwide or by whole classroom; often connected to broadest tier (core or foundational tier) of a tiered intervention model.  

**Problem-Solving Approach to RTI:** Assumes that no given intervention will be effective for all students; generally has four stages (problem identification, problem analysis, plan implementation, and plan evaluation); is sensitive to individual student differences; depends on the integrity of implementing interventions.  

**Problem-Solving Team:** Group of educational professionals coming together to consider student-specific data, brainstorm possible strategies/interventions, and develop a plan of action to address a student-specific need.  

**Progress Monitoring:** A scientifically based practice used to assess students’ academic performance and evaluate the effectiveness of instruction. Progress monitoring can be implemented with individual students or an entire class. Also, the process used to monitor implementation of specific interventions.  

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

**Screening:** See Universal Screening.  

**Secondary Levels of Intervention:** Interventions that relate directly to an area of need; are supplementary or primary interventions; are different from primary interventions; are often implemented in small-group settings; may be individualized; and are often connected to supplemental tier of a tiered intervention model.
Specific Learning Disability: See Learning Disability.

Standard Protocol Intervention: Use of same empirically validated intervention for all students with similar academic or behavior needs; facilitates quality control.

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

Tiered Model: Common model of three or more tiers that delineate levels of instructional interventions based on student skill need.

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.
### APPENDIX D: SITE DEMOGRAPHICS

#### Oregon Elementary School (K–5) 2006–2007

<table>
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<th>Value</th>
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<tbody>
<tr>
<td>Student population (size) at site</td>
<td>608</td>
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<tr>
<td>Percent of students on free/reduced-price lunch</td>
<td>56%</td>
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<tr>
<td>Percent of students who are ELL</td>
<td>38%</td>
</tr>
<tr>
<td>Percent of students served in special education</td>
<td>10%</td>
</tr>
<tr>
<td>Percent of students identified as having a specific learning disability</td>
<td>3.8%</td>
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<tr>
<td>Per-pupil funding</td>
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</tr>
</tbody>
</table>
| Percentage of students per grade proficient on screening measure | K – 88%  
1 – 71%  
2 – 66%  
3 – 91%  
4 – 81%  
5 – 85% |

Reading First school: N  
Title I school: Y

1 School indicated that third-grade scores are high because it was the first grade to receive targeted interventions since kindergarten.

#### Wisconsin Intermediate School (Grades 5–6) 2006–2007

<table>
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<th>Specification</th>
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<tbody>
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<td>529</td>
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<tr>
<td>Percent of students on free/reduced-price lunch</td>
<td>13%</td>
</tr>
<tr>
<td>Percent of students who are ELL</td>
<td>1%</td>
</tr>
<tr>
<td>Percent of students served in special education</td>
<td>16%</td>
</tr>
<tr>
<td>Percent of students identified as having a specific learning disability</td>
<td>5%</td>
</tr>
<tr>
<td>Per-pupil funding</td>
<td>$9,622</td>
</tr>
</tbody>
</table>
| Percentage of students per grade proficient on screening measure | 5 Math – 67%  
5 Read – 82%  
6 Math – 78%  
6 Read – 87% |

Reading First school: N  
Title I school: Y
<table>
<thead>
<tr>
<th>Pennsylvania Elementary School (K–4) 2006–2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student population (size) at site</td>
</tr>
<tr>
<td>Percent of students on free/reduced-price lunch</td>
</tr>
<tr>
<td>Percent of students who are ELL</td>
</tr>
<tr>
<td>Percent of students served in special education</td>
</tr>
<tr>
<td>Percent of students identified as having a specific learning disability</td>
</tr>
<tr>
<td>Per-pupil funding</td>
</tr>
</tbody>
</table>
| Percentage of students at low risk on measures at the middle of the school year 2006 – 2007 (see Appendix E for screening measures) | K – LNF – 68%  
PSF – 76%  
NWF – 45%  
ISF – 45%  
1 – PSF – 96%  
NWF – 41%  
ORF – 41%  
2 – ORF – 53%  
3 – ORF – 45%  
4 – ORF – 47% |
| Reading First school | N |
| Title I school | Y (targeted assistance) |

Notes. LNF = Letter Naming Fluency, PSF = Phoneme Segmentation Fluency, NWF = Nonsense Word Fluency, ISF = Initial Sound Fluency, ORF = Oral Reading Fluency.

<table>
<thead>
<tr>
<th>Florida Elementary School (K–5) 2006–2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student population (size) at site</td>
</tr>
<tr>
<td>Percent of students on free/reduced-price lunch</td>
</tr>
<tr>
<td>Percent of students who are ELL</td>
</tr>
<tr>
<td>Percent of students served in special education</td>
</tr>
<tr>
<td>Percent of students identified as having a specific learning disability</td>
</tr>
<tr>
<td>Per-pupil funding</td>
</tr>
</tbody>
</table>
| Percentage of students per grade proficient on screening measure (see Appendix E for screening measures) | K – 45%  
1 – 71% |
<p>| Reading First school | N |
| Title I school | N |</p>
<table>
<thead>
<tr>
<th>California Middle School (Grades 6–8) 2005–2006</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student population (size) at site</strong></td>
</tr>
<tr>
<td><strong>Percent of students on free/reduced-price lunch</strong></td>
</tr>
<tr>
<td><strong>Percent of students who are ELL</strong></td>
</tr>
<tr>
<td><strong>Percent of students served in special education</strong></td>
</tr>
<tr>
<td><strong>Percent of students identified as having a specific learning disability</strong></td>
</tr>
<tr>
<td><strong>Per-pupil funding</strong></td>
</tr>
<tr>
<td><strong>Percentage of students per grade proficient on state measure (CST English/language arts)</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Reading First school</strong></td>
</tr>
<tr>
<td><strong>Title I school</strong></td>
</tr>
</tbody>
</table>

2 The percentage of students who were below or far below basic was 16% for sixth grade, 17% for seventh grade, and 16% for eighth grade.
APPENDIX E: BRIEF SITE DESCRIPTIONS

Oregon Elementary School

- Academic areas: Reading, writing, math, behavior, and attendance
- Number of tiers: 3
- RTI purpose: Comprehensive school reform; LD identification
- Tier I:
  - Curricula used
    - Reading/language arts: Macmillan
    - Math: McGraw Hill
  - Length of instruction
    - Reading: 60 minutes daily (grades 1 through 5); 90 minutes daily (kindergarten)
    - Math: 40 minutes daily
  - Screening tools and procedures
    - Administered every eight weeks
      - Dynamic Indicators of Basic Early Literacy Skills (DIBELS) administered for reading by district team (comprising retired teachers and educational assistants [EAs])
      - Curriculum-based measures (CBMs) used for math
      - State-developed writing prompts used for writing
      - Universal screening for behavior using grade-appropriate measures
  - Data-based decision-making procedures
    - Weekly grade-level teachers’ meeting
    - RTI team (principal, school counselor, literacy specialist, special education representative, ELL representative, teachers) meets monthly to discuss students who are not making progress and to plan interventions
    - Students who are performing in the bottom 20% in reading, writing, math, behavior, or attendance in each grade are identified on a form that is reviewed by the RTI team
- Personnel used
  o Regular classroom teachers, literacy specialist, and educational assistants

• Tier II:
  - Curricula used
    o Reading: Approximately 24 different programs, including Read Naturally, Reading Mastery, Phonics for Reading, and REWARDS
    o Math: Connect Math in early grades; no set curriculum for upper grades (teacher generated)
    o Writing: Handwriting in kindergarten; conventions, grammar, and style in grades 1 through 5
    o Attendance: Morning check-in “breakfast club”; interventions with parents if problem persists
    o Behavior: Social skills, First Steps, teacher-implemented Behavior Improvement Plan
  - Length of instruction
    o Daily for 20–45 minutes
  - Progress-monitoring tools and procedures
    o DIBELS used weekly for students receiving reading intervention
    o Teacher-developed tests and CBMs administered weekly in math intervention groups
    o Writing papers collected and scored monthly using state rubric
    o Measures administered and scored by intervention teachers
    o Intervention teachers each set their own administration schedules
    o First Steps assessment administered for students receiving behavior interventions
    o Principal monitors attendance data
  - Data-based decision-making procedures
    o Progress-monitoring data are reviewed at monthly RTI team meetings
    o Intervention is changed if a student does not show growth after one month of intervention
    o Two Tier II interventions are conducted before referral to Tier III
    o Students exit Tier II after demonstrating growth along a predetermined aim line for at least one month
- Personnel used
  o Educational assistants

• Tier III:
  - Curricula used
    o Tier III intervention programs are typically more comprehensive and explicit than those used in Tier II
    o When appropriate, the same program may be used in both Tiers II and III with smaller group size and longer duration
  - Length of instruction
    o Daily for 30–45 minutes
  - Progress-monitoring tools and procedures
    o Same as Tier II
  - Data-based decision-making procedures
    o Progress-monitoring data are reviewed at monthly RTI team meetings
    o Students who do not show growth after receiving two Tier III interventions are referred to special education
    o Students exit Tier III after demonstrating growth along a predetermined aim line for at least one month

- Personnel used
  o Educational assistants
Wisconsin Intermediate School

- Academic areas: Reading and math
- Number of tiers: 4
- RTI purpose: Comprehensive school reform
- Tier I:
  - Curricula used
    - Reading: Houghton-Mifflin
    - Math: Everyday Math, Connected Mathematics
  - Length of instruction
    - 90-minute daily block for English/language arts
    - 45-minute daily for math
  - Screening tools and procedures
    - Administered three times per year
    - Reading: Maze passages/oral fluency
    - Math: CBMs
  - Data-based decision-making procedures
    - Screening results and year-end results from previous grade are used to assign students who are performing below grade level to intervention groups
    - Students who are behind grade level but have no history of delay from previous state test results are placed in Tier II
    - Students with critically low scores on screening measures or history of low performance on state test may be placed directly into Tier III or IV (decision is made by the problem-solving team)
    - Students who score in the “minimal” range on the state test are automatically placed in Tier III if multiple data sources support this decision
  - Personnel used
    - Regular education teachers, reading specialist, and special education teacher
• Tier II:
  - Curricula used
    o Core curriculum is pre-taught or re-taught
    o Additionally, in reading, students are homogeneously grouped according to the following needs: Group 1—Comprehension, Group 2—Fluency, Group 3—Phonics. Teachers emphasize instruction on each group’s specific needs. Materials are taken from the Houghton Mifflin program.
  - Length of instruction
    o Every other day for 45 minutes
  - Progress-monitoring tools and procedures
    o Administered every other week
    o Reading: Maze passages and DIBELS Oral Reading Fluency (ORF)
    o Math: Concepts and application
  - Data-based decision-making procedures
    o Students move out of Tier II when they reach grade level on progress-monitoring measures
  - Personnel used
    o ELL specialist, speech and language pathologist, special education teacher, and reading specialist

• Tier III:
  - Curricula used
    o Reading: Houghton Mifflin Soar to Success/Houghton Mifflin Phonics Intervention
    o Math: Re-teaching activities suggested in the core curriculum and teacher generated; individual instruction on math skills deficits
    o Core curriculum is also pre-taught or re-taught
  - Length of instruction
    o Daily for 45 minutes
  - Progress-monitoring tools and procedures
    o Administered weekly
    o Same measures as Tier II
- Data-based decision-making procedures
  o Students exit Tier III based on improvement to a predetermined level on progress-monitoring measures and approval of general education teacher; usually exit at semester break
- Personnel used
  o ELL specialist, speech and language pathologist, special education teacher, reading specialist

• Tier IV:
  - Curricula used
    o Individualized interventions in reading only
  - Length of instruction
    o Daily; individualized
  - Progress-monitoring tools and procedures
    o Administered weekly
    o Same measures as Tier II
  - Data-based decision-making procedures
    o Students exit Tier IV based on improvement to a predetermined level on progress-monitoring measures and approval of general education teacher; usually exit at semester break
- Personnel used
  o Special education teacher and reading specialist
Pennsylvania Elementary School

- Academic areas: Literacy, math, and behavior
- Number of tiers: 3
- RTI purpose: Comprehensive school reform; LD identification
- Tier I:
  - Curricula used
    - Reading: Houghton-Mifflin
    - Math: *Everyday Math*
  - Length of instruction
    - 90 minutes
  - Screening tools and procedures
    - Reading: DIBELS three times per year
    - Math: Quarterly skill assessments four times per year
    - Grades 3 and 4: 4Sight assessment administered five times/year
    - Behavior: Office referrals
  - Data-based decision-making procedures
    - Decisions on students needing intervention are made four times during the year at “data days,” when faculty meets to review student data and determine needs
  - Personnel used
    - Regular education teachers
- Tier II:
  - Curricula used
    - Enrichment provided to students performing above grade level
    - Additional instruction in small groups using extensions of core curriculum provided to students performing at grade level
    - Remedial instruction based on skill deficits provided to students performing below grade level using *Road to the Code, Project Read, Quick Read, Corrective Reading, Everyday Math* extra practice, *Mastery Math Facts*, and *Saxon Math*
  - Length of instruction
    - Provided to all students daily for 30 minutes
- Progress-monitoring tools and procedures
  o Every other week for strategic-level students
  o Every week for intensive-level students
- Data-based decision-making procedures
  o RTI team (math and literacy coach, grade-level representative, school psychologist, counselor, special area teacher) meets monthly to review data and assess interventions
- Personnel used
  o Regular education teacher, paraprofessionals, instructional aides, speech and language teachers, general education teachers, and special area teachers
- Tier III:
  - Curricula used
    o Reading only
  - Length of instruction
    o Daily for 30–60 minutes
  - Progress-monitoring tools and procedures
    o Same as Tier II
  - Data-based decision-making procedures
    o Same as Tier II
  - Personnel used
    o Reading specialist
Florida Elementary School

- Academic area: Reading
- Number of tiers: 4
- RTI purpose: Comprehensive school reform

Tier I:
- Curriculum used
  - Harcourt *Trophies*
- Length of instruction
  - 90 minutes to 2 hours per day
- Screening tools and procedures
  - State assessments administered three times per year
  - District benchmark in oral reading fluency and maze passages administered three times per year
- Data-based decision-making procedures
  - Screening data used to identify at-risk students and aid teachers in planning instruction
  - Assistant principal, reading coach, and grade-level teachers meet quarterly to discuss data and determine which students most need intervention
- Personnel used
  - Regular education teacher, assistant principal, and reading coach

Tier II:
- Curricula used
  - *PALS, Rewards, STARS, Extensions for Reading, Quick Reads, Vocabulary!, K-PALS*, depending on student need and goals
- Length of instruction
  - Four times per week for 30 minutes
- Progress-monitoring tools and procedures
  - Weekly administration of oral reading fluency measures and maze probes
  - RTI team (assistant principal, speech and language pathologist, reading coach, school psychologist, and student support/behavior specialist) meets every 6 weeks to analyze data with grade-level teachers
- Data-based decision-making procedures
  o Interventions are adjusted based on student progress
  o Students are moved out of intervention or into Tier III based on progress-monitoring results at the end of the 6-week period

- Personnel used
  o Regular education teacher, student support or behavior specialist, RTI team

- Tier III:
  - Curriculum used
    o Individual intervention
    o Students continue to participate in Tier II
  - Length of instruction
    o 50 minutes daily
    o This is seen as a temporary diagnostic tier
  - Progress-monitoring tools and procedures
    o Weekly administration of oral reading fluency measures and maze probes
  - Data-based decision-making procedures
    o Student support team (assistant principal, reading coach, speech and language pathologist, student support/behavior specialist, school psychologist) reviews progress-monitoring data weekly to determine whether student can return to Tier II or be referred for special education
  - Personnel used
    o Grade-level teacher, student support team

- Tier IV: Special education placement
  - Curriculum used
    o Various intervention programs, including Rewards, STARS, Extensions for Reading, Quick Reads, and Vocabulary!
  - Frequency of instruction
    o Daily
  - Progress-monitoring tools and procedures
    o Weekly administration of oral reading fluency measures and maze probes
- Data-based decision-making procedures
  o Data are used by the individualized education program (IEP) team in writing IEP goals and conducting student re-evaluations
- Personnel used
  o Special education teachers and specialists
California Middle School

- Academic area: Reading
- Number of tiers: 3
- RTI purpose: Comprehensive school reform, LD identification

Tier I:
- Curricula used
  - Holt Reinhart and daily fluency instruction during homeroom
- Length of instruction
  - 72 minutes daily, plus instruction during homeroom
- Screening tools and procedures
  - Grade-level fluency passages, San Diego Quick assessment, district writing prompts, Scholastic Reading Inventory, and curriculum-based assessments administered three times per year
- Data-based decision-making procedures
  - Principal, assistant principal, interventionist, and other lead teachers place students in instructional tiers at start of the year using results from state and local tests
  - Principal, speech and language pathologist, and grade-level teachers review scores in monthly grade-level meetings
  - Students are given at least two interventions by classroom teacher before being referred to Student Study Team for possible placement in intervention
  - Students who are two grade levels behind are placed in Tier II, and students who are more than two grade levels behind are placed in Tier III
- Personnel used
  - General education teachers
• Tier II:
  - Curricula used
    o REWARDS, Read Naturally, Soar to Success
  - Length of instruction
    o Every other day for 72 minutes
  - Progress-monitoring tools and procedures
    o Curriculum-based assessments as determined by the program
  - Data-based decision-making procedures
    o Students move between interventions based on improved progress-monitoring scores; decisions made on an individual basis throughout the year
    o Students exit Tier II at the end of a trimester if appropriate progress has been achieved
  - Personnel used
    o Regular education teacher, resource teacher, specialists, instructional assistants

• Tier III:
  - Curricula used
    o Language! 3rd edition, Read 180, High Point
  - Length of instruction
    o Daily for 144 minutes (in place of Tier I)
  - Progress-monitoring tools and procedures
    o Same as Tier II
  - Data-based decision-making procedures
    o Students exit Tier III after progressing to within two grade levels of reading expectations
  - Personnel used
    o Reading specialist and special education teacher