Response to Intervention

An Alignment Guide for System 44
Scholastic Inc. has prepared this Alignment Guide to assist states, districts, and schools that are currently implementing or are considering adopting a Response to Intervention (RTI) approach. This guide provides key background information on current educational policy related to RTI, and demonstrates how System 44 can complement and strengthen the implementation of RTI and ultimately raise student achievement. This Alignment Guide provides the following information:

- Response to Intervention Overview
- System 44 Overview
- Alignment of System 44 to RTI Core Components

System 44 is a breakthrough foundational reading program designed for the most challenged struggling readers in Grades 3–12. Intentionally metacognitive, System 44 helps students who lack basic decoding skills understand that the English language is a finite system of 44 sounds and 26 letters that can be mastered. System 44:

- Capitalizes on the best thinking on research-based phonics, vocabulary, fluency, and comprehension instruction for older students;
- Emphasizes explicit instruction that covers the building blocks of the English language, including phonological and phonemic awareness, phonics, morphology, and orthography, and connects them to meaning;
- Provides highly motivating and age-appropriate adaptive technology that builds fluency and adapts automatically and continuously to data being captured by curriculum-embedded assessment, ensuring that every single student moves efficiently through the program;
- Supports teachers by providing the System 44 Teaching Guide that presents direct teaching, teacher modeling, guided and independent practices and application, as well as opportunities for pre-teaching and re-teaching strategies as needed for specific students;
- Offers varied reading opportunities, including decodable text, independent reading libraries, and scaffolded reading experiences on the computer;
- Includes a valid computer-based assessment called the Scholastic Phonics Inventory™ (SPI), which can be used for screening and placement purposes as well as embedded assessments and progress monitoring tools so teachers can measure achievement and differentiate instruction according to individual needs;
- Contains professional development designed to expand teachers’ knowledge of research on how to enhance fluency, build decoding skills, and improve phonics instruction.

Using the Alignment Guide
Since January 2006, districts are permitted to use up to 15 percent of their Individuals with Disabilities Education Act (IDEA) funds for interventions and measurements to be used within an RTI framework. This Alignment Guide addresses how System 44 supports the implementation of RTI. For all questions regarding Response to Intervention services, please consult the final IDEA, Part B, regulations governing the Assistance to States for Education of Children with Disabilities Program and the Preschool Grants for Children with Disabilities Program. They can be found at http://idea.ed.gov/explore/home.

The Alignment Guide is informed by the IDEA 2004 Regulations, the National Association of State Directors of Education (NASDE) 2005 Report, guidelines provided by the Vaughn Gross Center for Reading and Language Arts at the University of Texas at Austin.
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About Scholastic Inc.

Scholastic is committed to providing teachers with effective materials for every stage of reading instruction to ensure that students develop the skills and strategies needed to succeed in school. Our reputation is built on an 85-year history of helping foster and support effective learning for all students. For years, we have worked with leading researchers to develop scientifically based products that improve student achievement, as well as meaningful changes in teacher effectiveness.

We look forward to partnering with you to improve reading achievement, and would like the opportunity to talk with you about how we can best support your efforts to implement Response to Intervention.
Response to Intervention (RTI) Overview

What is RTI?
Response to Intervention is a tiered approach to teaching and learning that empowers educators to continuously screen students' skills, identify achievement targets, collect data, monitor student progress, and calibrate instruction to match student needs.

The purpose of RTI is to proactively identify students in need of special services to prevent long-term academic failure in both general education and special education settings. By revealing students' strengths and unveiling opportunities for improvement, RTI helps teachers harness resources more efficiently to ensure every student, regardless of ability, grows into a confident, capable, lifelong learner.

The Multi-tiered Instruction and Intervention Model
RTI uses a multi-tiered model of service delivery to promote efficient response to students' needs. Each tier provides increasingly intensive support structures to ensure that students succeed:
In Tier 1, students receive core instructional interventions that are preventive and proactive. These are designed to differentiate instruction so that the majority of the students will respond and achieve established benchmarks depending on grade and reading achievement level.

In Tier 2, students who lack fundamental skills their peers mastered in Tier 1 are provided with additional short-term, strategic supplemental classroom instruction in small groups. Students in Tier 2 typically receive intervention instruction in small groups, providing them with more intensive, targeted attention from the teacher.

In Tier 3, students who have not adequately responded to the instruction provided in Tiers 1 and 2 are offered higher intensity, accelerated intervention to quickly build mastery of entry-level skills. The goal is to allow optimal access to a rigorous standards-based curriculum.

Core Components of RTI

A Multi-tiered Instruction and Intervention Model
Multiple tiers of intervention allow schools to offer increasingly intensive services to students. Based on student performance data, teachers make judgments about the intensity of instruction required for each student depending on the student’s reading achievement in relation to grade-level peers.

Scientifically Validated and Research-Based Interventions
IDEA 2004 requires the use of research-based interventions to the extent possible. Interventions should be based on research-proven practices. In addition, the intervention should be validated by scientific efficacy studies.

Universal Screening and Curriculum-Based Assessment
All students should be screened three times a year to identify those students who are not making expected academic progress. Screening measures should be brief, reliable, and valid, and should appropriately identify those students who require more intense interventions.

Progress Monitoring Tools and Informative Reports
In all tiers of intervention, data should be collected and analyzed to determine whether the interventions are producing the desired academic gains. Data should be translated into actionable reports so that teachers can identify achievement and meet accountability demands over the course of the school year.

Customized Professional Development and Capacity Building Solutions
Service solutions should be provided to help schools build their capacity to implement a tiered approach to learning. This includes providing a high-quality professional development plan that allows for coaching, e-learning courses, and other opportunities to support teachers’ and administrators needs.
System 44 Overview

System 44 is a foundational reading program for struggling readers in Grades 3–12. With adaptive technology and systematic teacher-directed instruction, System 44 helps students unlock the English language and learn the finite system of 44 sounds and 26 letters.

At the heart of System 44 is adaptive technology that provides four strands of instruction (The Code, Word Strategies, Sight Words, and Success) that teach students phonemic awareness, decoding, and word strategies, while building sight word recognition and comprehension. Within each strand, the software offers a four-step path to help students master these skills. In the Smart Zone, explicit instruction guides students in building skills and academic language as they develop metacognitive understanding. The Word Zone helps students develop fluent decoding skills through modeling and individualized practice of blending. The Spelling Zone helps students apply known sound-spellings to encoding, individualizing their study of spelling by providing systematic practice and immediate, corrective feedback specific to students’ errors. In the Fluency Zone, students engage in reading tasks that promote skills transfer and build fluency and comprehension.

With every click of the mouse, System 44 software customizes each student’s instructional path on the software through technology that adapts in response to individual student performance. The software also continuously collects and compiles performance data in actionable reports that help teachers monitor progress and plan data-driven instruction to optimize instructional time and maximize acceleration.

Explicit, sequential lessons in the System 44 Teaching Guide help teachers target skill instruction and review and reinforce the phonics and word strategy skills that students are learning on the software. In addition, System 44 includes a library of 36 age-appropriate paperbacks and corresponding audiobooks that are directly linked to the target phonic elements. These paperbacks are designed to promote transference of learning from the software.

System 44 can be implemented easily and flexibly as a stand-alone program, or in concert with Scholastic’s READ 180 program, or with any core reading program. It is recommended that students use System 44 daily during a 45–60 minute class period, with students spending a minimum of 20 minutes on the software and 20 minutes in small-group instruction or modeled/independent reading (as shown below). Each session should begin with a 5–10 minute whole-group introduction to review previous learning and launch the day’s instruction. Beyond the minimum recommended dosage, the time spent in each rotation can be adjusted depending on the teacher’s judgment of student needs, and depending on whether the program is being used as a stand-alone or in conjunction with another reading program.
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System 44 Aligns to Response to Intervention Core Components

The following information outlines how System 44 aligns to the core components of a Response to Intervention (RTI) approach to teaching and learning.

RTI 1 A Multi-tiered Instruction and Intervention Model

System 44 has the capacity to be used flexibly by educators within a variety of instructional models that address any one of the three tiers of service delivery—Tier 1, Tier 2, and Tier 3. While System 44 is most likely to be implemented as a Tier 2 or Tier 3 intervention, it can serve as a Tier 1 solution where the majority of students lack foundational reading skills.

Regardless of tier, System 44 meets the diverse needs of older struggling readers by:

● Accelerating Mastery of the Code—System 44 helps students understand the English language is a finite system of 44 sounds and 26 letters that can be mastered. With a focus on identifying and serving the individual instructional needs of each older struggling reader, System 44’s intentionally metacognitive approach supports each student in acquiring, as quickly and powerfully as possible, the knowledge, strategies, and confidence to attain level-appropriate reading and comprehension.

● Differentiating Instruction—System 44 varies the level of instructional challenge and support according to the learning needs of individual students. The adaptive technology maximizes students’ experience of success through lessons tailored to their skill level. Students who master content quickly can fast-track into a more advanced area of the program. Additionally, the software’s supportive coaching and immediate, corrective feedback help ensure that struggling or challenged students do not feel uncomfortable about not mastering specific skills as quickly as their classmates. Teachers can use the reports generated by the software to review student performance data and plan small-group instruction or independent practice according to students’ specific needs.

● Employing Scaffolded Instruction—The gradual release model, used throughout System 44, leads to ownership over learning as responsibility for performing a new skill is gradually transferred from teacher to student. The System 44 Teaching Guide assists teachers in scaffolding direct instruction for students during whole- and small-group lessons by providing pre-teaching and differentiated instruction resources for each lesson. System 44 software uses adaptive and audio technology to customize and scaffold individual skill practice. Comprehension supports are incorporated throughout System 44 library books, and the books are highly illustrated to further support understanding.

● Modifying Modes of Presentation—System 44’s multisensory instructional approach provides students with daily opportunities to view, listen, speak, record, and write. System 44 instruction includes videos, images and graphics, sounds, audiobooks, several
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different types of print components, and manipulatives. Through learning activities that combine two or more sensory modalities simultaneously—such as Mouth Position Videos that show visual and aural models of accurate phoneme articulation—System 44 provides multiple entry points for all learners to access and learn the content.

- **Providing Supports to English Language Learners**—Supports for English language learners are incorporated throughout the program, including picture cues and context sentences in the software and Decodable Digest, explicit vocabulary instruction in teacher-lead lessons, and audio and visual modules of correct pronunciation. In addition, the software and teacher-led lessons offer Spanish translations and instruction in Spanish cognates.

- **Supporting Students With Special Needs**—Designed specifically to meet the needs of older struggling readers with learning disabilities, System 44 applies research-proven practices for teaching students with special needs, including multisensory teaching, scaffolded and differentiated instruction, progress monitoring, and data-driven instruction. The software includes features such as video captioning and alternate color schemes to accommodate students with audio and visual impairments.

**RTI 2 Scientifically Validated and Research-Based Interventions**

The result of collaboration between Dr. Marilyn Jager Adams and Dr. Ted Hasselbring, System 44 combines the best practices in research-based phonics instruction for older struggling readers with state-of-the-art adaptive technology. In addition, Dr. Richard Wagner, the author of the Test of Word Reading Efficiency (TOWRE), the Comprehensive Test of Phonological Processing (CTOPP), and other well-recognized tests, is the lead validation researcher for the Scholastic Phonics Inventory (SPI).

The program draws on a foundation of research in the following six areas:

1. **Improving Phonemic Awareness, Decoding, and Fluency Instruction**
   Phonemic awareness, decoding, and fluency are the critical foundations upon which all other reading skills are built (Adams, 1994, 2001; Moats, 2001; Stanovich, 1991). To read fluently, students must be able to accurately and automatically recognize individual words through decoding or by sight (Adams, 2008; Scarborough, 2002; Wagner, 2008). For the most challenged older struggling readers, research shows that phonics-based intervention can impart the skills they lack and bring them to grade-level reading in one to two years of instruction (Torgesen, Alexander, Wagner, Rashotte, Voeller, & Conway, 2001). In System 44, students receive direct, explicit instruction and intensive training in phonemic awareness, phonics, decoding, spelling, word analysis, sight words, and vocabulary.

2. **Grounding Instruction in Meaning**
   Research shows that people are best able to absorb new concepts and transfer learning to new situations when they “learn with understanding rather than merely memorize sets of

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1. A full description of the research base underlying System 44 can be found in the System 44 Research Foundation Paper (Scholastic, 2008).
facts or follow a fixed set of procedures” (Bransford, Brown, & Cocking, 2003). Learning with meaning is the “ribbon” that ties the System 44 curriculum together, according to Dr. Marilyn Jager Adams. Throughout, word meanings are explained, exemplified, and pictured, and meaning is explored as students study morphological word families, roots, and affixes. Thus older readers learn words both by analysis of the sounds and letters that make them up and by the meanings they convey.

3. Differentiating Instruction for Older Struggling Readers
   Older struggling readers vary greatly in the types of reading problems they display (Boardman et al., 2008), requiring teachers to diagnose students’ needs accurately and provide targeted, intensive instruction that accommodates a variety of learning styles and needs (Hasselbring, Lewis, & Bausch, 2005). In System 44 differentiated and individualized instruction are achieved by the integration of multiple assessments, multiple entry points, adaptive computer technology, and targeted instructional materials. Teachers can thus create learning environments for multiple purposes to meet the needs of individual students. Older readers also benefit from learning metacognitive strategies, which help them “think about their thinking” before, during, and after a task (Boulware-Gooden et al., 2007). Teacher-led S.M.A.R.T. (Strategies for Metacognition, Academic Language, Reading, and Thinking) lessons in System 44 build students’ metacognitive strategies for mastering phonics.

4. Maximizing Retention of New Concepts
   Memory is enhanced by creating associations among concepts. Words presented in an organized, structured way are better remembered than those that are randomized (Medina 2008). Technology that affords students the opportunity to practice new skills systematically, with information presented in manageable sets, fosters automaticity (Hasselbring and Goin, 2004). In the System 44 software, the FASTT (Fluency and Automaticity through Systematic Teaching with Technology) model for software development facilitates transfer from short-term memory to long-term memory, by introducing manageable sets of items, providing repeated exposures, spacing review, and shortening response time.

5. Building and Sustaining Engagement
   Struggling readers who are motivated and engaged in meaningful reading activities for sustained periods are more likely to become proficient readers (Guthrie et al. 2007). In System 44’s software and teacher-led lessons, students are engaged daily with high-interest, age-appropriate texts and manageable, progressively difficult content that requires demonstrated proficiency before moving on, thus helping them to feel confident before being challenged with new content.

6. Frequent Monitoring of Student Progress
   Ongoing assessment and progress monitoring are vital to documenting student growth and informing instruction (Fisher & Ivey, 2006; Stecker, Fuchs, and Fuchs, 2005; Torgesen, 2002). As described in the next section, System 44 provides continual progress monitoring and data reporting (via software and print) to inform instruction and monitor progress toward Individualized Education Program (IEP) goals and objectives.
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Universal Screening and Curriculum Embedded Assessments

*System 44* continuously assesses students by using a variety of instruments. Students begin by taking the *Scholastic Phonics Inventory* (SPI), to assess basic letter recognition, decoding, and sight word knowledge. The SPI measures both accuracy and fluency by collecting data that identifies students who lack decoding skills, as well as students who demonstrate certain skills but have yet to achieve automaticity and fluency. Ultimately, the test pinpoints an appropriate point of entry for those students within the continuum of decoding instruction.

A research-based assessment, the SPI has been the subject of three scoring, reliability, and cross-validation studies: a southwestern sample with 192 ninth-grade students and a southeastern sample of 217 fifth-, seventh-, and ninth-grade students. The test has also been validated against the Test of Word Reading Efficiency (TOWRE) and the Word Analysis subtest from the Woodcock–Johnson III.

Curriculum-embedded assessments are included throughout the *System 44* software. The following activities in *System 44* collect individual student performance data:

- **Sound Challenge**—During this activity, a student hears the target review sound and quickly identifies the correct sound-spelling from a list. Results are reported in the Student Software Report.

- **Word Challenge**—During this activity, a student hears a word with the target or review spelling pattern and identifies the correct word from a list with four choices.

- **Spelling Challenge**—During this activity, a student hears a word from the current topics repeated at increasing speed intervals and systematically interspersed with review words. Results are reported in the Student Software Report.

- **Read & Think**—During this activity, a student reads a single decodable sentence on the screen. The computer then reads a question aloud and presents three answer choices related to that question. The student has to read for meaning to distinguish the correct choice. Results are reported in the Student Software Report.

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2 For further information on the design and validation of the *Scholastic Phonics Inventory*, see the *Scholastic Phonics Inventory Technical Guide* (Wagner, 2009).
Progress Monitor—Every topic in *System 44* ends with a quick Progress Monitor. This assessment resembles Word Challenge in that the student has to identify the target word from a list of five choices. Performance indicates whether students have mastered Topic skills and content. If students perform below proficiency on the Progress Monitor, they will automatically review that Topic with new and adapted content to target their specific deficits.

The *System 44* teacher support materials also contain curriculum-embedded assessments. For example, the Teaching Guide concludes with an assessment that is directed by the teacher and implemented with a small group of students. These curriculum-embedded assessments use the cloze format to build decoding and word recognition skills in the context of reading for meaning.

In addition, *System 44* includes two Summative Assessments that help monitor how well students have maintained skills and whether they can apply and transfer them to printed texts. The 50 multiple choice questions assess phonemic awareness and phonics, sight words and spelling, and morphology. The Midyear and End-of-Year Tests are curriculum-embedded, criterion-referenced to instruction in the Teaching Guide, and designed to measure whether students have mastered and maintained the content of previously taught lessons.

RTI 4 Progress Monitoring Tools & Informative Reports

The *System 44* software continuously collects individual student performance data that can be used to track progress over time. The software provides four types of progress monitoring:

- **Software Performance**—Interactive software instruction, practice, and assessment gather data on students’ accuracy and fluency with specific decoding, sight word, and word strategy skills.

- **Oral Reading Fluency Assessments**—In the *System 44* Success Passages, students engage in repeated readings of connected text with scaffolded support. Teachers can monitor oral reading fluency by listening to students’ Success Passage recordings.

- **Scholastic Reading Counts! (SRC) Quizzes**—The Scholastic Reading Counts! Quizzes enable students to demonstrate comprehension of the books they read during independent reading and practice. As students take the quizzes, the Scholastic Achievement Manager (SAM) gathers and organizes data on their usage and performance.

- **Informal Assessments**—*System 44* Teaching Guide lessons include informal lesson assessments that allow teachers to monitor mastery of lesson content. These frequent checks measure the transfer and maintenance of new skills from the software to print.

Ongoing, real-time reporting on student performance on the *System 44* software and SRI is available to teachers and administrators through the Scholastic Achievement Manager (SAM). Using SAM, teachers can generate detailed progress monitoring, instructional planning, and management reports, as well as alerts and parent letters that track software usage and progress in
in key skill areas. Teachers can then use the data from the reports to inform and target their instruction in order to meet all their students’ diverse needs.

SPI and System 44 reports include:

- **The Screening and Placement Report**, which can be used with students to determine initial placement and identify attainable goals at the beginning of System 44.

- **The Student Software Performance Report**, which tracks skill growth from the first to last cycle in each software zone. This means it can help identify performance patterns that indicate relative strengths and weaknesses in phonemic awareness, decoding, spelling, and/or comprehension.

- **The Reading Progress Report**, which helps teachers identify students who are not meeting usage or cumulative performance expectations.

- **The Response to Intervention Report**, which provides information to help teachers determine if System 44 is effective with students and compare their progress with that of peers.

- **The Differentiated Instruction and Grouping Report**, which can be used to group students who are moving at the same pace on the software for teacher-led instruction. It also helps teachers to review and revise student goals and regroup instruction as necessary.

- **The Student Mastery Report**, which details an individual student’s response to the System 44 instruction. It can be used to correlate software time with progress and mastery in each instructional category.

- **The Family Report**, which makes it simple for teachers to communicate information about student progress to families and caregivers. This report can be provided at each grading period or as outlined in the IEP.
Customized Professional Development & Capacity Building Solutions

Teachers, administrators, and specialists have access to customized professional development and capacity building solutions to implement System 44. System 44 implementation training exposes teachers to the program’s background and research, engages them in the student experience through a software simulator, explores program components, supports the development of an instructional plan tailored to their school and classroom context, offers practice using the Scholastic Achievement Manager (SAM), and explains the use of the many reports available through SAM. In addition, teachers and administrators have access to interactive webinars and in-person professional development seminars to learn how to use data to drive instruction, build decoding skills, and improve phonics instruction.
References


