

Response to Intervention at the Secondary Level

Tiered interventions—including whole-school, small-group, and individual interventions—are what make RTI initiatives successful.

By Matthew K. Burns

Note: This article is the second in a two-part series. The first part included a general explanation of response to intervention (RTI), its importance to secondary school principals, and a description of the components of effective RTI programs.

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Five years ago, Steven Waitz, the principal of Maple Middle School in Northbrook, IL, attended a training about “flexible service delivery” and was impressed with the emphasis on data-based decision making and evidence-based practice. Although the training focused on elementary students, he immediately saw implications for addressing the most common academic difficulty his school faced: student homework completion. Following the training, Maple implemented a project to collect homework completion data for all students and initiated a systemic homework completion intervention. The most important component of these efforts was establishing a process to identify the students who needed additional support. Over time, Waitz and his faculty expanded the project beyond homework completion and developed a multitiered system of service delivery that includes universal screening and benchmark assessments to identify students who are in need of assistance and implementing appropriate interventions for small groups of students. When the term *response to intervention* (RTI) became widely used, staff members at Maple realized that it applied to what they were doing.

Perhaps the most significant outcome of Maple’s RTI efforts is that all the students at Maple can now be successfully held to the high expectations of the community. Moreover, at the middle level, the curriculum is mostly literacy-based rather than reading-based, and teachers can intervene with students who do not have sufficient reading skills for success as well as reduce the number of students who require special education services. RTI is, according to Waitz, a shift in focus from what educators cannot do to help students to what educators *can* do, and his students have benefited from the change.

Why RTI Matters

RTI is a schoolwide initiative that fits within school reform and school improvement efforts. Its main objective is to help all students achieve at a proficient level. RTI generally consists of three tiers of intervention. (See figure 1.) It requires collaboration and team building among administrators, teachers, specialists, and parents, making strong leadership from the principal a key ingredient in the successful implementation of any RTI model.

Components of RTI

Although RTI can be applied to various academic subjects and behavioral concerns, as explained in the February 2008 Student Services column, the following discussion illustrates the use of RTI processes to improve the literacy skills of middle level and high school students who are not meeting grade-level standards.

Assessment

Curriculum-based measurement (CBM) is by far the most commonly used assessment model in RTI. CBM of literacy skills essentially involves having a student read three 1-minute probes aloud while an examiner records the correct and incorrect responses. The number of words read correctly per minute can serve as screening data to identify students in need of more intense intervention (benchmark assessment in tier I) and to monitor the progress of student learning (tiers II and III). National norms through grade 8 are available online for free at www.readnaturally.com/howto/whoneeds.htm. Oral reading fluency is closely linked to general reading outcomes in elementary grades, but it becomes a poorer indicator of general reading skills after about grade 6. Therefore, middle level and high schools should consider a number of measures at the various tiers.

Although benchmark assessments through grade 8 should probably incorporate a CBM of oral reading fluency, the maze procedure is probably the best indicator beginning in grade 7 or 8. The maze procedure involves having the students silently read a passage with every fifth or seventh word deleted. In place of the deleted word are three choices from which the student circles the word that best fits the sentence. Although group tests can be somewhat helpful for screening, progress monitoring data are important for tiers II and III, and group tests cannot measure progress. As of today, maze and CBM appear to be the most effective approaches.

In addition to CBM of oral reading fluency and maze, state accountability test results and data from other group tests should be considered as part of a secondary school's benchmark assessment, as should such important behavioral indicators as attendance, discipline referrals or suspensions, and measures of school climate for the individual student (e.g., *Comprehensive Assessment of School Environments* by NASSP, 1987).

Three times each year, a data management team should examine CBM of oral reading fluency and maze data, students' results on the most recent accountability test, and other data to decide which students require more intensive interventions than what is provided in the core curriculum.

Service Delivery

Although many people think of individualized interventions as the crux of RTI, it is the more standardized interventions used in tier II that directly determine the success of the model. The hallmark of tier II is small-group interventions. Students receive interventions on the basis of their needs with a standardized approach

Indicators That RTI May Help Your School

- The school did not make AYP.
- The student population in your building has high needs (e.g., a high-poverty environment).
- More than 2% of your student population is referred for an initial consideration of special education eligibility.
- Fewer than 90% of students in your building who are referred for special education are found eligible.
- Students from minority groups are overrepresented in your special education programs.

Figure 1.

Activities Associated With the Three-Tiered RTI Model

	STUDENT POPULATION	DESCRIPTION	ASSESSMENT DATA
Tier I	All Students	Universal: quality research-based core curriculum and instruction	Benchmark assessments conducted at least three times per year
Tier II	Approximately 15%	Targeted: small-group (three to six students) interventions delivered as part of general education for 30 minutes each day in addition to core reading instruction	Frequent measurement of the skill deficit and at least twice-monthly progress monitoring of general outcome skill
Tier III	Approximately 5%	Intensive: individualized interventions that are based on problem-solving models; could include special education services	At least weekly progress monitoring and frequent informal classroom-based assessments

Source: Burns, M. K., & Coolong-Chaffin, M. (2006). Response-to-intervention: Role for and effect on school psychology. *School Psychology Forum*, 1(1), 3–15.

RTI Resources

ASSESSMENT

Research Institute on Progress Monitoring

www.progressmonitoring.net

Edcheckup

www.edcheckup.com

AIMSweb

www.aimsweb.com

National Center on Student Progress Monitoring

www.studentprogress.org

Dynamic Indicators of Basic Early Literacy Skills

<http://dibels.uoregon.edu>

INTERVENTION

PALS

<http://kc.vanderbilt.edu/pals>

Intervention Central

www.interventioncentral.com

What Works Clearinghouse

www.whatworks.ed.gov

The Florida Center for Reading Research

www.fcrr.org

Best Evidence

Encyclopedia

www.bestevidence.org/math/math_summary.htm

RTI IN GENERAL

National Association of School Psychologists

www.nasponline.org/resources/rti/index.aspx

National Center on Response To Intervention

www.RTI4Success.org

to interventions. For example, students who lacked phonic skills might all participate in the *Rewards* program by Archer, Gleason, and Vachon (2005) and those with reading fluency deficits might participate in *Read Naturally* by Hasbrouck, Ihnot, and Rogers (1999).

Tier II interventions at the secondary level are often implemented in specially designed courses, but how those courses function depends on the characteristics of the individual school. Schools that use a 50-minute (or one-hour) course block could provide a course in remedial reading instruction for students who are struggling readers in addition to regular literacy instruction. A common model used in high schools is to schedule the remedial course simultaneously with a content area, such as social studies, and use the social studies curriculum as the instructional material. For example, 25 minutes might be dedicated to content-area instruction and 25 minutes to comprehension or decoding strategies applied to the content-area text. This would allow students to transfer back and forth between the courses (flexible grouping) with relatively little disruption.

A block schedule of 90 minutes could incorporate 30 minutes of reading enrichment in which students with strong or average reading skills would read independently and the teacher could run a small flexibly grouped remedial intervention in the same room. Alternatively, a reading specialist could coteach a course and provide remediation or could run a small group in a different setting. The latter would allow the reading specialist to conduct three groups, lasting 30 minutes each, within the same 90-minute block.

Because these are small groups, the tutor-to-student ratio should be between 6 and 10 students for each instructor. Thus, one teacher and one paraprofessional (or two teachers) could teach up to 20 students, or one reading specialist could pull out up to 10 students at any one time.

Problem Solving

Problem solving is the basis for RTI in that it involves any set of activities designed to “eliminate the difference between ‘what is’ and ‘what should be’ with respect to student development” (Deno, 2002, p. 38). In tier

II, problem solving tends to focus on identifying specific deficits (e.g., fluency versus comprehension), but sometimes more-intense interventions are needed for students who are not successful with the remedial efforts. In those cases, a more in-depth problem analysis is used to identify individualized interventions. This usually involves a collaborative effort to identify the current level of performance, the desired level of performance, and variables that prevent the student from obtaining that desired level. At the secondary level, this typically involves a team of teachers from various disciplines and instructional or intervention specialists. The actual team membership will change depending on the student and the problem, but a few core team members are needed, such as a remedial teacher, a school psychologist, and a content-area teacher.

Outcomes

Research has consistently found that RTI initiatives lead to gains in student achievement and schoolwide improvements, such as reduced referrals to and placements in special education and a higher rate of students scoring proficiently on state tests (Burns, Appleton, & Stehouwer, 2005). Windram, Scierka, and Silbergliitt (2007) described two secondary initiatives and found a 66% proficiency rate on a group-administered accountability test among the 18 high school students who were considered at risk for failing the tests and who participated in the pilot RTI project.

Moreover, the average growth rate on a group-administered test for those students was more than three times the national average among students in grade 9 and more than five times their growth from the previous year. A similar program for mathematics in grade 8 led to growth rates that exceeded the national average by a factor of almost six (Windram, Scierka, and Silbergliitt, 2007). Finally, the Heartland Area (Iowa) Education Agency 11 (2004) published extensive data regarding its well-known RTI approach and found high rates of proficiency among middle level and high school students, but perhaps more important, it reported a drop-out rate of less than 2%, which is well below the national average.

Conclusion

The national education community continues to focus tremendous attention on RTI as an effective means of improving student achievement and reducing drop-out rates. The U.S. Department of Education is currently funding numerous RTI-related research projects and technical assistance centers, such as the National Center for Response to Intervention (www.rti4success.org). Schools throughout the country are implementing RTI initiatives, but research is ongoing and implementation efforts, especially at the secondary level, are remarkably inconsistent. Adhering to core RTI components will more likely ensure successful outcomes. At the secondary level, these core components are data-based decision making with multiple sources of data (including state accountability tests); flexible, small-group instruction in both skill strategies and content; and collaborative problem analysis. **PL**

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RTI Resources

RTI IN GENERAL

National Association of State Directors of Special Education

www.nasdse.org/projects.cfm

The Council of Administrators of Special Education

www.casecec.org/rti.htm

RTI Partnership at University of California—Riverside

www.rti.ucr.edu

The IDEA Partnership

www.ideapartnership.org

National Research Center on Learning Disabilities

www.nrclld.org