PRACTICAL IDEAS AND PROMISING PRACTICES FOR EFFECTIVE DISTRICT RESPONSE TO INSTRUCTION/ INTERVENTION (RtI) INITIATIVES: DATA ISSUES TO CONSIDER

A PCG Education White Paper

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INTRODUCTION

At its core, RtI is about using data to make appropriate instructional decisions for the benefit of students. As a coordinated initiative, however, designing and implementing a quality district-wide RtI approach brings a host of challenges. Many of these challenges relate to setting up effective systems and processes for collecting and using data. How can districts collect and use data to improve the odds that RtI will result in greater student success?

Districts that are able to effectively implement RtI across schools can potentially reap many benefits. RtI has the power to:

- reinforce a common language about teaching, learning, and behavior throughout the district.

- support evidence-based instructional practices and establish expectations and interventions within and across schools.

- facilitate common approaches to using data to identify students in need of additional assistance, inform instruction, and monitor student progress.

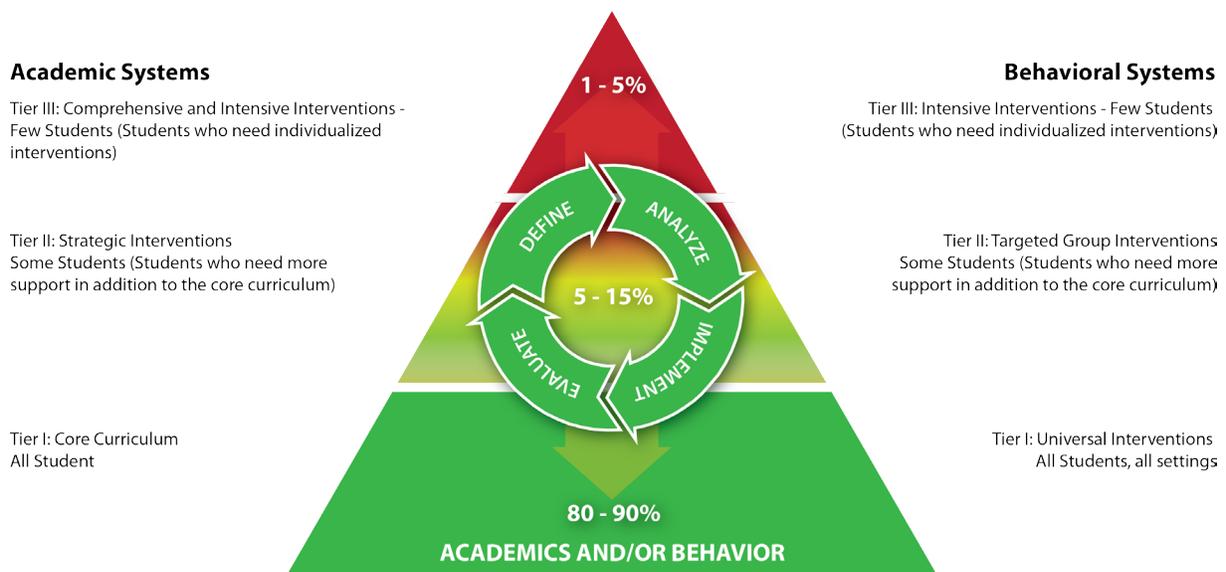Districts and schools with effective RtI systems in place focus on helping teachers provide more effective instruction and intervention to all students. Tiered systems of instruction and intervention are put in place to ensure that there is capacity to address the needs of all students. The aim is to meet the needs of at least 80 percent of students through the core instructional program (Tier 1). The 15–20 percent of students who require targeted intervention or supplemental instruction to close their learning gaps or address behavioral needs receive this support in a timely manner (Tier 2). The school proactively supports the 5–10 percent of students who require even more intensive intervention to achieve grade level expectations (Tier 3). There is some evidence that teachers within individual schools that have implemented a K–3 RtI system for reading can approach these levels once the system has been in place for 3–4 years.[1]

The theory is that when RtI is implemented as a robust, data-driven decision making process, the desired outcomes of RtI can be realized: a significantly greater percentage of students achieving on grade level, decreased discipline referrals, and fewer student referrals to special education. Actual district results to date are less clear. However, there is an emerging understanding of factors related to how data are used to support successful district implementation of RtI and these factors are the focus of this white paper.

WHAT IS RTI?

Response to Intervention (RtI) is a promising educational practice designed to ensure that all students have access to effective instruction. According to the RtI Action Network, RtI can be defined as "a multi-tier approach to the early identification and support of students with learning and behavior needs." [2] This multi-tier approach is commonly illustrated as a pyramid of interventions:

Three Tiered Model of School Supports: Example of an Infrastructure Resource Inventory

Academic Systems

Tier III: Comprehensive and Intensive Interventions - Few Students (Students who need individualized interventions)

Tier II: Strategic Interventions Some Students (Students who need more support in addition to the core curriculum)

Tier I: Core Curriculum All Student

Behavioral Systems

Tier III: Intensive Interventions - Few Students (Students who need individualized interventions)

Tier II: Targeted Group Interventions Some Students (Students who need more support in addition to the core curriculum)

Tier I: Universal Interventions All Students, all settings

1 - 5%
5 - 15%
80 - 90%
ACADEMICS AND/OR BEHAVIOR

DEFINE • ANALYZE • IMPLEMENT • EVALUATE

Source: Hardcastle, B., & Justice, K. (Panelists) (June 29 – July 2, 2008). Supporting and Evaluating Interventions: ProblemSolving & Response to Intervention. [PowerPoint slides]. Presented at 7thAnnual JustRead, Florida! K-12 LeadershipConference (June 29 – July 2, 2008). Available fromhttp://www.floridarti.usf.edu:16080/resources/presentations/

1 See, for example, http://www.rtinetwork.org/Learn/Research/ar/FieldStudies-SCRED.
2 http://www.rtinetwork.org/Learn/What/ar/WhatIsRTI

RtI is a fairly recent phenomenon as a systemic approach for supporting struggling learners. Some districts use the RtI acronym to refer to Response to Instruction, emphasizing that unless strong core academic programs and school wide behavioral supports are in place, the learning and behavior needs of many students will not be met in the regular classroom.

Implicit in an RtI approach is that we have a responsibility to support all students to reach academic success in the areas of reading and math. If a student is not successful, we have an obligation to put a set of tiered supports in place to accelerate student progress to meet or exceed grade level expectations.[3] In addition, if a student's behavior is interfering with learning, it is important to put a set of tiered interventions in place to help the student improve that behavior so he or she and others are able to learn.

IS RTI A GENERAL EDUCATION OR SPECIAL EDUCATION INITIATIVE?

According to the National Association of State Directors of Special Education,[4] RtI is operationally defined as the practice of providing high quality instruction/intervention matched to student needs and using level of performance and learning rate over a specific time period to make important educational decisions to guide instruction. The contrast between this and earlier methods of district response to instruction for struggling learners is that this is a proactive practice instead of a reactive practice, which waits for students to fail before providing support.

Although RtI was written into IDEA 2004 as recommended practice, effective implementation of RtI is not exclusively a general or special education function, since coordinated and sustained collaboration between general and special educators is one of the hallmarks of an effective RtI rollout. This notion of a shared responsiveness to the needs of all students is reinforced by regulations permitting 15 percent of IDEA funding to be used to support struggling learners who have not been identified as needing individualized education plans.

All educators, but particularly special educators, have a vested interested in seeing RtI succeed, since one of the purposes of RtI is to reduce the number of referrals to special education. Because of the integrative nature of RtI, it is essential that schools and districts be very clear about the expectations for the roles and responsibilities of general and special educators, including instructional specialists (literacy, math, Title I, ESL) vis a vis data collection, instructional planning, instructional delivery by tier, progress monitoring and reporting. This requires that at both the district and school level, it is communicated that RtI is an "all education" initiative, requiring active participation, ongoing professional development, and thoughtful collaboration by general and special educators.

On a practical level, most districts and schools are finding that RtI is best managed within the general education delivery system with direct and active support from special education personnel. This is because the decisions and processes related to screening, instructional delivery, and progress monitoring begin with classroom teachers (Tier 1) and include interventionists who are typically part of the general education system.

In the area of reading, some districts have recognized through the implementation of RtI that special education students have not had access to reading support resources offered through the general education program, a gap in the instructional delivery that can be addressed through RtI.

In these cases, the need for special educators and general educators to collaborate becomes obvious. For example, special educators may hot have a current background in how to teach reading and may not have participated in teacher professional development offered in association with the research-based core reading program. But literacy specialists in the building could provide these services to general and special education students struggling with reading, while special education staff members provide other instructional supports. Alternately, special educators may have strong backgrounds in reading and should be tapped to provide reading interventions to students identified as having reading difficulties regardless of whether they have been identified as requiring an individualized education plan (IEP).

RtI has the power to transform schools at the systems level because RtI sits at the intersection of a number of systems, including teacher professional development, school improvement planning, data use culture and capacity, use of research-based instructional programs, and the expectation that instruction be differentiated as needed at each tier[4]. Therefore, effective rollout of RtI requires that school and district administrators be informed about and involved with defining supporting, and reinforcing RtI policies and procedures.

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[3] In some districts, RtI is being renamed RtII (Response to Instruction and Intervention) to reflect the fact that RtI needs to serve all students when needed. For the purpose of this paper, we use RtI, the term most commonly used, to indicate an integrated system of instruction and intervention.

[4] National Association of State Directors of Special Education, 2005

[5] See, for example, the six guiding principles for RtI drafted by the International Reading Association at http://www.reading.org/General/Publications/ReadingToday/RTY-0902-rti.aspx

PRACTICAL IDEAS AND PROMISING PRACTICES FOR EFFECTIVE DISTRICT RESPONSE TO INSTRUCTION/INTERVENTION (RtI) INITIATIVES: DATA USE ISSUES TO CONSIDER

For RtI to be successful, specific personnel need to be explicitly charged with responsibility for RtI oversight and management at the school and district level. These individuals need to interact with district and school personnel in charge of data, school improvement, curriculum and instruction, professional development and special education. However, districts have found that the responsibility for RtI implementation cannot rest solely on a district RtI coordinator or the Title I personnel in a building but needs to be shared by members of the student support or problem-solving teams, which should include classroom teachers, case managers, and interventionists.

ELEMENTS OF A SUCCESSFUL DISTRICT RTI ROLLOUT

Align Processes Across District

RtI is a *system*, not a program. As such, if a district is serious about putting RtI in place, it cannot be as a limited "pilot" with no plans for expansion. RtI is not about each school designing its own RtI approach, including which assessments and which interventions educators at the school feel comfortable with and want to use. If a district is putting an RtI system in place, it cannot also use the discrepancy model for identification of learning disabilities, refuse to examine inequity of supports at certain schools, or determine that the definition of "at risk" is different at some schools than others.

While implementation will certainly vary to some degree from school to school based on staffing configurations, levels of student need, and availability and access to specified assessments and interventions there needs to be a commitment on the part of the district to ensuring these variations are not haphazard but are determined through thoughtful interaction with the school-based RtI team and in alignment with district expectations. For example, if the district establishes three Tier 2 intervention programs for grades 4-8, such as Soar to Success, Jamestown Navigator, and Read Now with Power Up, all schools serving eligible students should have adequate access to program materials, trained teachers, and schedules that permit participation in at least one of those programs.

Based on experience of districts with some success in establishing a district-wide rollout of RtI, it is recommended that the consensus about a set of structures, policies, expectations, and supports be established at the district level with input from school-based educators. Successful districts then pilot the established RtI model in a limited number of schools, further refine the model based on the pilot, and then roll out the model district-wide.

Districts that describe successful RtI rollouts typically begin with one or two grade spans (K-2 or K-5 or graduation plans for high school students) and begin with one or two areas of focus (reading, math or behavior) as opposed to trying to implement a K-12 RtI system in three focus areas "all at once."

ESTABLISH A DISTRICT RTI TEAM

Most districts establish a district RtI team to develop the following:

- A district-wide shared definition of RtI and specification regarding the goals and scope of the district RtI initiative;
- A multi year phased RtI implementation plan that includes sustained support and how the plan will be communicated to stakeholders;
- Structures and policies, including data management systems, screening, diagnostic and progress monitoring assessments, expectations for staffing, data use, available interventions and accountability;
- A plan for how the district will evaluate the impact of RtI in the district.

4 KEYS TO A SUCCESSFUL READING IMPROVEMENT SYSTEM

Although there is little systematic research available on the effectiveness of district RtI initiatives, based on an extensive review of the existing case studies and presentations by districts at educational conferences, it appears that successful district rollout of an RtI system focused on reading improvement requires four synergistic elements.[6] Each of these has implications for data collection and use at the district level.

Leadership: Informed, active leadership is needed at the district and school level to ensure communication, support and accountability.

School leaders need to understand the types of data they expect teachers to collect and use. For example, teachers will need to understand the screening benchmark assessments and what the assessments tell them about their students as readers. Many school-based leaders will need the support of the district to manage the change in culture needed to shift to using data to inform instruction in all tiers. School leaders also need to understand what instructional fidelity looks like in each tier and be able to conduct walkthroughs so that data on fidelity can be systematically collected and reported back to the faculty. Finally, leaders need to be able to interpret reports showing how students are responding to intervention and be able to make resource allocation decisions based on what interventions appear to be most helpful to students.

School-based RtI Teams: These school-based teams of general and special educators work together to ensure that struggling learners do not "fall through the cracks."

RtI teams need to be trained in how to administer screening, diagnostic and progress monitoring assessments and need to

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[6] See, for example, http://www.rti4success.org/images/stories/topPicks/district.pdf

understand what each type of assessment can tell them about student needs.

Team members need to be able to read data reports and determine if students are making adequate progress. A review of emerging practice indicates that standard protocol approach[7] is typically being used to identify and group students from Tier 1 and Tier 2 interventions in medium and large districts. A problem-solving approach[8] is more common for teams to use when discussing if students require Tier 3 support or referral to special education. Teams need to understand and use data appropriately to be able to implement the protocols and procedures the district expects to use.

Research Based Interventions: The district is responsible for ensuring that there is a strong Tier 1 program that can serve 80 percent of students.

The Tier 1 program for reading, for example, might be a research-based core reading program (K-3) and content literacy instruction (4-12). For behavior, the Tier 1 program might be Positive Behavioral Supports. The district needs to ensure the widespread availability of research-based supplemental interventions matched to specific student needs as well as professional development for teachers who are implementing these.

Teachers and intervention specialists need to understand and be able to use appropriate assessment tools (screening, diagnostic, benchmark and progress monitoring) to match students with suitable interventions and instructional supports. If assessments do not provide sufficient data to do this effectively, there is little chance that students will make adequate progress. For example, a benchmark score indicates an 8th grader is way behind his peers and diagnostic testing reveals the primary issue is comprehension. However, if the only available Tier 2 intervention at that school focuses on decoding, the assigning the student to that intervention will not be helpful.

Access to Data: The district needs to ensure that teachers have access to the data and tools needed to implement RtI with fidelity and make data-driven decisions at all levels.

Easy access to screening, diagnostic, progress monitoring, and reporting provide teachers with the data required to make informed decisions about student academic and behavioral needs.

It is very challenging to manage the amount of data that RtI requires at the classroom level, building level, or district level. Districts should consider how to make data collection and use as easy as possible. Teachers and intervention specialists need to focus on using the data to make placement and instructional decisions, monitor progress and determine next steps. Otherwise, an overwhelming amount

of time can be spent collecting and entering data. Electronic data management can be extremely valuable but typically requires a district level decision, as systems tend to be too expensive for individual schools to purchase.

ORGANIZE DECISION-MAKING

RtI has been described as "a set of processes for organizing decision making for data-driven instructional practices."[9] There are five core interactions with data that are essential to an effective RtI process aiming to provide effective instructional intervention

1. assessment data is used when screening all student to **identify** students in need of additional support,
2. multiple sources of data are used when **planning** how to meet students' instructional needs,
3. feedback data and logging data are used when **implementing** instruction and/or intervention according to plan,
4. progress monitoring data are used when **measuring** whether or not the student is responding to the support being provided, and
5. aggregated and disaggregated data are used when **evaluating** program efficacy.

Therefore, managing data use and collection clearly needs to be thought about as an integral part of RtI planning on the district level. Districts can organize their data management decisions around the five core data interactions. Examining these five key interactions with data can help districts better understand what types of data as well as what types of data use processes are needed for RtI to succeed.

Managing data use and collection clearly needs to be thought about as an integral part of RtI planning on the district level.

Below, each of the data interactions is described, along with some key questions that districts need to ask in order to effectively facilitate RtI implementation at the classroom (Tier 1), school (Tier 2 and 3), and district levels.

Screening and identification requires the district decide which screening assessments will be used to determine which students are on grade level and which need additional assistance. This also means that teachers need to understand the screening assessments (also called universal screening), how to administer them, what the

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[7] The protocol approach makes use of a specified set of benchmarks or cutoff scores on assessments to assign students to different intervention groups/programs; similarly, the protocol approach uses the same research-based intervention for all students with similar academic or behavioral needs.

[8] The problem solving approach assumes that no given intervention will be effective for all students; it generally has four stages (problem analysis, plan implementation, and plan evaluation) and is sensitive to individual student differences; implies a team meeting to assign students to interventions.

[9] Hall, S.L., Ed. (2007). Implementing response to intervention: A principal's guide. Thousand Oaks, CA: Corwin Press.

cut scores are for different levels of proficiency, what the reports tell about student learning, and what options are available to meet the needs of students who need additional support.

Questions for districts to consider

1. What assessment data will the district use to identify students in need of assistance at the K-3, 4-8 and 9-12 levels? How often will screening assessments be administered?

2. How will cut-off scores be established?

3. Will the assessments be taken on paper or on the computer/

4. How will results be put into electronic format for easy access by teachers, interventionists, student support teams, administrators?

Planning how to meet students' instructional needs refers to the data driven processes that are defined and implemented to ensure that students' needs are matched to the types and intensity of instructional interventions identified as helpful to support their progress. Effective RtI planning requires the district to put into place processes and expectations that the adults charged with supporting student success use data to develop an appropriate plan for each student. This may mean differentiating in the general classroom, and/or providing additional tutoring or small group instruction or computer-based instruction in addition to the core program offered to all students.

Questions for districts to consider

1. Will placement decisions into tiers be made on single scores (not recommended) or risk profiles (which include a combination of factors)? Will this depend on the tier?

2. How will information from the student information system and assessments be merged? (This allows educators to have easy access to expanded information when looking to group students for interventions as well as to address the needs of students not making adequate progress).

Implementing effective instruction and intervention means that teachers need to understand best practices. Teachers also need access to research-based materials with which to provide the supports described in the plan. Interventions need to be implemented with fidelity (that is, according to the developer's design) in order to expect outcomes like those others have gotten from the program, approach, or materials.

Teachers must also keep track of the support provided, If a student has excessive absences, for example, it would not be surprising if s/he makes little progress.

Questions for districts to consider

1. Is there a process in place for evaluating instructional and intervention programs.

2. What procedures will be put into place to collect instructional data and plan on-going support for teachers when the data indicate a need?

Measuring progress requires protocols for progress monitoring to determine if adequate progress is being made (if there is a "response to intervention"). Progress monitoring in Tier 1 could be checking student progress on benchmark or interim assessments offered three to four times per years to determine if students are being adequately supported to stay on track with their age-level peers through the core program. More frequent progress monitoring specifically designed to address the academic skills should be used with Tier 2 and Tier 3 students to ensure that students are making necessary progress to catch up with those reading and otherwise performing on grade level. These data-based check-ins help educators determine if the instruction and interventions in place for a given student are providing adequate support. If not, the RtI plan can be modified to better meet the needs of the student. The RtI approach assumes a certain amount of fluidity and flexible in meeting the needs of individual students.

Questions for districts to consider

1. What will be the minimum number of sessions or weeks of intervention instruction before progress monitoring takes place?

2. What target scores will be used?

3. What level of improvement is seen as "enough" progress in order to judge that an intervention is no longer needed?

4. How long does the rate of progress or performance level need to be in order to decide that the intervention is not effective and the student should be placed in an alternative intervention?

5. Who will meet (and how often) to review these data and make these decisions? How will they get access to the data they need?

Reporting and evaluating program efficacy is important so that teachers, interventionists, school and district administrators can determine if their RtI program is successful, including if certain components are more effective than others and for whom. This data review is a critical element of ongoing program review. Through such a review, a district can make appropriate adjustments to RtI processes and policies, review current interventions and assessments, determine if investments in specific interventions are paying off, target where additional teacher professional development is needed and identify pockets of success.

Questions for districts to consider

1. What reports are needed by each classroom teacher, each intervention group instructor, and by literacy leaders?
2. How will reports be generated to reflect student progress by grade level or school level? How will each intervention by evaluated for effectiveness?
3. Which reports will be used by administrators?
4. When will parents be involved? What data will be shared with parents?

MANAGING DATA USE AND COLLECTION

Data from various sources need to be integrated and available, decision rules about each type of data as related to each tier need to be established, and accessibility to relevant data and reporting by multiple users needs to be assured.

For example, progress monitoring typically relies on graphs as away to show individual student progress toward established grade level targets. But progress monitoring in the area of behavior might involve data collection using a handheld device, which is then uploaded into a system that connects the data to individual student records. Progress monitoring in math or reading might be quick assessments completed by students using paper and pencil with the results entered by Intervention teachers onto spread sheets, or it could be taken from computer-based tests. Regardless of the source of the data, it is important that the data be presented in the form of graphs so that teachers and student assistance teams can review student progress easily.

The ability to organize and access complex data is most ideally realized with use of a data warehouse or data management system that is specifically designed to support RtI initiatives. Such a system needs to handle multiple data feeds and combine assessment data with student information as discrete records as well as providing disaggregated reports as needed by class, course section, grade level, intervention group, Tier. A data management system can also support the use of key messages and expectations about RtI, common assessments, interventions, protocols and reporting across school sites. Without technology support to ensure a high level of data quality and adequate capacity for collecting and reporting data, it is less likely that the data management challenges of RtI inherent in a district roll out of the approach can be efficiently resolved. At a minimum, insistence on practices requiring significant data entry, data assembly and manual analysis may Compromise the timeliness and quality of the RtI system put into place. Thus, data management decisions relative to RtI maybe as significant as other design decisions about screening protocols, decision rules, selection of assessments and interventions, and progress monitoring in terms of the potential impact on effective implementation.

CONCLUSIONS

Effective management of data collection and use is at the heart of a successful district RtI initiative. Thinking about and implementing thoughtful decisions about how data will be collected and used can increase the momentum and efficacy of an RtI initiative.

Districts would do well to pay careful attention to how a culture of data use will be established and sustained. This attention to how data will be collected and used helps to ensure the planned RtI initiative will be carried out with quality and fidelity, justifying the investments in resources, structures, assessments, and interventions required as part of the RtI approach.

It may be helpful for districts to implement partial or comprehensive technology solutions to collect, manage, and report relevant data. Such technology solutions would especially support the efforts of medium and large districts charged with managing communication, protocols, assessments, interventions, and evaluation of RtI program efficacy across multiple school sites. Also key is the specific delineation of roles and responsibilities of general and special education personnel regarding the collection and use of data as part of RtI implementation.

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