

THE 10

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TEN STEPS to Make RTI Work in Your Schools



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Introduction

PS. 52 Sheepshead Bay School in Brooklyn, New York, serves more than 850 students from pre-kindergarten to fifth grade. Its students come from diverse socioeconomic backgrounds; some students live in wealthy neighborhoods, while others reside in homeless shelters. About a quarter are English language learners (ELLs).

PS. 52 Sheepshead Bay Demographics 2014–15 (Year 1)

Number of students in Pre K–Grade 5: 876

Asian: 12%

Black: 15%

Hispanic: 13%

White: 57%

Students with special needs: 15%

English language learners: 23%

State Test Scores:

Proficient in English language arts (ELA): 36%

Proficient in math: 54%

Students receiving academic intervention services: 94

Title I school

After scores on the 2014 New York State English language arts assessment were unsatisfactory, first-year principal Rafael Alvarez searched for a way to improve academic outcomes for his students.

Alvarez and his leadership team discussed the large body of research on student improvement and decided to focus on improving student reading using the Response to Intervention (RTI) framework. This is a research-based framework that uses data-based decision making and three levels of instruction to

address a wide range of student needs, including the needs of students who struggle with academics or behavior. The school leadership team partnered with American Institutes for Research (AIR) to design and implement its RTI model. Through 3 years of professional development (PD) sessions with AIR staff, the RTI framework has involved every student, teacher, and staff member at PS. 52.

AIR had a unique opportunity to work closely with PS. 52 to implement a rigorous RTI framework over 3 years. In the course of this work, both AIR and the school took away several important building blocks useful to any school or district implementing RTI. This piece summarizes that information by sharing the narrative of PS. 52's work alongside useful resources and evidence about the implementation of RTI. Teachers, students, administrators, and parents at PS. 52 followed 10 RTI building blocks.



What Is Response to Intervention?

Response to Intervention is a framework used across both general education and special education settings to ensure the learning needs of all students are met (National Center on Response to Intervention, 2010; Fuchs, Fuchs, & Compton, 2012). RTI is most effective when it includes four essential components:

1. Universal screening assessment of all students to identify which students are on track and which students are not.
2. Weekly to monthly progress monitoring for students who are not on track.
3. Increasingly intensive tiers of instruction to ensure all students receive the support they need to show improved learning outcomes. The tiers typically include

Tier 1, for all students,

Tier 2, for those students who require additional support, and

Tier 3, for the few students who need intensive instructional support.
4. Procedures for using assessment data to make decisions about student placement and movement from one tier to another.

(Source: National Center on Response to Intervention, 2010; Fuchs, Fuchs, & Compton, 2012; Gersten et al., 2008)

1

Focus on Leadership

The most critical element in the RTI framework is setting a clear vision and gaining the full commitment of the school leadership, from the district office to the principal's office, as well as teacher leaders, instructional specialists, and those who influence teacher practice throughout the school (Maier et al., 2016; O'Connor & Freeman, 2012). When principals, teachers, and other leaders make RTI a priority, have an articulated goal for improved student learning, and speak clearly about the need for and the promise of RTI for the students, teachers and staff get on board. Parents see the potential, and students have access to new ways to succeed. It all begins with a leader's vision and the determination to provide the budget, staffing, and resources to support a school-wide effort.

P.S. 52's Year 1 Mission and Action Plan Goals

"The mission of P.S. 52 is to meet the individual needs of our students (General Education, Special Education, ELL) with attention to their interests and attitudes while recognizing the differences of one another including culture, race and ethnicity. We expect academic rigor and excellence through differentiated instruction based on individual needs and learning styles while instilling a lifelong love of learning."

Action Plan Goals for Year 1:

Goal 1, Infrastructure: By June 2015, all classroom staff will be trained in research-based programs to build capacity for Tier 1 interventions in the classroom.

Goal 2, Screening: By June 2015, there will be universal screening tools for Grade K-5 students to identify at-risk students in reading.

Goal 3, Tier 1: By June 2015, all staff will receive training in the Five Pillars of Reading and the integration of these pillars into all components of the literacy program including reading aloud, shared reading, guided reading, and independent reading.



2

Prep for Success: Build Capacity and Allocate Resources

As the school's RTI vision becomes set, it is time to answer some core questions:

- Does the school have the resources in place to successfully implement RTI now and in the future?
- What changes are needed to allocate resources more strategically?
- Do the teachers and support staff (e.g., paraeducators and coaches) have the skills to use new curricular tools to assess student performance, adjust instruction for students, and make decisions about overall student growth? How will staff members develop their capacity in these areas?

Adept leaders ensure that staff have access to the resources they need to make RTI work, including high-quality professional development (PD) opportunities (e.g., training and coaching; Joyce & Showers, 2002).

Teacher Development

As the vision for RTI began to take shape—a year-long project overall—Principal Alvarez began developing the skills of teacher leaders and staff. Each year for 3 years, teachers, coaches, and paraprofessionals participated in five annual trainings conducted by AIR staff. These trainings focused on the essential components of RTI (National Center on Response to Intervention, 2010) and helped participants to develop a better understanding of the nuanced aspects of these components. At the end of each training, the Sheepshead staff and leadership developed next steps to continually improve RTI at their school. By 2017, the end of the third year, team members had completed 15 six-hour sessions on RTI, or roughly 90 hours of training.

Alvarez did more than train staff. He budgeted money for a new screening tool, created an intervention schedule to give sufficient time to help struggling students, and helped staff develop a process for efficiently looking at data and making decisions about instruction tiers. By concentrating on making RTI sustainable, Alvarez and the staff were able to gradually scale up the use of the RTI framework to better support all students, particularly those with the greatest needs.



3

Get Everyone on Board

Implementing any new program can create plenty of stress, which can reduce buy-in. When buy-in is low, the new program is less likely to be implemented for the long term (Damschroder et al., 2009; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). For RTI to become deeply rooted, staff, parents, administrators, school board members, and district staff must buy in to the framework. Three key strategies build buy-in. Two strategies are listed below, while the third is described in full detail in Building Block 4.

Share success stories. This enables stakeholders to see the value in learning new instructional and assessment practices, which likely require changes in the way they have typically worked with students (Rinaldi, Averill, & Stuart, 2010). For example, teachers can share how learning new practices helped them work more effectively with struggling students. Parents can talk about how learning the ways their children will be served under the RTI framework helped them to engage more actively with school staff. District leaders can share how learning to use data more strategically allowed them to better support schools and parents.

Clarify stakeholder roles within RTI (Fixsen et al., 2005; Rinaldi, Averill, & Stuart, 2010). Because staff will have to take on new roles with RTI, they need to be clear about what their new work will look like and why they have been assigned to fill those roles. Who assesses students, teachers, and support staff? Who teaches Tiers 2 and 3? Who analyzes and develops appropriate next steps so that students continually improve? Professional development can promote staff understanding of their roles with RTI.

4

Create an RTI Team

RTI implementation can be easier, faster, and more effective when a team guides all RTI-related efforts (Fixsen, Blase, Timbers, & Wolf, 2001; Shepherd, 2006). Every school implementing RTI should have a team focused on the use of the framework. School teams may also find it helpful to interface with district-level teams focused on RTI, as they can share how the framework has impacted student learning across levels of the system (e.g., across the district).

Many successful school teams begin their RTI work at least 1 year before implementation to ensure that stakeholders are prepared for the anticipated changes. Typically, schools have several teams in place to implement new practices (e.g., school improvement teams, grade-level teams, etc.). Most schools find that they can combine existing teams into one team, repurposing it to focus on RTI (Higgins, Weiner, & Young, 2012; Pierce & Arden, 2017).

RTI touches every aspect of a school, so the RTI team should broadly reflect all of the staff roles (Pierce & Arden, 2017). As a rule of thumb, membership should include the principal and other administrators with decision-making authority, as well as:

- Major curriculum staff—math, language arts, science, and art teachers;
- Staff with intervention expertise, such as school psychologists, speech and language therapists, and coaches;
- General education and special education teachers who work with students across all grade levels; and
- Support staff (e.g., paraeducators).

Team members are responsible for:

- Spelling out the school’s vision for RTI as a specific and measurable goal for improved student learning;
- Ensuring that there is a school-wide system for storing and analyzing student data;
- Developing ways for teachers to review the data in a timely fashion; and
- Developing a communication plan to spell out how parents, school staff, district staff, and others will share successes, challenges, and potential solutions related to RTI.

Teams may also find it helpful to articulate implementation tasks and activities in a calendar. See Table 1.



Table 1. Timeline Showing RTI Implementation Over 3 Years

	Sept.–Dec.	Jan.–March	April–June	June–August
Year 1 2014–15	Identified vision and goal for RTI, established an RTI team, developed a plan for PD on RTI, identified and administered RTI assessment, and built buy-in	Collected student data and continued to build teacher buy-in (this continued throughout the 3 years.)	Analyzed student data and began PD for interventionists and teachers	Purchased new interventions; interventionists attended training
Year 2 2015–16	Provided PD on RTI, implemented new intervention schedule and identified interventionists, implemented screening with one pilot grade	Analyzed winter screening data and determined needs	Administered spring screening, analyzed results, chose new screening tool, and began training	Purchased new tool, re-allocated staff to increase interventions provided
Year 3 2016–17	Administered new screening tool, analyzed data, evaluated new intervention structure	Analyzed winter screening data, continued to improve fidelity, began to build capacity of staff for next year		



5

Choose Your Data Sources Strategically

With the vision set, a team in place, buy-in established, and professional development occurring, schools should next identify the best data sources to use with RTI implementation. At a minimum, schools should plan to use annual fall, winter, and spring screening results to identify students at risk of not meeting grade-level standards.

It is critical that schools choose a screening tool that best meets their needs. If a school has a large population of students, it may want to choose a screening tool that can be given in large-group or whole-class formats using computers. Other schools may want to choose a tool that allows them to disaggregate the data so they can closely monitor the progress of their ELLs. The purpose of universal screening is to take a snapshot of all students' reading or math skills and determine their risk status (Gersten et al., 2009a; Gersten et al., 2009b).

Additionally, progress monitoring results for students served in Tiers 2 and 3 are critical sources of information about students' responsiveness to instruction (Center on Response to Intervention, n.d.a.; Gersten et al., 2009a; Gersten et al., 2009b).

Understand that it is difficult to systematically and efficiently wade through masses of data from RTI-related measures. Making decisions using RTI-related data is a skill that takes time to develop (Stecker, Fuchs, & Fuchs, 2008). Although commercially published assessment systems provide data compilations that make analysis easier, it is important that RTI team members and the staff working directly with students get the support they need to collect, analyze, and use RTI-related data. Plan to dedicate a block of time—several hours across the school year—to build staff expertise in data-based decision making and add several additional hours at least three times a year (e.g., fall, winter, and spring) for unpacking the data. Long-term PD provides the capacity-building experiences both new and experienced staff will require.

Choosing a Screening Tool

At Sheepshead Bay, choosing the appropriate screening tool was not easy. The RTI team began implementing screening with one grade level. After assessing their data and needs, they decided to look for a different screening tool. School personnel were not able to efficiently and confidently make decisions about the status of student risk and areas of need. The team looked to the Center on Response to Intervention Screening Tools Chart for a tool that would allow them to make more accurate instructional decisions for students and decided to purchase the STAR Reading assessment.

For 2016–17, the goal of RTI at P.S. 52 is to increase the number of students scoring in the “proficient” range on the STAR reading assessment. The RTI team meets biweekly to review screening and students’ progress monitoring data in interventions and discuss ways to increase student progress and improve their RTI framework.

6

Determine Which Students Are at Risk

Using a valid, reliable screening tool is the first step in determining which students are at risk of poor learning outcomes. Screening all students allows schools and districts to get a full view of subgroups as well as new students who may be at risk. Schools should employ universal screening two to three times a year. This lets school staff “catch” students who may not have been at risk in a previous screening and monitor the risk status of students previously identified as at risk. In addition, regular data collection allows staff to critically gauge the effectiveness of their instruction and interventions.

According to RTI guidelines, it is likely that instruction and curriculum are effective if at least 80% of students are not at risk of academic failure based on screening measures (Fuchs, Fuchs, & Compton, 2012). If that criterion is not met, Tier 1 instruction—the general education core instruction that all students receive—should likely be improved.

To determine the level of instruction for each student and to match student needs with services, schools develop a data-based decision process. RTI teams at the district and school level determine which interventions are available and which students require more intense instruction or interventions. Not all students who are deemed to be at risk require intervention; schools and districts need to use clear decision rules to determine which students require Tier 1, Tier 2, or Tier 3 intervention.

Schools might administer a secondary assessment—a progress monitoring, diagnostic, or other more targeted informal assessment—to identify students’ specific areas of need and to verify the universal screening

results. Following this multistage screening, schools can monitor data to determine if students are making the expected progress as a result of instruction or intervention. Based on this information, schools can identify who is at risk, who remains at risk despite instruction or intervention, and who is no longer at risk.

Decision Rules for P.S. 52

At P.S. 52, the RTI team first identified the bottom one-third of readers in each grade through its STAR screening assessment. Then they eliminated students who were already receiving intervention or support services (e.g., students receiving English as a second language support or special education services in reading). Finally, with teacher input, they analyzed the STAR screening assessment data and additional informal assessment data such as classroom formative assessments and running records to determine which students needed to move to a more or less intense level of instruction or intervention.

Video

Supporting Students Through Response to Intervention



P.S. 52 Sheepshead Bay School Principal Rafael Alvarez and staff discuss RTI implementation with their AIR coach.

<http://www.air.org/resource/supporting-students-through-response-intervention>

7 Implement Interventions

All students should receive high-quality instruction differentiated to meet their needs. This is at the core of Tier 1 instruction. However, some students may need additional instruction or interventions. When students are not performing on grade level, instruction must be designed to meet the students where they are and propel them toward grade-level expectations.



Some students may need a research-based intervention targeted to specific skill gaps. Tier 2 intervention should be delivered by highly trained educators well versed in the content and learning development of struggling students. Instruction at Tier 2 is best delivered in small group settings (for example, three to four kindergarteners, eight to 10 eighth graders) based on the content and student developmental level (National Center on Response to Intervention, 2010). To provide Tier 2 intervention, schools have the option of choosing a “standard protocol intervention,” often referred to as a packaged program, such as Read Naturally or Reading Mastery, or a set of carefully chosen evidence-based practices such as timed, repeated reading for fluency.

At this level, student data are monitored frequently, at least every other week, and student progress is measured to make sure the intervention is working. In most cases, after about 8–12 weeks, the student data are evaluated and the teacher decides whether to continue the intervention, change it completely, or simply adapt it to better meet the needs of the student.

A small number of students may not make adequate progress with Tier 2 interventions and will need a more individualized and intense intervention to address their skill gap, such as Tier 3. To determine the most appropriate Tier 3

intervention, PS. 52 uses an evidence-based process called data-based individualization (DBI) (National Center on Intensive Intervention, 2013) that helps teachers determine which students are significantly and chronically below grade level. Using DBI, teachers collect daily or weekly data on each student’s progress and immediately make changes to meet the student’s needs.

8 Closely Monitor Progress of Students in Tiers 2 and 3

To catch up to peers who are performing on grade level, students in Tiers 2 and 3 often need to achieve a year’s growth or more in a short time. Progress monitoring provides real-time information about overall student improvement (or the lack of it). Stakeholders—from teachers to parents to administrators—want timely information on which students in Tiers 2 and 3 are progressing, which students are not, and what changes in learning are happening.

It is important that teachers understand the unique value of progress monitoring compared to other types of assessments such as curriculum-embedded phonics inventories or end-of-unit tests. These other types of assessments provide information about students’ progress in a specific curriculum, rather than overall student improvement. Although progress monitoring data offer unique student information, teachers often find it challenging to monitor students. They often cite difficulties with the frequency (weekly or biweekly) of administering progress monitoring measures for students in Tiers 2 and 3, analyzing results, and using results for

making decisions about student instructional programming (Mellard, McKnight, & Woods, 2009; Stecker, Fuchs, & Fuchs, 2008). Another significant challenge is that some students who may benefit from Tier 2 or 3 intervention cannot receive that support right away, due to a lack of available resources such as interventionists. Schools may have to progress monitor these students in the Tier 1 setting.

Given these challenges, teachers often find it helpful to meet in small groups or one-on-one with coaches who have expertise in progress monitoring (Mellard, McKnight, & Woods, 2009; Stecker, Fuchs, & Fuchs, 2008).

Improving Practice School-Wide

To address a school-wide academic gap in vocabulary, P.S. 52 implemented a school-wide strategy to focus on vocabulary instruction for all students. It also used “The Fab Five,” a model of identifying and monitoring progress in small groups of students. Each Tier 1 classroom teacher chose five students needing additional instruction and used a valid progress monitoring tool to closely monitor each one’s progress in vocabulary acquisition and other skill gaps. The students could not yet receive Tier 2 or 3 due to resource constraints but still required additional support. Teachers provided differentiated instruction for each student and were able to make accurate and timely instructional decisions. Implementing the “Fab Five” helped all teachers focus on high-quality differentiated instruction.

9

Keep Coaching the Teachers

Continuous coaching is a critical follow-up to any RTI training. Coaching has been shown to lead to improved teacher practice and student outcomes. It consists of ongoing cycles of

- Observations of teachers and other staff as they attempt to implement RTI practices,
- Modeling of effective RTI practices, and
- Performance feedback about RTI practices (Kretlow & Bartholomew, 2010; Neuman & Cunningham, 2009; Pierce & Buysse, 2015).

Coaching enables staff to build on content learned from training to apply the newly acquired knowledge and skills to their classrooms (Joyce & Showers, 2002). Coaching also equips teachers with skills to apply new practices over time until the new practices become a regular part of their teaching routine. Finally, coaching can also guide teachers toward making more nuanced adjustments to how they use these practices to better meet specific learning needs.

For more information on coaching, visit <http://www.air.org/center/national-center-systemic-improvement-ncsi>.

The Center on Response to Intervention (n.d.a; n.d.b.) offers several briefs on progress monitoring at <http://www.rti4success.org/resource/progress-monitoring-briefs>, as well as self-paced learning modules, at <http://www.rti4success.org/rti-implementer-series-self-paced-learning-modules>.

Additional Coaching

In addition to the training described in Table 1, the team at P.S. 52 participated in 12 site-based coaching sessions conducted by AIR over the course of the 3 years of the project. This support allowed team members to develop the capacity to successfully implement RTI and improve student outcomes. Staff who participated in these events felt that they gained the expertise they needed to implement RTI effectively in their school.



10

Evaluate for Consistent Implementation

Implementation science research suggests that educational innovations, such as the RTI framework, are most effective if used as designed (Balu et al., 2015). Fidelity of RTI, or the skillful adherence to the model, allows educators to better understand if all essential components of RTI are being used and the degree to which those components were effective or ineffective. Higher levels of fidelity are linked to improved student outcomes (Durlak & DuPre, 2008).

AIR's Center on Response to Intervention offers two free fidelity measures for educators: the RTI Fidelity of Implementation Rubric (Center on Response to Intervention, 2014) and the District RTI Capacity and Implementation Rubric and Worksheet (National Center on Response to Intervention, 2012). These include interview questions that principals and district officials can ask teachers about how the RTI was set up and how it is running. Once fidelity is measured, school administrators and RTI teams should ask, "Have we achieved our goal for RTI?" Scoring guidelines can help pinpoint strengths and weaknesses.

PS. 52 used the RTI Fidelity of Implementation Rubric to assess its current level of implementation and determine areas of focus. Based on that initial assessment, they developed goals for building a strong RTI team, purchasing and administering a screening assessment, and implementing a few interventions as part of a pilot with one grade level.





References

- Balu, R., Zhu, P., Doolittle, F., Schiller, E., Jenkins, J., & Gersten, R. (2015). *Evaluation of response to intervention practices for elementary school reading* (NCEE 2016-4000). Washington, DC: National Center for Education Evaluation and Regional Assistance, U.S. Department of Education.
- Center on Response to Intervention. (2014). RTI fidelity of implementation rubric. Retrieved from <http://www.rti4success.org/resource/essential-components-rti-integrity-rubric-and-worksheet>
- Center on Response to Intervention. (n.d.a). Progress monitoring briefs. Retrieved March 8, 2017 from <http://www.rti4success.org/resource/progress-monitoring-briefs>
- Center on Response to Intervention. (n.d.b). RTI implementer series self-paced learning modules. Retrieved March 8, 2017 from <http://www.rti4success.org/rti-implementer-series-self-paced-learning-modules>
- Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science*, 4(1), 50.
- Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology*, 41(3-4), 327.
- Fixsen, D. L., Blase, K. A., Timbers, G. D., & Wolf, M. M. (2001). In search of program implementation: 792 replications of the Teaching-Family Model. In *Offender rehabilitation in practice: Implementing and evaluating effective programs* (pp. 149–166). London: Wiley.
- Fixsen, D. L., Naoom, S. F., Blase, K. A., & Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature* (FMHI publication #231). Tampa, FL: University of South Florida, Lound de la Parte Florida Mental Health Institute, The National Implementation Research Network.
- Fuchs, D., Fuchs, L., & Compton, D. L. (2012). Smart RTI: A next-generation approach to multilevel prevention. *Exceptional Children*, 78(3), 263–279.
- Gersten, R., Compton, D., Connor, C. M., Dimino, J., Santoro, L., Linan-Thompson, S., & Tilly, W. D. (2008). *Assisting students struggling with reading: Response to Intervention and multi-tier intervention for reading in the primary grades. A practice guide* (NCEE 2009-4045). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- Gersten, R., Beckmann, S., Clarke, B., Foegen, A., Marsh, L., Star, J. R., & Witzel, B. (2009a). *Assisting students struggling with mathematics: Response to intervention (RtI) for elementary and middle schools* (NCEE 2009-4060). What Works Clearinghouse.

Gersten, R., Compton, D., Connor, C. M., Dimino, J., Santoro, L., Linan-Thompson, S., & Tilly, W. D. (2009b). *Assisting students struggling with reading: Response to intervention (RtI) and multi-tier intervention in the primary grades (NCEE 2009-4045)*. Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Higgins, M. C., Weiner, J., & Young, L. (2012). Implementation teams: A new lever for organizational change. *Journal of Organizational Behavior*, 33(3), 366–388.

Joyce, B. R., & Showers, B. (2002). *Student achievement through staff development*. Alexandria, VA: Association for Supervision and Curriculum Development.

Kretlow, A. G., & Bartholomew, C. C. (2010). Using coaching to improve the fidelity of evidence-based practices: A review of studies. *Teacher Education and Special Education*, 33(4), 279–299.

Maier, M. P., Pate, J. L., Gibson, N. M., Hilgert, L., Hull, K., & Campbell, P. (2016). A quantitative examination of school leadership and response to intervention. *Learning Disabilities Research & Practice*, 31(2), 103–112.

Mellard, D. F., McKnight, M., & Woods, K. (2009). Response to intervention screening and progress monitoring practices in 41 local schools. *Learning Disabilities Research & Practice*, 24(4), 186–195.

National Center on Intensive Intervention. (2013). *Data-based individualization: A framework for intensive intervention*. Washington, DC: Office of Special Education, U.S. Department of Education.

National Center on Response to Intervention. (2010). *Essential components of RTI—A closer look at response to intervention*. Washington, DC: U.S. Department of Education, Office of Special Education Programs, National Center on Response to Intervention.

National Center on Response to Intervention. (2012). District RTI capacity and implementation rubric and worksheet. Retrieved from <http://www.rti4success.org/resource/district-rti-capacity-and-implementation-rubric-and-worksheet>

Neuman, S. B., & Cunningham, L. (2009). The impact of professional development and coaching on early language and literacy instructional practices. *American Educational Research Journal*, 46(2), 532–566.

O'Connor, E. P., & Freeman, E. W. (2012). District level considerations in supporting and sustaining RtI implementation. *Psychology in the Schools*, 49(3), 297–310.

Pierce, J. & Arden, S. (2017). Taking the lead. Developing the capacity of leaders to foster effective implementation and promote school change. Manuscript submitted for publication.

Pierce, J. D., & Buysse, V. (2015). Effective coaching: Improving teacher practice and outcomes for all learners. National Center for Systemic Improvement. Retrieved from http://www.air.org/sites/default/files/NCSI_Effective-Coaching-Brief-508.pdf



Rinaldi, C., Averill, O. H., & Stuart, S. (2010).

Response to intervention: Educators' perceptions of a three-year RTI collaborative reform effort in an urban elementary school. *Journal of Education*, 43–53.

Shepherd, K. G. (2006). Supporting all students:

The role of school principals in expanding general education capacity using response to intervention teams. *Journal of Special Education Leadership*, 19(2), 30–38.

Stecker, P. M., Fuchs, D., & Fuchs, L. S. (2008).

Progress monitoring as essential practice within response to intervention. *Rural Special Education Quarterly*, 27(4), 10.





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