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The SERVE Center at The University of North Carolina Greensboro is a university-based research, development, dissemination, evaluation, and technical assistance center. For more than 24 years, SERVE Center has worked to improve K-12 education by providing evidence-based resources and customized technical assistance to policymakers and practitioners.



The University of North Carolina Greensboro (UNCG) is one of the sixteen university campuses of The University of North Carolina. UNCG holds two classifications from the Carnegie Foundation for the Advancement of Teaching, as a “research university with high research activity” and for “community engagement” in curriculum, outreach, and partnerships.

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Overview

CISNC Introduction

In the 2014-2015 school-year, Communities In Schools of North Carolina (CISNC) introduced a framework that aligns site and student metrics and interventions and supports to four areas that have been shown to have the greatest impact on student success: attendance, behavior, coursework, and parent involvement, or ABC+P. Both combined and individually, attendance, behavior, and coursework are among the best predictors of a student's academic success and on-time graduation. While collecting data around ABC+P is critically important to understanding the school and student, it is even more important to use the data to drive high impact intervention and support delivery to empower each student to reach their full potential. To this end, Communities In Schools of North Carolina has partnered with the SERVE Center at the University of North Carolina at Greensboro to design curricula specifically for CIS within the ABC+P framework to enhance student outcomes in school and success in life. This document is one of more than 50 modules developed to support local CIS staff and most importantly the students that are served. We encourage you to explore all of the modules available online at www.cisnc.org.

Using Evidenced-Based Strategies

There are a multitude of strategies that claim to address coursework, but there are few that actually do so for all students. We suggest that schools use an evidence-based, decision-making model to ensure that high quality information informs the decisions made.

The Institute of Education Sciences (IES) at the U.S. Department of Education defines evidence-based decision making as routinely seeking out the best available information on prior research and recent evaluation findings before adopting programs or practices that will demand extensive material or human resources (including both funding and teacher time) and/or affect significant numbers of students (Whitehurst, 2004).

CISNC uses the Response to Intervention (RTI) framework as the basis for its practices. RTI is a multitiered framework of academic and behavioral interventions that require school staff to make instructional decisions based on data. This document focuses on a Tier 2 strategy. Tier 2 strategies typically focus on students who have not responded to Tier 1 supports and includes supplemental instruction and interventions that are periodically monitored to ensure students are responding to the supports. Tier 2 supports are targeted, structured, explicit and can take place in small groups or general education classrooms.

CISNC calls for the use of evidence-based interventions versus generally researched practices. The National Center on Response to Intervention (NCRTI) defines evidence-based interventions as:

... an intervention for which data from scientific, rigorous research studies have demonstrated (or empirically validated) the efficacy of the intervention.

Applying findings from experimental studies, single-case studies, or strong quasi-experimental studies, an evidence-based intervention improves student learning beyond what is expected without that intervention (Center on Response to Intervention [Center on RTI] at American Institutes for Research and the National Center on Intensive Intervention (NCII), 2014, p. 4).

Whereas a research based curricula “may” incorporate strategies that have been generally researched, but not studied using a rigorous research design. The following suggestion is based on interventions that have been studied using a scientific, rigorous research design. When incorporated with fidelity and as a part of a systematic process, students should positively respond to these strategies.

This document is written to provide intensive coursework interventions based on the best evidence from prior research and recent evaluations in elementary schools. In the context of our review, we propose two interventions designed to help struggling elementary students:

- Coursework – Supplemental Mathematics
- Coursework – Supplemental Reading

This document will focus on one easy to implement reading intervention for elementary schools.

Problem/Rationale

The Common Core State Standards for elementary and secondary education have been implemented to ensure that students are college and career ready for a globally competitive society upon high school graduation. Currently, more than 40% of students are leaving high school without being college and career ready (Achieve, 2012). In conjunction with these standards, many states have also instituted universal screening mechanisms to verify that students are achieving proficiency in key subject areas, as well as to accurately identify students with learning difficulties so that additional support may be provided.

One area of concern is elementary literacy. Nationally, 65% of elementary students are not demonstrating mastery of these critical skills (National Center for Education Statistics, 2013). In other words, millions of children in the United States cannot comprehend or evaluate text, reference related points, or support conclusions about the text. Students who are not reading at grade level by third grade are four times less likely to graduate on time from high school compared to those students reading proficiently at third grade (Hernandez, 2011). Without a high school education, students will only be qualified for 10% of available jobs (Achieve, 2012).

Literacy allows learners to employ their knowledge and past experiences, confidence, identity, and motivation to develop their reading skills in relevant ways, while learning

about the world around them. Yet, even with quality classroom instruction, some students still struggle with the core curriculum and require additional instructional support to be successful at school. The Institute for Education Sciences provides the following recommendations for interventions designed to support students who struggle with reading (Gersten et al., 2009).

- Provide intensive, systematic instruction to students in small groups on up to three foundational reading skills.
- Monitor progress monthly.

In addition to regular screening (fall, winter, spring) to identify students who fall below benchmark scores or are not making satisfactory progress with the core curriculum, targeted and sustained interventions should be provided to struggling students, based on individual need, over an extended period of time. The intervention should involve frequent checking and monitoring of the student's academic growth measures, faithful implementation of the core curriculum and supplemental instruction in targeted areas (i.e., intervention), and data-based decision making (Lembke, Hampton & Beyers, 2012).

Purpose

The purpose of this document is to focus on one easy to implement intervention that can be used in elementary schools. Student Support Specialists can supplement struggling students' reading development through:

- Intensive small group tutoring.
- Additional intervention strategies for schools.
- Tools and resources to share with students, schools and families.

Implementation Plan

Uses

Middle schools can use the sample intervention plan to assist at-risk students in improving their reading performance and academic outcomes. As identified in the sample, there may be times when the Student Support Specialist, teacher, or other instructional and support staff will assume primary responsibility for a component of the intervention, while at other times, additional school staff such as a School Intervention Team be collectively responsible for aspects of implementation of the intervention. Such distinctions will be noted in the sample intervention.

Audiences

The primary audience for this intervention is elementary students (grades 1-3).

Materials/Equipment/Space

- Student screening/assessment results
- Teaching space for small group of 3 students
- Leveled reading materials
- Curriculum based assessment tests
- Small prizes for treasure box (e.g., pencils, erasers, stickers, etc.)

Note: For presentations, check for access to computer, Smartboard or data projector and screen, relevant power cords, and remote slide advancer.

Time

- 40 minutes, 3-5 times weekly.
- 18 weeks.

Sample Intervention – Small Group Responsive Reading

Activity	Decision Making Level	Process Notes
<p>Create an intervention portfolio for each student.</p> <p>Closely examine individual student data to identify which topical areas require additional instruction (e.g., math facts, operations, etc.).</p>	<p>Assumes the Student Support Specialist (SSS) is working in collaboration with the school’s intervention support team (IST) and an Individualized Student Plan (ISP) has been developed for the student.</p>	<p><i>The intervention support team (IST) is a school-level team that serves as the primary problem solving team for all types of academic and behavioral learning issues. The team should include the classroom teacher, parent, resource or specialists as needed, guidance counselor, and principal (or designee).</i></p> <p><i>The Student Support Specialist is the needs-based plan of CISNC supported intervention/services provided to students who have been identified as needing targeted (tier 2) or intensive (tier 3) interventions and supports to be successful in school and life.</i></p> <p><i>Sample data sources include: benchmarks/curriculum based measurements (CBMs) such as EOG, EVAAS, PowerSchool, kindergarten registration screening, other assessment data, as well as attendance and disciplinary records.</i></p>
<p>Establish intervention framework.</p> <p>- Small group meeting time should be held when core reading instruction is <u>not</u> taking place.</p>	<p>Student Support Specialist and Intervention Support Team</p>	<p><i>Ensure that students included in the small group are all matched at the right intervention level and with students at the same level of need. For example, you would not match kindergartners with 2nd graders even though they may need the same level</i></p>



Activity	Decision Making Level	Process Notes
<ul style="list-style-type: none"> - Create small groups of 3 students per group. Match by grade level, proficiency, curriculum area weakness, etc. - Meet with each student's parent to inform about intervention and ways they can help student at home. 		<p><i>of reading support as this would likely cause additional stressors for the 2nd grade student.</i></p> <p><i>Consider a behavior management system for small group sessions, such as a group reward. Place marbles in a jar for satisfactory group work at the end of every session. At the end of the week, if the group has collected a certain amount of marbles, they get to choose small prizes from the treasure box.</i></p>
<p>Determine the curriculum content.</p> <ul style="list-style-type: none"> - Should focus on reading instruction (comprehension, fluency, and vocabulary) appropriate to the student's needs and developmental level. - Should build skills gradually (i.e. move from easy to hard) and integrate with other skills. - Should involve lots of interaction with student (e.g., frequent practice and specific feedback). 	<p>Student Support Specialist and Intervention Support Team</p>	<p><i>Curriculum content does not necessarily have to follow a scope and sequence format.</i></p> <ul style="list-style-type: none"> - <i>Consider creating a list of books (leveled for difficulty) for use in guided reading instruction. Teacher may already have this list available.</i> - <i>Use data from student assessments and weekly observations to identify student needs and strengths. Adjust instructional material as needed.</i>
<p>Initial meeting with each student.</p>	<p>Student Support Specialist</p>	<p><i>Meet with each student individually prior to the small group to build rapport and trust.</i></p> <ul style="list-style-type: none"> - <i>Assess student's sense of reading ability.</i>
<p>Meet with small group at designated days/times.</p> <ul style="list-style-type: none"> - Conduct 3-5 sessions each week (40 min each session). - Choose a focus student each session, sit beside the student and focus supportive instructions primarily to that student while including the other 2 students in the lesson. - Alternate focus student daily so that each student receives concentrated attention every three days. - As students achieve consistent mastery, increase difficulty level of reading material. 	<p>Student Support Specialist</p>	
<p>Sample Session Format</p>	<p>Student Support Specialist</p>	<p><i>Prior to reading a new book, discuss difficult word, subject matter and encourage students to make predictions to</i></p>

Activity	Decision Making Level	Process Notes
<p>Step 1: Model fluent and expressive reading. (10 min)</p> <ul style="list-style-type: none"> - Focus on the meaning of punctuation marks, reading smoothly and in phrases. - Teach 3-Step Strategy for unknown words. <ul style="list-style-type: none"> • Looks for part of the word they know. • Sound it out. • Check it. - With older students, stop to ask for alternate ways to use key vocabulary. <p>Step 2: Guided reading practice. (10 min)</p> <ul style="list-style-type: none"> - Work with the session’s target student in re-reading the story several times. - Assess target student for integration of 3-step strategy. - The other two students will read to each other while you are working with the target student. <p>Step 3: Choral reading. (10 min)</p> <ul style="list-style-type: none"> - Have the group read the passage out loud together. - Correct mistakes in a neutral, supportive tone. - Encourage the group to increase reading pace during each reading. <p>Step 4: Summarizing the text. (10 min)</p> <ul style="list-style-type: none"> - Lead students in a group discussion of the text. - Ask students to retell or summarize parts of the story. - Review vocabulary and check for understanding of the main idea. <p><u>Note:</u> Praise students regularly for their persistence and acknowledge progress. Distribute group rewards at the end of each week.</p>		<p><i>link the book to prior knowledge and establish purpose for reading.</i></p> <p><i>Step 1 builds comprehension and fluency as you model and teach expressive reading with students.</i></p> <ul style="list-style-type: none"> - <i>Ask, what is another word for ____?</i> <p><i>Step 2 provides guided practice and scaffolding and aids in assessment. When student encounters unknown words, remind student to use the 3-step strategy:</i></p> <ul style="list-style-type: none"> - <i>Ask student, do you see any parts you know? What sound does this letter make?</i> - <i>Say, say it slowly. Can you sound out this part? What’s the first sound? Now sound out the next part ...</i> - <i>Ask, did that make sense? Did that sound right?</i> <p><i>Step 3 provides extensive practice and corrective and positive feedback in a supportive, neutral tone.</i></p> <ul style="list-style-type: none"> - <i>Don’t allow students to practice mistakes.</i> <p><i>Step 4 builds comprehension and vocabulary.</i></p> <ul style="list-style-type: none"> - <i>Ask students the meaning of key words.</i> - <i>Ask students to identify main characters, sequence story events, identify story problems (provide evidence), etc.</i> - <i>Listen for level of detail provided, prior knowledge and real world connections, etc.</i>



Activity	Decision Making Level	Process Notes
<p>Monitor student progress.</p> <ul style="list-style-type: none"> - Use curriculum based weekly mastery tests to assess student progress. - Graph student progress in a reliable way. - At end of 6 weeks. <ul style="list-style-type: none"> • If student is responding to the intervention (consistently reaching mastery), regroup based on weaknesses and developmental level. • May also decide in consultation with IST review to return to regular classroom. • If student is not responding, continue for additional 6 weeks and re-assess at 12 weeks. - At end of 12 weeks. <ul style="list-style-type: none"> • If student continues to respond with mastery, return to regular classroom. • If inconsistent mastery levels reached, regroup based on weaknesses and developmental need. • If no response, assess impact of intervention on particular student. Adjust as needed. - At the end of 18 weeks. 	<p>Student Support Specialist (predetermined with IST).</p>	<p><i>Progress monitoring provides a valid picture of overall growth in math proficiency. Progress monitoring, e.g., talking with teachers, reviewing performance, attendance, or disciplinary data should be reviewed at a frequency that matches the risk and need of the student. It can also indicate when a student may no longer need the intervention or to regroup students who continue to need the intervention at different levels/targeted areas.</i></p> <p><i>Consider allowing students to graph their weekly progress on a bar graph. Students can use crayons to color the number of questions answered correctly on their mastery tests.</i></p> <p><i>Establish intervention benchmarks to monitor overall student progress.</i></p> <ul style="list-style-type: none"> - 6 weeks – review student intervention portfolio, classroom work, behavior charts, etc. to regroup students based on need and developmental level. Assess skills needed to be reviewed or re-taught. - 12 weeks – are students progressing? <ul style="list-style-type: none"> • If not, are critical components missing from the lessons/intervention? - 18 weeks – IST determines whether intervention was successful for the student. <ul style="list-style-type: none"> • Can/should student be returned to the regular classroom? What will ongoing monitoring look like (e.g., weekly follow-up with the teacher and/or touching base with the student to ensure that the student continues to do well)? • If no, refer for more intensive intervention (one-on-one) or continue additional weeks of small group instruction?

Suggested Supplemental Activities

- Plan professional development days to train school staff on the intervention framework.
- Develop an intervention support team to facilitate intervention (if the school does not already have one in place).
- Conduct a school-wide self-assessment/readiness to implement specific components and practices (e.g., screening and monitoring, core reading topics to be covered during interventions, systematic and intensive instruction in tiered interventions).
- Plan regular data days to review the results of screening, benchmark, and/or end-of-year assessments.

Resources

The following resources are identified as part of the intervention. Read through these resources carefully to become familiar with any concepts and instructions as they pertain to the content and intervention.

NC Standard Course of Study for K-12 English Language Arts

<http://www.ncpublicschools.org/docs/curriculum/languagearts/scos/ncscs-ela.pdf>

The following resources will provide additional information and suggestions for enhancing intervention activities and using data for decision making. Read through the resources carefully to become familiar with the information, any concepts and instructions as they pertain to the content and the extension of activities, and to determine their level of usefulness to the specific intervention.

Center on Response to Intervention

<http://www.rti4success.org/>

Doing What Works Library

Doing What Works helps educators understand and use research-based practices. This library includes interviews with researchers and educators, multimedia examples and sample materials from real schools and classrooms, and tools that can help educators take action.

<http://dwwlibrary.wested.org/>

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 primary grades. A practice guide.* (NCEE 2009-4045). Washington, D.C.: National Center for Education Evaluation and Regional Assistance, Institute for Education Sciences, U.S. Department of Education.

http://ies.ed.gov/ncee/wwc/pdf/practice_guides/rti_reading_pg_021809.pdf

Intervention Central

Intervention Central provides teachers, schools and districts with free resources to help struggling learners and implement Response to Intervention and attain the Common Core State Standards.

<http://www.interventioncentral.org/>

Note: All posters, images, and activity guides identified are copyright cleared for non-commercial use.

Measuring Success

Identifying outcomes and collecting data to measure the success of the intervention can help track the quality of implementation as well as the effectiveness of the intervention. In addition to state/district benchmark assessments, following are some additional suggestions that may be useful to measure success.

- General student outcomes
 - Curriculum-Based Measurements
 - Weekly progress monitoring
 - Attendance and/or disciplinary reports
- Content mastery
 - Assess student rate of progress (e.g., # sessions for student to attain consistent mastery)
- Observations (Student Support Specialist, teacher)
 - Student engagement and effort
 - Documented conversations with teachers, other school personnel, student, etc.
- Fidelity of implementation
 - Fidelity to lesson plan/sessions
 - Length of time per session
 - Effectiveness of intervention curriculum
- Parental feedback



Appendices

A. References

B. Research Alignment

Appendix A: References

- Achieve (2012). *How well is North Carolina preparing all students for college, careers and life*. (Slide deck). Retrieved from <http://www.achieve.org/north-carolina>
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Appendix B: Research Alignment

Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
<p>Bryant, D. P., Bryant, B. R., Roberts, G., Vaughn, S., Pfannenstiel, K. H., Porterfield, J., Gersten, R. (2011). Early numeracy intervention program for first-grade students with mathematics difficulties. <i>Exceptional Children</i>, 78(1), 7-23.</p>	<p>The purpose of this study was to determine the effects of an early numeracy preventative Tier 2 intervention on the mathematics performance of first-grade students with mathematics difficulties.</p> <p>The early numeracy intervention program focused on number and operation mathematical ideas, including problem solving, that were drawn from prominent sources on mathematics instruction. Activities included: counting sequence, counting principles, number</p>	<p>204 students; 139 in the treatment group and 65 in the control group.</p>	<p>The treatment group performed better than the comparison group on addition and subtraction combinations, $p < .0001$; place value, $p < .002$; number sequences, $p < .00001$; and the Texas Early Mathematics Inventories-progress Monitoring (TEMI-PM) total score, $p < .01$. There was no group difference on problem solving measures.</p> <p>By the end of first grade, 45% of treatment students and 22% of comparison students were no longer at risk for mathematics difficulties.</p>	<p>At the beginning of the academic year, the PI provided a three hour training to teachers on the intervention lessons and instructional materials.</p> <p>There were 11 units of instruction; each unit included 8 days of lessons. Each instructional day included a warm-up and two scripted lessons. Each of the two daily lessons was 10 min in length, while the warm-up was 3 minutes and consisted of fluency activities on previously taught skills.</p> <p>There was also a behavior management contingency system in</p>



Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
	<p>knowledge and relationships, partitioning and grouping of tens and units, and numerous opportunities for students to learn about combining and separating sets and working with basic facts.</p>			<p>place. Students had to meet the criteria of “Math Ready” before earning reinforcement.</p> <p>Tutoring sessions also occurred 4 days a week for 25 minutes per session (when time permitted) for intervention students.</p>
<p>Gilbert, J. L., Compton, D. L., Fuchs, D., Fuchs, L. S., Bouton, B., Barquero, L. A., & Cho, E. (2015). Efficacy of a first-grade responsiveness-to-intervention prevention model for struggling readers. <i>Reading Research Quarterly</i>, 48(2), 135-154.</p>	<p>This study examined the efficacy of a multi-tiered supplemental tutoring program for struggling first grade readers.</p> <p>The RTI model for this study combined several aspects: identified at risk students, monitored progress to make decisions about responsiveness, determined students’</p>	<p>Struggling first-grade readers ($n = 649$) were screened and progress monitored at the start of the school year. Those identified as unresponsive to general education Tier 1 ($n = 212$) were randomly assigned to receive Tier 2 small-group supplemental tutoring ($n = 134$) or to continue in Tier 1 ($n = 78$). Progress-monitoring data were</p>	<p>All groups made gains from pretest to posttest on all measures (word identification word attack, sight-word efficiency, and phonemic decoding efficiency), but some gains were higher than others.</p> <p>Results concluded that for students who were deemed at risk for reading difficulties</p>	<p>The instructional focus of the activities included in the supplemental, remedial tutoring program were letter-sound correspondence, sight-word recognition, phonemic awareness, decoding, spelling, and reading fluency.</p> <p>Tier I: whole class format.</p> <p>Tier II: small-group format with tutoring</p>



Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
	<p>instructional needs and formed homogeneous groups for instruction, provided targeted explicit and systematic instruction, and implemented a multitier program for tutoring.</p>	<p>used to identify non-responders to Tier 2 ($n = 45$), who were then randomly assigned to more Tier 2 tutoring ($n = 21$) or one-on-one Tier 3 tutoring ($n = 24$).</p>	<p>because of their nonresponse to Tier 1 instruction, supplemental reading tutoring was beneficial. Students who received tutoring (Tiers 2 and 3), on average, had significantly greater change scores than did students who received reading instruction only in their classrooms (Tier I).</p> <p>At the end of grade 1, slightly more students in Tier 2 (59%) scored in the average range on word reading than did students in Tier 1 (53%).</p> <p>There was no significant difference for students who received Tier III</p>	<p>provided as a supplement 3 times a week in 45 minute sessions.</p> <p>Tier III: more intensive than Tier II; one-on-one tutoring format daily.</p>



Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
			tutoring compared with those who received Tier II tutoring.	
<p>Hooper, S. R., Costa, L., C., McBee, M., Anderson, K. L., Yerby, D., Childress, A., & Knuth, S. B. (2013). A written language intervention for at-risk second grade students: A randomized controlled trial of the process assessment of the learner lesson plans in a tier 2 response-to-intervention (RtI) model. <i>Annals of Dyslexia: An Interdisciplinary Journal of The International Dyslexia Association</i>, 63(1), 44-64.</p>	<p>The study examined the use of the PAL lesson plans in second grade students at risk for later writing problems, and the subsequent developmental trajectory of overall writing scores across multiple time points from grades 1 through 3.</p> <p>At-risk students were defined as falling at or below the 25th percentile for their grade placement.</p>	<p>205 total students; 138 at risk students, randomized into treatment (n=68) vs business as usual (at-risk, non-treated), n=70. A typical group also was included (control group), n=67.</p>	<p>All three of the groups demonstrated growth in their writing skills over time for both the linear and curvilinear trajectories. Contrasts between the three groups showed the treatment effect was significant only on the quadratic component of the slope. The quadratic component represents an acceleration parameter, indicating that the treatment induced acceleration in the rate of writing skill acquisition for treated participants. The treatment group had a significant growth rate</p>	<p>All students received written language instruction via the regular classroom setting in a business-as-usual (BAU) model. Students assigned to the treatment groups also received the Process Assessment of the Learner (PAL) lesson plans in a small group format (3-6 students) in accordance with a Tier 2 intervention model, twice a week for 12 weeks.</p> <p>The intervention sequence employed the PAL Reading and Writing Lesson Sets 4 and 7 which comprised three</p>



Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
			of writing skills acquisition at grade 1.5 and 3.5, compared to the at-risk untreated group.	sections: sub-word level—Talking Letters, word level—Spelling, and text level—Handwriting and Composition.
<p>Johnson, E. S., Hancock, C., Carter, D. R., & Pool, J. L. (2012). Self-regulated strategy development as a tier 2 writing intervention. <i>Intervention in School and Clinic, 48</i>(4), 218-222.</p>	<p>The purpose of this study is to describe one schools’ journey to implement a Self-Regulated Strategy Development (SRSD) model to improve the writing strategies/skills of struggling 4th grade students.</p> <p>The basic stages of instruction outlined for SRSD include: developing and activating background knowledge, discussing the strategy, cognitive modeling of the strategy,</p>	7 students.	By the end of 12 weeks, four of the seven students met the goal of the TWW performance at the 50 th percentile. Two of the remaining three had performances just below the 50 th percentile.	<p>Mountain View Elementary School decided to focus its writing intervention on : the story writing strategy and the opinion essay strategy to help develop students’ writing abilities in both narrative and expository genres.</p> <p>The students were pulled from the end of their 90 minute reading block to attend SRSD intervention 4 days per week for 30 minutes each day.</p> <p>In general, the</p>



Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
	<p>memorization of the strategy, collaborative support of the strategy, and independent performance. In addition to these stages of writing instruction, four basic strategies for self-regulation are emphasized: goal setting, self-instruction, self-monitoring, and self-reinforcement.</p> <p>Fourth grade students were chosen because they had the highest percentage of students not meeting proficiency level and scoring below the 25th percentile on the total words written (TWW) measure.</p>			<p>intervention provider followed the steps, sample scripts, and lesson plans as presented in the <i>Powerful Writing Strategies for All Students</i> text. In addition to the writing strategies, students were taught to use the self-regulation strategies that include monitoring their own use of the strategies, reviewing their own writing, reviewing their peers' writing, and thinking of themselves as writers. An overall "getting started" strategy of Plan, Organize, Write (POW) was presented, and then various mnemonics were taught based on the specific writing genre. For example, the strategy POW + WWW</p>



Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
				<p>(Plan, Organize, Write + Who, When, Where) was used for story writing, and the strategy POW + TREE (Plan, Organize, Write + Topic sentence, Reasons, Explain Reasons, Examine Ending) was used for opinion essays.</p> <p>Weekly progress monitoring measures were implemented using the TWW.</p>
<p>Ritchey, K. D., Silverman, R. D., Montanaro, E. A., Speece, D. L., & Schatschneider, C. (2012). Effects of a tier 2 supplemental reading intervention for at-risk fourth grade students. <i>Exceptional Children</i>, 78(3), 318-334.</p>	<p>This study evaluated the effects of a 24-session multicomponent supplemental intervention targeting fluency and expository comprehension of science texts.</p>	<p>123 4th grade students identified as having a high probability of reading failure; 57 in the intervention group and 66 in the control group.</p>	<p>Intervention students performed significantly higher on science knowledge and comprehension strategy knowledge and use, but not on word reading, fluency, or other measures of reading comprehension.</p>	<p>The intervention occurred for 2 consecutive years and consisted of 24 scripted lessons implemented over 12 to 15 weeks. Intervention was provided in three 40-min sessions per week in groups of two to four students. Intervention was provided in addition</p>



Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
			<p>Moderator results suggested that children at higher risk in the intervention condition appeared to benefit more in comparison to lower probability children in intervention and compared to higher probability children in the control condition.</p>	<p>to general reading instruction provided by the classroom teachers. Tutoring by graduate research assistants was also provided.</p> <p>Fluency: students engaged in repeated reading, with a tutor, using a passage read in the previous lesson, for 5 to 7 min of the session. Next, students engaged in repeated reading individually or with a partner. Each lesson alternated between students rereading the passage for 3 min individually and rereading the passage with a partner (2 min per student).</p> <p>Comprehension: each lesson included explicit comprehension</p>



Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
				<p>instruction, vocabulary instruction, and text instruction and was approximately 25 to 30 min per session.</p> <p>Vocabulary: tutors introduced two to Four words in each lesson, following the instructional protocol for teaching vocabulary in context.</p>
<p>Valenzuela, V. V., Gutierrez, G., & Lambros, K. M. (2014). Response to intervention: Using single-case design to examine the impact of tier 2 mathematics interventions. <i>School Psychology Forum: Research in Practice</i>, 8(3), 144-155.</p>	<p>This study assessed the effectiveness of a Tier 2 standard mathematics intervention using evidence-based mathematics instructional strategies along with Touch Math to illustrate how schools may use this approach to address the needs of struggling students. The</p>	<p>4 second grade students.</p>	<p>ROI: the rate at which an average student is expected to improve given typical instruction.</p> <p>One of the students met the goal of an increase of +1.5 ROI and at least +12 overall in M-COMP by the end of the 8 week intervention. The student's initial</p>	<p>Tier 2 of the intervention was 8 weeks. Four skills were taught during the 8 weeks of Tier 2 intervention: single-digit addition, double-digit addition, single-digit subtraction, and double-digit subtraction.</p> <p>Students were pulled out of their classes twice a week for a small group intervention of 30</p>



Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
	<p>strategies used were number sense instruction, modeling procedures, guided math drill and practice of addition and subtraction facts, corrective feedback, and reinforcement for on-task behavior.</p> <p>Touch Math is an elementary-level instructional strategy for teaching number concepts and involves the association of numerical quantity with the visual representation of that number.</p> <p>Teachers recommended their lowest achieving math students in need of additional small group support.</p>		<p>baseline score was 9.5 and increased to 31.</p> <p>The second student had a baseline score of 8. He needed a score of 20 to reach his goal. He increased to a score of 15 and was deemed a “responder”. He remained in the intervention for an additional 6 weeks. After a total of 14 weeks, he met the goal and achieved an ROI of +1.57.</p> <p>The third student’s baseline score was 5.5. She needed to score a 17.5 to reach her goal. At the end of the first intervention she had only increased to a score of 8. It was determined that she was a “low responder”.</p>	<p>minutes per session. The first session was devoted to teaching the correct touch points for probe numbers 1–9. In subsequent sessions, students practiced the touch points for the first 5 minutes and then were explicitly taught how to use the strategy to solve computation problems through direct instruction and modeling for the next 10 minutes.</p> <p>For non-responders, Tier 2 of the intervention was implemented for an additional 6 weeks. It was identical to the initial Tier 2 intervention with the exception of an increase in intensity.</p> <p>Motivational strategies included verbally praising each student for</p>



Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
			<p>She remained in the intervention for an additional 6 weeks. By the end of the 14 weeks, her ROI was +3.1.</p> <p>The last student had a baseline score of 3.5. At the end of the 8 week intervention, he had not met his goal and was considered a “low responder”. He received an additional 6 weeks of the intervention. Although he did not meet the goal of a +1.5 ROI, it did increase to +1.04 from +0.15.</p>	<p>his or her participation in practicing the correct touch points and reinforcing on-task behavior during instruction. Tally marks on Post-it notes were recorded for engagement during guided practice and completion of math tasks. Once students accumulated a certain number of tally marks each week, they were rewarded with the opportunity to choose a tangible item from a treasure chest filled with pencils, erasers, and small toys.</p>

