Review of Reading Strategies for Students with Learning Disabilities

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In the late 1970s there was a public service spot on television that said, “Reading is fundamental…Pass it on.” While almost everyone would agree that being literate is an essential life skill, the pass it on part comes with a great deal of challenges. The process of learning to read begins very early in a child’s life in the form of learning to speak. Some would argue that other developmental milestones can also be linked as predictors of a child’s success rate in learning to read. In a recent child study meeting for a primary grade student, a speech pathologist asked a parent how long her child crawled before they walked. She further explained that the sensory experience of rubbing their face on the carpet as they learn to crawl is a precursor for developing language.

Learning to read is about making connections between our spoken language and the symbolic representation of print. Children who enter school with significant deficits in their vocabulary are already at risk for difficulties in reading according to the National Reading Panel (2000). Beginning reading instruction must include a balance of phonemic awareness, phonics, spelling, reading fluency, vocabulary, and reading comprehension (NRP 2000). The NRP’s findings also indicate that when students receive multiple exposures to vocabulary words, and when students are actively engaged in vocabulary instruction they are more likely to retain word meanings. This fact is a profound statement as to why quality preschool programs that focus on language acquisition are essential for at risk students. If the playing field is leveled before students enter kindergarten, then the propensity to misdiagnose reading disabilities could be avoided for some children.

It is often difficult to determine whether a child truly has a disability or simply has not been exposed to information. This is often the case in the primary grades. Sze (2009) addressed the topic of mislabeling students. She explained that students who have trouble learning to read
do not always have a processing disorder as the root cause. Sze (2009) proposed early intervention and assessment to address individual student needs. She cited the work of former Virginia State Superintendent Dr. Cannady (2008) as he advocated for each district to adopt a clear plan for struggling young readers prior to referring them for special education evaluations.

The purpose of this paper is to examine a sampling of research on reading disabilities and intervention strategies. Five articles were reviewed and a summary and analysis of each is included. A plethora of information exists in education claiming to be the one stop solution for students with reading difficulties. It is important to recognize that many well researched methods have been around for a number of years and continue help students make gains. In other words it is important for educators not to abandon proven methods and change pedagogy every time a new idea surfaces. The paper will conclude with a discussion of the common themes found in the research and the implications for school leaders faced with choices and challenges related to students with difficulties in the area of reading.


Jitendra and Gajria (2011) presented a thorough collection of strategies to assist teachers as they work with students to improve their skills. The key to their research is for teachers to learn ways to help students with meta-cognition. In other words, students need to learn how to think about their thinking as they organize information. The review of strategies is all encompassing and really can be used as a resource for both regular and special education teachers. Strategies ranging from graphic organizers, story maps, mnemonic devices, study
guides, and summarizing techniques are well explained and research data presented to support the promising outcomes for students. There is not a claim that these are truly researched based as the research does not yet exist.

One of the most interesting techniques presented by Jitendra and Gajria in the area of cognition is summarization. According to Rinehart, Stahl, and Erikson (1986) summarization “emphasizes the structure of ideas within text and how individual ideas relate to each other.” (p. 424). The goal is to help students be able to synthesize information that they read and mentally organize what is deemed important. This skill involves many complex cognitive steps but is critical for students to master. Jitendra and Gajria suggested several different methods researched by others and proven successful for students but recommend that any method used have a self monitoring component. They stressed that the steps to summarization are challenging and are usually best mastered when they are modeled and practiced repeatedly. They further proposed that the models that include the meta-cognitive aspects give students the best chance to maintain summarizing skills and be able to transfer them to other subject areas as well.

This study involved nine students in grades six through nine with reading disabilities. The specific information about each student was not available. This makes it difficult to examine variables of the study or to determine if it could be replicated. Students were taught using a direct instruction model as was the most common approach in 1986. The findings of the study have lead to further research in the area of meta-cognition which in itself is a positive outcome.

Gauthier and Schorzman (2012) reviewed the findings of many others in the area of reading comprehension and student engagement. They looked further than the original challenge of the mechanics of reading which are often so difficult for students with disabilities on to the next level which is to help students derive meaning from text. They looked at the work of Smith (2006) and Graves, Juel, Draves, and Dewitz (2011) who conducted studies that indicated that social interaction and high interest in the topics being read led to increased student motivation. Ways to increase student motivation was the focus but specific strategies modeled after Gunning’s work in 2010 in providing structure for conversation about text, commonly known as literature circles, was especially helpful for students with learning disabilities. Teachers who provided a framework for discussion helped with the language development needs of their students and helped them feel successful.

The goal of Gauthier and Schorzman’s (2012) action research study was to combine three well known strategies of oral reading by the teacher, student illustration of key elements of stories, and small group discussions about the literature. The study was done over one semester in an inclusion classroom and also in a pull-out model classroom. The researchers studied eight fifth grade students, seven boys and one girl. The students spent four hours a day in the general education classroom and three in the special education classroom. Their instructional team consisted of one general education teacher, one special education teacher, and one instructional assistant. According to the interest inventories given to the students in both fall and mid-year prior to the study, seven of the students reported low interest in reading and actually indicated a
strong dislike for reading. The other student was more proficient in reading and but the interest inventory reported a neutral attitude toward reading.

The first strategy implemented in the Gauthier and Schorzman (2012) study was oral reading by the teacher. Prior to the study, there were only occasional times when this occurred in the regular education classroom and not at all in the pull out classroom. The daily schedule was altered to allow for thirty minutes of oral reading a day from a chapter book. There were also planned activities to allow the children to interact and respond to the literature in both the regular and pull out classroom. The students were assigned illustrating activities and engaged in small group discussions.

The second strategy studied by Gauthier and Schorzman (2012) of student illustration came as a result of the teacher’s noticing how much the students loved art activities and how engaged they were during any instruction that allowed them to draw. As part of the study, students were asked to illustrate what was read to them each day immediately following the reading. There was another important connection in place as they would listen to the story in the general education classroom and then do the illustration as their first task in the pull out classroom.

The third strategy of structured discussion was also implemented every day. Students were put in small groups and given specific topics of discussion related to the book or to their own illustrations.

Within weeks of implementing these changes, the eight students were noted as asking for more time in reading, drawing, and discussion as were the other students in the class. There were several noticeable changes in student behaviors once this routine was started. Students were
observed reading orally by choice and sharing passages from books with other students. Other students were observed modeling the teacher and reading aloud to other students. Some were noted to have difficulties with fluency but received the support of their classmates and felt successful.

Another noted behavior was students drawing concepts in other classes to help them understand. Teachers observed students illustrating concepts in math and science and sharing those with their classmates. A third interesting behavior change was in student preferences in the library. Students were observed reading by choice in both the general education and pull out classrooms.

The most significant change for these eight students was recorded in their end of semester instructional reading level testing. None of the eight students showed improvement during first semester and five of them actually had lower scores mid-year than beginning of the year. At the end of second semester, three students showed marked improvements in their reading comprehension score. Most of the outcomes for these students will remain intangible but it is clear that there was a shift in attitude towards reading not only by the students but the adult as well.

This study employed many components that could be replicated. It is a common model for students to receive reading instruction in both the general education and special education classroom each day. This was a very good example of how collaboration between the members of this instructional team served these students well. They identified that motivation was the key problem by analyzing student feedback and then worked to implement changes in the curriculum.
that ultimately improved students’ overall approach to reading which has the potential to carry forward.


Another strategy often employed in teaching reading to students with learning disabilities in reading is repeated reading. Chard, Ketterlin-Geller, Baker, Doabler, and Apichatabutra (2009) examined this practice in their study. Their goal was to determine if the practice of exposing students to the same words over and over again actually works to improve fluency. Their work was based on the earlier work of Adams (1990) and Lipka, Lesaux and Siegal (2006) who proposed that students who have difficulties with phonics also have short term memory difficulties when it involves verbal data, also have trouble accessing their long term memory fast enough to decode words quickly. This is the basis for the reading disability and other reading skills including building vocabulary and reading comprehension naturally become an even greater challenge.

Chard et all (2009) focused on the core deficit of reading comprehension and the intervention of repeated reading to further the work of other researchers in this field since the 1970s that have shown success but still does not qualify the method as “evidence based”. Their main research question was, “Is the research base supporting the effectiveness of repeated reading based on high quality standards of single subject and experimental/quasi-experimental research that would lead to the determination that repeated reading is an evidence-based practice?” (p. 266).
The authors conducted an extensive examination of the body of research on the use of this method from 1975 to 2006 using a narrow definition that no other interventions could have been used simultaneously with repeated reading. They identified six studies that met the criteria as outlined by Horner (2005) and Gersten (2005) et al for what constitutes evidence based. These studies were evaluated in every possible category to determine validity and deficits were found in several of the studies. This compromised the findings. No studies met the rigorous research expectations in all categories and therefore this team could not prove that repeated reading could be classified truly as evidence based practice. The biggest problem they faced was the lack of replication which made it very difficult to make generalizing statements about the method. The results of this study indicate that future research focused on replicating as closely as possible some of the previous studies would help prove or disprove the value of repeated reading for students with disabilities.

The standards that these studies were put through by Chard et al (2009) are rigorous almost to the point of impossibility. Educational studies in non-laboratory settings have nuances and special circumstances even with the best efforts at controlling for them. It is important not to lose sight of the overall findings of research by allowing the research process itself to rule out potentially helpful information.


Response to Intervention (RtI) is one of the newest approaches to provide support for children who are demonstrating difficulties in the area of reading. It became the alternative assessment component of IDEA when Congress reauthorized the law in 2004. Dunn (2010)
provided a well researched study of how the newer paradigm of RtI can include the older strategies of the Reading Recovery model to truly benefit students in the primary grades.

Dunn (2010) implemented a study in a first grade classroom that used the Reading Recovery model for a period between 12 to 20 weeks depending on the needs of the students. He proposed that one of the biggest questions in reading intervention is often related to how long a strategy should be tried before assessing whether it has been beneficial. This particular study monitored each student’s progress through the leveled texts and the results were positive for most of the participants.

Dunn (2010) suggested a replicable model of what effective RtI should look like and how it should be implemented for students. The critically important idea in the need for RtI is it replaced the older school of thought which was the “wait to fail” notion of not implementing interventions prior to third grade. Most educators agree that if a child is struggling to learn the mechanics of reading and this persists until third grade, it is very likely that the student will continue to have difficulties in other areas related to reading and the gap will continue to widen.

RtI offers intervention strategies based on student needs and responses on an increasing level. All students receive Tier I which is instruction in the general education classroom using research based methods. All students are assessed three times during the year in reading skills such as letter recognition, decoding, comprehension, and fluency.

As a parallel to Dunn’s (2010) work, the model in Virginia is similar and based on the PALS assessment given to all K-3 students. Students who perform below the benchmark are identified and begin receiving Title I or small group instruction to remediate specific skills. This is an example of RtI Tier 2 interventions. A student who is still not able to meet the benchmark
and is significantly performing lower than her peers would be eligible for Tier 3 interventions which could include one on one tutorials or extra small group instruction. When a student does not show improvement after all of three Tiers of intervention, they are then referred for testing to determine if a disability exists.

Dunn (2010) explored the work of Fuchs and Fuchs (2007) and others to clearly define how long RtI should be implemented before referring a child for a full evaluation and found that there is no clear answer and schools and intervention teams need to make these decisions on an individual basis.

Dunn’s (2010) research including Reading Recovery (RR) as a component of RtI has not been employed in other studies. This study could be replicated but may require some research to find the appropriate training for teachers since this model is no longer in the forefront of reading instruction. RR came to life in the 1970s. Created by Marie Clay as her dissertation study, it was widely accepted and is still used in many schools. RR is a systematic approach for kindergarten and first grade students that involves three ‘rounds’ of intervention, each lasting between 12 and 20 weeks. Students work for 30 minutes a day with a RR trained teacher using books and activities designed to improve their reading skills. There are no worksheets and the instruction is highly interactive. Assessments using running records are completed often and each day’s lesson is based on observations and formative assessments. Dunn (2010) fully explored the research on RR and found that there were positive lasting effects for student who participated in RR. It stands to reason that Reading Recovery as a component of RtI could in fact have a positive impact for many students and could possibly prevent the need for some referrals to special education.
Nouvelle, R. C. (2010, January 1). The Effects of Oral Reading Fluency on Reading Comprehension for Students with Reading Disabilities and Specific Learning Disabilities. ProQuest LLC

Learning disabilities in reading have long been a source of exploration for students’ doctoral dissertations. Nouvelle (2010) designed a study to further examine the achievement gap that exists between white students and other sub groups in the area of reading. The No Child Left Behind Act of 2004 has brought a great deal of attention to this problem and a host of research is now being conducted on this topic. Students with disabilities are clearly falling behind other students based on the state testing results. Nouvelle researched the concept of oral reading fluency (ORF) and the connection to reading comprehension. More specifically, she conducted a study based on the theory of automaticity.

In the literature Nouvelle (2010) found other studies proposing that when students are taught strategies to improve fluency then their overall comprehension improves as well. The supported idea is that once a reader can move past the mechanics of reading they are then able to move into the complexities of cognition required to organize the information and create meaning from the text. She also wanted to study whether repeated readings or having students read unfamiliar passages or ‘cold reads’ are better predictors of a student’s reading comprehension ability.

Her quantitative, correlation study focused on 46 students in grades 3 through 6 who had learning disabilities in reading. The study was done over a ten week period and students were instructed using specific well documented strategies to help them improve their fluency rate. Students were pre and post tested in both fluency and comprehension using a standardized instrument. The study did not present any statistically significant relationship between gains in fluency and gains in reading comprehension. The results also did not produce any statistically
significant evidence to prove or disprove whether repeated readings or cold passages were better indicators of reading comprehension ability.

Research in this area has a great deal of variables based on the individual needs of the participants, the length of time the intervention was in place, and a host of other considerations. The implications for future study may be to only focus on fluency and not try to add in the component of repeated reading versus cold passages. This study would have been stronger had Nouvelle (2010) explored the fluency concept in depth. This topic could have lent itself to a qualitative component to capture student perceptions about their own reading ability. The study was structurally sound but lacked the insight that qualitative research can add to a study.

Discussion

The overarching theme of this body of research is that there is no one solution that best assists students with reading disabilities. There are countless nuances that interweave to make each student’s situation just a little unique. This is the case with every child in terms of learning strengths or weaknesses and it is only magnified in a student with a disability. The sense of urgency for a student to feel competent and successful early on in the process of learning to read emerged in all of the research. Dunn (2010) clearly pointed to this in his rationale for Response to Intervention. This is important because once a student is frustrated and develops negative feelings about reading, the challenge of finding strategies that work are overlaid with less than full buy in from the student. The research clearly indicates that student engagement is critical and early intervention increases the likelihood of achieving a high level of this.

Gauthier and Schorzman (2012) gave a wonderful example of how students’ perceptions of their ability can be changed when they feel successful. The old notion of allowing a student to
be unsuccessful until third grade is hopefully long gone and teachers are recognizing when students are struggling by using formative assessments very early in a child’s school career. This early intervention strategy hopefully over time will decrease the rate of misdiagnosing reading disabilities (Sze 2009). It is important for educators to explore the specifics of each child’s situation to determine whether or not the difficulty is based in their lack of exposure to print and pre reading experiences or determine that even after considerable instruction they are just not able to master the concept of reading.

For older students with reading disabilities, the research indicates the need to build fluency and comprehension skills. Jitendra and Gajria (2011) fully support that students can make great gains in this area when teachers use strategies to help students retain and transfer their learning. They suggest graphic organizers, mnemonic strategies, story maps, and others across content areas. So much effort is put forth in the primary grades by both students and teachers in learning the mechanics of reading that becoming a fluent reader seems unlikely for many students but it is an attainable goal for many with the right supports in place.

Moving from letter sounds to word calling to reading with expression is a process that requires constant practice. Building fluency also builds a student’s confidence. The research continuously comes back to the strategy of repeated reading. While Chard et al (2009) were very critical of the research in this area; it is a strategy that has shown improvement in students for many years. Exposing students to print until it becomes familiar and then celebrating the success they feel when they hear themselves reading fluently immediately lays the groundwork to challenge them with the next piece of unfamiliar text. The old adage of success breeds success is ever true for these students.
Reading comprehension is also a challenge for students with reading difficulties and the research indicates that literature circles are positively impacting outcomes as shown in the Gauthier and Schorzman (2012) study. Additionally, reading aloud to students from print that is above their independent reading level and then engaging them in conversations and activities that allow demonstration of knowledge in a ways other than paper/pencil has been shown to increase the level of interest and subsequently achievement. Again, it all comes back to interactive teaching methods that encourage student engagement.

The biggest idea is in the area of meta-cognition (Jitendra & Gajria 2011). If teachers want students to learn a strategy that will help them and then be able to transfer that strategy to the next task, it is important to help students think about thinking. Walking through the process of thinking out loud is a great tool for students and one that will gather strength over time. The details of this process are important and the practice has to be consistent over time for students to really benefit.

It seems as though the Response to Intervention framework is something that can really be a powerful model. It plays several important roles but the key is that it provides educators with a common language of operation. We are still in the first years of this model but already an understanding of the tiered system for interventions exists in most places. The next important component of this model is that it serves as a clearinghouse for evidence based strategies and specific interventions (Dunn 2010). Educators are famous for reinventing the wheel so to speak and abandoning tried and true methods when something new comes along with some new terms and a promise of success for students. Response to Intervention is a model that allows many combinations of interventions to best meet the needs of each student.
Leadership Implications

As an elementary school principal, it is imperative that I have a clear understanding of the process of reading and also the challenges faced by students with disabilities. Most principals also serve as chair of Child Study teams so being well versed in RtI is critical. When a child is struggling and their needs are brought to the child study committee, there needs to be an informed discussion about interventions that have already been implemented and others that potentially could have a positive impact.

Another critical component for leadership is the need for flexibility. Thinking about each person in the building and what they potentially can do to help meet students’ needs is a component of RtI. Struggling students are not only the responsibility of the classroom teacher or special education teacher. If there is a Physical Education teacher with an extra twenty minutes twice a week to do sight word flashcards with a student or listen to them read aloud, it can make a big difference for a child. The big picture for leadership is to create a culture that every child is everyone’s responsibility.

My school created a list of students who we identified as students who could benefit from additional support. Every adult in the building was asked to look over the names of the children and choose one that they had a relationship with or would like to create a relationship with and become that child’s special friend. The only rule was that it could not be a child currently in your class for grade level teachers. This idea manifested into teachers working with these students during lunch, after school, on weekends, or whenever they could find a few minutes during the week. Sometimes the difference for a child comes in just knowing that someone is going to ask how they are doing or caring how the spelling test went for them. Intervention strategies are not
always best measured by what specific methods are used, the real gains for students are often made by the relationship that is built in the exchange.

No leader can be the expert in all topics, including those related to disabilities, but knowing where to find key resources and staying informed on current research can make things happen faster and more efficiently for students thus reducing the amount of time they have to feel unsuccessful the classroom.
References


