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Non – Responders: Current Findings in Reading Instruction as Related to Students

Unresponsive to Early Intervention

Susan E. Spurduto

Lynchburg College

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Perhaps the most consistent way of describing reading instruction over the last thirty years is that it has been marked by continuous change. Foorman and Torgesen (2001) described this change according to each decade. They described the 1960s and 1970s definition of effective instruction as the “main effects of reading methods on student achievement” (Foorman & Torgesen, 2001, p. 203). The eighties shifted into a focus on “effective school research” and the relationships between process and product. While the eighties were not the first time explicit instruction was explored, it was during this time that there appeared a noteworthy link between explicit instruction and learning disabilities. The mid - eighties to the mid - nineties introduced the idea of “best practice” where exceptional teaching was placed on the spotlight.

In 1997, with the need for improving national reading scores becoming widely discussed, Congress charged the National Reading Panel (NRP) to “assess the status of research – based knowledge, including various approaches to teaching children to read” [National Institute of Child Health and Human Development (NICHD), 2000, p. 1]. Therefore, as forecasted by federal and state laws, the most current trend in reading instruction centers around evidence – based research (Foorman & Torgesen, 2001). The current use of research – based instruction is now seen as the means to achieving the national goal of seeing all students reading by the third grade, as stated in No Child Left Behind (P.L. 107 – 110, H.R.1).

The goals for reading instruction described in NCLB were largely impacted by concerns expressed through the NRP Progress and Summary reports, specifically about the condition of America’s young readers (P.L. 107 – 110, H.R.1). In the 1999 NRP

Progress Report (NICHD, 1999), panel members explained that research was showing a growing number of students who would not acquire reading skills at a mastery level. Furthermore, it was estimated that ten million children would be faced with reading difficulties within the first three years of instruction (NICHD, 1999). While the 14 member panel included prominent figures in the field of special education, the focus of the panel was not to gather information specifically aimed at students with learning disabilities. In fact, the Summary Report of the NRP specifically states that an area in need of further research is whether students with learning disabilities have diverse needs requiring instruction that is varied from lower achieving, students who are non – disabled (NICHD, 2000).

Questions still remain about whether or not current research – based reading instruction is effective for all students. There is a population of students that continue to struggle to learn how to read despite the use of research – based instruction. This population of students has been termed “non – responders” or “treatment resisters.” The emphasis on research – based reading instruction has promoted an increase of reading levels among students in the United States; however, the limited amount of research on the needs of students who are non – responder has yielded mixed reviews. The following paper will address current reading instruction practices that are in place for all students to become successful readers. In addition, the paper will present a review of what current research says about the characteristics of students who are non – responders, and suggested elements of effective instruction for this population.

Current Practices in Reading Instruction

Educators have long debated the most effective method of teaching reading (NICHD, 1999). The key debate has been between decoding - based approaches and holistic approaches (NICHD, 1999; Polloway, Patton, & Serna, 2008). Though there are still arguments for and against the various methods of teaching reading, it can be confidently said that reading instruction takes place for the ultimate goal of teaching students to comprehend text (Polloway et al., 2008; Torgesen, 2000). With that goal in mind, the NRP was able to explore and discuss in their Summary Report, the various methods of instruction that are proven to promote effective reading skills (NICHD, 2000). The ideal situation would be for all school systems and educators to implement research – based methods in the inclusion classroom, while implementing a structure that allows individualized instruction to struggling readers (Mathes & Torgesen, 1998). There are currently two projects receiving a significant amount of attention for their aim to improve reading instruction. The first of the two is the Reading First Program outlined in NCLB (P.L. 107 – 110, H.R.1).

The Reading First initiative simply encourages state and local school administrators to implement research - based reading instruction from kindergarten to second grade (P.L. 107 – 110, H.R.1). The focus is on early intervention and instruction found effective per the NRP report. Instruction that is research - validated includes teaching phonemic awareness, phonics, guided oral reading, and reading comprehension strategies (NICHD, 2000).

There is definite appeal for school systems to participate in the Reading First program. According to the proposal provided in the No Child Left Behind Act of 2001,

school systems will ultimately make less referrals to special education because students will receive effective instruction before they fall behind in reading (P.L. 107 – 110, H.R.1). In addition, state and local school systems will receive financial support to implement the research – based reading programs (P.L. 107 – 110, H.R.1).

The second instructional approach focuses on Response to Intervention as it is applied to reading instruction. There has been a growing interest in multi – level instructional approaches as teachers are addressing the diverse needs of students within inclusion classrooms (Al Otaiba & Fuchs, 2006; Hoover & Patton, 2008). Response to Intervention (RTI) promotes three key practices in the general education classroom. These practices include research – based interventions within the general education classroom, consistent measuring of student progress, and modifications made according to student needs (Fuchs & Fuchs, 2006; Kavale & Spaulding, 2008; Lose, 2007).

With the implementation of RTI, multiple levels of intervention are provided to students needing more individualized instruction. This model is seen as having a significant amount of potential because it can be “implemented in the early grades to strengthen the intensity and effectiveness of reading instruction for at – risk students” (Fuchs & Fuchs, 2006, p. 98). RTI allows for three tiers of support to be given to reading students. In the first tier all students receive high quality, or research – based, instruction within the general education classroom. In the second tier students continue to receive high quality instruction, but the instruction is provided in small groups. Tier 2 is for students who are beginning to show that they are lagging behind their peers. In tier 3 instruction students receive intense, individualized instruction. In tier 3 students are also

entering the evaluation process to receive special education services (Kavale & Spaulding, 2008).

The role of special educators will need to continue moving towards a collaborative approach, in order to successfully implement the RTI model (Hoover & Patton, 2008). According to Hoover and Patton (2008), two of the primary responsibilities of the special educator in the RTI model are to make instructional decisions based on the data they collect during interventions and provide research – based instruction. This allows students to receive instruction that is differentiated according to their needs (Hoover & Patton, 2008).

While as of 2006 RTI still remained an experimental process (Kavale & Spaulding, 2008) nevertheless, there are well - defined benefits for implementing RTI. RTI requires teachers to identify at risk students early on. Students are also able to receive individualized services more readily than if they were to have to go through the evaluation process to receive special education services (Al Otaiba & Fuchs, 2006). Al Otaiba and Fuchs (2006) stated that students who do not receive services until they are identified as needing special education services, are often in third or fourth grade prior to receiving specialized instruction. RTI encourages early intervention as opposed to a “wait to fail” approach.

The Reading First initiative and the Response to Intervention model of instruction are both producing positive effects on student acquisition of reading skills. These are ideal models that are, in fact, being implemented in various school systems. Though these are ideal models of instruction, multilevel and research – based, the problem educators are running into is that there are still students that do not respond to the instruction

provided. Al Otaiba and Fuchs (2006) suggest that there are potentially as many as 50% of students with learning disabilities that will be identified as non – responders to the reading instruction discussed.

Characteristics of Non – Responders to Reading Instruction

Of particular interest is a study conducted by Fuchs and Fuchs (2006) where the focus was on students working within an RTI model. When the students did not respond to the services provided in a RTI model, it was easier to deduce that those students had a true disability and were not affected by what some may have otherwise regarded as poor instruction (Fuchs & Fuchs, 2006). Until research – based reading instruction is consistently provided to all students in kindergarten and first grade it will be difficult to distinguish between students suffering from bad instruction and those who are truly at risk for reading failure. The question remains then: who are the students that are struggling to read even under ideal instructional models that implement research – based instruction and early intervention? Al Otaiba and Fuchs (2002) point out the necessity of knowing who these students are in order for research to focus on a more broadly effective intervention and to improve screening and selection of students in need of early and intense intervention.

The definition of students who are non – responders varies at this time. Some of the more common definitions found in research describe students with test scores below the 30th percentile (Torgesen, 2000). Other research has more specifically described students as “...scoring at or below the 30th percentile on Letter Identification...” (Scanlon et al., 2005, p. 12). Torgesen et al. (2001) created multiple criteria for a study of non – responders. The criteria included students described by the teacher as having severe

difficulty with word – level reading skills, a word – level reading score below average, verbal intelligence above 75, and below grade level performance on a phonemic awareness assessment (Torgesen et al. 2001). In a later study by Al Otaiba and Fuchs (2006), the focus was shifted to the amount of growth before and after administering treatment. In the same study Al Otaiba and Fuchs (2006) differentiated the definition of students who are considered non – responders for kindergarteners and first grade students. The difficulty in establishing a common definition of students who do not respond may be, in part, to the limited amount of research that currently exists, consistently describing the characteristics and needs of this population.

Current research has identified that the most prominent difficulty associated with students who have not responded to reading instruction is in phonemic awareness (PA) (e.g., Al Otaiba & Fuchs, 2002; Foorman & Torgesen, 2001; Simmons et al., 2007; Torgesen et al., 2001; Vellutino, Scanlon, & Lyon, 2000). PA refers to a student’s ability to identify, blend, segment, and manipulate phonemes (Shaywitz, 2003). In addition, PA has received much of its attention because it has been found to have a predictive relationship with a child’s later reading abilities (NICHD, 2000; Shaywitz, 2003).

In a thorough review of research, Al Otaiba and Fuchs (2002) found a significant amount of support for the idea that weaknesses in PA are common among students who are non – responders. Within this review, 21 studies explored the PA deficits of students unresponsive to instruction. Of the 21 studies, 16 found that “...poor phonological awareness clearly characterized unresponsive students” (Al Otaiba & Fuchs, 2002, p. 310). In a later experimental and longitudinal study conducted by Al Otaiba & Fuchs (2006), their earlier findings connecting students that are unresponsive and PA

weaknesses were supported. Based on the existing research, it appears that there is a strong connection between weaknesses in PA and students who are non – responders.

In addition to PA, various studies have discovered that students who do not respond to instruction are often characterized as having difficulty with rapid naming of verbal information (Al Otaiba & Fuchs, 2002; Al Otaiba & Fuchs, 2006; Vellutino et al., 2000). Rapid naming, also referred to as rapid automatic naming, is a student’s ability to “...retrieve verbal (phonetic) information held in long – term storage” (Shaywitz, 2003, p. 146). As a child reads, they must be able to go into their long – term memory in order to produce phonemes (Shaywitz, 2003). Similarly, students who are non – responders have been identified as having a deficit in verbal memory (Al Otaiba & Fuchs, 2006, Vellutino, et al., 2000). Verbal memory is defined as the “ability to store small bits of verbal information” (Shaywitz, 2003, p. 145).

Though PA is currently considered to have the most prominent link to students who are non – responders, there is concern that this relationship is attributed more strongly to the fact that it is the most widely researched topic (Al Otaiba & Fuchs, 2002). Bearing in mind that PA has received widespread attention, additional associations made with students unresponsive to instruction include, but are not limited to, vocabulary, (Al Otaiba & Fuchs, 2006; Foorman & Torgesen, 2001), behavior, and demographics (Al Otaiba & Fuchs, 2002). These variables, while potentially valid, have not received the same degree of research attention to support the findings. This serves as a reminder that further research is needed in the area of defining the characteristics of students who are non – responders. The ongoing study of students unresponsive to instruction will elicit more clearly defined characteristics, which should, in turn, allow a broader base of

knowledge to assist in developing effective interventions. Research regarding effective practices for the population of students who are unresponsive to reading instruction has already begun to unfold.

Elements of Effective Interventions for Non – Responders

In understanding the differences that exist among students, research supports that the bulk of instruction should be centered on phonemic awareness and phonics instruction (Harn, Linan – Thompson, & Gregory, 2008; Torgesen et al., 2001). However, PA training and phonics instruction has not proven to be the ‘end all’ for every student (Al Otaiba & Fuchs, 2002). While unresponsiveness is still in need of further research, it has been estimated that 30% of all students with reading disabilities and, as stated prior, 50 % of students with special needs, may not benefit from what we consider our best instruction (Al Otaiba & Fuchs, 2002). In their 1998 article, Torgesen and Mathes explained that reading failure is in fact preventable. Just two years later, in 2000, Torgesen completed a study on effective reading interventions. From this study, he concluded that there is not a definitive answer as to what conditions must exist for students with severe learning disabilities to learn the needed skills for reading (Torgesen, 2000). Currently, there exist several points of agreement among researchers regarding what could potentially help students that do not respond to high quality reading instruction.

When Instruction Should Occur

Students need to be identified as high risk very early on. Several studies show that the most effective interventions for students who are non – responders occur in kindergarten (Frances, Shaywitz, Stuebing, Shaywitz, & Fletcher, 1996; Harn et al.,

2008; Scanlon et al., 2005; Torgesen & Mathes, 1998). This same research has produced findings that promote early identification of students in kindergarten who are high risk paired with preventive practices. Studies have also strongly supported the effectiveness of early kindergarten prevention coupled with intense intervention in first grade (Scanlon et al., 2005; Torgesen & Mathes, 1998). These findings are consistent with the outline of effective intervention provided by Shaywitz (2003) in her work with students that have been diagnosed with dyslexia. She describes effective early intervention as providing prevention in kindergarten or remedial services in first grade.

With the growing use of RTI and the Reading First Program, more students will receive early intervention and prevention methods. A concern for students that do not respond to these early intervention strategies continues to develop. It seems as though there is a firm understanding of when effective reading instruction needs to start for students who are non – responders. The question that researchers are consistently attempting to answer is the how. How do we effectively teach students at a high risk for reading failure?

How to Effectively Teach Non – Responders

Much of the research that we have on teaching students that are at high risk for reading failure parallels the information we have about teaching all students to read through research – based methods. The literature that focuses on students who are unresponsive to current teaching methods continues to encourage the use of explicit and systematic instruction in phonemic awareness and phonics (Foorman & Torgesen, 2001; Harn et al., 2008; Torgesen et al., 2001; Torgesen & Mathes, 1998). The difference between working with students who struggle to read and those who are resisting

treatment, is that instruction simply needs to be more intense (Foorman & Torgesen, 2001; Scanlon et al., 2005; Torgesen et al., 2001; Torgesen & Mathes, 1998). The problem with saying that instruction needs to be intense is that “Usually the term ‘intensive’ is not defined” (NICHD, 2000, p. 10). There are several proposals describing what more intense instruction should look like.

Torgesen et al. (2001) defined the goal of intensive instruction as producing large amounts of change that a student can maintain over an extended amount of time. In many cases, intense instruction has taken on the form of added instructional time or a decreased number of students. Though there is no agreement on the ideal amount of time by which to increase instruction (NICHD, 2000), there is consensus that instructional time should be increased (Foorman & Torgesen, 2001; Harn et al., 2008; Torgesen et al., 2001). Instructional time can be increased by adding activities such as using a peer tutoring model or peer assisted learning strategy (Foorman & Torgesen, 2001). While there are limited studies on the use of multisensory approaches specifically used with students who are non – responders (Campbell, Helf, & Cook, 2008), it appears that this may be another possible means of increasing academic engaged time (Campbell et al., 2008). Increased instructional time can focus on teaching critical skills (Harn et al., 2008) or providing more time to engage in actual reading (Torgesen & Mathes, 1998). Additional instructional time does not have to come solely from adding on time to the class.

Instructional time can also be gained through decreasing the number of students. Small groups have been shown to be an effective means of instruction for students that are at a high risk for reading failure (Harn et al., 2008; Scanlon et al., 2005; Torgesen et al., 2001; Torgesen & Mathes, 1998). Opinions have varied as to the ideal number of

students to have in a small group setting. For a long time, instructors felt that one – on – one instruction was optimal. Research is beginning to reveal that there is no difference in the effectiveness of one – on – one instruction versus small groups of 3 or 4 (Foorman & Torgesen, 2001; Harn et al., 2008; Shaywitz, 2003).

Teachers need to scaffold their instruction (Harn et al., 2008; Torgesen et al., 2001; Torgesen & Mathes, 1998), allowing time for modeling, guided practice, and independent practice. Perhaps most importantly, students should receive instruction for as long as it is needed (Scanlon et al., 2005; Shaywitz, 2003).

In addition to intensifying instruction for students who are not responding to reading instruction, the curriculum should also have specific characteristics. All too often teachers are reliant on producing their own curriculum. Foorman and Torgesen (2001) noted, teachers often lack adequate resources and the knowledge base to create the curriculum (Foorman & Torgesen, 2001). Educators should be using a core curriculum that is focused on the specific needs of non – responders (Torgesen & Mathes, 1998). The curriculum for teaching students who are unresponsive to current instruction should focus on skills to build word recognition, fluency, and comprehension. This represents the comprehensive approach needed for the student to be successful (Torgesen & Mathes, 1998).

With all of the concepts and methods that are required to be effective in teaching reading to students who are non – responders, students that are a part of this population require some of the most skilled instructors (Lose, 2007). In her description of effective reading interventions, Shaywitz (2003) explained that instructors need to have a clear understanding of how children learn to read, coupled with experience in using a reading

program. Teachers that are working with students who are unresponsive need to be prepared to teach the material they are given, as well as have the ability to provide cognitive and emotional support to struggling readers (Foorman & Torgesen, 2001). Students that have not responded positively to research – based instruction, or who have not been provided adequate reading instruction, can become easily frustrated when not given the support that is needed. Foorman and Torgesen (2001, p. 209) stated, “The need of at – risk children for more positive emotional support in the form of encouragement, feedback, and positive reinforcement is widely understood.” Educators need to be prepared to work with the multifaceted task of providing these students with the means to become effective readers. Based on our understanding of this population, there are several implications to consider relating to general and special educators.

Discussion

Constant change and continued improvement are being made in the area of teaching reading to students across the nation. With initiatives such as Reading First and Response to Intervention, there is a push for all school – aged children to receive research – based reading instruction. As a result, students both with and without identified learning disabilities are more often receiving high quality instruction. With this in mind there are exceptions that need to be considered. There are students who, even with the best instruction, are not responding to prevention and intervention efforts. These students, who are referred to as non – responders, treatment resisters, or at high risk for reading failure, are in need of instruction even more individualized for their particular needs.

While the research has yielded mixed results, a developing body of knowledge can be used to guide these students to become successful readers. For these particular

students, early identification is necessary. Ideally they need to receive effective reading intervention in kindergarten and first grade. In the past, many of these students have not received special services until they are too far behind expected levels of performance in third and fourth grade. In agreement with the current research – validated instruction, these students need to receive instruction that is explicit and systematic; however, their instruction needs to be more intense. At this time, intensity of instruction is acquired through an increased amount of instructional time and through the use of small groups. There needs to be a thorough, comprehensive curriculum in place that addresses word recognition, fluency, and comprehension. Therefore, teachers need to have a strong knowledge of the development of reading skills and instructional methods.

As the heightened awareness of reading instruction continues to move us towards research – based methods, the needs of a more diverse group of students can be met in an inclusive setting. This lends to a closer working relationship between general education and special education teachers. General education teachers will need to become more fluent in instructional methods for students who have learning differences. Special education teachers will need to become more flexible and aware of their role within a general education classroom. This is not a new concept, as this has been the trend since the passage of No Child Left Behind (P.L. 107 – 110, H.R.1).

In terms of the classroom, the dynamics of the traditional general education setting will begin to change. The general education classroom will need to make adaptations to gear instruction toward encompassing a more diverse group of students. This will include exploration of methods of incorporating multiple levels of support, such as the RTI model. Additionally, more information will need to be provided to educators

and administrators on how to provide broader instructional methods that satisfy the needs of more students. Simply put, professional development for teachers will need to focus on the growing body of information on research – based instruction, as well as classroom adaptations to accommodate a diversifying population of students.

As reading instruction for students who are non – responders becomes a more heavily researched topic, there are a few considerations that may need to be addressed. In most of the current research there is not a consensus on how to name or define this population. These students have been referred to as non – responders, treatment resisters, as well as students that are a high – risk for reading failure. Future research would benefit from having a consistent term and definition of students who do not respond to reading interventions as replication of studies and application of findings is difficult without uniformity.

Within the study of students who are non – responders, there are particular topics that would benefit from further research. Included in these topics is the amount of time that needs to be added to intensify reading instruction. As the intensity of instruction focuses largely on the amount of time spent receiving instruction, it would be beneficial to gain an understanding of the amount of time needed to constitute intensified instruction. Also, much of the research being conducted focuses on providing students instruction in phonemic awareness and phonics. It would be beneficial to have a greater understanding of a balanced approach between phonemic awareness and comprehension strategies.

Overall, reading instruction is headed in a positive direction, focusing on the needs of all students, while still targeting the needs of specific populations. Strides have

been made, as many schools systems have adopted an RTI model over a wait – to – fail approach. As higher demands are being placed on students and teachers, there will continue to be an increased amount of stress and growing pains. Even so, a substantial amount of work has been put into making improvements in reading instruction, and the results of national assessments suggest that reading scores across the nation continue to improve [U.S. Department of Education (U.S. DOE), 2008]. No Child Left Behind has charged educators with the task of seeing that all students can read by the third grade (P.L. 107 – 110, H.R.1). In their most recent annual report, the U.S. DOE stated that “achievement of this goal depends on a continued commitment to high standards, annual assessments, accountability for results, a highly qualified teacher in every classroom, and information and options for parents” (U.S. DOE, 2008, p. 14). After a careful review of current literature, a convincing argument could be made that achieving this goal will also require further investigation and conclusive findings that support effective reading instruction for the population of students described as non – responders.

References

- Al Otaiba, S., & Fuchs, D. (2002). Characteristics of children who are unresponsive to early literacy intervention. [Online Version]. *Remedial and Special Education, 23*, 300 – 316.
- Al Otaiba, S., & Fuchs, D. (2006). Who are the young children for whom best practices in reading are ineffective? An experimental and longitudinal study. [Online Version]. *Journal of Learning Disabilities, 39*, 414 – 431.
- Campbell, M.L., Helf, S., & Cooke, N.L. (2008). Effects of adding multisensory components to a supplemental reading program on the decoding skills of treatment resisters. [Online Version]. *Education and Treatment of Children, 31*, 267 – 295.
- Foorman, B.R., & Torgesen, J.K. (2001). Critical elements of classroom and small – group instruction promote reading success in all students. [Online Version]. *Learning Disabilities Research and Practice, 16*, 203 – 212.
- Frances, D.J., Shaywitz, S.E., Stuebing, K.K., Shaywitz, B.A., & Fletcher, J.M. (1996). Developmental lag versus deficit models of reading disability: A longitudinal, individual growth curve analysis. [Online Version]. *Journal of Educational Psychology, 88*, 3 – 17.
- Fuchs, D., & Fuchs, L.S. (2006). Introduction to response to intervention: What, why, and how valid is it? [Online Version]. *Reading Research Quarterly, 41*, 93 – 99.
- Harn, B.A., Linan – Thompson, S., & Roberts, G. (2008). Intensifying instruction: Does additional instructional time make a difference for the most at – risk first graders? [Online Version]. *Journal of Learning Disabilities, 41*, 115 – 125.

- Hoover, J.J., & Patton, J.R. (2008). The role of special educators in a multitiered instructional system. [Online Version]. *Intervention in School and Clinic*, 43, 195-202.
- Kavale, K.A., & Spaulding, L.S. (2008). Is response to intervention good policy for specific learning disability? [Online Version]. *Learning Disabilities Research & Practice*, 23, 169 – 179.
- Lose, M.K. (2007). A child's response to intervention requires a responsive teacher of reading. [Online Version]. *The Reading Teacher*, 61, 276 – 279.
- Mathes, P.G., & Torgesen, J.K. (1998). All children can learn to read: Critical care for the prevention of reading failure. [Online Version]. *Peabody Journal of Education*, 73, 317 – 340.
- National Institute of Child Health and Human Development (1999). *National Reading Panel Progress Report*. Retrieved December, 6, 2008, from http://www.nationalreadingpanel.org/Publications/Interim_Report/section1.htm.
- National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence – based assessment of scientific research literature on reading and its implications for reading instruction*. (NIH Publication No. 00-4769). Washington, D.C.: U.S. Government Printing Office.
- No Child Left Behind Act of 2001, P.L. 107 – 110, H.R.1.
- Polloway, E.A., Patton, J.R., & Serna, L. (2008). *Strategies for teaching learners with special needs (9th ed.)*. Upper Saddle River, NJ: Pearson Education.
- Scanlon, D.M., Vellutino, F.R., Small, S.G., Fanuele, D.P., & Sweeney, J.M. (2005).

- Severe reading difficulties – Can they be prevented? A comparison of prevention and intervention approaches. [Online Version]. *Exceptionality*, 13, 209 – 227.
- Shaywitz, S.E. (2003). *Overcoming dyslexia: A new and complete science – based program for reading problems at any level*. New York: Vintage Books.
- Simmons, D.D., Kaménnui, Harn, B., Coyne, M.D., Stoolmiller, M., Santoro, L.E., Smith, S.B., Beck, C.T., & Kaufman, N.K. (2007). Attributes of effective and efficient kindergarten reading intervention: An examination of instructional time and design specificity. [Online Version]. *Journal of Learning Disabilities*, 40, 331 - 347.
- Torgesen, J.K. (2000). Individual differences in response to early interventions in reading. The lingering problem of treatment resisters. [Online Version]. *Learning Disabilities Research & Practice*, 15, 55 – 64.
- Torgesen, J.K., Alexander, A.W., Wagner, R.K., Rashotte, C.A., Voeller, K.K.S., & Conway, T. (2001). Intensive remedial instruction for children with severe reading disabilities: Immediate and long – term outcomes from two instructional approaches. [Online Version]. *Journal of Learning Disabilities*, 34, 33 – 58.
- U.S. Department of Education, Fiscal Year 2008 Performance and Accountability Report, Washington D.C., 20202.
- Vellutino, F.R., Scanlon, D.M., & Lyon, G.R. (2000). Differentiating between difficult – to – remediate and readily remediated poor readers. More evidence against the IQ – achievement discrepancy definition of reading disability. [Online Version]. *Journal of Learning Disabilities*, 33, 223 – 238.