EXHIBIT E

Response to Intervention:

A Multi-Tiered System for Supporting Students with Reading Difficulties

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ABSTRACT

Research has shown that effective interventions can prevent future reading failure, thereby, placing low-performing students on track for college and career readiness. As educators in the 21st century, we have access to a wealth of evidence-based resources to continually improve our expertise in teaching struggling readers. Yet, despite this, the results from state and national assessments indicate that many children are performing below proficiency in reading comprehension. Further, these data indicate that failing readers are predominately from lowincome families, mostly male, and to a degree, of minority status. From an RtI perspective, the success of students with reading problems will depend on three interrelated factors: 1) the effectiveness of instruction in the general education classroom, plus the teacher's ability to scaffold student learning on grade-level tasks; 2) the effectiveness of interventions for children with persistent reading difficulties, plus the teacher's ability to regulate degrees of instructional support within a model of explicit teaching, guided practice, and independence on tasks that gradually increase in complexity and difficulty, and 3) the ongoing collaboration between general education, Title 1 reading education, and special education with a focus on assisting students to transfer their knowledge, skills, and strategies for solving reading problems in different contexts. Moreover, classroom and specialty teachers must acquire a common language regarding evidence-based practices and comprehensive assessments for instructing children with reading problems. Without this common understanding, it is difficult for educators to engage in meaningful problem-solving conversations that are grounded in empirical research and supported by the systematic observation of change over time in student reading behavior. Furthermore, this common understanding must expand beyond school-based educators to include the voices of university faculty and the Arkansas Department of Education. In this paper, we offer data-based recommendations for nurturing the effective implementation of Response to Intervention in our state.

Response to Intervention: A Multi-Tiered System for Supporting Students With Reading Difficulties

Purpose of Paper

The purpose of this paper is to address best practices in special education with a focus on Response to Intervention (RtI) as a multi-tiered framework for identifying and instructing students with reading difficulties. To set the context, we begin with an overview of the data on learning disabilities and reading achievement in Arkansas schools. Then we present specific recommendations under two parts. The first part focuses on three areas: 1) RtI as a comprehensive, decision-making, data-driven design, 2) evidence-based practices for reading improvement, and 3) summary of recommendations for Arkansas schools. The second part addresses Dyslexia within the RtI framework under three areas: 1) institutional collaborations with a focus on the role of universities and ADE in Dyslexia education; 2) examples from Arkansas schools with successful RtI implementations, and 3) recommendations for next steps.

Insights From Special Education Data

With the establishment of the learning disability (LD) category in 1975, the number of students identified as having a learning disability increased by more than 300 percent from 1976 to 2000 (Cortiella & Horowitz, 2014). In a report published in 2001, *Rethinking Learning Disabilities*, the authors suggested that the LD category had become a 'catch-all' for low-achieving students and that, from its inception as a category, LD had served as a "sociological sponge that attempt[ed] to wipe up general education's spills and cleanse its ills" (as cited by Cortiella, 2009, p. 10). This bold statement implies that the overidentification of children with learning disabilities is largely associated with inadequacies in classroom instruction for children with reading problems. Highlighted within this theory are two important principles: 1) general education between classroom and special education teachers is needed to ensure the success of students with learning disabilities within the classroom setting.

As a result of increased efforts from 2002-2011, the number of students identified as having a specific learning disability (SLD) declined in almost every state with a national decrease of 18 percent. In 2011, the percent of Arkansas students identified as having an SLD decreased by 18.6 percent or 4.3 percent of the state's total student enrollment (as reported by Cortiella & Horowitz, 2014, p. 43). This decline in LD referrals appears to be the result of several factors, among them:

- Improvements in reading instruction provided in general education, making reading difficulties less prevalent in our nation's elementary schools.
- Greater efforts to provide intervention before a special education eligibility determination is made, including more differentiation in the classroom.
- More opportunities for early childhood education, including universal preschool and diagnostic evaluations to support school readiness.

• A dramatic shift in the way LD is identified, including Response to Intervention, resulting in greater numbers of struggling students receiving early assistance in general education and ultimately reducing the need for SE classification (Cortiella & Horowitz, 2014, p. 13).

Yet, despite the decline in the number of school-age children reported to have LD, it remains the largest category of students served by special education (42 percent). Furthermore, those identified with LD are majority male (66%) and disproportionally poor, and to some extent, from minority groups. Since the majority of students with LD receive most of their reading instruction in general education classrooms, it is imperative that classroom teachers and special education teachers collaborate on assessments and evidence-based practices for accelerating the reading gains of children with learning disabilities (Cortiella & Horowitz, 2014).

Insights From National and State Reading Data

According to the 2015 National Assessment of Educational Progress (NAEP), the percentage of fourth graders in Arkansas who performed at or above the basic level was 65 percent (31% proficient and advanced; 34% basic). Using the definition from the Arkansas School Performance Report (ADE, 2012), basic students are described as those who "show substantial skills in reading, writing, and mathematics; however, they only partially demonstrate the abilities to apply these skills (p. 2)." Therefore, basic students "demonstrate a need for some additional assistance, commitment, or study to reach the proficient level (p. 2)." From an RtI perspective, this definition implies that basic students have extensive skills that can be activated through explicit instruction and opportunities to apply strategies for solving problems in flexible contexts. Consequently, the majority of this group should be able to reach grade-level proficiency with targeted assistance by the general education teacher.

A further analysis of Arkansas data indicates that over the past two decades (1998-2015), the percentage of students at the proficient level or above levels increased by 23 points, and the performance gap between Black and White students in Arkansas schools decreased by roughly one grade level (about ten points). At the same time, however, the gap between students that were eligible for free/reduced lunch (an indicator of low family income) remained stagnate. Although these data suggest that Arkansas teachers are improving in their ability to instruct minority students, the challenge of poverty in our schools remains an uphill climb. From a literacy viewpoint, this reality calls for interventions with a greater focus on knowledge acquisition and vocabulary development, as well as foundational skills and problem solving strategies.

Although the data reveal that 68% of Arkansas fourth grade students are reading below proficiency (NAEP, 2015), it should be noted that in comparison to other states and the Nation, Arkansas fourth graders do not appear to be significantly behind. In 2011, 2013, and 2015, the Nation's average score for fourth grade students was 220 (217 for Arkansas), 221 (219 for Arkansas), and 221 (218 for Arkansas) respectively. Likewise, in 2015, the scores of Arkansas' fourth grade students matched those of fourth grade students in 12 states and were higher than

students' scores in 6 states. In addition, fourth grade students' percentages for below basic, basic, proficient, and advanced closely mirrored the Nation's average (32% below basic; 33% basic; 27% proficient; 8% advanced) as compared to Arkansas (32% below basic; 34% basic; 25% proficient; 6% advanced). Here, our intention is not to minimize the urgency for reading improvement in Arkansas schools, but rather to call attention to specific areas where we can build upon.

With that in mind, the 2012 Arkansas' Criterion Referenced Achievement report provides data for continuous improvement. As with scores representing Combined Populations, 24.8% African Americans, 16.9% Hispanics, 19.4% Low SES, and 20.5% Limited English Proficiency students were reading below grade level (below basic or basic) and do not mirror the NAEP 2015 findings described above. Further, 57% of fourth grade students with disabilities were reported as reading below grade level, suggesting that while there is much work to be done with Response to Intervention, in general, literacy training for classroom and special education teachers is also paramount.

Part I: Response to Intervention, Evidence-Based Practices, and Recommendations

Response to Intervention

At its best, Response to Intervention is designed to be a comprehensive, decision-making, data-driven process for identifying children with learning and behavioral difficulties and providing a series of more intensive instructional interventions over extended periods of time. It is the practice of (1) providing high-quality instruction/intervention matched to student needs and (2) using learning rate over time and level of performance to (3) make important educational decisions (Batsche, et. al., 2005). In general, RtI was created as a logical response to at least four factors: a) the increasing number of students classified as having an SLD (with associated costs), (b) the documented effectiveness of early intervention efforts for reducing that number (and associated costs), c) the overrepresentation of minority students in special education, and d) the demonstrable problems with IQ-achievement discrepancy assessments (Johnston, 2011, p. 514). Similarly, Gerstein and Domino (2006) argued that given the limited resources that schools possess, it is essential that students are not overly identified for reading disabilities (RD) and subsequently placed in intensive interventions that may not be necessary. In fact, research has shown that most efforts to identify reading problems early in development before formal reading instruction overly predicts reading disabilities (Felton, 1992; Jenkins & O'Connor, 2000); and that early intervention provides a tool for distinguishing between reading disabilities that are cognitive in nature as opposed to reading problems that are due to reading experiences, resources, and/or poor teaching (Clay, 1987; Vellutino, et al. 1996). An effective RtI process provides a framework for differentiating between students with low achievement (based on poor instruction, poverty, and other environmental factors) and students with reading disabilities.

The RtI design is a multi-tiered system of academic interventions that increases in intensity and duration as students move across the tiers. The process begins with high-quality classroom instruction and universal screening of all children and provides struggling learners with evidence-based interventions at increasing degrees of intensity to accelerate their rate of learning. Within this framework, teachers keep systematic data to measure how well the student is responding to intervention, while keeping in mind that rate of growth (acceleration) is the best measure of student responsiveness to instruction. An effective RtI framework includes five essential features:

- Maximizes the effect of core instruction for all students.
- Provides a problem-solving, data-based framework for assessing and monitoring student progress over time in response to instruction/intervention.
- Requires classroom and specialty teachers to collaborate on specific ways to scaffold students for success on grade level curriculum.
- Uses evidence-based and well-delivered interventions with degrees of intensity and duration to meet the unique needs of low-performing readers.
- Results in more accurate identification of students with reading disabilities.

Multi-Tiered System of Supports

As promoted by the Arkansas Department of Education, the multi-tiered system of supports provides a framework for responding to the needs of all students (see Figure 1). At each level, students must be engaged in meaningful tasks that stimulate their minds in successful problem-solving activity. Academic Engaged Time (AET) is the best predictor of student achievement (Batsche, et al. 2005).

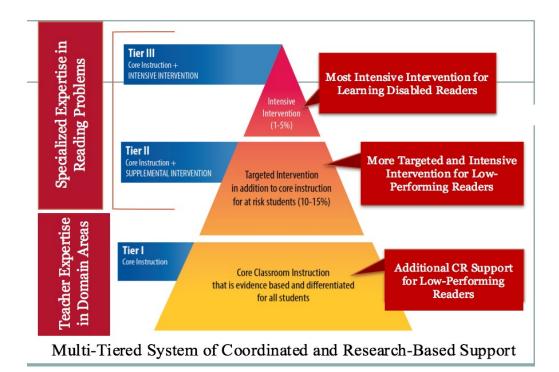
At Tier 1, core instruction is considered effective if at least 80% of students are meeting established benchmark goals. Therefore, core instruction should be at least 90 minutes daily and include evidence-based practices that support reading achievement, such as the following:

- Integrated curriculum that promotes the transfer of knowledge, skills, and strategies across reading, writing, and content areas.
- Clear models and demonstrations with guided practice and explicit feedback.
- In-class grouping strategies with small group and individualized support to meet student needs.
- Opportunities for volume reading to increase amount of reading experience, as well as vocabulary, content knowledge, and strategy development.
- Effective classroom management with established procedures and high levels of time on task.
- Explicit, systematic, and differentiated instruction, including phonics, comprehension, vocabulary, and writing.
- Balance of rigor and support to ensure students are able to accomplish challenging tasks with assistance, as needed, from a more knowledgeable person.

Generally, for students who are almost at proficiency (basic level), classroom teachers can provide individual or small group targeted assistance in a particular reading area. Also, the literacy coach can meet with low-performing readers in a small group to provide another layer of instructional support; or in some cases, a trained volunteer might work with an individual student on activities that promote fluency and increase reading volume.

Students who are not responding to high quality, differentiated classroom instruction (generally 10-15% of the class) are considered at risk for reading failure and are placed immediately in a more intensive, targeted intervention where their progress is carefully monitored. This intervention is generally 30 minutes a day with a reading specialist or a highly trained intervention specialist. It is important to note that only well-developed interventions that incorporate evidence-based practices should be used with struggling readers. To guide in selecting effective interventions, educators are encouraged to utilize public resources, such as the What Works Clearinghouse (WWC; www.whatworks.ed.gov) reviews of interventions, the WWC Practice Guides of evidence-based practices, and the USDE research findings from the Investing in Innovation (i3) Scale-up Grants on proven interventions. Further, teachers of struggling readers must understand how to teach for the integration of knowledge sources, strategic activity, and the transfer of information across intervention and classroom contexts. If specialists are knowledgeable in these areas, only a small percentage (1-5%) of students will need Tier III intervention.

Tier 3 services are designed to address the needs of students who are experiencing significant learning problems, including dyslexia, and/or unresponsive to Tier 1 and Tier 2 efforts. When a student has been identified as being in need of Tier 3 intervention, the next step is to select an evidence-based intervention with a standard protocol for implementation. (For examples of evidence-based intervention strategies, see What Works Clearinghouse, a resource developed by the Institute of Educational Sciences, US Department of Education).



Based on the Arkansas Department of Education RtI Framework. At Tier 1 level, teacher expertise in domain areas is essential. As students move up the scale of support, teacher will require more specialized knowledge of reading problems along a continuum of mild, moderate, and severe difficulties.

Accommodations and Modifications for General Education Teachers

At each level, success in the general education environment is central to learning; therefore, classroom teachers must work closely with special education teachers to ensure students are successful on grade level curriculum. Accommodations are viewed as changes to instruction that increase students' access to materials, thus enabling them to utilize their strengths to reduce the effect of their disability without lowering the standards or expectations. Some examples of modifications include the following:

- Use books on CD or partner reading.
- Use of word processor.
- Use of a scribe for recording answers.
- Shorten assignments without watering down the content.
- Select books at instructional level.
- Use of a tape recorder to record directions, stories, and lessons.
- Clarify or simplify written directions by underlining or highlighting significant parts
- Highlight essential information in a textbook.
- Provide additional practice activities, e.g., instructional games, peer teaching, self-correcting materials, computer software programs.
- Develop reading guides and rubrics for organizing and checking information.
- Use of explicit teaching procedures, e.g., advanced graphic organizers, close reading strategies, demonstrations, guided practice, corrective feedback

Instructional Alignment Across Tiers of Support

In support of struggling readers, the need for instructional alignment of reading programs is more important than ever. As early as 1985, Johnston, Allington, and Afflerbach proposed that instructional alignment between programs could be an important factor in a student's acceleration in a reading intervention. Simply put, instructional alignment occurs when classroom and intervention teachers create mutual plans for using common materials and instructional activities across multiple contexts in order to support the reading development of struggling learners. In a fragmented reading program, according to Johnston et al. (1985), the student's instruction in one program may interfere with learning in another setting, such that the student becomes confused about the nature of the task and how it should be solved. For decades, Allington and Johnston (1989), in their reviews of supplemental programs for low-performing readers, have argued that incongruent programs and isolated practices contribute to the problems of struggling readers. More recently, a study by McDowell, Retuzel, and Smith (2011) concluded that struggling readers who participated in instructionally aligned programs outperformed a similar group who did not. Collectively, the research suggests that aligned instruction creates a scaffold that enables struggling readers to transfer knowledge, skills, and strategies across multiple settings. From an RtI perspective, this structure provides students with opportunities for consistent, repetitive practice that leads to automaticity and deeper understandings of important concepts.

Evidence-Based Practices

A substantial body of evidence on early intervention has shown that children who are atrisk for reading failure can be helped through explicit and intensive instruction in reading (National Early Literacy Panel, 2008; Neuman & Dickinson, 2011). More specifically, research indicates that effective interventions are characterized by (1) explicit instruction in the alphabetic principle and related processes, while simultaneously integrating these processes with reading for meaning; (2) early intervention/ prevention efforts in the early grades; (3) small group/and or one-to-one intensive instruction; and (4) teaching that is matched to the child's instructional level.

Successful interventions are designed to move struggling readers into the normal range of reading performance within a short period of time. To accomplish this goal, an effective intervention is grounded in two learning theories: (a) acceleration and (b) scaffolded instruction. Acceleration occurs when the struggling learner is able to progress at a faster rate than his grade level peers, thus enabling him to catch up rapidly. Scaffolded instruction describes the degree of assistance provided by the teacher to enable the learner to accomplish a task that would otherwise be too difficult. In order to close the literacy gap by the end of third grade, interventions should incorporate evidence-based practices and scaffolding techniques that promote accelerated learning, thus moving struggling readers into the normal range of reading performance within a short amount of time. Furthermore, interventions must emphasize reading for meaning at all grade levels, with the expectation that students will demonstrate more

advanced reading strategies for comprehending a broad range of high-quality texts as they progress through the grades (Adams, 1996; Denton, Fletcher, Anthony & Francis, 2006).

Every Child Success Act (ESSA)

With the recent enactment of Every Student Succeeds Act (ESSA), Arkansas now has greater control over programs and assessments that will directly impact student achievement. ESSA is the first federal education law to define the term "evidence-based' and to distinguish between activities with "strong," "moderate," and "promising" support based on the strength of the existing research. In addition, the law includes a fourth category that allows schools to use research-based principles that lack direct empirical support; however, the program or activity being used must incorporate a process for ongoing evaluation. At the same time, it is important to note that when using federal funds to pay for interventions in low-performing schools, the law requires that states and school districts include activities that meet at least the promising standard.

To inform decisions about evidence-based interventions, educators can use the What Works Clearinghouse Practice Guides. The Practice Guides are based on reviews of research, the experiences of practitioners, and the expert opinions of a panel of nationally recognized experts. Using evidence standards, the Practice Guides provide recommendations and levels of evidence according to "strong," "moderate," and "minimal." In the area of beginning reading programs, the WWC Practice Guide identifies six critical skills for reading development (Shanahan, et. al, 2010).

- Word-level skills (phonemic awareness, word analysis strategies, sight word vocabulary, and practice to increase fluency while reading).
- Vocabulary knowledge and oral language skills (strategies to build vocabulary and strengthen listening comprehension).
- Broad conceptual knowledge (information-rich curriculum that develops students' background knowledge that is necessary for good reading comprehension).
- Comprehension strategies (cognitive strategies for problem-solving within texts).
- Thinking and reasoning strategies (making inferences as text becomes more complex)
- Motivation to understand and work toward academic goals (persistence and mental effort to stay engaged in a task).

Further, the Practice Guide makes the following recommendations with levels of evidence that support reading comprehension (Shanahan, et. al, 2010).

- Teach students to use reading comprehension strategies. (Strong)
- Teach students to identify and use the text's organizational structure to comprehend, learn, and remember content. (Moderate)
- Guide students through focused, high quality discussions on the meaning of the text. (Minimal)
- Select texts purposely to support comprehension development. (Minimal)

• Establish an engaging and motivating context to teach reading comprehension. (Moderate)

Key Recommendations

In the previous section, we described how data can be used to inform decision making about instruction and interventions for students. In summary, we present six recommendations that schools should consider in implementing an effective RtI approach.

- Educators should invest in evidence-based practices and programs for core curriculum and supplemental interventions.
- School teams should develop a strategic plan for implementing an effective RtI framework, including the systematic use of data for monitoring student progress and selecting the most appropriate interventions based on student rate of learning.
- Classroom instruction should include a greater focus on knowledge acquisition and vocabulary development, as well as foundational skills and problem solving strategies.
- Literacy coaches should be utilized for coaching classroom teachers in evidence-based practices for increasing the reading achievement of all students.
- Special education teachers should receive more training on evidence-based reading methods and assessments for all students, but especially those for struggling readers and for students with reading and writing disabilities.
- Teachers from general education, special education, and Title 1 reading education must collaborate on literacy assessments and instructional decisions that promote the integration and transfer of knowledge, skills, and strategies across learning contexts. These teachers also need professional development in effective collaboration skills and processes.

In the next section, we shift our focus to implementation and teacher training issues related to dyslexia within an RtI framework. While keeping in mind that the performance of students with disabilities is strongly related to the effectiveness of instruction in general education, we emphasize the need for a common language across multiple settings that is grounded in evidence-based practices and data-driven accountability. From this perspective, we describe the complimentary role of universities and ADE in supporting effective RtI implementations at the school level. Then we provide two examples of effective RtI implementations from Arkansas schools and conclude with specific recommendations for next steps.

Part II Institutional Collaborations, Examples from Arkansas Schools, and Recommendations

The successful implementation of the Arkansas Dyslexia Law will require collaboration between universities, schools, and the Department of Education, while recognizing the unique (but overlapping) roles and responsibilities of each institution. With six universities (IHEs) providing post-baccalaureate graduate certificates and master's degrees embedded within the dyslexia therapist coursework that leads to licensure, it will be imperative that the Arkansas Department of Education disseminates information to school districts about options for dyslexia therapist training that will meet licensure requirements. In addition, it will be equally important for IHEs to communicate with school districts specific information about their dyslexia therapist licensure programs.

University Role in Teacher Training, Development, and Research

As of May 2016, six Arkansas universities have been approved to train Dyslexia Therapists in graduate programs that result in an endorsement as a K-12 Dyslexia Therapist. Each university program underwent a rigorous review process by university peers to ensure compliance with Arkansas Competencies for Dyslexia Therapist K-12 endorsement. The current list of universities includes Arkansas State University, Harding University, Henderson State University, University of Arkansas at Little Rock, University of Arkansas at Fayetteville, and the University of Central Arkansas.

With the matriculation of teachers completing licensure requirements at six institutions statewide, it is anticipated that initial dependence on commercial prescriptive dyslexia programs will likely decrease. Moreover, with the State's implementation of the new Every Student Succeeds Act (ESSA), the expectation that schools and teachers will employ "evidence-based" interventions that provide "strong," "moderate," and "promising" effects will require significantly more scrutiny of commercial materials used for interventions.

While acknowledging that all approved Arkansas universities are committed to preparing Dyslexia Therapists, we present UALR as one example of a university's role in teacher training, school implementation, and interdisciplinary research in effective dyslexia interventions.

University of Arkansas at Little Rock - RtI and Dyslexia

With the approval of the UALR Dyslexia Therapist Graduate Certificate program, the faculty put into place the following longitudinal development and research efforts: 1) establish an interdisciplinary team of faculty from reading, special education, gifted and talented, speechlanguage therapy, audiology, early childhood, and research methods to examine issues related to training, development, and investigations in dyslexia education; 2) utilize technology as a clinical tool for observing and coaching teachers in real-time settings as they instruct children with learning disabilities, including dyslexia; 3) create online professional development modules on the Center for Literacy website for teachers who have completed the UALR Dyslexia Therapist certification program; 4) design a web-based system for collecting, analyzing, and reporting data on the effectiveness of various dyslexia interventions for increasing students' reading achievement; and 5) collaborate with the University of Arkansas Medical Sciences on longitudinal research to examine the impact of dyslexia intervention on reading development. Collectively, these efforts will enable UALR reading faculty to establish a seamless professional learning community with teachers licensed through the Dyslexia Therapist program, as well as establish a longitudinal database from which to inform the development of evidence-based interventions for students with reading disabilities. At present, 43 teachers have completed the coursework for the first training cohort and are in the process of completing the Praxis PLT exam, required for licensure. Additionally, there are 14 teachers participating in the second cohort which began in Summer 2016, and we anticipate over 20 teachers for our third cohort beginning in fall 2016.

Arkansas Department of Education's RtI Efforts

Currently, professional development for Arkansas teachers is provided through the ArkansasIDEAS website hosted by ATEN. Modules include (1) RtI Arkansas Overview, (2) RtI Arkansas Leadership, (3) RtI Arkansas Multi-Tier System of Support for Literacy, and (4) Elementary Handbook. Additionally, RtI Arkansas Multi-Tier System of Support for High School is under development. On the website, teachers also have access to the Literacy Matrix, a resource consisting of instructional materials for students in grades K-12. These materials reflect the five pillars of literacy instruction researched by the National Reading Panel (2000) including phonemic awareness, phonics, fluency, vocabulary, and comprehension with two additional components, oral language and writing. On the same website, resources provide teachers with progress monitoring tools, screening tools, academic interventions and links to the Center on Response to Intervention at American Institutes for Research, The Meadows Center for Preventing Educational Risk, The IRIS Center for Training Enhancements, and the Florida Center for Reading Research. For parents, the website offers a concise definition of Response to Intervention, the notification process in RtI, what the letter they receive should cover, and what to expect once their child has been identified for possible RtI services. Finally, the website shares information about the recently awarded \$5 million State Personnel Grant from the U.S. Department of Education Office of Special Education Programs. Used to develop literacy and behavior resources and tools, this five-year grant is currently being rolled out by the American Institutes for Research and Arkansas State University at Jonesboro's Center for Community Engagement to Arkansas schools and teachers providing professional development and technical assistance to help teachers assist all students, especially students with disabilities.

Two Examples of School Implementations of RtI

As a result of ADE professional development and university programs in promoting a multi-tier RtI framework, we believe Arkansas schools have made notable progress in this area. With that said, however, we acknowledge that silos between general education and special

education continue to exist, particularly in areas that relate to evidence-based reading practices, formative assessments, and literacy interventions. While keeping in mind that the first line of literacy defense occurs in the general education classroom and that the performance of students with disabilities is strongly related to the quality of instruction in Tier 1, any effective RtI plan must demonstrate collaboration between teachers. Therefore, in the next section, we highlight two schools – Westwood Elementary and Ward Elementary – for their efforts in bringing educators together to engage in problem solving dialogue for increasing the reading achievement of their students.

Westwood Elementary, Greenwood School District: The staff at Westwood Elementary uses a multi-tiered system of supports within a decision-making framework to address the needs of students with reading and math difficulties. The RtI framework includes three essential elements: (1) use of evidence-based practices, interventions, and assessments; (2) systematic and comprehensive assessment process, including monitoring the achievement gains of students at designated intervals to determine their responsiveness to intervention; and (3) weekly collaboration meetings between the school administrator (Renee Foster), two Special Education representatives from the central office, school counselor, literacy and math facilitators, dyslexia therapist (who is also a reading specialist), reading intervention specialist, and speech/language pathologist. During collaboration meetings, the RtI team reviews student data to make critical decisions regarding intensity and duration of intervention. Jill Pickens, the dyslexia therapist, also serves as one of the school's two reading specialists. In this dual role, Jill supports K-2 classroom teachers with Tier 1 assessments and instruction, and also provides Tier 2 and Tier 3 interventions to students with mild to severe reading difficulties. According to Jill, as a result of the collaboration between classroom and special education teachers, plus the implementation of systematic assessments and evidence-based interventions, the RtI framework has enabled Westwood staff to "stay on top" of students' needs and ensure that no student is left behind in literacy.

Ward Central Elementary, Cabot School District: An essential component of the RTI process at Ward Central Elementary involves structured activities for promoting collaboration among general education and special education teachers. Renee Johnson, the Special Education Instructional Specialist, described one specific activity, *Kid Talks*, that engages teachers in weekly collaborative discussions focused on the progress of struggling students. During these meetings, the classroom teacher discusses student progress in response to intervention; and the interventionists and Special Education teacher make recommendations for student success. Another collaborative activity focuses on the use of a *Data Wall* for monitoring student progress on a biweekly basis. The *Data Wall* enables all teachers involved in working with a particular student to simultaneously observe the student's performance across multiple settings. This shared Google document is accessible to administrators, teachers, interventionists, and Special Education teachers. A third collaborative activity, *Sharing the Book*, requires teachers to pass

around the student's reading book with instructional notes on skills, strategies, and/or words that are being taught across the various settings. Consequently, the student's confidence and motivation are enhanced as skills that were taught in the special education setting are revisited in the classroom context. One teacher described it this way, "Students are not confused with the focus of the lesson, and word work can be more specific and reinforced within both classrooms." Another teacher wrote, "Students are able to have the repetitiveness that they need to be able to put specific concepts into long term memory." Further, classroom teachers reported improvements in students' reading fluency, word recognition, and text levels. Through a variety of well-planned collaborative opportunities, the Ward Central staff is making a difference in the literacy achievement of struggling readers.

Recommendations for Next Steps

- There needs to be a rigorous evaluation of the specific Tier 1, 2, and 3 approaches being used by each district as compared to the essential best practices deemed necessary for successful reading and writing instruction for struggling readers and those with reading and writing disabilities that have been reviewed in this paper. While there may be different effective approaches to reading and writing instruction, it is important that the approaches being used at least utilize these essential best practices.
- Collaboration across general education, reading education, and special education must occur in order for educators to promote the transfer of students' knowledge, skills, and strategies from one learning context to another. This school-based collaboration must be intentionally embedded into the RtI framework, including specific activities that engage educators in using student data to inform instructional decisions.
- Collaboration among universities, ADE, and school districts must be intentionally designed to promote a common language about student learning, evidence-based reading practices, and data-driven accountability. State universities must become more active in teacher training and ongoing professional development of effective RtI approaches. Furthermore, universities should take an active role in conducting research on innovative 'promising' interventions that are grounded in evidence-based reading practices.
- High quality professional development must include (a) an emphasis on instruction and student learning, (b) opportunities for teacher collaboration and inquiry, and (c) the use of external expertise, while simultaneously respecting the knowledge and experience that teachers bring to the learning goals (Darling-Hammond, & McLaughlin, 1999; Saunders et al, 2009).

References

- Adams, M. (1996). *Beginning to read: Thinking and learning about print 9th ed.* Cambridge, MA: MIT Press.
- Allington, R. L. & Johnston, P. H. (1989). Coordination, collaboration, and consistency: The redesign of compensatory and special education interventions. In R. Slavin, N. Karweit, & N. Madden (Eds.). *Effective programs for students at risk* (pp. 320-352). Boston: MA: Allyn & Bacon.
- Author. (2016). *Arkansas Dyslexia Resource Guide*. Little Rock, AR: Arkansas Department of Education.
- Author. (2014). *IDA Dyslexia Handbook: What Every Family Should Know*. Baltimore, MD: International Dyslexia Association.
- Author. (2012). Arkansas School Performance Report. Little Rock, AR: Arkansas Department of Education.
- Batsche, G., Elliott, J., Graden, J. L., Grimes, J., Kovaleski, J. F., Prasse, D., Reschly, D. J. Schrag, J., Tilly, W. D., III. (2005). *Response to intervention: Policy considerations and implementation*. Alexandria, VA: National Association of State Directors of Special Education.
- Clay, M. M. (1987). Learning to be learning disabled. *New Zealand Journal of Educational Studies*, *22*, 155-173.
- Coyne, M.D., Simmons, D.C., Hagan-Burke, S., Simmons, L.E., Kwok, O.-M., Kim, M., ... Rawlinson, D.A.M. (2013). Adjusting beginning reading intervention based on student performance: An experimental evaluation. *Exceptional Children*, 80(1), 25–44.
- Cortiella, C. (2014). *The state of learning disabilities, 3rd edition*. New York: NY: National Center for Learning Disabilities.
- Cortiella, C. (2009). *The state of learning disabilities*, 2rd edition. New York: NY: National Center for Learning Disabilities.
- Darling-Hammond, L., & McLaughlin, M. W. (1999). Investing in teaching as a learning profession: Policy problems and prospects. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 376-411). San Francisco: Jossey-Bass.
- Denton, C. A., Fletcher, J. M., Anthony, J. L., & Francis, D. J. (2006). An evaluation of intensive intervention for students with persistent reading difficulties. *Journal of Learning Disabilities*, 39, 447-466
- Felton, R. H. (1992). Early identification of children at risk for reading disabilities. *Topics in Early Childhood Special Education*, *12*, 212-229.
- Gersten, R. & Dimino, J. (2006). RtI (Response to Intervention): Rethinking special education for studying reading difficulties (yet again). *Reading Research Quarterly*, 41, 99-108.

- Gersten, R., Fuchs, L. S., Williams, J. P., & Baker, S. (2001). Teaching reading comprehension strategies to students with learning disabilities: A review of research. *Review of Educational Research*, *71*, 279-320.
- Jenkins, J. R., & O'Connor, R. E. (2000). Early identification and intervention for young children with reading learning disabilities. In R. Bradley, L. Danielson, & D. Hallahan (Eds.), *Identification of learning disabilities* (pp. 99-149). Hillsdale, NJ: Erlbaum.
- Johnston, P. J. (2011). Response to intervention in literacy: Problems and possibilities. *Elementary School Journal*, 111(4): 511-534.
- Johnston, P. H., Allington, R. L., & Afflerbach, P. (1985). The congruence of classroom and remedial reading instruction. *Elementary School Journal*, *85*, 465-478.
- McDowell, C. W., Reutzel, D. R. & Smith, J. A. (2011). Does instructional alignment matter: Effects on struggling second graders' reading achievement. *Elementary School Journal*, *112 (2)*, pp. 259-279.
- National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel: A scientific synthesis of early literacy development and implications for intervention*. Washington, DC: National Institute for Literacy.
- National Reading Panel. (2000). *Report of the National Reading Panel –Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction.* Washington, D.C.: National Institute of Child Health and Human Development.
- Neuman, S., B. & Dickinson, D. K. (Eds). (2011). *Handbook of early literacy research (Vol. 3)*. New York: The Guildford Press.
- Saunders, W. M., Goldenberg, C. N., & Gallimore, R. (2009). Increasing achievement by focusing grade-level teams on improving classroom learning: A prospective, quasiexperimental study of Title I schools. *American Educational Research Journal*, 46(4), 1006-1033.
- Simmons, D. (2015). Instructional engineering principles to frame the future of reading intervention research and practice. *Remedial and Special Education*, *36*(1), 45–51.
- Shanahan, T., Callison, K., Carriere, C., Duke, N. K., Pearson, P. D., Schatschneider, C., & Torgesen, J. (2010). *Improving reading comprehension in kindergarten through 3rd grade: A practice guide* (NCEE 2010-4038). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S., Department of Education. Retrieved fromwhatworks.ed/gov/publications/practiceguides.
- Vellutino, F. R., Scanlon, D. M., Sipay, E. R., Small, S. G., Pratt, A., Chen, R. Y. & Denckla, M. B. (1996). Cognitive profiles of difficult-to-remediate and readily remediated poor readers: Early intervention as a vehicle for distinguishing between cognitive and experiential deficits as basic causes of specific reading disability. *Journal of Educational Psychology*, 88(4), 601-638.