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A Study of West Virginia Elementary Special Education Teachers' Roles, Responsibilities, and Practices within a Multitiered Instructional Support System: Implications for Policy and Practice

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**A STUDY OF WEST VIRGINIA ELEMENTARY SPECIAL EDUCATION
TEACHERS' ROLES, RESPONSIBILITIES, AND PRACTICES WITHIN A
MULTI-TIERED INSTRUCTIONAL SYSTEM:
IMPLICATIONS FOR POLICY AND PRACTICE**

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Dissertation submitted to the
Marshall University Graduate College
in partial fulfillment of the
Requirements for the degree of

Doctor of Education
in
Curriculum and Instruction

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DEDICATION

This work is dedicated to special education teachers who relentlessly strive to understand and teach struggling learners. They inspired me to study response to intervention through their eyes. Their steadfast commitment to the critical work involved in providing intervention to at-risk students gave both integrity and voice to this study.

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ABSTRACT

A Study of West Virginia Elementary Special Education Teachers' Roles, Responsibilities, and Practices within a Multi-tiered Instructional System: Implications for Policy and Practice

The purpose of the study was to provide a data-based description of West Virginia special education teachers' roles, responsibilities, and practices relevant to their participation in selected components of the Response to Intervention (RTI) process. Special educators' practices related to assessment, tiered instruction, decision making, and collaboration comprise the main components of study and were based on a conceptual framework developed by Hoover and Patton (2008).

A researcher-developed survey, the *Special Educator Response to Intervention Inventory* (SERTII), was used to explore the extent and characteristics of special educators' participation in RTI. The study population included all elementary special education teachers in West Virginia. The sample for the study included 341 special educators.

Statistical analyses showed significant levels of participation across each of the four areas examined. Elementary special educators participated in progress monitoring, provided weekly intervention sessions to at-risk students, and used research-based, explicit instructional strategies when delivering intervention. Teachers analyzed data and consulted regularly with general educators. They reported significant increases in the amount of collaboration between general and special educators since the initiation of RTI. Special education teachers participated in RTI decision-making activities such as determining students' needs for intervention, selecting and developing interventions, and making referrals for special education evaluations.

Self-reported qualitative data revealed special educators identify benefits of RTI as offering additional assistance to at-risk students, meeting individual needs, and delivering early intervention. Most commonly noted challenges of RTI for special educators included having sufficient time to implement the process, meeting the simultaneous needs of at-risk and IEP students, and interference with timely referrals for special education evaluation.

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CHAPTER ONE: INTRODUCTION AND RATIONALE

American school reform is often characterized by efforts to improve achievement results for all students and is highly focused on how to respond when at-risk students, including students with special needs, do not learn. The No Child Left Behind Act of 2001 (NCLB) provided impetus for school improvement and closing achievement gaps through the establishment of demanding accountability systems. Subsequently, in 2004, the Individuals with Disabilities Education Improvement Act (IDEA 2004), a companion law to NCLB, authorized the use of a process based on a child's response to scientific research-based intervention for the identification of specific learning disabilities (SLD) and set the stage for the response to intervention (RTI) initiative.

RTI is a widely implemented framework for instruction, assessment, and intervention grounded in evidence-based practices and problem-solving (Mellard & Johnson, 2008). It is a process, not a program, and its focus is on high quality, systematic instruction to maximize achievement outcomes for all students. Although its origins are situated in special education, the primary goal of RTI is to provide a school-wide academic and behavioral multi-tiered support system with varying intensities of intervention (NASDSE, 2005). An auxiliary application of the RTI process is the identification of students with specific learning disabilities.

Two factors have reinforced the use of RTI as a viable method for identifying students with specific learning disabilities. First, studies indicate incredible increases in the number of children identified as learning disabled over the last 30 years and attribute the growth to

insufficient general education services and faulty identification methods (Lyon et al., 2001). Second, much criticism has emerged regarding the effectiveness of the intelligence-achievement discrepancy model, the primary method used to identify a specific learning disability (SLD). This approach is often referred to as the “wait-to-fail” method due to its technical inadequacies, overall reliability issues, and insufficiency in linking to intervention (Fletcher, Coulter, Reschly & Vaughn, 2004; Vaughn & Fuchs, 2003; Speece & Case, 2001). Consequently, states, districts, and schools are replacing it with a more instructionally relevant and promising practice, RTI.

RTI is fundamentally reshaping the decisions, practices, and daily routines of general education teachers and administrators. Classroom teachers are changing how they respond to the needs of all students, especially those who struggle. RTI has prompted adoption of a new common vocabulary among educators that includes terms such as problem-solving teams, universal screening, progress monitoring, and targeted interventions (Fuchs & Fuchs, 2007; Kovaleski, 2007; Lembke, McMaster & Stecker, 2009).

RTI is a logical and pragmatic option for educational equity and school improvement that is changing how general education addresses the needs of at-risk students. Certainly, RTI poses challenges and questions for the basic structure and delivery of general education. Moreover, these responsive and intensive general education instructional practices also influence how, when, and to whom special education services are delivered.

The prevention and early intervention tenets and practices associated with RTI have the potential to reduce special education referral and placement rates and eventually alter the defining characteristics of the special education population. According to the federal Data Accountability Center (2008), 58% of the current special education population is comprised of students with high-incidence disabilities, such as learning disabilities, mild mental impairments,

and emotional/behavior disorders, who receive their special education services primarily in general education classrooms. With early intervention and the availability of more support in general education through the RTI approach, special education may eventually be reserved for only those students with the most complex and challenging educational needs. Predictably, unanswered questions abound.

Statement of the Problem

In 2005, the West Virginia Department of Education began its implementation of the RTI process (Palenchar & Boyer, 2008). A pilot project informed scaling up plans, and by 2007, the West Virginia Board of Education approved revisions to Policy 2419: Regulations for the Education of Students with Exceptionalities that required the phasing in of the use of RTI as the sole SLD identification method. Elementary schools were required to implement RTI processes in the area of reading by July 1, 2009, followed by mathematics in 2010. Middle and high school implementation dates were July 1, 2011 and July 1, 2012, respectively. Even though many schools across the nation and all West Virginia schools are currently establishing multi-tiered systems or RTI frameworks, many issues related to implementation of the process, including sufficient procedural guidance for practitioners related to scaling up, treatment, and treatment fidelity, remain unresolved (Hollenbeck, 2007; Reynolds & Shaywitz, 2007). Of note, Fuchs, Fuchs and Stecker (2010) posit that there exists no general consensus among administrators, researchers, policymakers, and advocates on the basic nature of RTI and its purpose within the “new continuum of general education placements and services” (p. 301).

For decades, special education services and programs have existed as distinct in purpose and form. They were often segregated from general education, fraught with low expectations for student achievement, and structured to perpetuate social and racial inequities through

inappropriate labeling practices (Hehir, 2008). Appreciably, with the introduction of RTI, historical boundaries between general and special education are being altered and redefined. Simply stated, special education is changing. Moreover, in this evolving yet often confusing contemporary educational context, the roles and responsibilities of the special educator are changing within the multi-tiered instructional system and need to be clarified and operationalized (Hoover & Patton, 2008). Hoover and Patton asserted that emerging responsibilities and purposes of special educators within a multi-tiered instructional system include essential specific skill sets organized into five distinct dimensions: 1) data-driven decision makers; 2) implementers of evidence-based interventions; 3) implementers of differentiated instruction; 4) implementers of social and behavioral supports; and 5) collaborators. For the purpose of this study, the skill set related to social and behavioral supports was not addressed because West Virginia's RTI initiative focuses only on academics at this point.

Hoover and Patton (2008) generated the five critical special educator roles and their corresponding subskills through a review of existing literature. None of the roles or subskills represents novel or even recently developed concepts relative to traditional expectations for the special education teacher. However, a coordinated and successful RTI system demands high levels of teacher knowledge and capacity within each domain. The authors proposed that the development of such competencies and expertise should establish meaningful and important roles for special educators in the contemporary multi-tiered system.

This study provides a data-based description of West Virginia special education teachers' responsibilities and purposes relevant to the nature and level of their participation in various components of tiered instruction. The primary purpose of the study was to develop a profile of West Virginia special education teachers applicable to their specific responsibilities within the

RTI framework. The intent is to explore the amount and type of instruction and intervention services provided to students not yet eligible for special education, the use of explicit instructional strategies, the nature and extent of collaboration activities, and the use of decision making processes that are essential to RTI.

The study also provides an opportunity to validate components of Hoover and Patton's (2008) framework addressing the roles and responsibilities of special educators within the context of RTI in West Virginia. Finally, the study offers an instrument for use in assessing the nature and extent of special educators' participation in the RTI process.

Research Questions

1. To what extent do West Virginia elementary special education teachers participate in tiered instruction and intervention?
2. How do West Virginia elementary special educators describe/perceive their collaborative roles with general education teachers within the context of a multi-tiered instructional system and regarding students not yet eligible for special education services?
3. How do West Virginia elementary special education teachers describe/perceive their roles as decision-makers relevant to students not yet eligible for special education services within a multi-tiered instructional system?
4. What benefits and challenges, if any, do West Virginia elementary special education teachers identify relevant to their roles within a multi-tiered instructional system?

Operational Definitions

The following terms were operationally defined for use in this study.

1. At-risk students - students receiving tiered instruction for learning problems but who have not yet been referred, evaluated, or determined eligible for special education services.
2. Tiered instruction - a three-tier, general education service delivery model with increasingly more intense levels of support for at-risk students. These tiers are not analogous to the construct of least restrictive environment used to denote special education placements.
3. Explicit instructional strategies - a systematic set of delivery and design procedures and practices designed to scaffold skill acquisition. Strategies are evidence-based practices that have demonstrated improved educational outcomes for students at-risk for educational failure.
4. Decision-making - ongoing, data-based instructional processes based on progress monitoring of student response to instruction and intervention.
5. Collaborative roles - interactions and communications between special and general education teachers that serve to support student learning in the core curriculum.
6. Title 1 status - whether a school received Title 1 funding for the implementation of additional academic support for at-risk students.
7. Special education caseload - the number of students with special needs assigned to a special education teacher.
8. Special education caseload type - characteristics of a special educator's caseload relevant to students with high and low incidence disabilities.
9. High incidence disabilities - more commonly identified disabilities such as mental impairments, learning disabilities, and behavior disorders.

10. Low incidence disabilities - less commonly identified disabilities such as severe intellectual disabilities, deafness, and blindness.
11. Special education placement options - categories of least restrictive environment as determined by a student's Individualized Education Program (IEP) team. The most commonly used options in public school settings include regular education full-time (REFT), regular education part-time (REPT), and separate class (SC).

Significance

Current changes in general education's capacity to meet the needs of struggling learners through RTI suggest that more research is needed to explore the associated evolving nature of special education services and the professionals who deliver them. Anecdotal evidence suggests special education teachers are expected to provide support to at-risk students as part of the multi-tiered general education system as well as to students with IEPs. Results of this study have implications for teacher preparation, teacher practice, and state education policies.

First, research findings could be used to inform the development and revision of curricula for special education teacher preparation programs and to provide guidance for designers and providers of professional development for a large special education workforce. Also, the instrument developed to assess special education teacher capacity within the RTI framework could be used by teacher preparation faculty and school administrators to identify areas of need for preservice and inservice training purposes.

This study's findings may also have implications that extend beyond teacher preparation and classroom practice issues associated with RTI. State education policymakers, too, may have interest in any emerging trends that may contribute to dialogue on special educator roles and responsibilities. As RTI is used to identify learning disabilities, policy involving new and

expanded roles for special educators within the tiered intervention process may be considered. For example, West Virginia's special education regulations currently allow a special educator to participate, to the extent possible with regard to caseloads, in the assessment and instructional processes of RTI that involve students not yet eligible for special education services. Findings from this study may either provide new considerations or validate the policy as stated.

Research findings may also provide suggestions for state policy governing the implementation of general education programs. Policy 2510, Assuring Quality of Education: Regulations for Education Programs, guides teaching and learning in West Virginia public schools. The policy does not currently address the provision of a multi-tiered system of support as an instructional framework for general education programs. Instead, RTI is described and required through state special education regulations as a method of identification of learning disabilities. Reference to the tiered instruction model in Policy 2510 might serve to promote and strengthen a shared responsibility for RTI between general and special education.

National level implications exist as well. The Special Educator Response to Intervention Inventory (SERTII) can be expected to provide the federal Office of Special Education Programs (OSEP) with insight as it deliberates during the approaching reauthorization of IDEA, particularly around use of IDEA funds relevant to the regulations for Child Find requirements and appropriate roles and responsibilities for special educators within the prevention framework of RTI.

Finally, no other study in the literature has identified a tool by which special education teacher competencies related to implementation of RTI processes are assessed. Additionally, results of this study will add to the knowledge base within the literature and perhaps focus needed recognition of an essential contributor to RTI – the special educator.

Delimitations of the Study

Following are delimitations of the study.

1. The researcher-designed Special Educator Response to Intervention Inventory (SERTII) was used as the measurement instrument.
2. The study focused on special education teachers serving at-risk students in kindergarten through grade five in West Virginia public schools.
3. The study focused on a theoretical framework posed by Hoover and Patton (2008) suggesting the roles and responsibilities of special education teachers within the RTI instructional delivery system.

Organization of the Study

Chapter One offers an introduction to the research. Chapter Two provides a review of pertinent literature. Chapter Three describes the methods and procedures used for data collection. Chapter Four presents the study findings. Chapter Five presents a discussion of the findings, conclusions, and recommendations for future research.

CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

Chapter Two provides an analysis of literature relevant to the roles and practices of special education teachers within the contemporary multi-tiered instructional system or response to intervention (RTI) framework. The literature review begins with an overview of applicable paradigms, legislation, and social phenomena that provide a historical perspective of special education with which to compare its contemporary characteristics.

The emergence of RTI comprises a second literature base applicable to the context of the study. RTI is a framework that systematically supports struggling learners in general education before considering them for special education services. It is neither a method nor a program. Congress reauthorized the Individuals with Disabilities Education Improvement Act (IDEA) in 2004 and gave states the option to use RTI as a means for identifying students with specific learning disabilities (SLD). Since the reauthorization, RTI has emerged as both a general education school improvement initiative and a special education eligibility process. Interestingly, there is neither a formal RTI definition nor a model of delivery that is universally recognized and practiced. Moreover, a variety of state, district, and school-based RTI practices exist (Mellard, Stern & Woods, 2011). Nonetheless, RTI is shaping how schools provide instruction, especially to students who struggle to learn important reading, writing, and mathematics concepts and skills. Because RTI is expanding the parameters of general education, it is also provoking questions about the purpose and function of special education services and its providers, special education teachers.

Finally, a review of extant literature on key research-based instructional practices designed to address the diverse and often challenging needs of students at-risk for school failure

or those with disabilities is presented. Special education research is replete with empirical evidence of effective instructional practices that improve achievement and behavioral outcomes for students with disabilities. An analysis of research-based strategies provides a framework for examining the roles and responsibilities of today's special educators within RTI. The foundation of the literature review focuses on a significant body of effective instruction research aimed at improving educational outcomes for students with high incidence disabilities such as learning disabilities, mild mental impairments, and behavior disorders. Primarily through meta-analyses, special education researchers identified a core set of instructional principles and strategies proven effective with students with challenging learning and behavioral needs.

Today, the field of special education is examining its own effectiveness in light of federal accountability mandates, standards-based curriculum initiatives, large-scale school reform initiatives, and, most significantly, the current emphasis on research-based instruction (Kaufman, 1994; Lipsky, 2005; Mostert & Crockett, 2000). Results of this study present a deeper understanding of the specific profiles of special education teachers' responsibilities and purposes within their schools' RTI processes. Absent from the current literature base associated with RTI is strong empirical evidence addressing how special education teachers are utilized, what services they provide to at-risk students in the RTI process, and whether they possess the knowledge base and skill sets needed to fulfill their new roles.

The results of this study, then, provide a preliminary discussion and understanding of the extent to which RTI structures and processes affect the roles, responsibilities, and instructional practices of West Virginia special educators. This analysis is especially important as the field of special education seeks to establish its value and place within the current educational backdrop.

Understanding a Context for Change: Special Education in Retrospect

RTI is frequently characterized as “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” (NASDSE, 2005). Although RTI is both a general education effort to improve achievement outcomes for students, especially for those who struggle, and an important component in identifying learning disabilities, the RTI agenda has been advanced primarily by special education by reason of both opportunity and need.

Conceptualization of RTI on a large scale began with the last reauthorization of the Individuals with Disabilities Education Improvement Act (IDEA 2004) that provided the opportunity and momentum for the RTI initiative. Specifically, the law states:

In determining whether a child has a specific learning disability, a local educational agency may use a process that determines if [he or she] responds to scientific, research-based intervention as part of the evaluation process (20 U.S.C. §141[b][6]).

At this time, IDEA 2004 is the only federal legislative reference to RTI.

Many assert that special education has been misunderstood and misrepresented, in part, due to a disconnect between theory and practice (Hockenbury, Kauffman & Hallahan, 1999). Over the years, special education evolved into an often separate and segregated system, existing parallel to general education and largely characterized by exclusion and misclassification of students (Reynolds, Wang & Walberg, 1987; Stainback & Stainback, 1984; Turbull, 2009; Will, 1986). Moreover, special education is frequently criticized for its focus on compliance and less than desirable achievement outcomes for students, including high school graduation, employment rates, and post-secondary schooling. Wolf and Hassel (2001) argued that “the

compliance model fails even to ensure widespread compliance with federal and state laws and regulations, while generating unexpected, undesirable outcomes and perverse incentives” (p. 54).

A brief overview of significant special education paradigms, policies, and practices establishes a context for understanding the present adoption and appeal of RTI as a viable solution for improving educational outcomes of all students, including those with disabilities. A retrospective view of special education sets the stage for understanding the current sense of urgency, mission, and commitment occurring under the auspices of RTI.

McLeskey (2007) edited a compilation of what he refers to as “classic articles in special education reform” (p. v). The articles provide a conceptual framework for understanding how the field of special education has evolved. Likewise, through an examination of McLeskey’s purposeful selection of seminal writings, the underpinnings of RTI are effectively substantiated. Key topics include essays on educating students with mild disabilities, inclusion practices, and curriculum-based measurement.

Although the origins of special education can be traced back at least two centuries, 1975 is commonly noted as the defining date of modern special education when Congress passed Public Law 94-142, first named the Education for All Handicapped Children Act (EAHCA). This landmark legislation provides a starting point for examining contemporary special education policy and practice. Centuries of segregation, isolation, and denial of public education motivated the enactment of the law; and, over the years since its initial implementation, the field of special education has moved steadfastly to ensure that students with disabilities are provided appropriate learning opportunities (Hallahan, Kauffman & Lloyd, 1999; Hallahan & Mercer, 2001).

Special education formally entered the educational landscape in 1975 with the enactment of EAHCA, but the call for more equitable treatment and better educational opportunities for students who struggled to learn occurred much earlier. The 1960s marked an era of change, and the conditions of special education were examined and even condemned (McLeskey, 2007). In 1968, Dunn chastised both general and special educators' widespread preference of special schools and classes as iniquitous and discriminatory labeling practices. He posited that special education could be transformed by educating all students in general classrooms and criticized the prevalent practices of removing students from general classrooms, thereby removing responsibility from general education teachers. Moreover, he defined the role of the special education teacher as diagnostician, consultant, and provider of prescriptive, remedial instruction. Dunn's perspective of special education demanded a stronger and more accommodating general education system and still characterizes aspects of contemporary special education practice.

Another significant concept that profoundly shaped the next several decades for special education was the articulation of the "cascade system of special education services" (Deno, 1970, p. 234). Deno, too, criticized the use of categorical disability labels and emphasized instead the uniqueness of the individual student. She proposed that special education should be organized around the delivery of specific educational services to better meet the needs of diverse learners. Deno's cascade system identified seven levels of special education service, with increasing levels of support and assistance. The first three levels, for example, addressed the education of children with disabilities in regular education classes, regular class participation with supplemental instructional services, and part-time special classes. This concept exists in present-day special education as least restrictive environment (LRE), and its consideration is a fundamental right of a student with a disability through the Individualized Education Program

(IEP) process. During Deno's era, special education teachers addressed the instructional needs of students primarily in separate, segregated classrooms and often in special schools. Little if any collaboration between general and special educators occurred, as students with disabilities were primarily the responsibilities of their special education teachers. Deno's cascade of services concept and LRE would not have any effect until the 1970s when the federal special education law was authorized.

Resource teaching or resource room programming was another widely implemented model for the delivery of special education. Cohen (1982) asserted that resource teachers were expected to support and coordinate students' regular education program while also remediating deficit areas. The role of the special education teacher was multidimensional, including knowledge and expertise to support their students in the general curriculum as well as the specialized instructional and behavioral interventions used with students in the resource room. Resource teachers provided both direct and indirect services. Direct services included the diagnosis of learning problems, remediation of specific skill deficiencies, tutoring in core content, and behavior management. Indirect services involved consultation with general education teachers, adapting and modifying curriculum, and working with parents and administrators. The resource teacher model is still used today to provide special education services, both as the only format for delivery and also in conjunction with direct teacher support (i.e., co-teaching) in inclusive settings.

By the time the federal law was enacted in 1975, special education practice had met with direct public criticism and the call for change was clear; special education reform was underway. In practice, special education was typified by categorical programming for students, and restrictive learning environments wherein students' access to their grade level peers and the

general curriculum were limited. Notably, a culture of compliance with the new federal law was launched. By the 1980s, the stage was set for the ensuing reconsideration of purpose and renovation of practices (Yell, Shriner & Katsiyannis, 2006).

A decade into the implementation of PL 94-142, Will (1986) outlined a new vision of special education that indicted the special program approach and advocated inclusive education of students with disabilities. Will, Assistant Secretary for the Office of Special Education and Rehabilitative Services, U.S. Department of Education, condemned compensatory and remedial special education programs for their failure to meet the needs of students and their tendency to erect barriers to positive student outcomes. Will saw the system as fragmented and flawed with its themes of isolation, separation, low expectations, and removal and saw the need for a more supportive system in light of the approaching literacy requirements related to advancement in technology. She pressed strongly for the building of an educational system distinguished by a shared responsibility for educating students with learning problems. Her vision came to be known as the Regular Education Initiative (REI).

Reynolds, Wang, and Walberg (1987) warned that “unless major structural changes are made, the field of special education is destined to become more of a problem, and less of a solution, in providing education for children who have special needs” (p. 391). The authors supported Dunn’s (1968) anti-categorical approach to special education services and questioned in particular the increasing number of students identified with specific learning disabilities and whether they were meaningfully and substantially different from non-labeled low achieving students.

Likewise, Stainback and Stainback (1984) proposed a rationale for the merging of regular and special education. The authors acknowledged the individual differences among all

students and rejected the notion of two types of students – regular and special. They completely rebuffed the dual system of education that classified students, believed in the existence of distinct instructional methods for regular and special needs students, and encouraged competition among resources and expertise. They suggested that regular and special education should fuse along the domains of individualization for all students, eligibility for special education services based on student characteristics instead of distinct disability categories, shared resources, and a more responsive general education system prepared to meet the needs of all students. The Regular Education Initiative, first conceptualized in 1986 by Will, required consensus among general and special educators and a defining of roles and responsibilities (Jenkins, Pious, & Jewell, 1990).

At the same time that the REI was gaining momentum, special educators questioned whether or not general education was ready and able to assume the responsibilities for appropriately instructing students with unique and often challenging learning needs (Baker & Zigmond, 1990). Today, as RTI processes and practices shape how general education instruction is delivered, the vision of a unified, single system of education for all students remains somewhat elusive, yet hopeful.

The REI introduced new roles for special education teachers. If students with disabilities were to spend more of their days in general education, so, too, would their teachers. Special education teachers began to support and provide direct services to students with disabilities in general classroom settings. The need to work in tandem with general education teachers increased, and special educators' skill sets expanded to include co-teaching and collaboration.

Another paradigm shift occurred in the 1980s related to how students were identified for special education. The often inconsistent identification processes used to determine which

students received special education services were criticized for disproportionate percentages of minority and male students in special education and general lack of standardization across schools, districts, and states (Kelman, 2001; Wang, Maynard, & Walberg, 1986). In question were referral practices and assessment tools and procedures; conceptual definitions of the various disability categories, particularly learning disabilities, mental retardation, behavior disorders, and gifted; and specific classification criteria used for determining eligibility for special education services (National Research Council, 2002).

As the 1980s marked the commencement of challenging the status quo and the conceptualization of new paradigms, a new vision for special education was offered in the 1990s with the emergence of the inclusive education movement. Special education reformers began to question the quality of the general education learning environment and its role in low academic achievement. Perhaps poor performance could be attributed to a larger degree to faulty instructional practices than solely to intra-individual learning characteristics.

In 1990, Congress reauthorized the EAHCA. The amended law was known as the Individuals with Disabilities Education Act (IDEA) and engendered an era of inclusive thinking and programming. Fuchs and Fuchs (1994) discussed the emergence of two distinct groups of special education advocates. The first group was concerned with students with high-incidence disabilities such as learning disabilities, mild mental impairments, and behavioral disorders. This perspective on special education reform was characterized by a willingness to include all at-risk students and a strong belief that special education should be part of the larger general education system and not a separate entity. A second group advocated for students with low-incidence disabilities such as severe cognitive disabilities and sensory impairments. The primary

goal of this group was full integration of students with low incidence disabilities into neighborhood schools.

Dunn's (1968) merging of general and special education was perhaps being realized under the term mainstreaming. Mainstreaming, however, was often operationalized as a privilege afforded to students who were able to participate successfully in general education settings with relatively minimal support from their special education teachers. In this service delivery model, the general education teacher assumed the majority of responsibility for student learning and academic advancement.

The Regular Education Initiative was succeeded by the inclusive schooling movement, and yet another effort to align and integrate general and special education commenced (Fuchs & Fuchs, 1994). Inclusion, the controversial philosophical term, can still elicit intense emotion from educators and parents. Unlike mainstreaming, inclusion supposes the delivery of special education services in the general classroom with goals of academic and/or social benefit to the student. Interestingly, federal law, which does not specifically include the term "inclusion," provides for a continuum of services with general education full-time being a placement option decided by the student's IEP team. Nonetheless, whether placement decisions are based on educational need, financial resources, or convenience, inclusion continues to be a widely accepted option for the provision of special education services. As Epanchin and Friend (2009) observed, special education reform in the late 1980s and early 1990s focused on where rather than how well students with disabilities were educated. The location of services debate emanated from fundamental attitudes and belief systems focused on separating children who learned differently from their general education peers.

The role of the special educator began to shift away from separate settings and emphasis on basic skills remediation toward general education settings and a broader approach that required supporting students across the general curriculum. Special education teachers became more collaborative with their general education colleagues, provided both direct and indirect services to their students with special needs, co-planned, and co-taught. With these roles and responsibilities in mind, Vaughn, Bos, and Schumm (2003) coined the term “inclusion support teacher” (IST).

Another issue that arose in the 1990s was the debate over special education teachers’ roles within the context of prereferral intervention practices (Graden, 1989; Lloyd, Crowley, Kohler, & Strain, 1988; Pugach & Johnson, 1989). Prereferral intervention refers to the systematic application of assessment and intervention strategies in an effort to improve learning problems and ultimately prevent the inaccurate identification of a disability. School-based teams comprised of general and special educators provide a structure and process for problem solving and addressing the needs of students within the general education curriculum. Teachers work together to identify problems, generate solutions, and then evaluate the results of interventions. Prereferral intervention goals are two-fold: 1) assist general education teachers, and 2) reduce the number of students referred for and placed in special education (Papalia-Berardi & Hall, 2007). Graden (1989) emphasized that a key feature of prereferral intervention was the already existing special education service delivery option of collaborative consultation between teachers. Graden also criticized the choice of the term prereferral intervention as it implied the eventuality or certainty of a special education referral rather than the possibility of the amelioration of a problem.

Kauffman (1994) speculated that special education as a field was essentially in danger of extinction, citing the failure to deliver quality effective instruction to exceptional students, particularly those with learning disabilities. He called for the continuation of a continuum of services and spurned indiscriminate inclusion of students with disabilities in regular education classes. His special education reform agenda included the clear articulation of the fundamental goals of special education; revision of special education teacher preparation programs and inservice training; and, most importantly, the use of intensive, scientific, research-based instructional strategies designed to be effective with the students who struggle to learn.

As the category of learning disabilities grew, so did questions regarding whether and how these students should be included in general education, and the debate stimulated by the regular education initiative continued (Baker & Zigmond, 1990; Fuchs & Fuchs, 1995; McLeskey & Pacchiano, D., 1994). For the majority of students with high incidence disabilities, namely learning disabilities, the evidence did not initially support the effectiveness of inclusive practices, blaming large instructional groups and undifferentiated curricula for limited academic success (Kauffman, 1993; Vaughn & Schumm, 1995). The concept of responsible inclusion for students with learning disabilities addressed the importance of student-centered decision-making based on needs and adequacy of general education instruction in meeting those needs. Effective practices and positive outcomes are the measures of successful inclusion. Consequently, researchers began to focus their inquiries on relevant instructional practices rather than the learning environment in which students with LD were instructed (Baker & Zigmond, 1990). Instruction for students with learning disabilities focused on remediation of skill deficiencies versus approaches that emphasized compensation for learning difficulties (Baker & Zigmond, 1995).

Eventually, the position on the inclusion of students with learning disabilities moved toward a consensus that students should spend the majority of their school days in general education classrooms, but receive intense, explicit instruction in pull-out settings (McLeskey, Henry & Axelrod, 1999). Accordingly, in 1998-1999, 47% of children ages 6-21, both nationally and in West Virginia, spent 80% or more of their school days in general education classes. National trends are also indicative of more inclusive placements with 62% of students with disabilities ages 6-21 spending 80% or more of their school days in general education settings during the 2007-2008 school year (DAC, 2008). Part B Child Count data for 2008 for West Virginia indicated that 67.84% of students with disabilities spent 80% or more of their day in general education learning environments, slightly higher than the national average.

IDEA was reauthorized in 1997 and signaled the beginning of a new era of accountability in special education. Hallmarks of the regulations included assurance of access to the general curriculum for the purpose of meeting educational standards. Educators were challenged to rethink, redefine, and operationalize an improved meaning of access, participation, and progress in the general curriculum. Specific strategies included increased parental involvement, inclusion of students with disabilities in statewide assessments, quality professional development for all personnel charged with educating and providing services to children with disabilities, and, most importantly, higher expectations for student achievement. Although the mandate fell somewhat short of its virtuous goals aimed at redressing historical equity issues for students with disabilities, it did pave the way for subsequent and defining legislation strongly focused on achievement results (Hassel & Wolf, 2001).

Inclusive programming for students with disabilities and the utilization of co-teaching models also raised expectations for the knowledge and skill sets of special education teachers.

Shared instructional responsibilities demanded new and higher levels of content-area or subject-matter expertise. The special education teacher was expected to assist in the delivery of core content, modify or adapt general education curricula, and also teach specific learning strategies (e.g., sentence writing strategies, test taking strategies) to help students cope with challenging grade-level learning standards and setting demands.

The recollection of significant policies and events that influenced special education would be incomplete without mention of the No Child Left Behind Act of 2001, which preceded and largely influenced IDEA 2004. It is essential to understand the purposeful alignment of NCLB and IDEA 2004, and thereby, an unparalleled legislative connection of general and special education. This ambitious federal undertaking and commitment marked the initiation of a unique large-scale and collaborative school reform effort that continues today. The intent of both mandates is clear: only through high expectations and use of research-based instructional methods will special education improve educational outcomes for students with disabilities (Turnbull, 2009).

In 2001, President Bush established the Commission on Excellence in Special Education that served as a catalyst for reforming special education and moving it from a culture of compliance to one of results for children with disabilities. The Commission's work resulted in the publication of *A New Era: Revitalizing Special Education for Children and Their Families*. Three key recommendations in the report related to the identification of students with learning disabilities were subsequently incorporated into IDEA 2004: 1) identify and intervene early; 2) simplify the identification process; and 3) incorporate response to intervention during identification and assessment processes. The linking of NCLB and IDEA was underway.

Notably, although pundits and educators from classrooms to state education agencies found any number of shortcomings in the underlying principles of NCLB with regard to students with disabilities (Ratcliffe & Willard, 2006), others applauded the momentum afforded to special education by NCLB's stringent accountability and high expectations for all students (West & Whitby, 2008). For the first time, students with disabilities were meaningfully included in school, district, and state accountability systems. For example, under NCLB requirements, students with disabilities were guaranteed appropriate accommodations on large-scale assessments, access to highly qualified teachers, and assurances of scientifically-based curricula and methodology. Likewise, NCLB, through clear language regarding access to the general curriculum for students with disabilities, focused attention on achievement through the provisions of annual yearly progress (AYP). Improved student achievement is not optional under NCLB.

One of the most substantial and focused requirements of NCLB was the Reading First initiative. Reading First was a distinct and unprecedented feature of NCLB with its focus on at-risk students and the importance of effective, research-based instructional content and methods. Its general purpose was to ensure that all children in kindergarten through grade three were provided optimal opportunities to learn to read. Twenty-five of West Virginia's 55 county school districts participated in Reading First and received \$43.8 million over six years to administer the program in 42 of its most disadvantaged schools (U.S. Department of Education, 2003).

According to Guidance for the Reading First Program (2002), the project was designed to assist states in implementing the research-based recommendations of the National Reading Panel Report through significant grant funding. Reading First monies were used to increase teacher

professional development to ensure that all teachers, including special education teachers, have the necessary skills to teach reading effectively and to help struggling students overcome their learning difficulties early. The terms scientific-based reading research (SBRR) and scientific-based reading instruction (SBRI) were introduced to general education teachers, as were the concepts of screening to identify at-risk learners early, wide use of diagnostic reading assessments, and progress monitoring to measure student growth and achievement. Prior to Reading First, the aforementioned assessment and instruction components were not routinely implemented by general education teachers. In the decade since the enactment of NCLB, the practices continue to be established in an ever-growing number of general education classrooms across the country. Notably, such practices were well established in the special educators' repertoires and constitute an indispensable skill set they bring to the RTI initiative.

In 2004, on the heels of NCLB, IDEA was reauthorized as the Individuals with Disabilities Education Improvement Act. This reauthorization was closely aligned with NCLB and genuinely strengthened the accountability components of IDEA 1997. As its name suggests, improvement of outcomes for children with disabilities is the hallmark of the mandate. The most significant changes included: a requirement for highly qualified special education teachers; increased funding with the promise of full funding by 2011; paperwork reduction pertaining to Individualized Education Programs (IEPs); the addition of recoupment of attorney's fees for school districts in association with due process hearings; increased considerations for determining the relationship between disability and discipline procedures; and the required option to replace the severe discrepancy model for the identification of students with learning disabilities in favor of response to intervention (Smith, 2005).

Of particular importance in understanding RTI is a provision of IDEA 2004 that strengthens the requirement to rule out lack of appropriate instruction before determining a child has a learning disability. Even though consideration of the effectiveness of general education has always been implicit in special education law, IDEA 2004 highlighted the notion through language that specifically addresses the provision of appropriate reading instruction, including the essential components of reading instruction as defined under NCLB and based on the Report of the National Reading Panel (2000). The specificity of the requirement addresses not only the instructional content for reading, but also that it is to be delivered through the use of scientifically-based research practices.

Although IDEA 2004 has indeed brought positive change to special education students and their teachers, Horn and Tynan (2001) articulated several unintended negative consequences of the legislation that merit consideration: incentives to identify large percentages of students with disabilities related to state funding formulae, redirection of fiscal resources from general education to special education, and the building of a culture in favor of accommodation as opposed to intense, explicit intervention for students with disabilities.

Although inclusion practices have to some extent perpetuated a culture of accommodation, RTI, with emphases on research-based instruction, data-based decision-making, and frequent progress monitoring, is shifting the focus back to more individualized and diagnostic approaches to addressing the needs of at-risk students. The term intervention has become part of the language and practice of general education and will likely influence how special education defines specially designed instruction for children with the most challenging learning and behavior difficulties.

The history of special education, replete with federal policies, philosophical and moral debates, divergent opinions, and numerous attempts at reshaping and redefining itself as a field, is indeed a study in both reform and perseverance. Throughout its history, the field has been characterized by a sense of urgency, a sense of mission, and a sense of commitment aimed at improving educational and life outcomes for children and youth with disabilities.

Learning Disabilities: A Historical Consideration of Construct and Identification

In 2009, the National Center for Learning Disabilities reported that 2.7 million public school students, 5.5% of all school-age children, were identified as students with specific learning disabilities who receive special education services through IEPs (Cortiella, 2009). Until recently, the number of students with learning disabilities steadily increased since the inception of the disability category in the early 1960s. In 2003, Kavale and Forness noted that about half of the 2.5 million students eligible for special education were identified under the LD category and the enormity of such an identification rate was extraordinary. Evident in these statistics is a pressing need to redefine the construct of specific learning disabilities and reconsider which students justifiably require specially designed instruction afforded through an IEP. Moreover, Fuchs, Mock, Morgan, and Young (2003) charged that the “LD designation is arbitrary” (p. 158) due to inconsistencies in both the definition of LD and the application of eligibility criteria.

Lyon et al. (2001) challenged the field of LD to rectify the disproportionate increase in the prevalence of LD by examining the construct’s definition. The authors argued the following: 1) the heterogeneity across the seven domains of LD (i.e., listening, speaking, basic reading, reading comprehension, arithmetic calculation, mathematics reasoning, and written expression) precludes diagnostic specificity; 2) the traditional assumption of intrinsic or neurobiological causes of LD may be faulty in that environmental factors, including the type of reading

instruction provided, may impact brain functioning; 3) the classification of low achieving students as those with unexpected and expected underachievement relies too heavily on the notion that IQ is a valid predictor of learning ability and perpetuates an emphasis on eligibility over instruction; and 4) the exclusionary aspects of the LD definition are ambiguous at best and the under-recognition of links between brain development and environmental factors exclude a large subset of underachieving children.

A brief overview of the history of the field of learning disabilities establishes appreciation for the urgency and the importance of subsequent fundamental changes to both the definition and how the construct is operationalized. Key theories and research shaped the field and provide insight into the current acceptance of response to intervention as a framework for identification that links classification to instructional practices.

Language and reading disabilities gained attention in the early 1920s primarily through the work of Samuel Orton. Orton was keenly interested in a group of children who demonstrated average and above-average intelligence yet performed very poorly in school. Orton estimated that over 10% of students enrolled in schools had reading disabilities, hypothesized that the complex nature of reading suggested that several areas of the brain addressed the reading process, and emphasized the idea of cerebral mixed dominance and reversals as key markers for what he termed “congenital word blindness” (Hallahan & Mercer, 2001). Later, Orton used the term “strephosymbolia” to describe the confusion some children demonstrated with the symbols of language (Hallahan & Mock, 2003). Orton’s influence on the field of learning disabilities continues today through use of multisensory approaches to explicit phonics instruction based on his theories.

Another influential pioneer in the field of learning disabilities was Orton's research assistant, Marion Monroe. In the 1930s, Monroe further explored explicit instruction and developed a synthetic phonetic reading approach that involves systematic conversion of letters to sounds or phonemes followed by the blending of sounds into words. Notably, Monroe is credited with the practices of calculating reading indices and the discrepancy between an individual's expected and realized reading level. Hallahan and Mock (2003) noted that perhaps Monroe's greatest contribution to the field of learning disabilities was her use of individual case studies to document the similarities and differences among children with severe reading disabilities. Monroe focused on the analysis of reading errors to determine the most effective course of instruction. Her work emphasized the role of diagnostic assessment to inform practice, and the remedial teaching techniques were enthusiastically accepted by practitioners in public schools (Hallahan & Mercer, 2001).

Samuel Kirk was the first researcher to employ the term learning disabilities and did so in a 1962 publication entitled *Educating Exceptional Children* (Hallahan & Mock, 2003). Kirk is often credited with initiating the diagnostic-remedial model of addressing LD (Hallahan, Kauffman & Lloyd, 1999) and is noted for his work in developing the Illinois Test of Psycholinguistic Abilities (ITPA). The ITPA was widely used for diagnosing learning disabilities and assisting with instructional programming based on assessment results.

At the center of the learning disabilities diagnosis controversy is a longstanding lack of consensus over the conceptual definition of the condition. Kirk (1962) defined learning disability as:

... a retardation, disorder, or delayed development in one or more of the processes of speech, language, reading, writing, arithmetic, or other school subject resulting from a

psychological handicap caused by a possible cerebral dysfunction and/or emotional or behavioral disturbances. It is not the result of mental retardation, sensory deprivation, or cultural and instructional factors. (p. 263)

In 1965 another definition of LD was offered by Bateman, a student of Kirk:

Children who have learning disorders are those who manifest an educationally significant discrepancy between their estimated intellectual potential and actual level of performance related to basic disorders in the learning process, which may or may not be accompanied by demonstrable central nervous system dysfunction, and which are not secondary to generalized mental retardation, educational or cultural deprivation, severe emotional disturbance, or sensory loss. (p. 220)

Bateman's definition differed significantly from Kirk's in that it formally proposed the concept of ability-achievement discrepancy first introduced by Monroe, excluded emotional causes, and did not suggest examples of learning disabilities (Hammill, 1990). The concept of discrepancy was one that could be operationalized or measured and thus began its popularity as the most widely used method of LD identification.

Throughout the 1960s, a series of task forces convened to define and reach consensus on the definition of learning disabilities. These proceedings marked the beginning of the use of the term minimal brain dysfunction as synonymous with learning disabilities and an acknowledgment of intraindividual differences as characteristics of children with LD (Hallahan, Kauffman & Lloyd, 1999). The language associated with the construct of learning disabilities was being reshaped and heading for possible consensus.

In 1968, the National Advisory Committee on Handicapped Children (NACHC) developed a definition of LD touted by Hammill (1990) as the "seminal definition of learning

disabilities, for it was the basis for the 1976 USOE definition incorporated in to Public Law 94-142” (p. 75). The NACHC definition was grounded in Kirk’s earlier version but included significant additions: 1) emotional disturbance was not considered causal to learning disabilities; 2) the definition was restricted to children; and 3) the definition included the concept of thinking disorders along with academic difficulties (Hammill, 1990; Hallahan, Kauffman, & Lloyd, 1999). Thus, states developed a variety of metrics to discern an ability-achievement discrepancy. These practices defined learning disabilities identification until the advent of response to intervention approaches allowed in the 2004 reauthorization of the IDEA.

Finally, in 1976 the U.S. Office of Education articulated a definition of learning disabilities that also included diagnostic criteria (Hammill, 1990). The definition that referred to a “severe discrepancy” between a child’s cognitive ability and academic achievement provided the impetus for the application of statistical formulae in making the LD decision. Hammill noted almost immediate opposition to the mathematical procedures and conceptual issues that were, nonetheless, to be used for another two decades. Although the USOE’s final definition did not include the discrepancy formula, it did add to the final regulations the aptitude-achievement discrepancy as part of the evaluation criteria for the identification of LD (Kauffman, Hallahan, & Lloyd, 1999).

Two final definitions of learning disabilities promulgated in the late 1980s complete the decades-long effort to accurately operationalize the concept. First, the National Joint Committee on Learning Disabilities (NJCLD) asserted the following definition:

Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities but do not by themselves constitute a

learning disability. Although learning disabilities may occur concomitantly with other handicapping conditions (for example, sensory impairment, mental retardation, serious emotional disturbance) or with extrinsic influences (such as cultural differences, insufficient or inappropriate instruction), they are not the result of those conditions or influences (1990, p.1).

This definition includes five fundamental constructs that distinguish it from previous interpretations:

1. Learning disabilities span the lifetime and are heterogeneous, across and within the individual;
2. Learning disabilities result in significant difficulties in the acquisition of important skills related to listening, speaking, reading, writing, reasoning, and/or mathematics;
3. Learning disabilities are intrinsic to the individual and may manifest to varying degrees across the lifetime;
4. Learning disabilities may occur concomitantly with other disabilities but are not primarily the result of conditions such as sensory impairments or mental retardation;
5. Learning disabilities are not caused by extrinsic factors such as cultural/environmental influences and/or ineffective or inadequate instruction (NJCLD, 1997, p. 258a).

Reform efforts in the field of LD continued to waver over the next several decades. Lack of a consistent definition and criteria for determining eligibility, innovative thinking about how and where students with learning disabilities should be educated, and key policy initiatives contributed to an educational context disposed and bound for change.

Ahearn (2003) highlighted the profusion of mathematical approaches used over the years to quantify learning disabilities. Methods included regression formulas, use of cognitive discrepancy between verbal and performance IQs, standard scores and standard deviations, and expectancy formulas and grade level deviations. Clearly there was no consensus in the field on the most efficacious methodology for identifying LD.

Similarly, a central issue surrounding the concept of learning disabilities was and still is the suggestion of unexpected underachievement as the primary and defining characteristic of a learning disability. Kirk's definition specifically distinguished learning disabilities from mental

retardation and the aforementioned exclusionary factors (Kirk, 1977). Today, LD advocates, including parents, teachers, administrators, and psychologists, maintain the efficacy of the average or above average intellectual ability component of the LD construct. Also adding to the debate was what Holdnack and Weiss (2006) referred to as the “disconnect between the definition of an SLD and the eligibility criteria” (p. 873). That is, although the definition refers to a disorder in psychological processes, the eligibility criteria first mandated in Education for All Handicapped Children Act of 1975 specified the measurement of a severe discrepancy between intelligence or ability and academic achievement as determined by a statistical calculation.

Nevertheless, IDEA 1997 required that students with specific learning disabilities exhibit a “severe discrepancy between ability and achievement” (p. 12,457) in one or more achievement areas. The law also required consideration of exclusionary factors. That is, a learning disability could not be determined unless other conditions such as visual, hearing, or motor disabilities, mental retardation, emotional disorders, and environmental, cultural, and economic disadvantage were ruled out as the primary causes of underachievement. However, the mandate did not include procedural guidance on how the severe discrepancy should be determined nor did it specify the extent to which a discrepancy constituted a learning disability. Nonetheless, the discrepancy concept became the primary, and in many cases the only, criterion used to determine a learning disability (Kavale & Forness, 2003).

Over the next few years, as another reauthorization of IDEA was anticipated, various proposals for changing the learning disabilities construct and evaluation criteria emerged in the literature. In 2000 the U.S. Office of Special Education initiated a plan to address the issues surrounding the classification of learning disabilities. The work, called the LD Initiative,

included the following: commission of white papers, sponsorship of an LD Summit, roundtable discussions with stakeholders, and dissemination of the white papers and proceedings of the LD Summit (Bradley & Danielson, 2004). Outcomes of the LD initiative included consensus on the legitimacy of the LD construct, the inadequacy of the aptitude-achievement discrepancy as a tool for identifying LD, and the potential of response to intervention as an alternate method for both identifying and improving outcomes for individuals with learning disabilities. Appreciably, the National Research Center on Learning Disabilities (NRCLD) was established and continues to impact current issues and developments in the field of learning disabilities.

Lyon et al. (2001) offered specific and substantive recommendations for improving how learning disabilities should be defined and operationalized. The authors suggested the following: 1) replace the exclusionary definition of LD with evidence-based classification systems that incorporate specific characteristics of each type of learning disability; 2) abandon the IQ-achievement discrepancy criterion as the primary indicator of LD and replace it with processes that compare a student to age/grade level curricular expectations; 3) cease the practice of excluding children based on cultural and social factors, including lack of adequate instruction; and 4) include a process that measures a student's response to research-based early intervention.

Indeed, change finally arrived in 2004 through an updated IDEA that incorporated the LD concepts for classification and instruction articulated by noted scholars and researchers. Although the definition of learning disabilities remained essentially unaltered from the original 1977 description articulated by the U.S. Office of Education, as the EACHA of 1975 approached full implementation (Swanson, Harris & Graham, 2003), a long-awaited change in the operational definition was provided for in the statute. IDEA 2004 includes the use of scientific, research-based interventions as part of the evaluation process for determining eligibility for

special education under the learning disabilities category. Notably, it also prohibits state education agencies from requiring the use of a severe ability-achievement discrepancy for eligibility purposes. Also underscored in IDEA 2004 was the importance of early intervention. Thus, local education agencies are permitted to use up to 15% of their special education funds to develop and implement early intervening services for young children not receiving special education services. Early intervening activities include both academic and behavioral supports likely to reduce the number of children referred for special education. This emphasis is unprecedented in federal special education law and marks the inauguration of the use of IDEA funding to promote early intervention to prevent disabilities.

However, a dichotomy of theory and practice exists and is actually perpetuated by flexible language in IDEA 2004 that permits two competing approaches, research-based interventions and the severe discrepancy model, to be used for diagnosing learning disabilities. The role of cognitive evaluation for assessing learning disabilities has been highly controversial, supported passionately by some and condemned as irrelevant and unethical by others. RTI relies on an assumption of adequate educational opportunity through the provision of research-based instruction and the use of formative assessment aimed at articulating LD as extreme underachievement (Gresham, 2001). Conversely, a second option recognizes a cognitive processing deficit model (Kavale, Kauffman, Bachmeier & LeFever, 2008). Consequently, there are inconsistent understandings and applications of eligibility criteria among and between states and even within school districts. Moreover, critical debates involving the construct and classification issues of learning disabilities, though somewhat different in substance from earlier arguments, remain.

Questioning the Role of IQ in Diagnosing LD

Intelligence has long been a defining criterion of learning disabilities. Furthermore, since the inception of the learning disabilities category, both definitions and procedures for identification of learning disabilities have been disputed. The aptitude-achievement discrepancy method, in particular, has received substantial criticism over the years for its conceptual foundation and measurement deficiencies (Gresham, VanDerHeyden & Witt, 2005; Speece & Case, 2001; Vaughn & Fuchs, 2003; Vellutino, Scanlon, Small & Fanuele, 2006). Frequently cited in the literature as having significant influential effects on the notion of average intelligence and poor academic achievement in diagnosing LD is the work of Rutter and Yule (1975) who, in a large-scale epidemiological study, proposed two distinct subgroups of poor readers. Notably, they are credited with conceiving the concept of the IQ-achievement discrepancy (Fuchs, Mock, Morgan & Young, 2003). The researchers documented that one group of students with pronounced reading disabilities exhibited significant discrepancies between observed and expected reading ability. That is, the students had no other significant academic weaknesses. A second group of students was characterized by poor reading ability, a variety of other learning difficulties, and no significant discrepancy between observed and expected reading achievement. This seminal research greatly influenced subsequent theories, attitudes, and beliefs related to the notion of learning disabilities as unexpected underachievement.

Interestingly, the aptitude-achievement discrepancy classification ideology flourished for decades in spite of contradictory empirical evidence. Moreover, the legitimacy of intelligence testing in diagnosing LD continues to be argued among researchers, policymakers, and practitioners (Fletcher, Francis, Morris & Lyon, 2005). Disputes also continue today as to whether or not students known as “slow learners”, that is children with lower than average

intelligence who underachieve, should be provided the opportunities and rights of special education.

Ysseldyke, Algozzine, Shinn, and McGue (1982) investigated the extent to which students classified as learning disabled differed from non-classified students. The researchers concluded that at least 40% of their sample population was misclassified, with 33 children misidentified as LD and 7 as non-LD. Results of the study yielded negligible differences between the two groups of students, thereby initiating the question of the efficacy of ability-achievement discrepancy formulae as a valid metric for classifying LD.

Fletcher and Denton (2003) summarized the literature that supports the problematic nature of aptitude-achievement discrepancy approaches. The researchers concluded that continued investigation of the efficacy of discrepancy models is futile in terms of distinguishing between subgroups of underachievers. Their analysis also supported the need to investigate different interventions for different kinds of non-responders. Fletcher and Denton recommended the use of hybrid models that use low achievement, exclusionary factors, and response to intervention to identify learning disabilities and noted that such models “have the promise of operationalizing the concept of unexpected underachievement in a way that is meaningful: as a demonstrable inability to learn” (p. 7).

However, other experts in the field of learning disabilities argued for a differential diagnosis that distinguished learning disabilities from mental retardation. Although not necessarily advocating for use of the aptitude-achievement discrepancy, there is a considerable amount of research supporting the benefits of cognitive assessments in the diagnosis process.

Fuchs and Young (2006) systematically examined 13 studies involving over 1,500 children who were either at-risk or identified as reading disabled. They assessed the predictive

capability of IQ on responsiveness to reading instruction to explore the efficacy of cognitive assessment in decision-making for LD. Though results were mixed, 62% of the 13 studies demonstrated IQ as a unique variance in children's response to reading intervention. That is, IQ influenced the effectiveness or ineffectiveness of reading interventions for children with higher and lower cognitive abilities, respectively. Additionally, the research suggested that IQ became increasingly more predictive of responsiveness as children moved along the complex continuum of reading acquisition. That is, when comprehension was measured, IQ was a statistically significant predictor of reading growth.

More recently, the role of IQ in the identification of learning disabilities was further tested by a meta-analysis conducted by Stuebing, Barth, Molfese, Weiss, and Fletcher (2009). The researchers reviewed 22 studies that met specific criteria including clearly defined intervention components, measures of IQ, longitudinal designs, and sufficient data with which to calculate the effect of IQ on predicting response to intervention. The results of the meta-analysis allowed the researchers to conclude that IQ accounted for only a small amount of variance in predicting intervention response.

Another recent meta-analysis of 32 studies conducted by Johnson, Humphrey, Mellard, Woods, and Swanson (2010) yielded large effect sizes in cognitive processing differences among groups of LD students and typical peers. Study results emphasized that students with learning disabilities significantly underachieved in reading and mathematics and that students with SLD tended to exhibit large cognitive deficits, thereby substantiating the inclusion of cognitive processing assessment as part of the evaluation and diagnosis of SLD. Also demonstrated in the meta-analysis were particular markers of low reading achievement including phonological

processing, verbal working memory, and processing speed. No clear indicators for similar research questions emerged for mathematics.

The empirical evidence supporting the efficacy of intelligence in determining learning disabilities remains ambiguous. Indeed, researchers, policymakers, and practitioners will continue to pursue definitive answers. In the meantime, the reality of American schooling is that response to intervention is being established as a viable strategy for early intervention and prevention of learning difficulties as well as the method of choice for identifying learning disabilities. Additionally, implicit in its conceptualization is that RTI methods differentiate between low achievement caused by inappropriate instruction and low achievement as a result of disability (Fuchs, Fuchs & Compton, 2004). At present, the lack of an absolute understanding of the role of IQ in determining learning disabilities does not appear to be hampering the use of RTI as an identification method.

Emergence of the New Paradigm: Response to Intervention

Although RTI is a relatively contemporary term in education, its underpinnings are traceable in both general and special education. Most agree that the 1982 National Research Council study conducted by Heller and Messick marked the beginning of RTI ideology (Fuchs, Fuchs & Compton, 2004). The study yielded three recommendations to justify special education eligibility: 1) general education is effective for most students; 2) special education improves student outcomes, thereby validating the classification; and 3) assessment practices are valid. These basic tenets are evident in contemporary RTI frameworks and practices. As American schools face a multitude of issues and challenges, RTI provides a systematic and practical response to meeting the needs of millions of children struggling to meet the rigorous demands of 21st century curricula and high expectations for all students.

Gladwell (2000) referred to a tipping point as “that one dramatic moment in an epidemic when everything can change all at once” (p. 9). In light of the history of special education, the RTI initiative may be viewed as a defining innovation in American schooling. RTI principles and practices are gaining momentum in the restructuring of American schools, quickly becoming a key strategy for school improvement, and impacting the delivery of both general and special education. Interestingly, the scaling up of RTI is moving at such a rapid pace that its implementation may be preceding both policy and research in many instances (Danielson, Doolittle, & Bradley, 2005).

Implementation of RTI has steadily increased from 2007 to the present. Zirkel and Thomas (2010) reported that one fourth of states either partially or completely require RTI for the identification of learning disabilities, with West Virginia falling into the latter group. West Virginia Board of Education Policy 2419: Regulations for the Education of Students with Exceptionalities (2007) phases in the use of RTI and prohibits use of the severe discrepancy approach. The timeline moved RTI into elementary schools by 2009 with middle and high schools following in 2011 and 2012.

Credit for the paradigm shift engendered by the RTI initiative is commonly attributed within the literature to two distinct factors. First, there was growing dissatisfaction with unreliable procedures for identifying learning disabilities that were responsible for extraordinary numbers of children being determined eligible for special education services, until the last decade wherein numbers have declined (Cortiella, 2009). Coupled with the desire for more valid and reliable classification procedures was widespread dissatisfaction with general education outcomes and an acknowledgement that general education has an obligation to meet the diverse needs of at-risk students through systematic, research-based prevention and early identification

practices (Lyon et al., 2001). Fuchs and Deshler (2007) compared RTI to the Regular Education Initiative advanced by Madeline Will in the 1980s that challenged general educators to higher levels of accommodations for students with learning differences. However, they also cautioned that RTI demands a substantive change in how general education addresses the needs of students who struggle. RTI, then, is a systematic approach for both meeting the diverse needs of all students and also providing an effective, instructionally focused process for determining learning disabilities (Kavale & Spaulding, 2008).

Features of a Response to Intervention Service Delivery Model

RTI recognizes the broader general education responsibility for meeting the needs of all students through the provision of effective, evidence-based instruction. RTI is a student-centered framework for providing support that is preventive in nature. RTI processes encompass prevention science constructs and help teachers link assessment data to classroom practice to determine if students are performing as expected when given evidence-based instruction (Lembke, McMaster & Stecker, 2009). Important information gathered as a result of tiered instruction and ongoing assessment also provides a component of the learning disabilities diagnosis. It is a systematic process of continuous improvement with recursive features for an individual student level of concern, problem solving, and timely intervention.

An RTI framework allows general education teachers to organize and deliver instruction that supports all learners, with purposeful and intentional focus on the needs of children who struggle (Vaughn, 2003). Teachers use scientifically research-based instructional strategies to deliver quality instruction in the early grades to prevent, in particular, long-term reading difficulties and unnecessary placements in special education (Fletcher, Coulter, Reschly & Vaughn, 2004). Within this model, teachers assess students regularly and use progress

monitoring data to determine and provide increasing intensities of explicit instruction and intervention. Differences between tiers are characterized by the frequency and length of instructional sessions, group size, frequency of progress monitoring, and duration of instruction.

The Three-Tier Instructional Model

Over the last several decades, large numbers of students received special education services under the learning disabilities category. These services were predominantly focused on addressing problems associated with reading difficulties. However, countless other students did not meet the discrepancy criteria and, therefore, did not receive critical educational services to address their learning difficulties. Educators often referred to such children as “gray area students” or as “falling through the cracks” of the educational system. They were students for whom the general curriculum is not sufficient. They were children who simply need more strategic, individually designed instruction to meet grade level goals. Today, tolerance for such attitudes and practices is low. In response, use of multiple tiers of increasing intensity and an associated set of common principles is fast approaching common practice levels in American schools (Reschly, 2005).

At the core of RTI is an instructional service delivery model that tasks general education teachers with assuming greater responsibility for quality, research-based instruction before presuming disability. RTI may be conceptualized as a process of evaluating the effectiveness of basic instruction in meeting the needs of all students (Glover & DiPerna, 2007; Speece, Case, & Molloy, 2003). States and school districts have developed a variety of models for implementing RTI (Barnes & Harlacher, 2008; National Association of State Directors of Special Education, 2008), and several common components of RTI comprise these systems. Widely agreed upon features include: 1) universal screening to determine which students are at risk for learning

difficulties in key areas such as reading and mathematics; 2) research-based instruction to provide a strong foundation within general education; 3) frequent progress monitoring aimed at evaluating student achievement to make timely instructional adjustments; 4) data-based decision-making; and 5) a multi-tiered instructional delivery model with a range or layers of increasing levels of intervention support (Vaughn, Denton & Fletcher, 2010).

Glover and DiPerna (2007) noted that emergent research on multi-tiered systems of support document their potential for improving student achievement outcomes. However, the authors also emphasized the need for research to address the utility of assessment tools, the outcomes associated with tier-specific intervention, and the effects of varying intensity of interventions. More research is needed to investigate specific interventions across various content areas as well as programmatic levels. In terms of practice, RTI is still in its formative years. Ensuring that teachers know the most effective practices and implement them with fidelity in their classrooms is a daunting professional development task at both the preservice and inservice levels of teacher preparation.

The tiered feature of a multi-tiered instructional model refers to the layering of instruction so that increasing levels of instruction are provided in response to student needs. Much of the foundational research and practice of RTI is grounded in beginning reading acquisition with the intent to prevent reading disabilities by intervening early. Lyon, et al. (2001) held that research-based prevention programs, especially in the area of reading, could significantly reduce the number of children identified as learning disabled and that empirical evidence amassed over several decades demanded the adoption of more effective and responsible identification procedures. Moreover, the authors asserted that the large numbers of LD students actually reflected the consequences of poor general education reading instruction due to

inadequate teacher skill sets and resultant underutilization of research-based instructional practices. The multi-tiered model of instruction, then, is a practical strategy for improving reading instruction in general education as well as an alternative option for identifying learning disabilities. Most research and practice to date has predominantly focused on reading, as this critical access skill permeates the entire school curriculum and also accounts for the main academic difficulty of the majority of students identified under the learning disabilities category.

Vaughn (2003) described a three-tier model for reading that provides more intense and explicit instruction as the at-risk student moves through the tiers. Differences among the tiers are characterized by the intensity of instruction, amount of time allotted for instruction, group size, and frequency of progress monitoring. Use of research-based instructional strategies is a critical aspect of each tier, and a fundamental outcome of the process is to distinguish insufficient instruction from disability (Fuchs & Fuchs, 2007). West Virginia's three-tier model as described in state special education regulations is largely based on Vaughn's conception of instructional tiers.

Tier 1: Primary prevention.

Tier 1 instruction is the core reading program designed to ensure that the majority of students acquire foundational reading skills in the early grades, typically kindergarten through grade three. The core program includes a research-based curriculum and instruction emphasizing the critical elements of beginning reading as documented by the National Reading Panel Report (2001). Five essential elements include phonemic awareness, phonics, fluency, vocabulary, and comprehension. Also emphasized for Tier 1 instruction is a 90-minute reading block, flexible instructional groupings based on benchmark assessments administered at least three times per year. Tier 1 instruction, provided by the general education teacher, is

differentiated to address the diverse needs of beginning readers and is preventative in nature through high quality instructional practices.

Successful implementation of RTI depends wholly on effective Tier 1 classroom instruction. Supportive structures and effective strategies of good general education reading instruction ground a successful RTI implementation and reduce the number of students who experience difficulties. Scruggs (2003) emphasized that an advantage of RTI is higher expectations for general education outcomes and noted that RTI practices are “likely to eliminate or greatly reduce ‘teaching disabilities’, that is, those supposed learning problems that are really the fault of ineffective instruction” (p. 3).

Greenwood, Kamps, Terry, and Linebarger (2004) compiled evidence of the effects of strategies shown to reduce reading problems through general education instruction. The authors cited Class Wide Peer Tutoring (CWPT) and peer-assisted learning strategies (PALS) as significantly improving student engagement during classroom instruction and accelerating academic performance on standardized achievement tests among low socioeconomic status (SES) students in grades one through four. CWPT practices include cooperative learning formats, explicit instruction, and multiple opportunities to learn important reading skills such as phonemic awareness, decoding, and comprehension strategies. Student-directed instructional practices as opposed to traditional teacher-directed instruction allow classroom teachers to provide higher levels of differentiated instruction. Students are engaged, support one another through learning routines that are explicitly taught and practiced to mastery, and actually read more within their small cooperative groups.

Greenwood, Kamps, Terry, and Linebarger (2004) also discussed the evidence base associated with Peer-Assisted Learning Strategies (PALS) and its strong effects on kindergarten

and first grade reading achievement. PALS procedures include the pairing of high-performing students with lower-performing students. Partners take turns assuming roles of tutor and tutee and use specific procedures for reading classroom texts. Summarization and predicting assigned text comprise the focus of the cooperative strategy. According to a more recent evaluation by the What Works Clearinghouse (WWC), a research initiative sponsored by the U.S. Department of Education's Institute of Education Sciences, PALS was found to have possible positive effects on alphabets, fluency, and comprehension but did not evidence effects on overall general reading achievement (WWC, 2007).

As RTI implementation becomes more prevalent and more sophisticated, the importance of evaluating the effectiveness of Tier 1 core academic and behavioral programs for all students comprises a main focus of the RTI research agenda (Kovaleski, 2007). Kovaleski noted the specific language included in IDEA 2004 that clearly sets a direction for evaluating student performance:

The child does not achieve adequately for the child's age or to meet state-approved grade-level standards in one or more of the following areas, when provided with learning experiences and instruction appropriate for the child's age or State-approved grade level standards... (§300.309[a][1]).

The concept of comparing students' achievement to grade-level performance standards brings a different perspective to the process of identifying disability and highlights an increased responsibility of general education teachers to ensure all students have evidence-based opportunities to learn at grade level. Although student classroom performance has always been a consideration in an eligibility determination, other metrics such as cognitive assessments and standardized achievement tests were central in making disability decisions. Poor classroom performance prompted the referral process and the investigation of intraindividual causes for learning difficulties as presumably measured by the IQ-achievement discrepancy model (Yell,

Shriner & Katsiyannis, 2006). However, the intent of the IDEA 2004 provision regarding adequate achievement unmistakably focuses on relative performance and requires evaluation procedures to explore and identify the discrepancy between actual student performance and performance expectations as defined by state standards. Which children and how many children are eligible for special education services will likely be subject to discussion and debate as RTI is scaled up.

A second important element of Tier 1 is the use of universal screening procedures that assist school personnel in identifying students who are at risk for reading difficulty. Universal screening measures should be quick and efficient assessments that reliably identify students as either meeting benchmarks or needing intervention to meet grade level goals. Davis, Lindo, and Compton (2007) discussed the importance of universal screening to accurately identify the pool of students at risk for developing reading disabilities and proposed four possible categories of screening outcomes: true positives, true negatives, false positives, and false negatives. Notably, false positives weaken the integrity of RTI models by unnecessarily stressing school intervention resources. False negatives are problematic, too, in that at-risk students are erroneously excluded from critical early intervention efforts.

When students do not adequately respond to Tier 1 instruction, they receive Tier 2 intervention aimed at correcting learning difficulties early. Decisions to provide more intense instruction to students who are below grade level expectations in reading skills are based on benchmark assessments. Tier 2 intervention is supplemental and additional instruction delivered in small group settings. The primary goal of Tier 2 intervention is to efficiently address skill deficits that impede grade level performance (Vaughn, 2003).

Tier 2: Secondary prevention.

Research in beginning reading has documented the efficacy of providing secondary interventions to improve long-term outcomes for most students with reading difficulties in the elementary grades, especially if those difficulties are identified and addressed early (Vaughn, Wanzek, Scammacca, Linan-Thompson & Woodruff, 2009). Improvements have been evidenced across the reading domains of phonemic awareness, phonics, fluency, vocabulary, and comprehension. Vaughn (2003) described Tier 2, or secondary prevention, as research-based instruction in one or more of the five essential components of reading provided in small groups for a minimum of 30 minutes per day beyond the recommended 90 minutes of core reading instruction. Tier 2 instruction is aligned to classroom curricula and aimed at closing gaps to prevent serious difficulties. More focused and strategic than Tier 1, Tier 2 instructional components include explicit, scaffolded instruction, multiple opportunities to practice skills, and timely corrective feedback. Students' progress toward specific reading goals is monitored two times per month so that intervention strategies can be adjusted if growth in achievement is not sufficient.

Tier 2 instruction is provided by the classroom teacher or other personnel such as reading specialists and special educators and is considered an opportunity within general education to help struggling learners strengthen important skill sets. A primary goal of Tier 2 intervention is to accelerate student growth since learning at an average rate will simply maintain the deficit (Vaughn, Denton & Fletcher, 2010). Students who make progress toward closing the gap between their reading levels and grade-level standards continue in Tier 2 until goals are met. Students who make insufficient progress after an adequate period of time, generally anywhere

from eight to 24 weeks, are provided Tier 3 intense intervention and may eventually be referred for special education.

Vaughn and Roberts (2007) asserted that secondary intervention must be specifically targeted to the needs of the learner and identified critical elements of effective instructional design. The researchers' guidelines for intervention content include phonemic awareness, phonics, spelling/writing, fluency, vocabulary, and comprehension. The extent to which each area is emphasized depends on a student's instructional level, and not all elements are appropriate for all children at any given time. Intervention intensity also distinguishes Tier 2 instruction and may be accomplished by adjusting both the frequency and duration of intervention. Schools select commercial programs or design customized curricula that include the following elements: appropriate grouping formats, three to five instructional sessions per week, intervention aligned with core reading instruction, corrective feedback to students, opportunities to practice essential beginning reading skills, and frequent assessment to document progress and adjust intervention.

Tier 2 is a critical and defining feature of the RTI model. Several decades of research in beginning reading documents the efficacy of providing explicit instruction, the defining characteristic of Tier 2 intervention, to students who struggle, especially in first through third grades when literacy skills are developing (Snow, Burns & Griffin, 1998). Hall (2002) described explicit instruction as systematic teaching with specific delivery and design procedures. The author noted two critical components of explicit instruction as the observable high levels of teacher-student interaction and the more discreet instructional design principles. Specific instructional delivery components include frequent student responses, appropriate pacing, adequate processing time, monitoring of responses, and feedback. Instructional design elements

include development of big ideas, use of conspicuous strategies, mediated scaffolding, strategic integration, judicious review, and primed background knowledge.

Important research findings related to the content of beginning reading instruction such as the critical importance of phonological awareness, rapid automatic naming ability, and accurate and fluent word recognition or decoding have greatly affected current understanding and practice (Torgesen, et al., 2001). These findings provide knowledge of important instructional approaches for intervening early, thereby reducing the prevalence of reading disabilities.

Key understandings about the nature of severe reading disability have also been highlighted in the reading research and clearly demonstrate the need for intensive, explicit, and systematic instruction in beginning reading skills such as phonics and fluency (Torgesen et al., 2001). Thus, the research provides starting points for identifying student needs and designing appropriate intervention to combat reading difficulties. The content and delivery of reading instruction are unambiguous in the research; ensuring teacher knowledge and practice of effective research-based strategies are the challenges facing schools and districts. Alternately, the aforementioned instructional approaches must be evaluated rigorously in consideration of the unique needs of individual students. New instructional practices are not necessarily effective for all students in every learning context, and attention to effectiveness through program evaluation is essential (Morris, 2004).

Wanzek and Vaughn (2007) observed that a significant challenge of RTI lies in the identifying and implementing of the most effective interventions. The researchers presented an extensive synthesis of evidence-based early reading interventions by analyzing 18 studies. Studies included in the analysis met the following criteria: reported in peer-reviewed journals, included students in kindergarten through grade three with learning disabilities in reading,

involved early literacy interventions provided for at least 100 sessions as part of school rather than outside tutoring, and addressed reading outcomes. Findings suggested the following regarding the nature and characteristics of effective intense intervention:

- Highest effects involved instruction in both phonics and text reading;
- Students who spent more time in intervention did not necessarily make greater achievement gains;
- One-to-one instruction appeared to be associated with greater gains than intervention provided in groups; and
- Interventions provided in kindergarten and beginning first grade were more effective than those provided in later grades.

Notably, two models of developing Tier 2 interventions guide RTI processes and procedures - problem solving and standard treatment protocol approaches. The models differ in both conceptual and technical aspects and are also often combined to meet the needs of districts' and schools' RTI initiatives (Fuchs, Fuchs, & Compton, 2004).

A problem-solving approach to intervention is employed by a student support or child study team. Educators analyze and discuss individual student assessment data to determine interventions matched to specific skill deficiencies (Stecker, Fuchs & Fuchs, 2008). Problem solving is primarily the work of general education teachers and relies on teacher use of assessment data to make instructional decisions. When classroom interventions are not successful, a collaborative team addresses the problem, making additional instructional recommendations, setting goals, monitoring progress, and, when appropriate, making referrals for special education evaluations. Collaboration among teachers is a critical component of the problem-solving model and includes input and consultation from Title 1 teachers and special

educators, especially during the phase when interventions are being modified. The problem-solving model is a dynamic, individualized, and inductive process for supporting at-risk students and has been used for several decades as both a prereferral intervention strategy as well as a method of identifying disability. In terms of its use as a special education eligibility model, problem-solving methods seek to identify and document the most effective interventions for the individual child and result in more appropriate referrals for evaluation (McNamara & Hollinger, 2003).

Three of the most frequently cited examples of large-scale problem-solving systems are Iowa's Heartland Area Education Agency (AEA), the Minneapolis Public School initiative that occurred in the early 1990s, and Pennsylvania's Instructional Support Team (IST) service delivery models initiated in the 1980s. The models have provided direction for implementing child-center problem solving within the context of RTI.

In the Heartland AEA model, problem solving involves identifying an objective or behavioral definition of a student's academic or behavior problem followed by implementation of systematic interventions (Grimes & Kurns, 2003). Iowa included intervention-based problem solving in its special education rules in 2000, which set forth five essential features of problem solving: 1) problems description; 2) data collection and analysis; 3) intervention design and implementation; 4) progress monitoring; and 5) intervention evaluation. Grimes and Kurns noted that Iowa's special education service delivery is enhanced by the problem-solving process in that it focuses on the particular strategies and interventions that promote student success.

Minnesota's eligibility criteria did not require the use of intelligence testing for learning disabilities and mental impairments until 1992. Prior to the change in eligibility standards, schools used curriculum-based measurement procedures for prereferral interventions and in

special education. Dissatisfied with the new regulations and in opposition to the use of cognitive assessments, the Minneapolis School System applied for and was granted a waiver and implemented a problem-solving approach for the identification of students with disabilities (Marston, Reschly, Lau, Muyskens, & Canter, 2003). The Minneapolis model includes the following steps that guide the identification of academic and behavioral problems and subsequent intervention to address them. Marston, Reschly, Lau, Muyskens and Canter (2003) outlined the steps as:

1. Describe the problem with specificity.
2. Generate and implement strategies for instructional intervention.
3. Monitor student progress and evaluate effectiveness of instruction.
4. Continue the cycle as necessary.

An independent evaluation of the Minneapolis problem-solving model was conducted in 1997 by Reschly and Starkweather (Marston, Reschly, Muyskens, Lau, & Canter, 2003). The researchers concluded that prereferral interventions using the problem-solving model were superior to traditionally developed intervention; students in need of special education were identified earlier than with traditional processes; and rates of disproportionate representation of African-American students were reduced. Results of the evaluation supported the district's decision to determine disabilities using the problem-solving model rather than the traditional approach focused on cognitive assessments.

A final problem-solving approach is exemplified in the Instructional Support Team structure developed in Pennsylvania as a prereferral intervention system. ISTs employ collaborative problem-solving processes similar to both the Heartland and Minneapolis models. One distinguishing aspect of the IST is the use of a support teacher who is tasked with assisting

the general education teacher in implementing interventions prior to a special education referral (Fuchs, Mock, Morgan & Young, 2003).

Carney and Stiefel (2008) studied the long-term outcomes of Pennsylvania's IST system. The researchers examined the number of elementary students referred for intervention support, student progress at each tier of intervention, and whether tiered support inhibited or delayed referral for special education. The research was conducted over 3.5 years and included 537 students identified as at-risk for academic and behavioral difficulties. Though significant inferential findings were precluded by a small sample size, the research yielded several important implications for RTI practice.

First, over one third of the students in the study were re-referred for Tier 2 intervention during the 3.5 years of the study. Of interest is that even though the students did not progress through the tiers and eventually qualified for special education services, they continued to receive levels of support to maintain their skills for several years. The researchers also documented that 59% of the students who received Tier 2 intervention were found to be somewhat successful but still in need of some level of support by the end of the study. The result raised the question of whether problem solving alone best addresses the needs of struggling learners. Finally, results of the study suggested that special education referrals were not inhibited or delayed because students received secondary interventions. Carney and Stiefel (2008) emphasized the need for further research to address effects of secondary interventions and how to meet the needs of students who need secondary intervention but do not qualify for special education services.

The second method for providing intervention aimed at closing skill gaps is the standard-treatment protocol approach. In a standard protocol approach, research-based interventions are

implemented to prevent and address academic deficiencies. Groups of students with similar academic problems are provided a scientifically validated program and, as noted by Christ, Burns, and Ysseldyke (2005), a key characteristic of the approach is that the intervention protocols are implemented with relatively little analysis of the deficit skill. A main benefit of the approach is that teachers are trained to implement one as opposed to multiple interventions and are not tasked with individual student decision-making, as all students participate in the selected intervention. Examples of standard treatment protocols include programs such as Auditory Discrimination in Depth, Embedded Phonics, and Reading Recovery (Carney & Stiefel, 2008). Fuchs, Fuchs, and Compton (2004) noted that standard treatment protocol approaches generally provided greater levels of intense intervention than problem-solving methods, but also produced more frequent false negatives, and students who benefit from Tier 2 but later require more intense support.

At the school level a standard treatment protocol approach might include the use of specific reading programs. Marchand-Martella, Ruby, and Martella (2007) investigated the use of *Reading Mastery Plus* for kindergarten through third grade students who struggled in the five components of reading. The program was used across Tiers 1, 2, and 3. Results of the study suggested the use of the same instructional methodology was efficacious for struggling readers.

However, more recently both intervention approaches comprise fundamental components of a multi-tiered service delivery model (Kovaleski, 2007). Gresham, VanDerHeyden, and Witt (2005) maintained that a problem-solving approach to RTI requires great levels of teacher responsibility to ensure the “precision and intensity of intervention efforts” (p. 19). The authors also noted that standard treatment protocols provide for higher levels of control and fidelity of the instructional content and delivery methods through highly

structured and scripted programs. With the advantages of both approaches in mind, combination methods may prove the most efficacious and efficient in actual school practice.

Tier 3: Tertiary prevention.

Tier 3, or the tertiary level of intervention, is the point at which RTI models diverge. Some RTI models distinguish Tier 3 as special education services whereas others include Tier 3 intense intervention as the last intervention opportunity within general education before a disability determination and eligibility for special education occurs. Whether Tier 3 is recognized as special education services or not, the instruction provided is targeted, intense, and child-centered.

Vaughn (2003) described Tier 3 intervention as “intensive, strategic, supplemental and often considerably longer in duration than the 10 to 20 weeks of supplemental instruction provided in Tier Two” (p. 2). Students who receive Tier 3 intervention show minimal or limited response to intervention instruction at Tier 2. Tier 3 instruction is characterized by smaller group size, typically one teacher to no more than three students, more explicit instructional techniques, and a duration of months or even longer. Instruction at this layer of the model is comprehensive in nature in that students may exhibit skills deficiencies across several or even all of the essential components of beginning reading. Students’ progress toward specific goals is monitored frequently, at least two times per month.

An important question in both the RTI literature and practice pertains to the number of tiers needed to effectively prevent learning problems and also identify learning disabilities. Reschly (2005) elaborated on the universal acceptance of Tier 1 as general education and the final tier as special education. He pointed out, however, that the number of layers between is subject to debate. Proponents of more tiers argue that both small group and individualized

interventions should be provided prior to determining eligibility for special education services. Reschly argued for a compromise wherein Tiers 1 and 2 are viewed as prevention and Tier 3 is regarded as a combination of prevention efforts and disability determination and involving an intense problem-solving stage.

Marston (2005) summarized three key research studies conducted by Sharon Vaughn, Roland O'Connor, and David Tilly. The author examined the studies for trends pertaining to the number of tiers necessary for acceptable prevention outcomes as well as acceptable patterns of LD identification. Regarding Tier 1 effectiveness for reducing reading difficulties, results indicated low to moderate effects for Tier 1, moderate effects for Tier 2, and higher effects for Tier 3 than for either Tier 1 or Tier 2. In sum, 92% of all the students across the three studies responded to either Tier 1, 2, or 3 interventions. Data related to identifying learning disabilities must be considered with some caution since the percentage of students identified for special education that represented the total population could not be calculated. However, Marston noted that in one study seven out of 10 Tier 3 students qualified for special education.

Even though tiered intervention certainly has an impressive evidence base in terms of reducing reading failure in the early grades, it should not be presumed to be a panacea. Despite the provision of research-based, explicit reading intervention, there remain some children who continue to struggle. These students are referred to as low responders or treatment resisters who show some response to good instruction yet perform at such low levels they are deemed unlikely to attain grade-level skills (Vaughn, et al., 2009).

Vaughn et al. (2009) summarized a body of research that addressed the differences among students' responses to intervention. They identified the following areas as possible markers for differentiating low response: phonological processing, rapid-naming ability, and

verbal ability. The researchers also examined important intervention variables that accelerated low responders. These include increased intervention intensity or changes in the focus of intervention such as emphasis on comprehension strategies instead of word level skills. In their own study, Vaughn et al. specifically examined the effects of intensive intervention on first grade low responders. Results indicated that by the end of second grade, when provided tertiary intervention in word reading and text comprehension, low responders made significant progress. However, the study raised two important questions that remain to be addressed in the literature. First, at what point within the tiered process should special education be considered? Next, what is the nature of the most effective specialized instruction for low responders?

This group of studies provides important insight into the level and nature of intervention needed to address the learning of children with persistent and difficult to teach reading difficulties and contributes to better understanding of disability. If low responders are regarded as students with learning disabilities for whom specially designed instruction will be provided through IEPs, more research is needed to identify important features of effective instruction for such students.

More recently, Vaughn, Denton, and Fletcher (2010) examined the characteristics of more intensive interventions and described attributes and corresponding effects. The researchers defined intensity in terms of group size, length of each intervention session, duration of the intervention, knowledge and expertise of the instructor, and how instructional time is used. Student grade level and severity of difficulties dictated the level of intensity needed to accelerate learning. Their review of relevant research suggested that the following instructional practices intensify intervention for younger students with serious reading difficulties: 1) provide intervention in small groups; 2) for extended daily sessions; 3) over an extended period of time;

and 4) use explicit, systematic word-level instruction, high levels of student participation/engagement, and practice reading connected text.

Progress Monitoring: Using Curriculum-based Measurement to Inform Instruction

Frequent progress monitoring for the purpose of measuring student growth attributed to intervention comprises an essential component of RTI. Effective evaluation of a student's response to intervention depends on a reliable measurement system upon which conclusions about level of learning and learning growth over time can be made. As schools scale up RTI practices, progress monitoring and valid measurement tools become critical implementation factors. Stecker, Lembke, and Foegen (2008) suggested that for progress monitoring practices to become valued and accepted by teachers, assessment tools must have the following characteristics: 1) sensitivity to changes in student learning; 2) instructional relevance; and 3) efficiency in terms of administration time.

Curriculum-based measurement (CBM) is a form of progress monitoring that has been supported in the research literature for many years. The methodology was developed in the 1970s at the University of Minnesota Institute for Research on Learning Disabilities by Deno and Mirkin to evaluate an instructional approach used in special education and known as Data-Based Program Modification (DBPM) (Deno, 1992). Deno and Mirkin developed a set of standardized, technically adequate measurement procedures that have been used as screening tools for at-risk students, prereferral evaluation, placement in special education programs, and formative evaluation (Deno, 2003).

Today, CBM is widely used as an integral progress monitoring tool for decision-making purposes within each layer of the multi-tiered support model of RTI. Data obtained from repeated measures of targeted intervention over time provide verification of student achievement

gains or lack thereof. CBM data are graphed and used to document change in performance over time. Teachers use the graphical representation of the learning trends to modify instruction and ensure students are benefitting from a particular intervention. The first conclusion drawn when progress is not evident is that the intervention was not appropriate or sufficient and an instructional change is needed. CBM assists teachers in making important links between instructional decisions and student performance data (Stecker & Fuchs, 2000; Tindal, 1992). Shinn and Habedank (1992) also advocated for the use of CBM data for the purpose of making special education eligibility decisions with a focus on the discrepancy between the student's performance and that of typical peers. The authors asserted that CBM in concert with other assessment information constituted a viable and defensible eligibility decision-making process.

Deno (2003) reviewed the characteristics of CBM to include the following: 1) technical adequacy; 2) standard measurement tasks; 3) prescriptive stimulus materials (e.g., assessment materials derived from local instructional materials); 4) specific administration and scoring procedures; 5) systematic performance sampling through direct observation procedures; 6) multiple equivalent samples to measure performance on the same task over time; 7) time efficient with short (e.g., 1-3 minutes in duration) assessments; and 8) easy to teach to test administrators. These features of CBM contribute to reliable and valid progress monitoring within the context of RTI and complement Stecker, Lembke, and Foegen's (2008) suggestions for a useful progress monitoring tool that meets the needs of teachers and students.

CBM procedures provide practitioners systematic methods for sampling the reading curriculum. Short probes that measure important reading skills include letter-sound fluency, word identification fluency, passage reading fluency, and maze fluency. The Dynamic Indicators of Basic Early Literacy Skills (DIBELS) is one of the most widely used curriculum-based

measurement tools in the area of reading. Although DIBELS was developed in the late 1980s at the University of Oregon, the measures gained substantial national attention through NCLB's Reading First initiative. DIBELS is a set of procedures designed to assess the development of early literacy skills in kindergarten through grade six (Center on Teaching and Learning, 2010). The measures are efficient and allow teachers to readily identify students at risk for reading problems when used as a universal screener and also serve as a progress monitoring tool as intervention is provided.

Issues and Concerns with RTI as an LD Identification Approach

Even though there is relatively little disagreement among researchers and practitioners that RTI is a valid and ethical approach to reducing reading failure by providing layers of support, there remain questions regarding its utility as a method for identifying learning disabilities (Kavale & Spaulding, 2008; Mastropieri & Scruggs, 2005). Reynolds and Shaywitz (2009) questioned the feasibility of RTI as a valid and reliable scientific method of LD identification, citing insufficient research support, a plethora of school and district-based implementation issues, substantial scaling up concerns related to treatment fidelity, and vague definitions of responsiveness to intervention. The authors also argued that RTI is another type of discrepancy model that defines disability as a discrepancy between state standards and student achievement of standards. They questioned the metrics for both evaluating response to intervention and determining group achievement norms to which an individual student is compared. Appreciably, Reynolds and Shaywitz took issue with an assumption within RTI that cognitive ability is irrelevant to the identification of learning disabilities, noting an incomplete and often contradictory literature base.

Barnes and Harlacher (2008) also raised questions about RTI in terms of applicability across states, districts, and schools. The authors asserted that RTI models have been presented and implemented with protocols of rigid and inflexible procedures rather than as a set of guiding principles to address the unique needs of student populations. They emphasized the importance of distinguishing the features of RTI that vary based on need and the unchanging underlying tenets that exemplify its essence.

Undoubtedly, all the information needed to rely on RTI as a method of school improvement and a means by which learning disabilities are identified has not yet emerged. Fuchs and Deshler (2007) urged researchers and practitioners to continue to ask important questions that will help refine technical aspects and classroom practice. The authors posed the following questions for consideration as RTI is scaled up:

- What conditions support successful implementation of RTI?
- What is the nature of Tier 1 instruction?
- What is problem solving and does it promote achievement among children with severe learning problems?
- Who are responders and nonresponders?
- Is there a need for formal testing by multidisciplinary teams? (pp. 131-134)

In February 2010, the Learning Disabilities Association of America (LDA) issued a white paper proposing a mismatch between the definitions of a learning disability as stated in IDEA 2004 and the eligibility criteria outlined in the subsequent 2006 Regulations (LDA, 2010). The LDA charged that the definition supports the cognitive features of a learning disability, but the Regulations emphasize the child's attainment of grade level standards without consideration of intellectual ability, specifically patterns of strengths and weaknesses. This perspective supports traditional notions of the etiology of learning disabilities that are not congruent with current RTI practices. The LDA is the largest non-profit volunteer organization aimed at supporting and advocating for individuals with learning disabilities and its position on the operational definition

of SLD may hold significant influence among a large membership of practitioners, parents, and other stakeholders.

Expectedly, the LDA's criticism of the focus on the achievement of grade-level standards rather than the intellectual ability aspect of learning disabilities did not go unnoticed. In December 2010, a group of prominent researchers and scholars responded to the LDA's position on SLD identification (Consortium on Evidence-Based Interventions, 2010). The group asserted that the professional literature base includes a sufficient amount of empirical evidence that does not support the advancement of a cognitive-based approach of LD identification but, instead, confirms the instructionally-based criteria embedded in the RTI service delivery model. The Consortium faulted the LDA for use of a biased expert panel without disclosure as well as the lack of a refereed research base. Important opinions expressed in the Consortium's response to the LDA include recognition that the identification of learning disabilities requires consideration of multiple criteria; there is not statutory requirement to comply with the definition of SLD; there exists a continuum of severity among students with learning difficulties and there are no unique cognitive patterns associated with good or poor responders; and an RTI model is a viable alternative to the IQ-achievement discrepancy model of identification.

Undoubtedly, the discussions stimulated by the aforementioned groups will continue as the RTI research and practice agenda moves forward. Likewise, the nature of special education, and therefore, the roles and responsibilities of special education teachers will also be considered.

Special Educators' Roles and Responsibilities within the RTI Framework

Knowledge, skills, and dispositions of special education teachers have always been reflective of the needs of individual children and youth, yet also responsive to the relevant educational and political contexts of the times. Preferences for where to deliver special

education services, that is the least restrictive environment concept, have moved from predominantly separate classes in the early years of special education to the more inclusive programming options selected for a majority of students today. Regardless of which service delivery model is deemed most appropriate or favored, the need for specialized skill sets for special educators has remained. Baker and Zigmond (1995) suggested that special educator preparation programs should focus on both the skills needed for inclusive programming as well as “diagnostic and remedial strategies, monitoring progress, and adjusting instruction for individuals and small groups” (p. 178).

As early as 1923, the newly established Council for Exceptional Children (CEC) developed and adopted professional standards for ethics and practice (Reynolds, 1966). As the field of special education expanded, so did the need for preservice preparation programs that addressed the unique and specialized services provided by special educators. As colleges and universities embraced the task of developing quality special education preparation programs, they turned to CEC’s standards as an important component of program accreditation. Notably, the National Council for Accreditation of Teacher Education (NCATE) utilizes CEC’s professional standards describing the knowledge and skills necessary for special education teachers in their official approval process of pre-service preparation programs.

For decades, CEC standards have guided the development of special education teacher preparation programs. The performance-based standards represent the research-based knowledge, skill sets, and dispositions central to the special education profession and provide a framework for pre-service teacher preparation through professional development for practicing special educators (Council for Exceptional Children, 2009).

CEC's ethics, standards, and guidelines publication, *What Every Special Educator Must Know* (2009), provides the structure for ensuring that special education professionals acquire and maintain necessary qualifications and competencies related to providing quality special education. Broadly, the standards address pedagogy and core academic subject matter. Specific standards focus on learner characteristics and differences, instructional strategies, learning environments, language, instructional planning, assessment, and collaboration. Additional standards focus on the knowledge and skill sets needed to address specific exceptional learning needs (e.g., teachers of individuals with learning disabilities, autism, gifts, and talents); advanced standards include leadership, research, program evaluation, and professional development strands.

RTI has placed a multiplicity of demands on general education and requires a responsive, research-based, and data driven general education learning environment. While both general and special education teachers find themselves in new roles with often challenging responsibilities for struggling learners, special education teachers are already situated in many ways to fulfill their emerging roles within an RTI system. As general and special educators assume higher levels of collective responsibility for the education of all students, the core competencies set forth in the CEC professional standards provide valuable and pragmatic guidance to shape effective instruction for all students who need additional academic or behavioral supports.

The tiered instructional model that supports struggling learners and is used to identify students with learning disabilities provides impetus for an examination of the roles and responsibilities of the special educator within a new general education service delivery model. Special education teachers are to some extent positioned to support and enhance the RTI process with their specialized skill sets in the areas of assessment, problem solving, and instruction of at-

risk students. The degree to which special educators are prepared for their roles and have the resources to fulfill them is an important area of study (Hoover & Patton, 2008).

Since the adoption of more inclusive programming options for students with disabilities in the beginning in the 1980s, special educators have provided services to students with IEPs in general education settings. With the advent of RTI, special educators are also often asked and are able to offer their knowledge and skills to students not yet identified for special education in efforts to prevent disability or ameliorate their impact through early intervention practices.

Although defining teacher roles is dependent on understanding and fully operationalizing RTI (Mastropieri and Scruggs, 2005), the conversation about the value a special educator adds to RTI has begun.

Importantly, the Council for Exceptional Children published a position paper in 2007, *Position on Response to Intervention (RTI): The Unique Role of Special Education and Special Educators*. CEC acknowledged the importance of RTI in early intervention and identification of learning disabilities, but also strongly articulated the need for identifying and clarifying the roles and responsibilities of the special educator within the RTI process. The paper recognized general educators as the primary providers of intervention to at-risk students in Tier 1 and Tier 2 with special educators assuming expanded roles at Tier 3.

Hoover and Patton (2008), in an endeavor to clarify and operationalize the roles and responsibilities of special educators in a multi-tiered support system, proposed a framework for organizing how special education teachers can and should work within the context of RTI. The authors compared the multi-tiered system of support to expanded parameters of conventional prereferral interventions. They envisioned special educators in key roles, working throughout the tiers to lend their expertise to all students as appropriate. As such, special education teachers

have both vested interests as well as pertinent skill sets to offer within the RTI initiative. Hoover and Patton categorized the emerging roles of special educators into the following five dimensions: 1) data-driven decision makers; 2) implementers of evidence-based interventions; 3) implementers of differentiated instruction; 4) implementers of social and behavioral supports; and 5) collaborators. This framework provides a basis for defining and describing how special educators support and enhance the RTI initiative.

As data-driven decision makers, special educators use formal and informal assessment data to monitor student progress and make important educational decisions. Special educators use their skill sets to help determine students' need for differentiated general classroom instruction, more intense or different interventions, and for some students, evaluation for special education services.

Special educators are charged with implementing evidence-based interventions designed to scaffold and accelerate skill acquisition for struggling learners. Of particular merit are explicit instructional strategies that have demonstrated improved educational outcomes for students at-risk for educational failure.

The ability to support general education teachers in the design and delivery of differentiated instruction is also essential. An efficacious multi-tiered framework depends on strong Tier 1 instruction that is characterized by differentiated instruction that accommodates the needs of individual learners in the general classroom setting.

As implementers of social and behavioral supports, special educators evaluate classroom environments and identify appropriate behavioral supports. Importantly, special educators assist general education teachers in modifying and accommodating the general curriculum and environment for students with behavioral challenges.

Finally, the role of collaborator is crucial in ensuring that struggling students' needs are met across all school settings. Special educators communicate effectively and regularly with general education teachers and parents so students benefit from the multi-tiered system. Special educators help teachers and parents understand the unique needs of their students and how evidence-based strategies enhance learning and increase student achievement.

Basis for Effective Intervention Practices

There is a robust literature base of evidence-based, effective intervention practices, especially for use with students with reading problems. The literature is extensive, well-defined, and includes evidence to support both broad components of effective intervention as well as specific instructional strategies with often impressive effect sizes (Burns, Christ, Boice & Szadokierski, 2010). Research derived from both the fields of reading and learning disabilities comprises the well-documented literature base and provides an extensive foundation for the development and delivery of effective interventions within the context of RTI as well as in special education. What and how to teach to improve the reading skills of struggling students is clearly evidenced in the reading research amassed over the last several decades. Unfortunately, in examining the prevalence of evidence-based instructional practices in special education, Burns and Ysseldyke (2009) concluded that the extensive literature base on effective instruction for students with disabilities is not necessarily utilized in classroom practice.

Even though for decades researchers and practitioners have sought to understand the etiology of reading difficulties and solutions to ameliorate them, it is the work of the National Reading Panel (NRP) published in 2000 that commenced earnest and widespread national attention to improving reading achievement. The panel, convened in 1998 at the request of Congress, built upon and expanded earlier efforts of the National Research Council (NRC)

Committee on Preventing Reading Difficulties in Young Children (Snow, Burns, & Griffin, 1998). The panel included researchers, higher education representatives, reading teachers, administrators, and parents. The NRP was directed to review the existing reading research applicable to kindergarten through grade three. The resulting report, *Teaching Children to Read*, provided a meta-analysis of research on essential reading areas of phonemic awareness, phonics, fluency, vocabulary, and comprehension. The report emphasized the aforementioned critical areas of reading development that should be the focus of elementary reading instruction with the goal of preventing reading problems through early intervention and emphasis on the research-based conditions that promote reading acquisition. The report also specifically addressed students considered as reading-disabled and included research-based recommendations for improving their reading skills. Subsequently, in 2001, the Elementary and Secondary Education Act (ESEA) was reauthorized as No Child Left Behind and included significant regulations, namely the Reading First initiative aimed at closing achievement gaps for disadvantaged students that thrust early reading instruction to the forefront of the national educational agenda. The NRP's findings follow, as presented by the International Reading Association (2002) relevant to at-risk readers across the five components of reading.

Phonemic awareness skills instruction resulted in the largest gains in reading for at-risk students and transferred to reading across all conditions and characteristics studied. The findings also indicated that systematic phonics instruction is significantly more effective than non-phonics in preventing reading difficulties, especially with at-risk beginning readers and disabled readers. Positive effects of fluency instruction were found for both good and poor readers. Instruction from teachers outweighed guidance from peers and parents. Several key vocabulary strategies were determined essential and include: keyword method, incidental learning, repeated

exposures, preteaching vocabulary, restructuring reading materials, and the context method.

Finally, the NRP findings supported the following text comprehension strategies: comprehension monitoring, cooperative learning, graphic organizers, story structure, question answering, question generation, summarization, and multiple strategies use in natural contexts (NRP, 2002).

With the emergence of the three-tier reading model and corresponding RTI processes, research-based reading curricula and practices are critical components of general education Tier 1 reading instruction. Moreover, Denton, Vaughn, and Fletcher (2003) noted the current research base aptly addresses not only how typical children learn to read, but also how struggling readers improve their achievement through carefully designed interventions. Understandably, it is imperative that reading specialists and other teachers who deliver intervention to children who need more than core reading instruction are aware of the features of research-based intervention and incorporate them into the development and delivery of reading intervention.

Swanson (1999) synthesized three decades of intervention literature with a meta-analysis of studies that focused on word recognition and reading comprehension. Results suggested that an instructional approach combining strategy and direct instruction positively influences reading comprehension and that direct instruction improves word recognition.

In 2001, Torgesen et al. investigated the effects of two instructional approaches designed to accelerate reading growth of children with severe reading difficulties. The study compared and contrasted two explicit and systematic word-level reading interventions that differed in the amount of time devoted to various instructional activities. Notably, both instructional methods included principles of explicit instruction in phonemic awareness, phonemic decoding, and sight word recognition. Both methods also incorporated systematic sequencing of skills, scaffolded error-correction routines, and multiple and extensive opportunities for practice. Results of the

study indicated similar and large reading gains among both groups of students that were attributed to the use of explicit instruction principles in the design of the interventions.

Denton, Vaughn, and Fletcher (2003) addressed research-validated practices in consideration of the current response to intervention model and summarized findings from major consensus reports including the National Reading Panel (2000), the Rand Reading Study Group (2002), and the work of Snow, Burns, and Griffin (1998). Importantly, a convergence of evidence indicated that teachers must modify or differentiate the nature and intensity of instruction to meet the unique needs of struggling students. Paired with differentiated instruction is systematic, explicit instruction for low achieving readers that is characterized by teacher modeling of skills and concepts.

One consistent concept within the effective intervention literature is explicit instruction in the same essential reading components taught in the general classroom (Foorman, Carlson & Santi, 2007; McCardle & Chhabra, 2004). Although various definitions exist, the term is generally interpreted to mean purposeful, specific instruction designed to scaffold student acquisition of skills. Teachers who use explicit instructional techniques make few assumptions about student skills and knowledge and have little confidence that at-risk or struggling readers will learn important reading skills incidentally.

Hall (2002) defined explicit instruction as “a systematic instructional approach that includes sets of delivery and design procedures derived from effective schools research merged with behavior analysis” (p. 1). It incorporates both instructional delivery and design components. Instructional design features include big ideas, conspicuous strategies, mediated scaffolding, strategic integration, judicious review, and primed background knowledge. Instructional delivery features include requiring frequent student response, providing appropriate

instructional pacing, allowing for adequate processing time, monitoring responses, and providing corrective feedback.

Rupley, Blair, and Nichols (2009) examined the role of direct and explicit reading instruction for struggling readers as it relates to facilitating skill acquisition in each of the five components of reading. Essential teacher practices included explicit explanations or elaborations of skills to be learned, modeling or demonstrating how to use a skill or strategy (e.g., talk-alouds, think-alouds), and meaningful guided practice or mediated instruction. The authors summarized the instructional sequence employed during explicit instruction as follows: 1) review and check previous work; 2) present new material; 3) provide guided practice; 4) provide feedback and corrections; 5) provide independent practice; and 6) provide weekly and monthly reviews.

Rupley, Blair, and Nichols (2009) also emphasized the significance of scaffolding or supporting learning to help students bridge what they know and are able to do with intended instructional goals. The concept of scaffolding encompasses both general supports provided through the aforementioned components of the instructional sequence as well as the teaching of specific cognitive strategies. Likewise, the authors noted that providing opportunities for students to apply reading skills and strategies comprise another essential aspect of explicit instruction and relates directly to the effective use of assessment data. With careful progress monitoring, teachers can design appropriate practice activities for struggling readers, especially when the students' instructional reading levels are considered when selecting materials.

Finally, Rupley, Blair, and Nichols (2009) discussed the importance of incorporating academic engaged time into the instruction for struggling readers. Academic engaged time refers to the actual amount of time students are actively involved in a specific learning task. When

employed with fidelity, explicit instruction techniques promote active student engagement as well as increased time on task.

Summary

In summary, there is a profusion of knowledge regarding specific research-based instructional practices with high probability of improved learning outcomes for struggling learners, especially in the content area of reading. Decades of research in both learning disabilities and reading have established a broad and vital foundation for the provision of intentional instruction aimed at ensuring that all children, including those who struggle, gain important reading skills as early as possible. Moreover, research has provided important information relevant to ameliorating the effects of learning problems through the use of specific principles and methods of explicit instruction. The RTI initiative brings both a rich opportunity and a moral imperative for use of valid and effective instructional practices to help teachers prevent disabilities and intervene early. This area of research will continue to be of interest and value as schools, and special education teachers in particular, refine and assess the fidelity of their RTI practices and work to improve intervention outcomes for at-risk students through tiered instruction. Importantly, special education teachers' skill sets around the development and delivery of explicit instruction position them to play key roles as both consultants and interventionists within the RTI system.

CHAPTER THREE: RESEARCH METHODS

Methodology

The primary purpose of the study was to develop a profile of West Virginia special education teachers' roles and responsibilities within the RTI process. Specifically, this research examined the nature and scope of elementary special education teachers' work with at-risk students not yet eligible for special education services but receiving instructional support through a multi-tiered support system. A secondary intent of the study was to validate components of Hoover and Patton's (2008) framework of special educators' skill sets and knowledge.

This chapter describes the research design employed, the population studied, instrument development and validation, data collection methods, and statistical methods of data analyses used in the study.

Research Design

A cross-sectional descriptive research design was employed to obtain data representative of the roles special education teachers fill and tasks they complete within their schools' RTI models. The design was selected to allow the researcher to collect data from a large number of West Virginia elementary special education teachers. A descriptive research design is aimed at observing and describing a particular behavior, or set of behaviors, to understand a phenomenon and may use quantitative, qualitative, or mixed data collection (Fink, 2003). Descriptive research explains existing variables and the relationships that exist among them (Johnson & Christensen, 2008). In cross-sectional research, data are collected during a single point in time over a relatively short time period (Johnson & Christensen, 2008).

Hoover and Patton (2008) proposed a framework of skill sets and knowledge for which special education teachers may be uniquely qualified to implement within the context of RTI. Accordingly, this study examined special education teachers' roles and responsibilities relevant to: 1) data-driven decision making; 2) implementation of differentiated instruction; 3) implementation of evidence-based interventions; and 4) collaboration with general education teachers. Since at the time the study was conducted, West Virginia's RTI implementation as required by state special education policy did not specifically address the provision of social and behavioral supports within an RTI framework, the research design did not incorporate the behavioral aspects of Hoover and Patton's framework.

Population

The population for this study was special education teachers employed in public elementary school settings in West Virginia during the 2010-2011 school year. According to the West Virginia Education Information System (WVEIS), approximately 1,500 special educators served students with disabilities in kindergarten through grade five across West Virginia's 55 county school systems in 2010-2011. For the purposes of this study, the elementary level was defined as a school that includes grade levels of kindergarten through grade five and the intent of the study was to survey the total population.

Instrumentation

Development

This study employed a researcher-developed instrument entitled Special Educators' RTI Inventory (SERTII) for data collection (see Appendix A). The survey was based on a conceptual framework advanced by Hoover and Patton (2008) that proposed broad categories of roles and more specific tasks for which special education teachers should be proficient within the context

of a multi-tiered system of support. The SERTII was developed around specific elements of the framework including data-driven decision-making, implementation of differentiated instruction, evidence-based intervention, and collaboration with general educators. It also included items to assess special educators' perceptions about their roles within RTI. Elementary level special education teachers provided self-report responses to items that queried a variety of tasks describing the nature and extent of their participation in their school's RTI process across the domains of assessment and instruction, decision making, and collaboration. Survey questions addressed specific skill sets commonly used by special educators with students at risk for academic failure and who are not yet eligible for special education services.

The SERTII included four sections organized around the following domains: 1) teacher demographic data; 2) assessment, instruction, decision making, and collaboration activities associated with Tier 1 core instruction; 3) assessment, instruction, decision making, and collaboration activities associated with Tier 2 supplemental intervention; and 4) assessment, instruction, decision making, and collaboration activities associated with Tier 3 intense intervention.

Section 1 contained seven demographic questions. The first question asked respondents to indicate through yes/no responses if they participated in their school's RTI process. This information was used to determine whether a particular respondent completed the rest of the survey, as remaining questions addressed only teachers who participated in their schools' RTI initiatives. Respondents who did not participate in the RTI process were asked to mark a checklist containing possible reasons for their non-participation. Two questions addressed respondents' total years experience teaching special education and the type of certification held. Three additional questions asked teachers who participated in the RTI process to use numerical

responses to describe the number of students on their current special education caseloads, the numbers of high and low incidence disability categories represented within their caseloads, and the number of students on their caseloads with special education services delivered in general education full-time, general education part-time, and separate class placements.

Section 2 included 11 items designed to ascertain special education teachers' roles and responsibilities for assessment, instruction, decision making, and collaboration within Tier 1 core instruction relevant to at-risk students. Questions requiring yes/no responses pertained to participation in universal screening, data analysis, differentiation of core instruction, and consultation/collaboration with general education teachers regarding at-risk students. Teachers responded to questions addressing the amount of time per month spent analyzing and discussing student data with general education teachers. Another question addressed the frequency of differentiating instruction for students in general education settings. Respondents also answered a question regarding the amount of time spent discussing at-risk students' needs since the implementation of RTI. A yes/no question related to teachers' involvement in decisions to move students to Tier 2 was also included. Finally, special education teachers described the frequency of general education colleagues' requests for how to support or instruct at-risk students.

Section 3 contained 10 questions addressing teachers' roles in Tier 2 supplemental intervention for at-risk students. Questions allowed respondents to characterize their participation in the RTI processes of diagnostic assessment, progress monitoring, graphing and organizing data, amount of Tier 2 intervention provided, time spent planning for Tier 2, time spent consulting with general education teachers, and involvement in decisions to move students from Tier 2 to Tier 3. Respondents were asked to indicate the extent to which they used fundamental principles of explicit instruction in Tier 2 intervention. Explicit instruction

strategies included: intentional review of previously taught skills; modeling new skills to be learned; guided practice of newly taught skills; examples and non-examples of new skills or strategies; immediate affirmative and corrective feedback; and distributed and cumulative practice.

Section 4 included 13 items related to special educators' roles and responsibilities for Tier 3 Intense Intervention. Items addressed analysis of progress monitoring data, decision making related to referral for special education evaluation, amount of Tier 3 provided, frequency of consultation with general education teachers, use of explicit instructional strategies for intervention, preparedness to provide tiered intervention to at-risk students, and specific administrative or instructional supports needed. Yes/no responses were used to describe participation in progress monitoring data meetings, membership in decision making teams for special education referrals, and whether both at-risk and students with IEPs were instructed in Tier 3 intervention sessions. Numerical responses were collected regarding time spent per week providing Tier 3 intervention. The extent of Tier 3 planning and documentation was also assessed. Frequency of consultation with general education teachers regarding students receiving Tier 3 intervention was described. The same principles of explicit instruction used in Section 3 were applied again with the same descriptors of frequency of use.

A question aimed at how teachers perceived their roles and responsibilities within the RTI system asked respondents to describe RTI as either placing too much responsibility on special educators, expanding but enhancing roles and responsibilities, or having no impact on roles and responsibilities of special educators. Respondents were asked to note potential administrative or instructional supports needed to enhance their roles and responsibilities by marking a checklist that also included an option for additional items.

Finally, two open-ended questions designed to explore primarily qualitative phenomena invited respondents to express their opinions of benefits and challenges of RTI. Specifically, teachers were asked to describe the most beneficial and challenging aspects of RTI from their perspectives as special educators. These data were coded and analyzed qualitatively using emergent category analysis (Patton, 2002).

Validation

Content validity refers to the degree to which an instrument measures its intended constructs or domains of interest (Johnson & Christensen, 2008). In addressing content validity, researchers seek to assess whether the items represent possible items (Creswell & Clark, 2011) as well as the formatting, wording, administration, and scoring of the survey (Johnson & Christensen, 2008).

The SERTII was reviewed by a panel of experts to establish content validity. Panel members who agreed to review the SERTII included three West Virginia educators with knowledge and expertise in the RTI process (see Appendix B). The individuals included a district level special education director, a district level special education coordinator, and an elementary special education teacher. Each panel member had participated in the various phases of planning, developing, and implementing the RTI process in their schools and/or districts.

Expert panel members were provided copies of the survey instrument and a researcher-developed matrix that aligned the survey questions to each of the research questions (see Appendix C). The four sections of the survey were reviewed and each survey item was examined for clarity, fidelity to West Virginia's RTI model, and relevance to the research questions. Panel members were asked to provide feedback via email. One follow-up telephone discussion was conducted to clarify email feedback from one expert panel member. Overall,

panel members concluded that the SERTII content, length, and language were clear and aligned with Hoover & Patton's (2008) framework and the research questions. Some minor revisions were made to terms used in describing tiered instruction and decision-making teams.

After obtaining permission to conduct the study from the Marshall University Institutional Review Board (IRB), a pilot study was conducted to validate the Special Educator Response to Intervention Inventory for assessing the characteristics and extent of teachers' participation in their schools' RTI process (see Appendix D). Participants for the pilot study consisted of a convenience sample of five West Virginia elementary level special educators. Pilot participants were provided a paper/pencil version of the survey and asked to make suggestions related to clarity, commonly understood language, and formatting. Pilot study participant recommendations were limited to minor word changes and were used to revise the Special Educator Response to Intervention Inventory.

Data Collection Procedures

Following validation of the instrument, an email was sent to West Virginia principals, whose schools included kindergarten through grade five, explaining the purpose of the study and stating that a package of surveys would be mailed to them for distribution to their special education teachers (see Appendix E). The package of surveys sent to each school during the week of April 25, 2011, included a cover letter for the principal (see Appendix F) that requested him/her to disseminate surveys to all special education teachers in the school. Each identified special education teacher received an Anonymous Survey Consent letter (see Appendix G) and a pre-addressed, postage-paid envelope within which to return the survey directly to the researcher. A follow-up email (see Appendix H) was sent to principals on May 11, 2011, reminding them to

distribute surveys to their special education teachers. A final email was sent to principals on June 5, 2011, for the purpose of thanking them for their participation in the study (see Appendix I).

Data Analysis Procedures

The Special Educator Response to Intervention Inventory was used to measure the extent to which West Virginia elementary special education teachers participate in the tiered instruction model for students at-risk for academic failure and not already eligible for special education services. Survey data were sorted and categorized based on participants' responses and data were analyzed to determine teacher participation in specific components of the RTI process including assessment, instruction, decision making, and collaboration activities.

Descriptive statistics were calculated in response to each research question. Chi-square analyses were performed to determine the statistical significance, if any, of participant responses in relation to their self-reported levels of provision of essential components of the RTI process, preparedness to employ principles of explicit instruction for Tier 2 and Tier 3 intervention, and teacher perceptions of their roles and responsibilities within the RTI process. Pearson correlation coefficients were applied to determine relationships between groups categorized by the characteristics of their special education caseloads and placement options of their students. Independent sample t-tests were used to determine the statistical significance, if any, of findings related to the provision of Tier 2 and Tier 3 intervention across non-Title and Title 1 schools. Analysis of variance was conducted to explore differences between respondents' caseload size, caseload placement options, and caseload make-up (i.e., high and low incidence disabilities), and their perceptions of their roles and responsibilities in the RTI process. Qualitative data obtained through two constructed response survey items were sorted, coded, organized, and analyzed for common themes using emergent category analysis (Bogdan & Biklen, 2007).

Limitations of the Study

Data were collected through self-reported questionnaires and, therefore, were limited to the motivation of respondents to report accurate information. No assurances can be provided that study participants carefully and adequately completed the survey.

Summary

The procedures described in this chapter were designed to determine the nature and extent of the roles and responsibilities of special education teachers within West Virginia's RTI process. A group of 1,500 elementary level special education teachers were surveyed to assess their involvement in the RTI activities of assessment, instruction, decision making, and collaboration. Relevant descriptive and inferential statistics were employed to explain survey results and to determine any differences among survey responses.

CHAPTER 4: PRESENTATION AND ANALYSIS OF THE DATA

Purposes of this study were to develop a profile of West Virginia special education teachers' roles and responsibilities within a multi-tiered system of support and to validate components of Hoover and Patton's (2008) framework of special educators' skill sets and knowledge. This chapter presents the data collected for the study and provides a statistical analysis of those data. The chapter is organized into the following sections: a) data collection procedures; b) respondent characteristics; c) major findings for each of the four research questions addressed by this study; d) ancillary findings; and e) chapter summary.

Data Collection Procedures

On April 24, 2011, an email was sent to 453 West Virginia principals whose schools included kindergarten through grade five (see Appendix E). The correspondence explained the purpose of the study and stated that a package of surveys would be mailed to them for distribution to their special education teachers. Information obtained from the West Virginia Education Information System (WVEIS) indicated that a total of 1,500 special education teachers serve students in kindergarten through grade five.

During the week of April 25, 2011, a package containing four surveys was sent to each school. Each package included a cover letter (see Appendix F) that explained the purpose of the study and requested the principal disseminate the surveys to all K-5 special education teachers in their schools. Each identified teacher received an anonymous survey consent letter (see Appendix G) and a pre-addressed, postage-paid envelope for direct return of the completed survey to the researcher. A second email to principals was sent on May 11, 2011 (see Appendix H). The purpose of the email was to ascertain if surveys had been received and also served as another reminder to distribute the surveys to special education teachers. Upon receipt of the May

11, 2011, reminder email, 49 principals corresponded via email to the researcher to report they had not received a survey packet. Packages containing the specific number of surveys needed by each principal were mailed upon receipt of each request. A final email (see Appendix I) was sent to principals on June 5, 2011. The email thanked administrators and special educators for their support of the research study and reminded them to distribute the surveys to special education teachers if they had not already done so. Data collection was concluded June 17, 2011, at the completion of the 2010-2011 school year. A total of 341 surveys were returned to the researcher.

Respondent Characteristics

In part one of the SERTII, respondents were asked whether or not they participated in their schools' RTI process for at-risk students not yet identified for special education. One hundred thirty-one respondents indicated they did not and were asked to indicate which of four reasons for non-participation were applicable. Two hundred ten respondents reported they participated in their school's RTI process; those surveys comprise the data used for analysis in this study.

Of the 131 respondents reporting they did not participate in their school's RTI process, the majority (79.4%) of respondents reported their special education caseloads prevented them from delivering RTI services to at-risk students ($n = 104$). Thirty respondents (22.9%) indicated there were enough interventionists without them. Twenty-eight respondents (21.4%) reported they had not been asked to participate in RTI, and 20 respondents (15.3%) indicated special education and intervention schedule conflicts precluded participation. Data for reasons for non-participation in the RTI process are displayed in Table 1.

Means and standard deviations were calculated for the number of students with high or low incidence disabilities and the number of students in each of three special education

placement options for each special educator who indicated they participated in their school's RTI initiative. The mean number of students on respondents' special education caseloads with high incidence disabilities was 10.03 (SD = 5.74). The mean number of students with low disabilities was 1.03 (SD = 2.13). The mean numbers of students in each special education placement option were as follows: regular education full-time placement was 4.26 (SD = 5.64), regular education part-time was 6.01 (SD = 5.89), and special education separate class was 0.66 (SD = 1.79). Data for the characteristics of respondents' special education caseloads are displayed in Table 2.

The 210 respondents who indicated they participated in their schools' RTI processes were asked to answer five demographic questions pertaining to their years of experience teaching special education, type of special education certification held, number of students with disabilities on their current caseloads, number of students on their caseloads with high and low incidence disabilities, and number of students on their caseloads in each of three special education placement options (i.e., general education full-time, general education part-time, separate class). A question in part two of the survey also requested respondents indicate their schools' Title 1 or non-Title 1 status.

Quartiles were calculated to group responses according to years of special education teaching experience. Sixty respondents (28.6%) reported they had between zero and four years of experience. The remaining respondents indicated the following years of experience: 5 – 10 years (23.9%), 11 – 21 years (22.5%), and 22 – 39 years (25.2%). The mean for years of experience was 13.30 (SD = 10.86). The majority (90.5%) of respondents reported they hold professional teaching certificates. Among the other types of teaching certificates, 6.7% indicated they taught on permit, 2.4% held temporary teaching certificates, and 0.5% held alternative teaching certificates. These data are summarized in Table 3.

Quartiles were calculated to group responses according to the number of students on respondents' special education caseloads. Fifty-one respondents (24.4%) indicated they had between one and six students on their caseloads. The remaining three categories were split as follows: 7 – 10 students (27.1%), 11 – 14 students (25.2%), and 15 – 39 students (22.9%). The mean number of students on respondents' special education caseloads was 11.07 (SD = 5.7). Respondents were also asked to report on the socioeconomic status of their schools. One hundred forty-two (67.9%) respondents indicated their schools meet federal guidelines to receive Title 1 funding. Sixty-seven (32%) teachers reported their schools did not meet federal guidelines for such funding. These data are summarized in Table 3.

Table 1. *Reasons for special educators' non-participation in RTI process (n = 131)*

Reason for non-participation	<i>n</i> *	%
I have not been asked.	28	21.4
My special education caseload uses all possible time.	104	79.4
There are enough interventionists without me.	30	22.9
My special education schedule conflicts with intervention time.	20	15.3

* Duplicated count

Table 2. *Mean special education caseloads by disability type and placement option (n = 210)*

Caseload descriptor	No. of Students	
	<i>M</i>	<i>SD</i>
Students with high incidence disabilities	10.03	5.74
Students with low incidence disabilities	1.03	2.13
Students in regular education full-time placements	4.26	5.64
Students in regular education part-time placements	6.01	5.89
Students in special education separate class placements	0.66	1.79

Table 3. *Demographic characteristics of special educators participating in RTI process (n = 210)*

Characteristic	<i>n</i>	%
Years of teaching experience in special education		
0 - 4 years	60	28.6
5 - 10 years	50	23.9
11 - 21 years	47	22.5
22 - 39 years	53	25.2
Type special education certification		
Professional	190	90.5
Alternative Teaching Certificate	1	0.5
Temporary Teaching Certificate	5	2.4
Permit	14	6.7
Students on special education caseload		
1 – 6 students	51	24.4
7 – 10 students	57	27.1
11 – 14 students	53	25.2
15 – 39 students	49	22.9
Title 1 Status		
Title 1 school	142	67.9
Non-Title 1 school	67	32.0

Major Findings

Findings summarized within this section are organized around the four research questions investigated during the study. A final section addresses findings ancillary to the research questions.

Research Question One: To what extent do West Virginia elementary special education teachers participate in tiered instruction and intervention?

Survey questions allowed study participants to report their level of participation in their schools' RTI processes. Areas addressed included assessment, provision of tiered instruction, amount of time spent planning and documenting RTI, and frequency of use of explicit instructional strategies when providing Tier 2 and Tier 3 intervention.

Assessment

Survey questions addressed four RTI framework assessment components: 1) administration of diagnostic assessments; 2) progress monitoring for Tier 2 interventions; 3) graphing or otherwise organizing Tier 2 assessment data; and 4) progress monitoring Tier 3 interventions. More than half (55.7%) of the respondents reported they administered diagnostic assessments to at-risk students. A chi-square analysis determined these results were not statistically significant, $X^2(1, N = 210) = 2.99, p < .084$. Two thirds (67.6%) of the respondents indicated they progress monitored at-risk students receiving Tier 2 intervention services. A chi-square analysis determined these results were significant, $X^2(1, N = 210) = 26.91, p < .001$. One hundred seventeen (55.7%) respondents indicated they graphed or otherwise organized assessment data for students receiving Tier 2 intervention. A chi-square analysis determined these results were not statistically significant, $X^2(1, N = 210) = 2.99, p < .084$. More than eight in 10 (81.4%) respondents reported they progress monitored at-risk students receiving Tier 3

intervention services. A chi-square analysis determined these results were significant, $X^2(1, N = 210) = 82.97, p \leq .001$. Information pertaining to assessment components of the RTI framework delivered by special education teachers to at-risk students is summarized in Table 4.

Provision of Tiered Intervention

Respondents were asked to report the number of Tier 2 and Tier 3 sessions provided per week. Eighteen (9.5%) respondents indicated they provided no Tier 2 or Tier 3 intervention to at-risk students not yet eligible for special education. Thirty (14.3%) respondents indicated they provided only Tier 2 intervention and reported providing an average of 7.03 (SD = 5.47, R = 1-40) sessions per week. Forty-five respondents (21%) indicated they provided only Tier 3 intervention with an average of 9.33 (SD = 6.79, R = 1-45) sessions per week. The majority (55.2%) of respondents reported they provided both Tier 2 and Tier 3 intervention with an average of 15.48 (SD = 12.24) sessions provided per week. Data related to the level and amount of tiered intervention services provided to at-risk students by respondents are reported in Table 5.

Time Spent Planning for and Documenting RTI

Respondents reported the amount of time spent per week planning for and documenting Tier 2 and Tier 3 interventions. Of the 210 respondents, 42.4% indicated they spent less than one hour per week planning for and documenting Tier 2 interventions. Remaining respondents indicated they planned for and documented Tier 2 intervention as follows: 40.5% spent between one and two hours and 16.2% spent more than two hours. Chi-square analysis determined the results were statistically significant, $X^2(1, N = 208) = 27.1, p < .001$. These data are displayed in Table 6.

Respondents were also asked to report the amount of time spent per week planning for and documenting Tier 3 interventions. Eighty-seven (41.4%) respondents indicated they spent

between one and two hours per week planning for and documenting Tier 3 interventions. Remaining respondents indicated they plan for and document Tier 3 intervention as follows: 32.9% spent less than one hour and 25.7% spent more than two hours. Chi-square analysis determined these results were statistically significant, $X^2 (1, N = 208) = 7.8, p < .05$. Data related to the time spent per week planning for and documenting Tier 2 and Tier 3 interventions are reported in Table 6.

Table 4. *RTI framework assessment components implemented by special educators (n = 210)*

RTI Framework Assessment Components Implementation					
	<u>Yes</u>		<u>No</u>		X ² (1)
	<i>n</i>	% total	<i>n</i>	% total	
1. Administer diagnostic assessments to at-risk students	117	55.7	92	43.8	2.99
2. Progress monitor at-risk students at Tier 2	142	67.6	67	31.9	26.91***
3. Graph or organize assessment data for students receiving Tier 2 intervention	117	55.7	92	43.8	2.99
4. Progress monitor at-risk students at Tier 3	171	81.4	39	18.6	82.97***

***p ≤ .001

Table 5. *Comparison of special educators' provision of tiered intervention services to at-risk students (n = 210)*

Level of tiered intervention services provided	Number of tiered intervention sessions provided per week			
	<i>n</i>	%	M	SD
Provide no Tier 2 or Tier 3 intervention services	18	9.5	-	-
Provide only Tier 2 intervention services	30	14.3	7.03	5.47
Provide only Tier 3 intervention services	45	21.0	9.33	6.79
Provide both Tier 2 and Tier 3 intervention services	116	55.2	15.48	12.24

Table 6. *Special educators' time per week planning for and documenting Tier 2 and Tier 3 intervention (n = 208)*

Activity	<u>Amount of time per week</u>						X ² (1)
	<u>Less than 1 hour</u>		<u>1 – 2 hours</u>		<u>More than 2 hours</u>		
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
Planning for and documenting Tier 2 intervention	89	42.4	85	40.5	34	16.2	27.1**
Planning for and documenting Tier 3 intervention	69	32.9	87	41.4	54	25.7	7.8*

** p ≤ .01

* p ≤ .05

Use of Explicit Instructional Strategies at Tier 2 and Tier 3.

Respondents reported the frequency of their use of six explicit instructional strategies with at-risk students at both Tier 2 and Tier 3. Data pertaining to each of the six strategies across both tiers are discussed below and reported in Table 7.

Intentional review of previously taught skills.

When reporting levels of use at Tier 2, 34% of the respondents reported they used intentional review of previously taught skills very often, 24.4% indicated they always used the strategy, 23.4% reported they never used intentional review, 12.9% used the strategy fairly often, and 5.3% use it sometimes. Nearly half (44.8%) reported they always used intentional review for Tier 3 intervention, 25.7% indicated they very often used the strategy, 18.1% indicated they never used the strategy, 7.6% reported they used it fairly often, and 3.8% reported they sometimes used intentional review of previously taught skills. Chi-square analysis indicated statistically significant differences for the frequency of use of intentional review at Tier 2, $X^2(1, N = 210) = 51.6, p < .05$ and at Tier 3, $X^2(1, N = 210) = 111.8, p < .05$.

Modeling new skills to be learned.

Regarding modeling new skills to be learned, nearly three-fourths of the respondents reported using the strategy either always (30.1%), very often (28.7%), or fairly often (12.9%) when instructing at-risk students at Tier 2. Almost one-fourth (24.9%) never used modeling and 3.3% used it only sometimes. At Tier 3, 47.4% of respondents reported they always used the strategy when instructing at-risk students. Over one-fourth (25.8%) reported they used modeling of new skills very often, 18.7% never used modeling, 6.2% use it fairly often, and 1.9% modeled new skills to be learned sometimes. Chi-square analysis indicated statistically significant

differences for the frequency of use of modeling new skills to be learned at Tier 2, $X^2(1, N = 210) = 55.4, p < .05$ and at Tier 3, $X^2(1, N = 210) = 136.0, p < .05$.

Guided practice of newly taught skills.

With reference to the use of guided practice of newly taught skills for Tier 2, 34.9% reported they always used the strategy, 28.7% used guided practice very often, 23.9% never used guided practice, 10% used it fairly often, and 2.4% sometimes utilized guided practice of newly taught skills. With reference to the use of guided practice of newly taught skills for Tier 3 interventions, more than half (52.4%) of the respondents reported they always use the strategy, 22.9% use guided practice very often, 18.1% never used guided practice, 4.8% used the strategy fairly often, and 1.9% sometimes utilized guided practice of newly taught skills at Tier 3. Chi-square analysis indicated statistically significant differences for the frequency of use of guided practice of newly taught skills at Tier 2, $X^2(1, N = 210) = 75.6, p < .05$ and Tier 3, $X^2(1, N = 210) = 170.1, p < .05$.

Examples and non-examples of new skills or strategies.

Three of 10 (29.2%) respondents indicated they used examples and non-examples of new skills or strategies very often, 25.4% reported they never used examples and non-examples, 24.9% reported always using the strategy, 13.9% used the strategy fairly often, and 6.7% sometimes used the strategy. More than one-third (34.8%) of the respondents indicated they always used examples and non-examples of new skills or strategies when instructing at-risk students at Tier 2. For Tier 3 interventions, 28% reported they used examples and non-examples very often, 18.6% never used the strategy, 13.3% used the strategy fairly often, and 5.2% sometimes used examples and non-examples of new skills or strategies. Chi-square analysis

indicated statistically significant differences for the frequency of use of examples and non-examples at Tier 2, $X^2(1, N = 210) = 36.7, p < .05$ and Tier 3, $X^2(1, N = 210) = 57.5, p < .05$.

Immediate affirmative and corrective feedback.

Almost half (44.5%) of the respondents indicated they always provided immediate affirmative and corrective feedback to students at Tier 2, 23.4% reported they never provided feedback, 22% used the strategy very often, 7.7% responded fairly often, and 2.4% reported using the strategy sometimes. Regarding the provision of immediate affirmative and corrective feedback to students, more than half (58.1%) of the respondents indicated they always employed the strategy, 18.1% reported they never used it, 18.1% indicated they used corrective feedback very often, 4.8% responded they used the strategy fairly often, and 1.0% reported they sometimes used the strategy at Tier 3. Chi-square analysis indicated statistically significant differences for the frequency of use of immediate affirmative and corrective feedback at Tier 2, $X^2(1, N = 210) = 112.7, p < .05$ and Tier 3, $X^2(1, N = 210) = 215.6, p < .05$.

Distributed and cumulative practice.

Finally, 31.1% of the respondents reported their use of distributed and cumulative practice at Tier 2 as very often, 28.2% reported they always used the strategy, 25.4% reported never using distributed and cumulative practice, 10.5% reported fairly often, and 4.8% reported they sometimes used the strategy. For Tier 3, 42.4% of the respondents reported their use of distributed and cumulative practice as always, 28.6% reported they used the strategy very often, 19.0% reported they never used the strategy, 8.1% reported they fairly often used distributed and cumulative practice, and 1.9% reported they sometimes used the strategy. Chi-square analysis indicated statistically significant differences for the frequency of use of distributed and

cumulative practice at Tier 2, $X^2(1, N = 210) = 56.5$, $p < .05$ and Tier 3, $X^2(1, N = 210) = 109.7$,
 $p < .05$.

Table 7. *Special educators' use of explicit instructional strategies at Tier 2 and Tier 3 (n = 210)*

Strategy	Frequency of Use										X ² (1)
	<u>Never</u>		<u>Sometimes</u>		<u>Fairly Often</u>		<u>Very Often</u>		<u>Always</u>		
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
Intentional review of previously taught skills											
Tier 2	49	23.4	11	5.3	27	12.9	71	34	51	24.4	51.6*
Tier 3	38	18.1	8	3.8	16	7.6	54	25.7	94	44.8	111.81*
Modeling new skills to be learned											
Tier 2	52	24.9	7	3.3	27	12.9	60	28.7	63	30.1	55.3*
Tier 3	39	18.7	4	1.9	13	6.2	54	25.8	99	47.4	136.0*
Guided practice of newly taught skills											
Tier 2	50	23.9	5	2.4	21	10	60	28.7	73	34.9	75.6*
Tier 3	38	18.1	4	1.9	10	4.8	48	22.9	110	52.4	170.1*
Examples and non-examples of new skills or strategies											
Tier 2	53	25.4	14	6.7	29	13.9	61	29.2	52	24.9	36.7*
Tier 3	39	18.6	11	5.2	28	13.3	59	28.1	73	34.8	57.5*
Immediate affirmative and corrective feedback											
Tier 2	49	23.4	5	2.4	16	7.7	46	22	93	44.5	112.7*
Tier 3	38	18.1	2	1.0	10	4.8	38	18.1	122	58.1	215.6*
Distributed and cumulative practice											
Tier 2	53	25.4	10	4.8	22	10.5	65	31.1	59	28.2	56.5*
Tier 3	40	19.0	4	1.9	17	8.1	60	28.6	89	42.4	109.7*

*p < .05

In summarizing the findings for Research Question 1, statistical analyses indicated West Virginia elementary special education teachers reported significant levels of participation in their schools' RTI processes across each of four areas examined. Areas included assessment, provision of tiered intervention, time spent planning for and documenting RTI, and use of explicit instructional practices for intervention. In the area of assessment, two-thirds of respondents indicated they progress monitored students receiving Tier 2 intervention and more than 80% reported they progress monitored students at Tier 3. The majority of respondents reported providing both Tier 2 and Tier 3 intervention, averaging 15 intervention sessions per week that amounted to an average of 7.5 hours. More than half the respondents reported they spent at least one hour per week planning for and documenting Tier 2 and over 67% indicated the same amount of time for Tier 3 planning and documentation. Finally, the most frequently used explicit instruction strategies were immediate affirmative and corrective feedback, guided practice of newly taught skills, and intentional review of previously taught skills. At Tier 3, the most frequently used strategies included immediate feedback, guided practice, and modeling of new skills to be learned.

Research Question Two: How do West Virginia elementary special educators describe/perceive their collaborative roles with general education teachers within the context of a multi-tiered instructional system and regarding students not yet eligible for special education services?

Responding special education teachers were asked how often they worked with general education teachers to differentiate Tier 1 classroom instruction for at-risk students. The majority (53.1%) of respondents indicated they frequently worked with general educators to differentiate instruction. Remaining respondents indicated they collaborated with general educators to

differentiate instruction as follows: 26.8% reported occasionally, 15.3% reported hardly ever, and 4.8% reported never. A chi-square analysis of these data determined these results were significant, $X^2(1, N = 208) = 108.3, p < .001$. These data are displayed in Table 8.

Respondents were also asked to indicate how often they were asked by general education teachers to support or instruct at-risk students at Tier 1. More than 40% indicated they were occasionally asked by general education teachers to support or instruct at-risk students in the core or Tier 1. Remaining respondents indicated they were asked by general education teachers to support or instruct at-risk students in Tier 1 as follows: 35.1% were frequently asked, 16.8% were hardly ever asked, and 6.3% were never asked. A chi-square analysis of these data determined these results were significant, $X^2(1, N = 208) = 66.8, p < .001$. Data related to the frequency at which respondents participate in Tier 1 activities are reported in Table 8.

Respondents also reported the amount of time spent collaborating with general education teachers to discuss and analyze at-risk students' achievement data at Tier 1. More than one-fourth (25.8%) of respondents indicated they spent more than two hours per month; 17.6% reported spending one to two hours per month; 15.2% indicated spending less than one hour per month; and, 2.6% reported they spent no time collaborating on Tier 1 data for at-risk students. Chi-square analysis determined these results were statistically significant, $X^2(1, N = 209) = 61.41, p < .001$. These data are displayed in Table 9.

Table 8. *Frequency of Tier 1 collaborative services implemented by special educators for at-risk students (n = 208)*

	<u>Frequency of services provided at Tier 1</u>									
	<u>Never</u>		<u>Hardly ever</u>		<u>Occasionally</u>		<u>Frequently</u>		$X^2(1)$	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%		
<hr/>										
Tier 1 collaborative services										
<hr/>										
1. Work with general educators to differentiate instruction	10	4.8	32	15.3	56	26.8	111	53.1	108.3***	
2. Asked by general educators to support/instruct at-risk students	13	6.3	35	16.8	87	41.8	73	35.1	66.8***	

*** $p \leq .001$

Table 9. *Special educators' collaboration time with general education teachers for discussion and analysis of Tier 1 student achievement data (n = 209)*

	<u>Amount of Collaboration per Month</u>								$X^2(1)$
	<u>None</u>		<u>Less than 1 hour</u>		<u>1-2 hours</u>		<u>More than 2 hours</u>		
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
Time spent collaborating with general education teachers to discuss and analyze student Tier 1 achievement data	9	4.3	52	24.9	60	28.7	88	42.1	61.41***

*** $p \leq .001$

A Likert Scale ranging from 1- 5 (1 = never, 2 = daily, 3 = weekly, 4 = monthly, 5 = quarterly) was used to measure how often special educators consulted with general education teachers for students receiving Tier 2 intervention. Over one-third (36.2%) of respondents reported they consulted with general education teachers on a weekly basis. Almost one in four (23.8%) reported they never consulted with general education teachers, 7.1% reported they consulted on a daily basis, 26.2% reported they consulted on a monthly basis, and 6.2% consulted quarterly with general education teachers. A chi-square analysis of these data indicated results were statistically significant, $X^2(1, N = 209) = 125.5, p < .001$. Data are found in Table 10.

In reporting the frequency of consultation with general education teachers for students receiving Tier 3 services, 41.9% of respondents indicated they consulted weekly. Remaining respondents indicated they consulted for students receiving Tier 3 as follows: 23.3% reported monthly, 21.9% reported never, 8.6% reported daily, and 4.3% reported quarterly. Chi-square analysis of these data determined results were significant, $X^2(1, N = 209) = 91.6, p < .00$. Data related to the frequency of special educators' consultation with general education teachers regarding at-risk students receiving Tier 2 and Tier 3 intervention are summarized in Table 10.

Respondents were also asked to report changes in the amount of collaboration with general education teachers since the initiation of their schools' RTI processes. Of those who responded, 71.6% indicated they spend more time collaborating than before RTI commenced. Remaining responses were as follows: 18.8% indicated they spend the same amount of time collaborating and 9.1% indicated they spend less time collaborating with general education teachers since RTI began. Chi-square analysis determined these data were statistically significant $X^2(1, N = 208) = 255.15, p \leq .000$. These data are summarized in Table 11.

Table 10. *Type and frequency of special educators' consultation with general education teachers (n = 209)*

Purpose of consultation	<u>Frequency of Consultation</u>										X ² (1)
	<u>Never</u>		<u>Daily</u>		<u>Weekly</u>		<u>Monthly</u>		<u>Quarterly</u>		
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
Consultation with general education teachers for students receiving Tier 2	50	23.8	15	7.1	76	36.2	55	26.2	13	6.2	125.5***
Consultation with general education teachers for students receiving Tier 3	46	21.9	18	8.6	88	41.9	49	23.3	9	4.3	91.6***

***p ≤ .001

Table 11: *Change in amount of collaboration since initiation of RTI (n = 208)*

	<u>Change in amount of collaboration</u>						X ² (1)
	<u>Less time</u>		<u>More time</u>		<u>Same amount of time</u>		
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
Amount of time general and special education teachers spend discussing and planning for at-risk students needs since RTI began	19	9.1	149	71.6	39	18.8	255.15***

***p ≤ .001

In summarizing the findings for Research Question 2, more than half of survey respondents indicated they worked with general education teachers to differentiate classroom instruction. Thirty-five percent of special educators reported they frequently supported or instructed at-risk students in general education and 42% reported they occasionally provided this service. More than seven of 10 respondents (70.8%) indicated they spent at least one hour per month analyzing at-risk students' achievement data with general education teachers. Thirty-six percent of respondents reported weekly consultation with general educators for Tier 2 and 26% consulted on a monthly basis. Similarly at Tier 3, 42% of respondents consulted weekly and 23% consulted monthly. Special education teachers also reported significant increases in the amount of collaboration between special and general educators since the initiation of the RTI system with 72% of respondents indicating they spent more time collaborating since RTI was initiated.

Research Question Three: How do West Virginia elementary special education teachers describe/perceive their roles as decision-makers relevant to students not yet eligible for special education services within a multi-tiered instructional system?

Respondents were asked to report whether they participated in eight RTI decision-making processes. One hundred seventy-eight (85.2%) respondents reported they were part of the group that analyzed Tier 1 universal screening data. One hundred seventy-one respondents (81.8%) indicated they participated in Tier 2 progress monitoring data discussions. One hundred sixty-four or 78.1% of respondents indicated they participated in Tier 3 progress monitoring discussions. One hundred seventy-nine (85.6%) respondents reported they were members of their schools' RTI teams. Chi-square analyses determined these results were statistically significant for universal screening, $X^2(1, N = 210) = 103.39, p < .001$, Tier 2 progress

monitoring analysis, $X^2(1, N = 210) = 84.64, p < .001$, Tier 3 progress monitoring analysis, $X^2(1, N = 210) = 66.31, p < .001$, and member school RTI team, $X^2(1, N = 210) = 106.23, p < .001$. Data are displayed in Table 12.

More than six of 10 respondents (62.7%) reported they were members of the group that determined at-risk students' need for Tier 2 services and 58.4% reported they participated in the group that selected and developed Tier 2 interventions. The majority (70.8%) of the respondents reported they participated in the group that determined at-risk students' need for Tier 3 intervention services. Almost eight of 10 teachers (78.1%) indicated they participated in decisions to refer students for special education evaluations. Chi-square analyses determined these results were statistically significant for determining need for Tier 2, $X^2(1, N = 209) = 13.44, p < .001$, selecting Tier 2 interventions, $X^2(1, N = 209) = 5.86, p < .001$, determining need for Tier 3, $X^2(1, N = 209) = 36.22, p < .001$, and making referrals for special education evaluations, $X^2(1, N = 209) = 66.31, p < .001$. Data pertaining to RTI decision-making activities are summarized in Table 12.

Table 12: *Special educators' participation in RTI group decision-making activities (n = 209)*

Purpose of RTI decision-making team	Yes	Percent	No	Percent	X ² (1)
Part of group that analyzes universal screening data	178	85.2	31	14.8	103.39***
Part of group that analyzes Tier 2 progress monitoring data	171	81.8	38	18.2	84.64***
Part of group that analyzes Tier 3 progress monitoring data	164	78.1	46	21.9	66.31***
Member of school RTI team	179	85.6	30	14.4	106.23***
Part of decision-making group that determines need for Tier 2	131	62.7	78	37.3	13.44***
Part of decision-making group that selects/develops Tier 2 interventions	122	58.4	87	41.6	5.86***
Part of decision-making group that determines need for Tier 3	148	70.8	61	29.2	36.22***
Part of decision-making group that makes referrals for special education evaluation	164	78.1	45	21.9	66.31***

***p ≤ .001

In summarizing the findings for Research Question 3, participants reported significant levels of participation in fundamental decision-making activities. The most frequently cited decision-making activities were membership on their schools' RTI teams with 86% responding they were members followed by participation on the team that analyzed universal screening data with 85.2% responding affirmatively. Special education teachers also reported high participation on teams that analyzed Tier 2 and Tier 3 progress monitoring data with response rates of 81.8% and 78.1% respectively. Seventy-eight percent of respondents reported they participated in making referrals for special education evaluations.

Research Question Four: What benefits and challenges, if any, do West Virginia elementary special education teachers identify relevant to their roles within a multi-tiered instructional system?

Respondents were asked to relate their perceptions about their roles and responsibilities as special educators within the RTI process. The majority (71.0%) of respondents indicated RTI had expanded but enhanced their roles and responsibilities as special educators. Slightly more than one-fourth (25.7%) indicated RTI had placed too much responsibility on special education teachers and 3.8% reported RTI has had no impact on their roles and responsibilities. A chi-square analysis determined statistically significant differences, $X^2(1, N = 210) = 145.49, p \leq .001$. Information pertaining to special educators' perceptions of their roles and responsibilities are shown in Table 13.

A survey item requested respondents to identify which, if any, of seven administrative and instructional supports enhanced and supported their roles and responsibilities within the RTI system. Nearly three-fourths (73.8%) of respondents indicated they needed more flexible school scheduling that accommodates their special education caseloads and services to at-risk students in the RTI process. Similarly, 72.9% of respondents indicated they needed more time for collaboration and planning. Remaining supports identified were as follows: 55.2% reported they needed a more efficient method for documenting RTI, 43.3% indicated professional development in selecting or developing evidence-based interventions was needed, 30.5% indicated they needed improved assessment tools, 30.0% indicated a need for professional development in data analysis, and 30% reported a need for professional development in co-teaching, co-planning, and collaboration. Data pertaining to needed administrative and instructional supports identified by special educators is summarized in Table 14.

Table 13: *Special educators' perceptions of their roles and responsibilities within the RTI process* (n = 210)

Role perceptions	<i>n</i>	%
RTI has placed too much responsibility on special education teachers	54	25.7
RTI has expanded but enhanced the roles and responsibilities of special education teachers	148	71.0
RTI has had no impact on the roles and responsibilities of special education teachers	8	3.8

$\chi^2 (1, N = 210) = 145.49, p \leq .001$

Table 14: *Needed administrative and instructional supports identified by special educators* (n = 210)

Administrative/instructional supports	<u>Supports</u>	
	<i>n</i> *	% of Total
Professional development in data analysis	63	30.0
Professional development in selecting or developing evidence-based interventions	91	43.3
Professional development in co-teaching, co-planning, and collaboration	63	30.0
More time for collaboration and planning	153	72.9
More flexible school scheduling to accommodate special education caseloads and the RTI process	155	73.8
More efficient methods for documenting RTI (e.g., online tracking/reporting system)	116	55.2
Improved assessment tools	64	30.5

* Duplicated Count

Finally, respondents were provided opportunities to respond to two open-ended questions designed to obtain their perceptions of the most beneficial and challenging aspects of RTI. A total of 134 respondents provided comments pertaining to benefits and 129 respondents elaborated on the challenges of RTI. The most commonly noted benefit (17.7%) of RTI was the additional assistance offered to students at risk for academic failure. Other benefits cited included references to effectively meeting students' needs (13.8%), delivery of early intervention (12.4%), opportunities for small group instruction (7.7%), prevention of students "slipping through the cracks" (7.7%), and the avoidance of unnecessary special education placements (6.7%). These data are presented in Table 15.

Special education teachers also identified several challenges associated with the RTI model. The most commonly cited challenge of RTI for special education teachers was time for planning, data collection, documentation, and collaboration with 30% of respondents identifying this area as a challenge. Other comments addressed difficulties in addressing the needs of both at-risk and IEP students (15.3%), delayed special education/eligibility (9.2%), and documentation/paperwork burdens (8.3%). These data are presented in Table 16.

Table 15: *Special educators' perceived benefits of RTI (n = 192)**

Teacher comments	<i>N</i>	%
Additional assistance for at-risk students	37	17.7
Benefits for all students	13	6.2
Meeting student needs	29	13.9
Small group instruction	18	8.6
Prevents “slipping through cracks”	16	7.7
Data to drive instruction	6	2.9
Avoidance of special education placements	14	6.7
Early intervention	26	12.4
Increased teacher communication/collaboration	13	6.2
Benefits of progress monitoring	9	4.3
Benefits of targeted instruction	11	5.3

* Duplicated Count

Table 16: *Special educators' perceived challenges of RTI (n = 191)**

Teacher comments	<i>n</i>	%
Time (for process, planning, data collection, documenting, collaborating)	69	30.1
Scheduling	31	13.5
Delayed special education evaluation/eligibility	21	9.2
Documentation/paperwork burdens	16	8.3
Addressing needs of at-risk and IEP students	35	15.3
Other (e.g., inadequate assessment tools, insufficient staff, teacher buy-in)	50	21.8

* Duplicated Count

In summarizing the findings for Research Question 4, the majority (71.0%) of respondents reported RTI expanded but enhanced their roles and responsibilities as special educators. Additionally, the need for more flexible school scheduling and more time for collaboration and planning were the most commonly reported administrative and instructional supports thought to enhance and support their roles and responsibilities within RTI. Furthermore, survey respondents most frequently cited benefits of RTI as the offering of additional assistance for at-risk students and the delivery of early intervention. Most commonly cited challenges of RTI included having insufficient time to implement the process and issues related to scheduling.

Ancillary Research Findings

The SERTII was used to collect demographic data describing the Title 1 status of special educators' schools, the number of students on their special education caseloads, and corresponding caseload type (i.e., number of students with high- and low-incidence disabilities). These data were analyzed to determine correlations between demographic characteristics of respondents and their participation in key RTI practices including administration of diagnostic assessments, whether they instructed at-risk and IEP students in the same small group intervention groups, the number of Tier 2 and Tier 3 sessions taught per week, and their perceptions of their roles and responsibilities as special educators within the RTI process.

RTI Participation and Title 1 Status

A chi-square test for independence indicated no significant difference between Title 1 status and the administration of diagnostic assessments to at-risk students by special educators, $X^2(1, n = 191) = .904, p = .084$. A chi-square test indicated a significant statistical difference between respondents' schools' Title 1 status and their instruction of at-risk and IEP students in

the same intervention sessions, $\chi^2(1, n = 191) = .70, p < .001$ with teachers in Title 1 schools instructing these groups of students together more frequently than teachers in non-Title 1 schools. These data are represented in Table 17.

Independent samples t-tests were conducted to compare the provision of Tier 2 and Tier 3 intervention sessions across non-Title and Title 1 school status. There was no significant difference in the number of Tier 2 sessions provided by special education teachers in non-Title 1 schools ($M = 7.73, SD = 8.05$) and Title 1 schools ($M = 6.34, SD = 7.18$); $t = 1.21, p = .230$ (two-tailed). Likewise, there was no significant difference in the number of Tier 3 sessions provided in non-Title 1 schools ($M = 6.79, SD = 5.43$) and Title 1 schools ($M = 7.51, SD = 7.44$); $t = -.68, p = .50$ (two-tailed). Data are displayed in Table 18.

Table 17. Comparison of special educators providing key RTI services in Title 1 and non-Title 1 schools (n = 191)

<u>RTI Component</u>	<u>Title 1</u>		<u>Non-Title 1</u>		X ²
	n	%	n	%	
Administer diagnostic assessments	74	58	37	59	.904
Instruct at-risk and IEP students in same intervention sessions	88	69	45	71	.705***

*** p < .001

Table 18. Special educators' provision of tiered intervention sessions in Title 1 (n = 128) and non-Title 1 (n = 63) schools

<u>Tiered intervention service</u>	<u>Title 1</u>		<u>Non-Title 1</u>		t (189)
	M	SD	M	SD	
Number of Tier 2 sessions provided	6.34	7.18	7.73	8.05	1.21
Number of Tier 3 sessions provided	7.51	7.44	6.79	5.43	-.68

A chi-square test for independence indicated no significant difference between Title 1 status and special education teachers' perceptions of their roles and responsibilities within the RTI process, $\chi^2(1, n = 191) = 1.76, p = .778$. These data are displayed in Table 19.

RTI Participation and Special Education Caseload Size

The relationships between respondents' special education caseload size and teachers' delivery of Tier 2 and Tier 3 interventions were also examined using Pearson correlation coefficients. There were no significant correlations between teacher caseload size and the number of Tier 2 intervention sessions per week ($M = 6.22, SD = 7.49, r = -.066$), nor between teacher caseload size and the number of Tier 3 intervention sessions per week ($M = 6.62, SD = 6.84, r = -.073$). These data are summarized in Table 20.

Table 19. Comparison of Title 1 status and special educators' perceptions of RTI roles and responsibilities (n = 191)

<u>Special educators' perceptions</u>	<u>Title 1</u>		<u>Non-Title 1</u>		X^2
	N	%	N	%	
RTI places too much responsibility on special educators	31	24.2	18	28.6	1.76
RTI expands but enhances roles and responsibilities of special educators	94	73.4	44	69.8	
RTI has no impact on roles and responsibilities of special educators	3	2.3	1	1.6	

Table 20. Relationship between caseload size and number of tiered intervention services provided at Tier 2 and Tier 3 (n= 192)

<u>Measure</u>	M	SD	<u>Measure</u>		
			CS	T2	T3
Caseload Size (CS)	11.10	5.78	-	-	-
Number of Tier 2 intervention sessions (T2)	6.22	7.49	-.066	-	-
Number of Tier 3 intervention sessions (T3)	6.62	6.84	.073	-	-

A one-way between-groups ANOVA was conducted to explore the impact of caseload size on special educators' perceptions of their roles and responsibilities within the RTI process. Respondents were divided into three groups based on survey responses: RTI places too much responsibility on special education teachers (N = 50, M = 12.98, SD = 5.98), RTI expands but enhances the roles and responsibilities of special education teachers (N = 138, M = 10.42, SD = 5.52), and RTI has no impact on their roles and responsibilities (N = 4, M = 11.00, SD = 8.29). There was a statistically significant difference at the $p < .05$ level for the three groups: $F(2, 192) = 3.71, p = .026$. Data are summarized in Table 21.

Table 21. *Comparison of caseload size and special educators' perceptions of RTI roles and responsibilities (n = 192)*

<u>Special educators' perceptions</u>	N	M	SD	F*
RTI places too much responsibility on special educators	50	12.98	5.98	3.706*
RTI expands but enhances roles and responsibilities of special educators	138	10.42	5.51	
RTI has no impact on roles and responsibilities of special educators	4	11.00	8.28	

* $p < .05$

RTI Participation and Special Education Caseload Type

The relationship between the number of students with high incidence disabilities ($M = 10.03$, $SD = 5.74$) included on special educators' caseloads and teachers' provision of Tier 2 and Tier 3 intervention were investigated using two-tailed Pearson correlation coefficients. There was no statistically significant correlation between the number of students with high incidence disabilities on teachers' caseloads $r = -.041$, $n = 191$, $p = .572$ and teachers' provision of Tier 2 intervention sessions. There was a statistical correlation between the number of students with high incidence disabilities on teachers' caseloads and the number of Tier 3 sessions provided, $r = .100$, $n = 191$, $p = .166$. These data are summarized in Table 22.

A one-way between-groups ANOVA was conducted to explore the impact of caseloads inclusive of students with high incidence disabilities on special educators' perceptions of their roles and responsibilities within the RTI process. Respondents were divided into three groups based on survey responses: RTI places too much responsibility on special education teachers ($N = 54$, $M = 12.00$, $SD = 5.5$), RTI expands but enhances the roles and responsibilities of special education teachers ($N = 148$, $M = 9.39$, $SD = 5.6$), and RTI has no impact on their roles and responsibilities ($N = 8$, $M = 8.63$, $SD = 6.65$). There was a statistically significant difference for the three groups: $F(2, 192) = 4.5$, $p = .012$. Data are summarized in Table 23.

Table 22. *Relationship between number of students with high incidence disabilities on caseloads and number of tiered intervention services provided at Tier 2 and Tier 3 (n = 191)*

<u>Measure</u>	<u>Measure</u>				
	M	SD	N	T2	T3
Number students with high incidence disabilities (N)	10.03	5.74	-	-	-
Number of Tier 2 intervention sessions (T2)	6.22	7.41	-.041	-	-
Number of Tier 3 intervention sessions (T3)	6.62	6.85	.100	-	-

Table 23. *Comparison of number of students with high incidence disabilities on caseloads and special educators' perceptions of RTI roles and responsibilities (n = 192)*

<u>Special educators' perceptions</u>	N	M	SD	F*
RTI places too much responsibility on special educators	54	12.00	5.5	4.5*
RTI expands but enhances roles and responsibilities of special educators	148	9.39	5.6	
RTI has no impact on roles and responsibilities of special educators	8	8.63	6.65	

*p < .05

The relationship between teacher caseloads inclusive of students with low-incidence disabilities ($M = 1.03$, $SD = 2.13$) and teachers' delivery of Tier 2 and Tier 3 intervention was examined using a two-tailed Pearson correlation coefficient. There was no statistically significant correlation between the two variables at Tier 2 ($r = -.060$, $n = 192$, $p = .412$) or at Tier 3 ($r = -.061$, $n = 192$, $p = .404$). These data are displayed in Table 24.

A one-way between-groups ANOVA was conducted to investigate the impact of caseloads inclusive of students with low-incidence disabilities and special educators' perceptions of their roles and responsibilities within the RTI process as measured by the SERTII. Respondents were divided into three groups based on the following survey item responses: RTI places too much responsibility on special educators ($N = 50$, $M = .70$, $SD = 1.06$), RTI expands but enhances the roles and responsibilities of special educators ($N = 138$, $M = 1.18$, $SD = 2.40$), and RTI has no impact on their roles and responsibilities ($N = 4$, $M = 1.50$, $SD = 2.25$). Results of ANOVA indicated no significant differences between the mean scores of teachers whose caseloads include students with low-incidence disabilities and their perceptions of the RTI roles and responsibilities, $F(2, 210) = 1.45$, $p = .237$. These data are represented in Table 25.

Table 24. *Relationship between number of students with low incidence disabilities on caseloads and special educators provision of tiered intervention services provided at Tier 2 and Tier 3 (n = 192)*

<u>Measure</u>	M	SD	<u>Measure</u>		
			N	T2	T3
Number students with low incidence disabilities (N)	1.03	2.13	-	-	-
Number of Tier 2 intervention sessions (T2)	6.22	7.41	-.060	-	-
Number of Tier 3 intervention sessions (T3)	6.62	6.85	-.061	-	-

Table 25 *Comparison of number of students with low incidence disabilities on caseloads and special educators' perceptions of RTI roles and responsibilities (n = 210)*

Special educators' perceptions	N	M	SD	F
RTI places too much responsibility on special educators	55	.70	1.09	1.45
RTI expands but enhances roles and responsibilities of special educators	138	1.18	2.47	-
RTI has no impact on roles and responsibilities of special educators	4	2.25	2.63	-

RTI Participation and Special Education Students' Placement Options

The relationship between the mean number of students on teachers' caseloads in regular education full-time (REFT) special education placements and teachers' delivery of Tier 2 and Tier 3 intervention sessions was explored using two-tailed Pearson correlation coefficients. No statistically significant correlations were found between the number of students in REFT placements and teachers' provision of Tier 2, $r = -.020$, $n = 191$, $p = .779$. Statistically significant correlations were established between the number of students in REFT placements and teachers' provision of Tier 3, $r = .164$, $n = 192$, $p < .05$. These data are displayed in Table 26.

A one-way between-groups analysis of variance was conducted to explore the impact of caseloads inclusive of students in REFT placements and special educators' perceptions of their roles and responsibilities in the RTI process as measured by the SERTII. Respondents were divided into three groups based on survey item responses as follows: RTI places too much responsibility on special educators ($n = 50$, $M = 5.20$, $SD = 6.99$), RTI expands but enhances the roles and responsibilities of special educators ($n = 138$, $M = 4.25$, $SD = 5.27$), and RTI has no impact on their roles and responsibilities ($n = 4$, $M = 1.25$, $SD = 1.50$). Results of ANOVA indicated no significant differences between the mean scores of teachers whose caseloads include students in REFT special education placements and their perceptions of the RTI roles and responsibilities, $F(2, 191) = 1.13$, $p = .325$. These data are represented in Table 27.

Table 26. *Relationship between number of students in regular education full-time (REFT) placements on caseloads and special educators provision of tiered intervention services provided at Tier 2 and Tier 3 (n = 192)*

<u>Measure</u>	M	SD	<u>Measure</u>		
			REFT	T2	T3
Number students in REFT placements	4.26	5.64	-	-	-
Number of Tier 2 intervention sessions (T2)	6.22	7.41	-.020	-	-
Number of Tier 3 intervention sessions (T3)	6.62	6.85	.164*	-	-

*p < .05

Table 27. *Comparison of number of students in regular education full-time (REFT) placements on caseloads and special educators' perceptions of RTI roles and responsibilities (n = 192)*

<u>Special educators' perceptions</u>	N	M	SD	F
RTI places too much responsibility on special educators	50	5.20	6.99	1.13*
RTI expands but enhances roles and responsibilities of special educators	138	4.25	5.27	-
RTI has no impact on roles and responsibilities of special educators	4	1.25	1.50	-

*p = .325

The relationship between the mean number of students in regular education part-time (REPT) special education placements on teachers' caseloads and teachers' delivery of Tier 2 and Tier 3 intervention sessions was explored using a two-tailed Pearson correlation coefficient. Results indicate no statistically significant relationships between the variables for Tier 2, $r = .002$, $n = 191$, $p = .980$ or for Tier 3, $r = -.038$, $n = 192$, $p = .599$. These data are displayed in Table 28.

A one-way ANOVA was conducted to investigate the impact of caseloads inclusive of students in REPT special education placements and special educators' perceptions of their roles and responsibilities within the RTI process. Respondents were divided into three groups based on survey item responses as follows: RTI places too much responsibility on special educators ($N = 50$, $M = 7.02$, $SD = 6.13$), RTI expands but enhances the roles and responsibilities of special educators ($N = 138$, $M = 5.46$, $SD = 5.60$), and RTI has no impact on their roles and responsibilities ($N = 4$, $M = 9.75$, $SD = 9.74$) as summarized in Table 32. Results of ANOVA indicated no significant differences between the mean scores of teachers whose caseloads include students in REPT special education placements and their perceptions of the RTI roles and responsibilities, $F(2, 191) = 2.19$, $p = .115$. These data are represented in Table 29.

Table 28. *Relationship between number of students in regular education part-time (REPT) placements on caseloads and special educators provision of tiered intervention services provided at Tier 2 and Tier 3 (n = 210)*

<u>Measure</u>	M	SD	<u>Measure</u>		
			REPT	T2	T3
Number students in REPT placements	6.01	5.89	-	-	-
Number of Tier 2 intervention sessions (T2)	6.22	7.41	.002	-	-
Number of Tier 3 intervention sessions (T3)	6.62	6.85	-.038	-	-

Table 29. *Comparison of number of students in regular education part-time (REPT) placements on caseloads and special educators' perceptions of RTI roles and responsibilities (n = 192)*

<u>Special educators' perceptions</u>	N	M	SD	F
RTI places too much responsibility on special educators	50	7.02	6.13	2.19
RTI expands but enhances roles and responsibilities of special educators	138	5.46	5.60	
RTI has no impact on roles and responsibilities of special educators	4	9.75	9.74	

The relationship between the mean number of students in separate class (SC) special education placements on teachers' caseloads and teachers' delivery of Tier 2 and Tier 3 intervention sessions was explored using a two-tailed Pearson correlation coefficient. Results indicate a statistically significant relationship between the variables for Tier 2, $r = -.143$, $n = 191$, $p < .05$, but no statistically significant relationship for the variables for Tier 3, $r = -.139$, $n = 192$, $p = .054$. These data are displayed in Table 30.

A one-way between-groups ANOVA was conducted to investigate the impact of caseloads inclusive of students in SC special education placements and special educators' perceptions of their roles and responsibilities within the RTI process. Respondents were divided into three groups based on survey item responses as follows: RTI places too much responsibility on special educators ($N = 50$, $M = .36$, $SD = 1.41$), RTI expands but enhances the roles and responsibilities of special educators ($N = 138$, $M = .71$, $SD = 1.80$), and RTI has no impact on their roles and responsibilities ($N = 4$). Results of ANOVA indicated no significant differences between the mean scores of teachers whose caseloads include students in SC special education placements and their perceptions of the RTI roles and responsibilities, $F(2, 191) = 1.05$, $p = .352$. These data are represented in Table 31.

Table 30. *Relationship between number of students in separate class (SC) placements on caseloads and special educators provision of tiered intervention services provided at Tier 2 and Tier 3 (n = 210)*

<u>Measure</u>	M	SD	<u>Measure</u>		
			SC	T2	T3
Number students in SC placements	.66	1.79	-	-	-
Number of Tier 2 intervention sessions (T2)	6.22	7.41	-.143*	-	-
Number of Tier 3 intervention sessions (T3)	6.62	6.85	-.139	-	-

*p < .05

Table 31. *Comparison of number of students in separate class (SC) placements on caseloads and special educators' perceptions of RTI roles and responsibilities (n = 192)*

<u>Special educators' perceptions</u>	N	M	SD	F
RTI places too much responsibility on special educators	50	.36	1.41	1.05
RTI expands but enhances roles and responsibilities of special educators	138	.71	1.80	
RTI has no impact on roles and responsibilities of special educators	4	-	-	

Summary of Ancillary Research Findings

In summary, chi-square analysis indicated a significant statistical difference between respondents' schools' Title 1 status and their instruction of at-risk and IEP students in the same intervention sessions, with teachers in Title 1 schools instructing both groups together more often than did teachers in non-Title 1 schools. Chi-square analysis revealed no statistically significant relationships between Title 1 status and the administration of diagnostic assessments, or special educators' perceptions of their roles and responsibilities within the RTI process. Independent samples t-tests resulted in no significant differences in the number of Tier 2 and Tier 3 sessions provided by special educators in non-Title and Title 1 schools.

Pearson correlation coefficients revealed no statistically significant relationships between special education teachers' caseload size and the number of Tier 2 and Tier 3 intervention sessions provided per week, the number of students with high incidence disabilities included on special educators' caseloads, and teachers' provision of Tier 2 intervention. For Tier 3, there was a small negative correlation between the number of students with high incidence disabilities on teachers' caseloads and the number of Tier 3 sessions provided.

Analysis of variance indicated statistically significant differences related to average (11.10) caseload size and three groups of respondents who perceived that RTI places too much responsibility on special education teachers, RTI expands but enhances the roles and responsibilities of special education teachers, and RTI has no impact on their roles and responsibilities. Higher average caseloads were associated with feelings that RTI places too much responsibility on special education teachers. Lower caseloads were associated with feelings that RTI has no impact on special educators' roles and responsibilities.

ANOVA testing resulted in no statistically significant differences between teacher caseloads including high incidence disabilities and teachers' perceptions of their RTI roles and responsibilities. Pearson correlation coefficient testing revealed no statistically significant relationships between teachers' caseloads inclusive of students with low incidence disabilities and teachers' delivery of Tier 2 and Tier 3 interventions. Likewise, ANOVA testing resulted in no significant differences between teacher caseloads including low-incidence disabilities and teachers' perceptions of their RTI roles and responsibilities.

Pearson correlation coefficient testing also revealed a statistically significant relationship between SC student special education placements and teachers' provision of Tier 2 intervention with lower frequencies of Tier 2 associated with higher numbers of students in SC placements. No statistically significant relationships were determined between REFT and REPT placements and provision of Tier 2 intervention. No statistically significant relationships between any special education placement options and teachers' provision of Tier 3 intervention services were found. ANOVA testing revealed no statistically significant relationships between student placements and teachers' perceptions of their RTI roles and responsibilities.

CHAPTER 5: SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

This chapter begins with a review of the study's purpose, methods used, and demographic data collected. Summaries of research findings follow. Study conclusions, discussion and implications, and recommendations for further research complete the chapter.

Purpose of the Study

The primary purpose of the study was to develop a profile of West Virginia special education teachers' roles and responsibilities within the RTI process. Specifically, this research examined the nature and scope of elementary special education teachers' work with at-risk students not yet eligible for special education services but receiving instructional support through a multi-tiered support system. A secondary intent of the study was to validate components of Hoover and Patton's (2008) framework of special educators' skill sets and knowledge.

Research questions that guided the study were:

1. To what extent do West Virginia elementary special education teachers participate in tiered instruction and intervention?
2. How do West Virginia elementary special educators describe/perceive their collaborative roles with general education teachers within the context of a multi-tiered instructional system and regarding students not yet eligible for special education services?
3. How do West Virginia elementary special education teachers describe/perceive their roles as decision-makers relevant to students not yet eligible for special education services within a multi-tiered instructional system?
4. What benefits and challenges, if any, do West Virginia elementary special education teachers identify relevant to their roles within a multi-tiered instructional system?

Methods

A descriptive quantitative research design was used to study a population of elementary special education teachers across West Virginia's 55 school districts during the 2010-2011 school year. Approximately 1,500 special educators who provide special education services to students with disabilities at the elementary level in 453 schools that included grade levels kindergarten through grade five served as the population for this study.

A researcher-developed survey, the Special Educator Response to Intervention Inventory (SERTII), was used to identify and describe specific tasks implemented by special education teachers with at-risk students within the three tier instruction model. The survey was based on available literature with emphasis on Hoover and Patton's (2008) framework for the emerging roles of the special educator within the context of RTI. The survey addressed essential RTI components related to instructional services provided by special educators to students not yet eligible for special education, collaboration activities among special and general education teachers, and special educators' participation in key decision-making processes. Special education teachers' utilization of six explicit instructional strategies and teachers' perceptions of benefits and challenges of RTI were also examined. The SERTII was validated for content and format by an expert panel of three West Virginia educators who had participated in various phases of planning, developing, and implementing the RTI process in their schools and/or districts. The survey was also piloted by a small convenience sample of five West Virginia elementary level special educators whose schools implemented RTI.

One mailing of the survey instrument yielded 355 responses. Three hundred forty-one surveys met criteria for inclusion in the research. Those excluded were inadvertently completed

by personnel other than special education teachers such as Title 1 teachers, speech/language therapists, PreK teachers, or middle level special educators.

Demographics

Two hundred ten (61.6%) special educators responded that they participated in their school's RTI process, while 131 (38.4%) reported they had not. Respondents who did not participate in RTI identified which of four reasons best explained non-participation. The majority (79.4%) indicated their special education caseloads prevented them from delivering RTI services to at-risk students ($n = 104$). Other reasons to which non-participation was attributed included sufficient numbers of interventionists without them (22.9%), failure to be asked to participate (21.4%), and mismatches between special education schedules and tiered instruction for at-risk students (15.3%).

For study participants, the mean for years of experience was 13.30 ($SD = 10.86$). The majority (90.5%) of respondents reported they held professional teaching certificates ($n = 190$). The mean number of students with disabilities assigned to teachers' caseloads was 11.07 ($SD = 5.7$). The average number of students with high incidence disabilities was 10.03 ($SD = 5.74$), while the average number of students with low incidence disabilities was 1.03 ($SD = 2.13$). The average number of students per each respondent's caseload at each placement option was as follows: regular education full-time was 4.26 with a standard deviation of 5.64, regular education part-time was 6.01 with a standard deviation of 5.89, and special education separate class was 0.66 with a standard deviation of 1.79. In relation to Title 1 status, the majority (67.9%) of respondents specified their schools received Title 1 funding.

Summary of Findings

Special educators who reported they participated in their school's RTI process responded to survey items intended to determine and describe their roles and responsibilities pertaining to assessment, provision of tiered instruction and intervention, amount of time spent planning and documenting RTI, and frequency of use of explicit instructional strategies when providing Tier 2 and Tier 3 intervention within the three tier instruction model.

More than two-thirds (67.6%) of special educators indicated they progress monitored at-risk students receiving Tier 2 intervention services and more than eight in 10 (81.4%) responded likewise for Tier 3. The majority of respondents reported providing both Tier 2 and Tier 3 interventions, averaging 15 sessions each week. More than half the respondents reported they spent one hour or more each week planning for and documenting tiered intervention for at-risk students.

Participating special educators reported the most frequently used explicit instruction strategies at Tier 2 were immediate affirmative and corrective feedback, guided practice of newly taught skills, and intentional review of previously taught skills. At Tier 3, the most frequently used strategies included immediate feedback, guided practice, and modeling of new skills to be learned.

More than half (53.1%) of responding special education teachers indicated they frequently worked with general educators to differentiate instruction. Special educators reported they were occasionally (40%) or frequently (35%) asked by general education teachers to support or instruct at-risk students in the core or Tier 1. More than one-fourth (25.8%) of respondents indicated they spent more than two hours per month discussing and analyzing at-risk students' Tier 1 achievement data.

Respondents reported whether they participated in eight RTI decision-making processes. Eighty-five percent of respondents reported they were members of the decision-making group that analyzes Tier 1 universal screening data. Over 80% (81.8%) indicated they participated in Tier 2 progress monitoring data discussions. More than 75% (78.1%) of respondents reported they participated in Tier 3 progress monitoring discussions. More than eight in 10 (85.6%) respondents reported they were members of their schools' RTI teams.

More than six of 10 respondents (62.7%) reported they are members of the group that determined at-risk students' need for Tier 2 services, and 58.4% reported they participated in the group that selected and developed Tier 2 interventions. The majority (70.8%) of the respondents indicated they participated in the group that determined at-risk students' need for Tier 3 intervention services. Almost eight of 10 teachers (78.1%) indicated they were part of the decision-making groups that made referrals for special education evaluations.

Research participants reported their feelings or perceptions about their roles and responsibilities as special educators within the RTI process. The majority (71%) of respondents indicated RTI has expanded but enhanced their roles and responsibilities as special educators.

Respondents also identified which of seven administrative and instructional supports would enhance and support their roles and responsibilities within the RTI system. Nearly three-fourths of respondents indicated they needed more flexible school scheduling to accommodate their special education caseloads and services to at-risk students in the RTI process and suggested they needed more time for collaboration and planning.

Two open-ended questions were designed to obtain participants' perceptions of the most beneficial and challenging aspects of RTI. A total of 134 respondents commented on the benefits, most commonly citing additional assistance for at-risk students. A total of 129

respondents commented on the challenges of RTI. The most commonly cited challenges reported by respondents represent three themes: 1) sufficient time to implement the process, including scheduling; 2) meeting the needs of both at-risk students and students with IEPs; and 3) interference with timely referrals for special education evaluation. Notably, 69% of the responses mentioned the issue of time.

Analysis of variance revealed statistical differences related to average (11.10) caseload size and three groups of respondents who perceived that RTI places too much responsibility on special education teachers, RTI expands but enhances the roles and responsibilities of special education teachers, and RTI has no impact on their roles and responsibilities. Higher average caseloads were associated with feelings that RTI places too much responsibility on special education teachers. Lower caseloads were correlated to feelings that RTI has no impact on special educators' roles and responsibilities. For Tier 3, there was a small negative correlation between higher numbers of students with high incidence disabilities on teachers' caseloads and fewer numbers of Tier 3 sessions provided.

Conclusions

The analysis of data collected for this study provided sufficient evidence to support the following conclusions.

Research Question One: To what extent do West Virginia elementary special education teachers participate in tiered instruction and intervention?

Elementary special education teachers are clearly involved in monitoring student progress. They actively provide weekly intervention sessions to at-risk students and generally use research-based, explicit instructional strategies when delivering Tier 2 and Tier 3 intervention.

Research Question Two: How do West Virginia elementary special educators describe/perceive their collaborative roles with general education teachers within the context of a multi-tiered instructional system and regarding students not yet eligible for special education services?

Elementary special education teachers work with general educators to differentiate classroom instruction for at-risk students. They also support or instruct at-risk students during Tier 1 instruction. West Virginia special educators spend time analyzing achievement data with general education teachers and consult regularly with general educators regarding students receiving Tier 2 and Tier 3 interventions. Special education teachers also acknowledged significant increases in the amount of collaboration between special and general educators since the initiation of the RTI system.

Research Question Three: How do West Virginia elementary special education teachers describe/perceive their roles as decision-makers relevant to students not yet eligible for special education services within a multi-tiered instructional system?

Special education teachers are active participants in a variety of RTI decision-making activities. They are members of school-level teams that analyze Tier 1 universal screening data and discuss progress monitoring results for students receiving Tier 2 and Tier 3 interventions. Importantly, special education teachers are members of their schools' RTI teams. They determine at-risk students' needs for Tier 2 and Tier 3 services, select and develop Tier 2 and Tier 3 interventions, and assist in making decisions to refer at-risk students for special education evaluations.

Research Question Four: What benefits and challenges, if any, do West Virginia elementary special education teachers identify relevant to their roles within a multi-tiered instructional system?

Special educators most frequently cited the provision of additional assistance to at-risk students, meeting students' individual needs, and delivery of early intervention as the benefits of RTI. Most commonly cited challenges of RTI included having sufficient time to implement the process, meeting the simultaneous needs of at-risk and IEP students, and interference with timely referrals for special education.

Conclusions from Ancillary Research Findings

Special education teachers with caseloads inclusive of students with high incidence disabilities provided more Tier 3 than Tier 2 intervention sessions. Higher average special education teacher caseloads were associated with feelings that RTI places too much responsibility on special education teachers. Lower caseloads were associated with feelings that RTI has no impact on special educators' roles and responsibilities. Special education teachers whose caseloads included students in Separate Class (SC) placements participated less frequently in the provision of Tier 2 intervention services.

Discussion and Implications

In a school-wide RTI process or multi-tiered system of instructional support, the delivery of both general and special education change as the data-driven, intervention-focused, problem solving components of RTI inspire a school culture of individualized problem solving and planning for all students. Because RTI is enlarging the parameters of academic and behavioral supports offered by general education, it also engenders questions about the roles and responsibilities of both general and special education teachers. Although the literature base for

understanding and implementing response to intervention continues to grow, few studies have explicitly described the roles and responsibilities of special education teachers within the context of the RTI framework.

Hoover and Patton (2008) articulated a conceptual framework valuable in examining the emerging special educator's role in a multi-tiered instruction education system. The authors described roles and skill sets needed by special educators to support their schools' multi-tiered instructional environments. They pointed out that the skill sets needed by special educators to implement new roles within the multi-tiered instructional system are not new, but nonetheless, represent current emphases in addressing the needs of students who struggle.

In the current investigation, it is encouraging that the majority of participating elementary special education teachers who responded to the SERTII indicated they contributed to their schools' RTI process by providing various key components to students not yet eligible for special education services. Of the 341 returned surveys, 210 elementary level special educators indicated they participated to some extent in their school's RTI initiative. This result suggests that in West Virginia, many elementary schools have expected and/or required special education teachers to assume roles and responsibilities in the implementation of the RTI process. Based on these results, it would appear that districts and schools have utilized an option in Policy 2419: Regulations for the Education of Students with Exceptionalities that permits special educators to provide intervention within the RTI system when special education caseloads allow. This finding supports Hoover and Patton's (2008) assertion that special education teachers' roles are evolving within the context of RTI and that many special educator skill sets needed to implement RTI may already be in place.

Stecker, Lembke, and Foegen (2008) illustrated that progress monitoring is an essential RTI practice used to measure student growth as a result of intervention. Participating special education teachers reported they implemented important progress monitoring activities for students receiving Tier 2 and Tier 3 interventions. More than two-thirds of participants progress monitored at Tier 2 and 80% progress monitored at Tier 3. Based on these results, it would seem that special education teachers' roles and responsibilities include the important data-based monitoring of students' academic performance.

However, special educators who participated in this study neither administered diagnostic assessments nor graphed or otherwise organized assessment data at statistically significant frequencies. To some degree, this outcome is worrisome given the critical importance of diagnostic testing to pinpoint the specific skills to be targeted for intervention and the need to clearly display data for use in team decision making. These findings suggest that participants' schools and/or districts may not be implementing or supporting these key RTI practices, or perhaps personnel other than special educators are responsible for these tasks. Findings also revealed that special education teachers identified professional development in data analysis as a needed administrative support. Perhaps, then, special education teachers are not adequately prepared to analyze assessment data for the purpose of adjusting intervention and both pre- and inservice training should focus more intensely on this essential skill set.

Research findings revealed that just over one-third of special educators provided only Tier 2 or Tier 3 interventions, but more than 50% of participants implemented both Tier 2 and Tier 3 services, conducting an average of 15 intervention sessions amounting to 7.5 hours per week in addition to instructing the students with disabilities on their caseloads. This suggests that special educators who do participate in RTI are assuming important roles and

responsibilities relevant to instruction and intervention as West Virginia elementary schools implement a multi-tiered system of support for at-risk learners.

An essential aspect of RTI is the linking of assessment data to instructional practice to determine if students are making the expected progress as a result of evidence-based instruction and intervention (Lembke, McMaster & Stecker, 2009). Results regarding the amount of time special educators spent planning for and documenting tiered intervention yielded two statistically significant findings. Fifty-seven percent of participants reported they spent one hour or more each week planning for and documenting Tier 2 interventions. Sixty-seven percent reported they spent a similar amount of time planning for and documenting Tier 3. This planning and preparation time was in addition to the responsibilities associated with their special education caseloads and, again, acknowledges the contributions of West Virginia elementary special education teachers to their schools' RTI implementations.

Research-validated practices are essential components of the RTI model, and explicit instruction is a consistent concept within the effective intervention literature (Foorman, Carlson & Santi, 2007; McCardle & Chhabra, 2004). Special education teachers who participated in this study reported use of research-based explicit instructional strategies when providing Tier 2 and Tier 3 interventions. The most frequently used explicit instruction strategies at Tier 2 were immediate affirmative and corrective feedback, guided practice of newly taught skills, and intentional review of previously taught skills. At Tier 3, the most frequently used strategies included immediate feedback, guided practice, and modeling of new skills to be learned. Notably, higher frequencies of use were reported for Tier 3 interventions underscoring teachers' understanding of the necessity of purposeful, specific instruction designed to scaffold acquisition of skills, especially for students who struggle significantly.

Collaboration among general and special education teachers is necessary to effectively deliver services to at-risk students within the multi-tiered instruction system (Hoover & Patton, 2008). This study revealed four statistically significant areas of collaboration in which special educators participated. More than half (53.1%) of responding special education teachers indicated they frequently work with general educators to differentiate instruction. More than 40% of special educators reported they were occasionally asked by general education teachers to support or instruct at-risk students in the core or Tier 1. More than four in 10 respondents indicated they spend at least one hour each month collaborating with general education teachers on Tier 1 achievement data for at-risk students not yet eligible for special education services. Over 60% of respondents reported they consulted with general education teachers on either a weekly or monthly basis for Tier 2. Over 65% of special educators indicated they consulted either weekly or monthly with general education teachers for students receiving Tier 3 intervention services. Statistical analysis also indicated that since the initiation of RTI, the amount of collaboration between general and special education teachers has increased. These findings substantiate that West Virginia elementary special educators are assuming necessary collaborator roles as described by Hoover and Patton (2008).

An effective RTI system includes several types of decision-making practices aimed at improving outcomes for at-risk students. More than eight in 10 special educators participated in the groups that analyzed Tier 1 and Tier 2 achievement and progress monitoring data. Almost 80% participated in Tier 3 progress monitoring discussions. Eighty-five percent of respondents reported they were members of their schools' RTI teams, and almost 80% participated in the decisions to refer at-risk students for special education evaluations. These findings make clear that special education teachers can and do regularly fulfill the roles of decision-makers in the

RTI process and suggest teachers possess important skill sets that contribute to their schools' implementation of RTI.

When special education teachers were asked to express their feelings about their roles and responsibilities within the RTI process, the majority of respondents indicated RTI has expanded but enhanced their roles and responsibilities. Only 25% of participants reported that RTI placed too much responsibility on special educators and less than 4% noted RTI had no impact on them as special education teachers. These findings are encouraging in terms of the impact of RTI on special education teachers who appear to be prepared and positioned to be integral members of the multi-tiered instructional team at the elementary level.

Special educators also identified administrative and instructional supports that would enhance and support their roles and responsibilities within the RTI system. A majority of respondents cited more flexible school scheduling that accommodates their special education caseloads and services to at-risk students and more time for collaboration and planning as important supports. More than half of the participants reported they needed a more efficient method for documenting RTI. These observations should serve as a needs assessment for school, district, and state level decision makers interested in improving and strengthening the implementation of RTI.

Special educators also acknowledged several benefits and challenges presented by RTI. Most frequently cited as benefits were the additional assistance available to at-risk students, meeting individual learning needs, and early intervention practices. Other noted benefits included opportunities for all students to learn, small group instruction, prevention of "slipping through the cracks," avoidance of special education placements, and increased teacher communication and collaboration. These acknowledgements attest to special educators'

commitment to the RTI framework and their willingness and ability to address the needs of students in their schools who are not yet identified for services through the IEP process.

Challenges reported by special educators included: 1) sufficient time to implement RTI; 2) meeting the needs of both at-risk and IEP students; and 3) interference with timely referrals for special education. Considering the extent of special educators' participation in their schools' RTI processes, these comments provide practical suggestions and considerations for districts and schools when determining how special education teachers will participate in the RTI system. Especially important is the assertion that teachers find it difficult to meet the needs of at-risk students and their students with disabilities. In West Virginia, current special education policy permits special educators to participate in RTI only when their special education caseload allows such practice. Perhaps clarification is needed regarding the parameters of special educators' participation in the delivery of tiered intervention for at-risk students and what constitutes an "unused portion" of their caseloads because the implementation of IEPs must be a priority.

Another important observation made by special education teachers through responses to two open-ended questions is the notion that RTI interferes with the special education evaluation process. Again, federal and state policies ensure RTI implementation does not delay or deny the evaluation process. Districts and schools must be diligent in the monitoring of intervention practices and timelines to ensure timely evaluations in accordance with policy requirements.

For the most part, data analysis revealed no significant relationships between key demographic characteristics and several RTI practices implemented by special educators. There were no significant differences between Title 1 school status and the administration of diagnostic assessments or special educators' perceptions of their roles and responsibilities within the RTI process. Likewise, no significant differences in the number of Tier 2 and Tier 3 sessions

provided by special educators were noted among non-Title and Title 1 schools. However, special educators in Title 1 schools did instruct at-risk and IEP students together more frequently than teachers in non-Title 1 schools. These findings suggest that the availability of resources, including personnel, in Title 1 schools has little impact on the roles and responsibilities of special education teachers within the RTI system.

These findings are somewhat confounding as Title 1 eligible schools generally possess more resources, including certified reading specialists and sufficient funding for instructional materials and programs. It would be expected that some differences between Title 1 and non-Title schools exist with regard to implementing RTI. Further research might investigate how Title 1 reading teachers perceive their roles and fulfill their responsibilities within the RTI process. As Fuchs and Deshler (2007) cautioned, RTI demands a substantive change in how general education, which includes Title 1 reading teachers, addresses the needs of students who struggle.

Also, possibly the association of RTI with special education, through both state policy and district and school-level practice, contributed to the aforementioned findings, especially since in West Virginia, state and local special education leaders initially developed and introduced the RTI model and guidelines. Perhaps uncertainty and continuing debate over the learning disabilities construct and evaluation criteria (Bradley & Danielson, 2004; Lyon, 2001; Speece & Case, 2001; Vaughn & Fuchs, 2001) also add confusion and misunderstanding to the RTI landscape, thereby affecting school-level practice with general educators deferring to special educators when a learning disability is suspected.

Findings did indicate statistical differences related to average special education teacher caseload size and perceptions of the impact of RTI on special educators. Higher average

caseloads were associated with feeling that RTI places too much responsibility on special educators. These results have important implications for the extent to which special educators might be expected to participate in their schools' RTI initiatives. District and school administrators must carefully analyze special education caseloads and set clear expectations as well as limits on the level to which special educators should be responsible for at-risk students who are not yet eligible for special education services.

Other variables investigated were special education teacher caseload type (i.e., number of students with high and low incidence disabilities) and special education placement options. While there were no significant relationships established between the number of students in each caseload type and teachers' provision of Tier 2 intervention, for Tier 3 there was a small negative correlation between higher numbers of students with high incidence disabilities and fewer numbers of Tier 3 intervention sessions. Based on these findings, it appears that factors related to special educators' caseloads play little if any role in teachers' participation in their schools' RTI initiatives. This information might suggest that special educators' roles and responsibilities in RTI are administratively determined without regard for their special education responsibilities or the characteristics of their special education caseloads.

Important implications for education in general may also be derived from this study. In West Virginia, the fundamental constructs of RTI comprise special education policy relevant to the identification of learning disabilities. Under the guidance of new state level leadership, RTI is now referred to as a component of Supports for Personalized Learning (SPL), which reflects a vision and mission for West Virginia schools focused on meeting the individual needs of all students (West Virginia Policy 2419, 2012). A revised Policy 2419 is currently pending State Board approval and will include not only a new name but also more flexibility for the

implementation of several procedural components of the multi-tiered system of support. For example, in the proposed policy changes, the concept of tiers is changed to levels, supports for behavior needs are addressed, and more flexibility is extended to districts relevant to the frequency and duration of interventions at each level of instruction and intervention. How these changes affect current standards of practice in the school and classroom should be communicated clearly and monitored carefully at both the state and local levels.

The guiding regulations for all West Virginia education programs are set forth in West Virginia Board of Education Policy 2510, Assuring Quality of Education: Regulations for Education Programs. However, Policy 2510 does not specifically address the multi-tiered model of instructional support. Instead, the regulations reference “strategies for early intervention to correct student deficiencies” (p. 9) and the concepts of extra time, extra help, and multiple instructional strategies are also cited. At this time, an explicit definition of tiered instruction and a description of the model as supported in the literature exist only in state special education policy.

Because the multi-tiered instructional framework is a useful strategy for meeting the needs of struggling students and is also an integral component for the identification of learning disabilities in West Virginia, state policymakers should examine the potential for ambiguity and inconsistencies in practice across schools, districts, and the state due to different and separate general and special education policies. RTI, as a school-wide initiative, demands high levels of collaboration between general and special education and a common understanding of how students who struggle should be provided appropriate and effective instructional support. Incorporating the tenets of SPL into general education regulations could promote common

understanding, unify practice of general and special educators, and move West Virginia schools toward a more seamless system of meeting the needs of at-risk learners.

Importantly, a provision in the 2007 state special education regulations that allowed an unused portion of a special educator's caseload to be dedicated to participation in the RTI process has been removed. This study identified the special education teacher as an interventionist with specific roles in and responsibilities for working with at-risk students not yet eligible for special education. Thirty-two percent of the special education teachers who reported they participated in RTI served at-risk learners in non-Title 1 schools that do not necessarily have funding for needed interventionists. The absence of regulatory language around the use of special education teachers as interventionists could have adverse effects on non-Title 1 schools' RTI implementation. Special educators bring unique skill sets to the assessment, instruction, collaboration, and decision-making involved in an effective RTI system. As written, it is unclear as to whether the pending state regulations permit special education teachers to provide intervention to at-risk students not yet eligible for special education. Hopefully, while not specifically communicated in policy, an expectation for the continued involvement of the special educator in SPL exists.

Finally, the proposed West Virginia special education regulations also articulate additional criteria for identifying learning disabilities. The eligibility committee may examine how a student's cognitive processing affects achievement and may use patterns of strengths and weaknesses to confirm the presence of a learning disability. This concept is associated with a more traditional view of learning disabilities. However, Johnson, Humphrey, Mellard, Woods, and Swanson's (2010) meta-analyses supported the inclusion of cognitive processing as a component of the learning disabilities diagnosis in the area of reading, but no similar indicators

emerged for use in the area of mathematics. Nonetheless, experts in the field of learning disabilities continue to debate the etiology of LDs and how to appropriately distinguish learning disabilities from other conditions that adversely impact academic achievement. Perhaps future research and the eventual reauthorization of the IDEA will provide greater insight and procedural guidance on the role of cognitive processing in the identification of learning disabilities.

Recommendations for Further Research

This study investigated and provided some specific understandings of the roles and responsibilities of West Virginia elementary special education teachers within the multi-tiered instructional system or RTI. Teachers provided information on the extent and nature of their participation in the RTI system as well as the benefits and challenges of RTI from the perspective of a special educator. Other questions generated by the findings of this study may be investigated through further research as summarized below.

1. This study focused solely on the implementation of RTI at the elementary school level in the content area of reading. Additional research could investigate the roles and responsibilities of middle and high school special educators with regard to their schools' RTI implementations. Likewise, how West Virginia elementary special educators contribute to RTI for mathematics, writing, and behavior could be examined.
2. Findings from this study indicate that the sample population of elementary special education teachers incorporates research-based explicit instructional strategies into their delivery of Tier 2 and Tier 3 interventions. Because this research relied on self-reported use of the strategies, a research design including direct

observation could potentially yield more accurate information about the actual implementation and possibly the quality of the explicit instructional strategies.

3. This study explored how special education teachers perceive their roles and responsibilities within the multi-tiered instructional system using a survey questionnaire. Further study utilizing interviews and observations could engender deeper and more detailed information about teachers' feelings about their participation in RTI.
4. Findings from this study illustrated the nature and extent of special educators' participation in the RTI initiative. The literature recognizes that special educators are important members of the RTI process but should not assume the bulk of responsibility in the provision of tiered instruction to at-risk students. Additional examination of parity in implementing RTI among Title 1, general, and special education teachers would yield a broader view of the multi-tiered instructional system and how it is supported by all educators.
5. Respondents in this study reported that RTI practices interfere with timely referrals for special education. Additional research seeking to confirm or deny this effect of RTI would provide important information for state, district, and school level administrators who develop policy, plan for implementation, and oversee the RTI process.
6. This study focused exclusively on special educators' perceptions of their roles and responsibilities in the RTI system. Further research might explore the perceptions of administrators and general education teachers relative to the value added to RTI by special educators' knowledge, skill sets, and dispositions.

7. This study was developed to describe how elementary special educators participate in West Virginia's RTI initiative. Additional research might examine how professional development and teacher preparation programs support and accommodate the changing roles of special educators and service delivery models within the multi-tiered instructional system.
8. In light of West Virginia's Support for Personalized Learning initiative, additional research on how statewide implementation of upcoming requirements, including new levels of flexibility for districts and schools, should be explored.

APPENDICES

Appendix A: Participant Survey, Special Educator Response to Intervention Inventory

Appendix B: Panel of Experts

Appendix C: Research Questions and SERTII Alignment Matrix

Appendix D: IRB Approval

Appendix E: Initial Email to Elementary Principals

Appendix F: Cover Letter to Elementary Principals

Appendix G: Anonymous Survey Consent

Appendix H: Follow-up Email to Elementary Principals

Appendix I: Final Email to Elementary Principals

Appendix A: Participant Survey Special Educator RTI Inventory (SERTII)

The *Special Educator RTI Inventory* (SERTII) is a tool used to examine the characteristics and extent of special education teachers' participation in their schools' RTI processes for **grades K-5**. Research findings may possibly help our special education profession define the roles and responsibilities of special education teachers in the RTI instructional system. **PLEASE NOTE:** For the purpose of this study, **at-risk students** are defined as struggling learners who **DO NOT have IEPs**. The SERTII takes approximately 8-10 minutes to complete. Please use the postage-paid envelope provided to return the SERTII to me. Thank you for your time and important insights about RTI through the eyes of a special educator!

Section 1: Background Information
<p>1. Do you participate in your school's RTI process for at-risk students not yet identified for special education?</p> <p><input type="checkbox"/> Yes If you answer YES to this question, proceed to Question 3 and complete the remainder of the survey.</p> <p><input type="checkbox"/> No If you answer NO to this question, complete only Question 2 and return the survey in the postage-paid envelope provided. Thank you!</p>
<p>2. If you answered NO to Question 1, which of the following reasons best explains why? Check all that apply.</p> <p><input type="checkbox"/> I have not been asked.</p> <p><input type="checkbox"/> My special education caseload uses all possible time.</p> <p><input type="checkbox"/> There are enough interventionists without me.</p> <p><input type="checkbox"/> My special education schedule conflicts with Tier 2 intervention time.</p> <p><input type="checkbox"/> Other _____</p>
<p>3. Counting this year, how many years have you taught special education? _____</p>
<p>4. Please check the type of special education certification you hold.</p> <p><input type="checkbox"/> Professional <input type="checkbox"/> Alternative Teaching Certificate <input type="checkbox"/> Temporary Teaching Certificate <input type="checkbox"/> Permit</p>
<p>5. How many students with disabilities in grades K-5 are on your current special education caseload? _____</p>
<p>6. What number of the students on your special education caseload is in each of the categories below?</p> <ul style="list-style-type: none"> • High incidence disabilities (e.g., SLD, MI, OHI, EBD)? _____ • Low incidence disabilities (e.g., autism, blind, deaf, severe/profound MI)? _____ <p style="text-align: center;">Total should equal 100% of your caseload.</p>

<p>7. What number of students on your caseload is in each of the placement options below?</p> <ul style="list-style-type: none"> • General education full-time (e.g., inclusion services)? _____ • Special education part-time settings (e.g., resource room)? _____ • Special education full-time settings (e.g., separate class)? _____ <p style="text-align: center;">Total should equal 100% of your caseload.</p>		
Section II: Tier 1 Core Instruction		
1. Do you teach in a Title 1 school?	Yes	No
2. Do you participate in discussions at meetings wherein universal screening data are analyzed?	Yes	No
3. Are you part of the decision-making group that determines which students need Tier 2 intervention?	Yes	No
4. Are you part of the group that selects/develops Tier 2 interventions for at-risk students?	Yes	No
5. In the last two years, have you been expected to increase your knowledge of reading instruction?	Yes	No
6. In the last two years, have you been expected to increase your knowledge of math instruction?	Yes	No
7. Are you a member of your school's RTI team, literacy leadership team, curriculum team, Student Assistance Team (SAT), or other similar group that addresses tiered instruction?	Yes	No
<p>8. Approximately how much time per month do you spend discussing and analyzing student data with general education teachers? Check the best answer.</p> <p><input type="checkbox"/> None <input type="checkbox"/> Less than 1 hours <input type="checkbox"/> 1-2 hours <input type="checkbox"/> More than 2 hours</p>		
<p>9. How often do you work with general education teachers to differentiate instruction (e.g., work with small groups, modify learning activities, adapt content) for at-risk learners? Check the best answer.</p> <p><input type="checkbox"/> Never <input type="checkbox"/> Hardly ever <input type="checkbox"/> Occasionally <input type="checkbox"/> Frequently</p>		
<p>10. Since your school began RTI, which of the following best describes the amount of time general and special education teachers spend discussing and planning for at-risk students' needs? Check the best answer.</p> <p><input type="checkbox"/> Less time <input type="checkbox"/> More time <input type="checkbox"/> About the same amount of time</p>		
<p>11. Since your school began RTI, which of the following best describes how often general education teachers ask you how to support or instruct at-risk students? Check the best answer.</p> <p><input type="checkbox"/> Never <input type="checkbox"/> Hardly ever <input type="checkbox"/> Occasionally <input type="checkbox"/> Frequently</p>		

Section III: Tier 2 Strategic Intervention					
1. Do you administer diagnostic assessments (e.g., PSI, QPS) to students who do not meet benchmarks?	Yes	No			
2. Do you participate in discussions at meetings wherein progress monitoring data are analyzed?	Yes	No			
3. Do you monitor the progress of students to whom you provide Tier 2 intervention?	Yes	No			
4. Are you part of the decision-making group that determines which students need Tier 3 intervention?	Yes	No			
5. Do you ever instruct both <i>at-risk students</i> AND <i>students with IEPs</i> in the same Tier 2 sessions?	Yes	No			
6. Do you graph or otherwise organize assessment data for students receiving Tier 2 intervention?	Yes	No			
7. On average, how many Tier 2 intervention sessions do you provide per week to at-risk students? _____					
8. Approximately how much time per week do you spend planning for and documenting Tier 2 intervention? Check the best answer. <input type="checkbox"/> Less than 1 hour <input type="checkbox"/> Between 1 and 2 hours <input type="checkbox"/> More than 2 hours					
9. How often do you consult (e.g., discuss effectiveness of intervention, content of intervention, progress monitoring results) with general education teachers regarding the Tier 2 intervention you provide to at-risk students? Check the best answer. <input type="checkbox"/> Never <input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Other _____					
10. Circle the number that best describes the extent to which you use each of the following strategies when providing Tier 2 intervention to at-risk students.					
	Never	Some-times	Fairly Often	Very Often	Always
a. Intentional review of previously taught skills	1	2	3	4	5
b. Modeling new skills to be learned	1	2	3	4	5
c. Guided practice of newly taught skills	1	2	3	4	5
d. Examples and non-examples of new skills or strategies	1	2	3	4	5
e. Immediate affirmative and corrective feedback	1	2	3	4	5
f. Distributed and cumulative practice	1	2	3	4	5

Section IV: Tier 3 Intensive Intervention					
1. Do you participate in discussions in meetings wherein Tier 3 progress monitoring data are analyzed?	Yes	No			
2. Are you part of the group that determines which students need to be evaluated for special education?	Yes	No			
3. Do you monitor the progress of the students to whom you provide Tier 3 intervention?	Yes	No			
4. Do you ever instruct both <i>at-risk students</i> AND <i>students with IEPs</i> in the same Tier 3 sessions?	Yes	No			
5. Approximately how many Tier 3 intervention sessions do you provide per week to at-risk students? _____					
6. How much time per week do you spend planning for and documenting Tier 3 intensive intervention? Check the best answer. <input type="checkbox"/> Less than 1 hour <input type="checkbox"/> Between 1 and 2 hours <input type="checkbox"/> More than 2 hours					
7. How often do you consult (e.g., discuss effectiveness of intervention, content of intervention, progress monitoring results) with general education teachers regarding the Tier 3 intensive intervention you provide to at-risk students? Check the best answer. <input type="checkbox"/> Never <input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Other _____					
8. Circle the number that best describes the extent to which you use each of the following strategies when providing Tier 3 intervention to at-risk students.					
	Never	Some-times	Fairly Often	Very Often	Always
a. Intentional review of previously taught skills	1	2	3	4	5
b. Modeling new skills to be learned	1	2	3	4	5
c. Guided practice of newly taught skills	1	2	3	4	5
d. Examples and non-examples of new skills or strategies	1	2	3	4	5
e. Immediate affirmative and corrective feedback	1	2	3	4	5
f. Distributed and cumulative practice	1	2	3	4	5
9. The responsibilities below are typically associated with the RTI process. Circle the number that best describes the extent to which you feel prepared to provide each service to at-risk students.					

	Not prepared	Not very prepared	Some-what prepared	Adequate-ly prepared	Well prepared
a. Analyzing student achievement data	1	2	3	4	5
b. Identifying evidence-based strategies	1	2	3	4	5
c. Monitoring student progress	1	2	3	4	5
d. Adjusting interventions that are not working	1	2	3	4	5
e. Collaborating/communicating with general education teachers about at-risk students	1	2	3	4	5
f. Differentiating instruction for at-risk students	1	2	3	4	5
<p>10. Check the statement that best describes how you feel about your roles and responsibilities as a special educator within the RTI process.</p> <ul style="list-style-type: none"> <input type="checkbox"/> RTI has placed too much responsibility on special education teachers. <input type="checkbox"/> RTI has expanded but enhanced the roles and responsibilities of special education teachers. <input type="checkbox"/> RTI has had no impact on the roles and responsibilities of special education teachers. 					
<p>11. Which of the following administrative or instructional supports would enhance and support your roles and responsibilities within the RTI system? Check all that apply.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Professional development in data analysis <input type="checkbox"/> Professional development in selecting or developing evidence-based interventions <input type="checkbox"/> Professional development in co-teaching, co-planning, and collaboration <input type="checkbox"/> More time for collaboration and planning <input type="checkbox"/> More flexible school scheduling to accommodate special education caseloads and the RTI process <input type="checkbox"/> More efficient methods for documenting RTI (e.g., online tracking/reporting system) <input type="checkbox"/> Improved assessment tools <input type="checkbox"/> Other _____ 					

12. From your perspective as a special education teacher, what are the most beneficial aspects of RTI?

13. From your perspective as a special education teacher, what are the most challenging aspects of RTI?

WVDE – CIS - 027

Thank you very much for sharing this information and your opinions!

Please use the postage-paid envelope to return the survey to me:

Linda Palenchar
1419 Oakmont Rd.
Charleston, WV 25314

Appendix B: Panel of Experts

The panel of experts who reviewed the Special Educator Response to Intervention Inventory (SERTII) and the corresponding research questions included the following professionals:

Yvonne Santin, Ed.D.
Wood County Schools
Parkersburg, West Virginia

Brenda Clark, M.A.
RESA 5 RTI Specialist
Parkersburg, West Virginia

Autumn Withrow, M.A.
Kanawha County Schools
Charleston, West Virginia

Appendix C: Research Questions and SERTII Alignment Matrix

Research Question 1	Research Question 2	Research Question 3	Research Question 4
<p>To what extent do West Virginia elementary special education teachers participate in tiered instruction and intervention?</p>	<p>How do West Virginia elementary special educators describe/perceive their collaborative roles with general education teachers within the context of a multi-tiered instructional system and regarding students not yet eligible for special education services?</p>	<p>How do West Virginia elementary special education teachers describe/perceive their roles as decision-makers relevant to students not yet eligible for special education services within a multi-tiered instructional system?</p>	<p>What benefits and challenges, if any, do West Virginia elementary special education teachers identify relevant to their roles within a multi-tiered instructional system?</p>

Survey Items	Research Question
Section I: Background Information	
1. Do you participate in your school's RTI process for at-risk students not yet identified for special education?	1
2. If you answered NO to Question 1, which of the following reasons best explains why?	1
3. Counting this year, how many years have you taught special education?	1
4. Please check the type of special education certification you hold.	1
5. How many students with disabilities in grades K-5 are on your current special education caseload?	1
6. What number of the students on your special education caseload is in each category (high/low incidence)?	1
7. What number of students on your caseload is in each placement option (REFT, REPT, SC)?	1
Section II: Tier 1 Core Instruction	
1. Do you teach in a Title 1 school?	1
2. Do you participate in discussions at meetings wherein universal screening data are analyzed?	3
3. Are you part of the decision-making group that determines which students need Tier 2 intervention?	3
4. Are you part of the group that selects/develops Tier 2 interventions for at-risk students?	3
5. In the last two years, have you been expected to increase your	1

knowledge of reading instruction?	
6. In the last two years, have you been expected to increase your knowledge of math instruction?	1
7. Are you a member of your school's RTI team, literacy leadership team, curriculum team, Student Assistance Team (SAT), or other similar group that addresses tiered instruction?	3
8. Approximately how much time per month do you spend discussing and analyzing student data with general education teachers?	1
9. How often do you work with general education teachers to differentiate instruction (e.g., work with small groups, modify learning activities, adapt content) for at-risk learners?	2
10. Since your school began RTI, which of the following best describes the amount of time general and special education teachers spend discussing and planning for at-risk students' needs?	2
11. Since your school began RTI, which of the following best describes how often general education teachers ask you how to support or instruct at-risk students?	2
Section III: Tier 2 Strategic Intervention	
1. Do you administer diagnostic assessments (e.g., PSI, QPS) to students who do not meet benchmarks?	1
2. Do you participate in discussions at meetings wherein progress monitoring data are analyzed?	3
3. Do you monitor the progress of students to whom you provide Tier 2 intervention?	1
4. Are you part of the decision-making group that determines which students need Tier 3 intervention?	3
5. Do you ever instruct both <i>at-risk students</i> AND <i>students with IEPs</i> in the same Tier 2 sessions?	1
6. Do you graph or otherwise organize assessment data for students receiving Tier 2 intervention?	1
7. On average, how many Tier 2 intervention sessions do you provide per week to at-risk students?	1
8. Approximately how much time per week do you spend planning for and documenting Tier 2 intervention?	1
9. How often do you consult (e.g., discuss effectiveness of intervention, content of intervention, progress monitoring results) with general education teachers regarding the Tier 2 intervention you provide to at-risk students?	2
10. <i>Circle the number that best describes</i> the extent to which you use each of the following strategies when providing Tier 2 intervention to at-risk students.	1

Section IV: Tier 3 Intensive Intervention	
1. Do you participate in discussions in meetings wherein Tier 3 progress monitoring data are analyzed?	3
2. Are you part of the group that determines which students need to be evaluated for special education?	3
3. Do you monitor the progress of the students to whom you provide Tier 3 intervention?	1
4. Do you ever instruct both at-risk students AND students with IEPs in the same Tier 3 sessions?	1
5. Approximately how many Tier 3 intervention sessions do you provide per week to at-risk students?	1
6. How much time per week do you spend planning for and documenting Tier 3 intensive intervention?	1
7. How often do you consult (e.g., discuss effectiveness of intervention, content of intervention, progress monitoring results) with general education teachers regarding the Tier 3 intensive intervention you provide to at-risk students?	2
8. <i>Circle the number that best describes</i> the extent to which you use each of the following strategies when providing Tier 3 intervention to at-risk students.	1
9. The responsibilities below are typically associated with the RTI process. <i>Circle the number that best describes</i> the extent to which you feel prepared to provide each service to at-risk students.	1
10. <i>Check the statement</i> that best describes how you feel about your roles and responsibilities as a special educator within the RTI process.	4
11. Which of the following administrative or instructional supports would enhance and support your roles and responsibilities within the RTI system?	4
12. From your perspective as a special education teacher, what are the most beneficial aspects of RTI?	4
13. From your perspective as a special education teacher, what are the most challenging aspects of RTI?	4

Appendix D: IRB Approval



Office of Research Integrity
Institutional Review Board
401 11th St., Suite 1300
Huntington, WV 25701

FWA 00002704
IRB1 #00002205
IRB2 #00003206

April 15, 2011

Ron Childress, EdD
Graduate School of Education and Professional Development, MUGC

RE: IRBNet ID# 234237-1
At: Marshall University Institutional Review Board #2 (Social/Behavioral)

Dear Dr. Childress:

Protocol Title:	[234237-1] A Study of West Virginia Elementary Special Education Teachers' Roles, Responsibilities and Practices within a Multitiered Instructional System: Implications for Policy and Practice	
Expiration Date:	April 15, 2012	
Site Location:	MUGC	
Type of Change:	New Project	APPROVED
Review Type:	Exempt Review	

In accordance with 45CFR48.101(b)(2), the above study and informed consent were granted Exempted approval today by the Marshall University Institutional Review Board #2 (Social/Behavioral) Chair for the period of 12 months. The approval will expire April 15, 2012. A continuing review request for this study must be submitted no later than 30 days prior to the expiration date.

This study is for student Linda Palenchar.

If you have any questions, please contact the Marshall University Institutional Review Board #2 (Social/Behavioral) Coordinator Bruce Day, CIP at (304) 696-4303 or day50@marshall.edu. Please include your study title and reference number in all correspondence with this office.

Appendix E: Initial Email to Elementary Principals

From: Linda Palenchar [mailto:LPalenchar@suddenlink.net]

Sent: Sunday, April 24, 2011 9:56 PM

To: ABRAM HIGHLEY (ahighley@access.k12.wv.us); ALLEN LAUGH (alaugh@access.k12.wv.us); AMANDA CRAIG (acraig@access.k12.wv.us); ANN MICKLE (annbmick@aol.com); BETSY PATTERSON (blpatter@access.k12.wv.us); BRETT UBBENS (bubbens@access.k12.wv.us); CHERYL WAYTS (cwayts@access.k12.wv.us); CHRISTIE WILLIS (cwillis@access.k12.wv.us); DARYLA RAPP (dprapp@access.k12.wv.us); DEBORAH KAY WHITE (dbkwhite@access.k12.wv.us); DWIGHT GOFF (drgoff@access.k12.wv.us); ELIZABETH CONRAD (econrad@access.k12.wv.us); FREDRICK SHREVE (fshreve@access.k12.wv.us); HEATHER MANNIX-BRETTTHAUER (hmannix@access.k12.wv.us); HUSTON PAUL C II (phuston@access.k12.wv.us); JEREMY PYLE (jpyle@access.k12.wv.us); JODY JOHNSON (jljohnso@access.k12.wv.us); JOSEPH OLIVERIO (joliveri@access.k12.wv.us); JULIE HANDLEY (jghandle@access.k12.wv.us); KAREN BRADY (kbrady@access.k12.wv.us); KAY BOWLING (kmbowlin@access.k12.wv.us); KEITH PALMER (kpalmer@access.k12.wv.us); KENNETHA HOWES (khowes@access.k12.wv.us); KIMBERLY FALLS (kfalls@access.k12.wv.us); M ESTHER LAUDERMAN (elauderm@access.k12.wv.us); MARGARET SHANK (mfshank@access.k12.wv.us); MARY ELIZABETH THOMAS (marthoma@access.k12.wv.us); MARY VINCENT (mpvincen@access.k12.wv.us); MELINDA AKERS (hroy@access.k12.wv.us); MICHAEL DEROSE (mderose@access.k12.wv.us); MICHAEL FLING (mfling@access.k12.wv.us); MICHAEL WAYNE TABOR (tabormichael@hotmail.com); MICHELLE JEFFERS (mdjeffer@access.k12.wv.us); PATRICIA LEE HARVEY (plharvey@earthlink.net); PATRICIA MARIE FELDMEIERS (pfeldmeier@access.k12.wv.us); PEGGY HALL (peggyhall33@netscape.net); PENNY LOUISE TONELLI (ptonelli@access.k12.wv.us); RHONDA GAYE SHAVER (rgshaver@access.k12.wv.us); ROBIN DAQUILANTE (khanood@access.k12.wv.us); RONDLYNN COOL (rcool@access.k12.wv.us); SARA STANKUS (sstankus@access.k12.wv.us); STEVEN LEWIS (stlewis@access.k12.wv.us); SUE ANDERSEN (seanders@access.k12.wv.us); TAMMY CHAMBERS (tchamber@access.k12.wv.us); WESLEY SHANNON EZELL (wezell@access.k12.wv.us); WILLIAM MATTHEWS (wmatthew@access.k12.wv.us)

Cc: 'dbever@access.k12.wv.us'; 'krodes@access.k12.wv.us'; 'dgcalthoun@access.k12.wv.us'; 'mwalton@access.k12.wv.us'; 'scochran@access.k12.wv.us'; 'dnovotny@access.k12.wv.us'; 'jsharris@access.k12.wv.us'; 'ysantin@access.k12.wv.us'

Subject: WV RTI Survey for Special Education Teachers

Good morning, Elementary Principals! West Virginia elementary schools have been working to implement the Response to Intervention (RTI) process since 2009 when Policy 2419, *Regulations for the Education of Students with Exceptionalities*, required the use of RTI to identify students with learning disabilities. New roles and responsibilities for special education teachers are evolving and it is important to examine the supports special educators provide within the tiered system as well as the extent of their participation in the process.

I am currently working on my doctorate at Marshall University. The purpose of this email is to invite you to assist me in disseminating a survey to **special education teachers** at your school. My research project is entitled, *A Study of West Virginia Elementary Special Education Teachers' Roles, Responsibilities, and Practices within a Multitiered Instructional System*:

Implications for Policy and Research. It explores the characteristics and extent of elementary special educators' participation in the RTI process.

In a few days (during the week of April 25th), you will receive a package in the mail that includes multiple paper copies of a survey, the *Special Educator RTI Inventory (SERTII)*. I am asking that you distribute the surveys along with the enclosed cover letters and self-addressed, pre-paid postage envelopes to **each special education teacher on your staff**. Please include **all special education** teachers whether they participate directly in RTI or not. Please **DO NOT** include therapists (e.g., speech/language, occupational) or school psychologists.

Teacher survey responses will be completely anonymous and used only for the intended purposes of this doctoral research project. Teachers are asked not to write any personally identifiable information on their returned surveys.

If you have any questions about the study you may contact Dr. Ron Childress at rchildress@marshall.edu or 304.7446.2074. You may contact me at lpalenchar@suddenlink.net or 304.344.5799.

If you have any questions concerning your rights as a research participant you may contact the Marshall University Office of Research Integrity at 304.696.4303.

Thank you for your assistance with this task.

It is greatly appreciated!

Linda Palenchar

Appendix F: Cover Letter to Elementary Principals

April 25, 2011

Dear West Virginia Principal,

West Virginia elementary schools have been working to implement the Response to Intervention (RTI) process since 2009 when Policy 2419, *Regulations for the Education of Students with Exceptionalities*, required the use of RTI to identify students with learning disabilities. New roles and responsibilities for special education teachers are evolving and it is important to examine the supports special educators provide within the tiered system as well as the extent of their participation in the process.

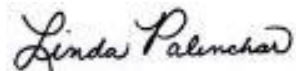
I am currently working on my doctorate at Marshall University. The purpose of this letter is to invite you to assist me in disseminating a survey to **special education teachers** at your school. My research project is entitled, *A Study of West Virginia Elementary Special Education Teachers' Roles, Responsibilities, and Practices within a Multitiered Instructional System: Implications for Policy and Research*. It explores the characteristics and extent of elementary special educators' participation in the RTI process.

I am asking that you distribute the enclosed surveys along with the self-addressed, pre-paid postage envelopes that are also included to **each special education teacher on your staff** sometime during the next week. Please include all special education teachers whether they participate directly in RTI or not. Please **DO NOT** include therapists (e.g., speech/language, occupational) or school psychologists.

Teacher survey responses will be completely anonymous and used only for the intended purposes of this doctoral research project. Teachers are asked not to write any personally identifiable information on their returned surveys.

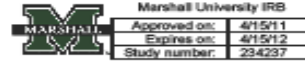
If you have any questions about the study you may contact Dr. Ron Childress at rchildress@marshall.edu or 304.7446.2074. You may contact me at lpalenchar@suddenlink.net or 304.344.5799. If you have any questions concerning your rights as a research participant you may contact the Marshall University Office of Research Integrity at 304.696.4303.

Sincerely,



Appendix G: Anonymous Survey Consent

Anonymous Survey Consent



Dear West Virginia Special Educator,

West Virginia elementary schools have been working to implement the Response to Intervention (RTI) process since 2009 when Policy 2419, *Regulations for the Education of Students with Exceptionalities*, required the use of RTI to identify students with learning disabilities. New roles and responsibilities for special education teachers are evolving and it is important to examine the supports special educators provide within the tiered system as well as the extent of their participation in the process.

You are invited to participate in a research project entitled "*A Study of West Virginia Elementary Special Education Teachers' Roles, Responsibilities and Practices within a Multitiered Instructional System: Implications for Policy and Practice*". This study of special education teachers' involvement in RTI is being conducted as part of the dissertation requirements for my Education Doctoral program in Curriculum and Instruction at Marshall University.

To study new roles and responsibilities, I am asking you to complete the *Special Educator Response to Intervention Inventory* (SERTII). The survey is comprised of questions and statements related to a variety of activities in which elementary special education teachers may be participating within their schools' RTI process.

Your replies will be anonymous, so *please do not put your name anywhere on the form*. There are no known risks involved with this study. Participation is completely voluntary and there will be no penalty or loss of benefits if you choose not to participate in this research study. If you choose not to participate you may either return or discard the blank survey. You may choose to not answer any question by simply leaving it blank.

Returning the survey via US mail to me indicates your consent for use of the answers you supply. If you have any questions about the study you may contact Dr. Ron Childress at rchildress@marshall.edu and 304.7446.2074 or Linda Palenchar at lpalenchar@suddenlink.net and 304.344.5799. If you have any questions concerning your rights as a research participant you may contact the Marshall University Office of Research Integrity at 304.696.4303.

By completing this survey and returning it you are also confirming that you are 18 years of age or older. Please keep this page for your records. Thank you!

Sincerely,

Linda Palenchar

Appendix H: Follow-up Email to Elementary Principals

From: Linda Palenchar [mailto:LPalenchar@suddenlink.net]

Sent: Wednesday, May 11, 2011 10:01 PM

To: BARBARA ANN MILLER (bwhisner@access.k12.wv.us); CARRIE HENDERSHOT (cahender@access.k12.wv.us); CHARLENE BROWN (csbrown@access.k12.wv.us); CYNTHIA MCCUTCHEON (cmmccutc@access.k12.wv.us); DAVENE BURKS (dburks@access.k12.wv.us); DEANN HARTSHORN (dhartsho@access.k12.wv.us); DEBRA TAMPOYA (dtampoya@access.k12.wv.us); DIANE BURNSIDE (dburnsid@access.k12.wv.us); ELIZABETH ZUCHOWSKI (lnakaish@access.k12.wv.us); JAMES HAUGH (vesmith@access.k12.wv.us); JANE DUFFY (jduffy@access.k12.wv.us); JANIE DEVAUL (jdevaul@access.k12.wv.us); JOHN CHARLES LEE (jlee@access.k12.wv.us); JOYCE LYDON OTT (jalydon@access.k12.wv.us); KAREN COLLINS (kecollin@access.k12.wv.us); KAREN SUE KLAMUT (kklamut@access.k12.wv.us); KENNETH WOLFE (kpwolfe@access.k12.wv.us); KIMBERLY ANN CAIN (kacain@access.k12.wv.us); KIMBERLY MIDDLEMAS (kmiddlem@access.k12.wv.us); LARRY WERRY (lwerry@access.k12.wv.us); MARK STUTLER (mstutler@access.k12.wv.us); MARY LYNN COCCO (mcocco@access.k12.wv.us); MASON ANDREW NEPTUNE (myergovi@access.k12.wv.us); MICHAEL ANTHONY HINCE (mhince@access.k12.wv.us); MICHAEL WILLIAMS (mkewilli@access.k12.wv.us); MICHELLE LEE FLEMING (mlflemin@access.k12.wv.us); NICOLE ANGELA FOX (nbell@access.k12.wv.us); RICHARD WEBER (rwweber@access.k12.wv.us); ROBERT MOORE (rwmoore@access.k12.wv.us); ROBERT SOLLY (rsolly@access.k12.wv.us); ROSANN HARDIN (rhardin@access.k12.wv.us); SANDRA WOLFE (skwolfe@access.k12.wv.us); SCOTT MORRIS (scmorris@access.k12.wv.us); WELDON YODER (wyoder@access.k12.wv.us); WENDY CLUTTER (wclutter@access.k12.wv.us)

Cc: 'gdeasy@access.k12.wv.us'; 'shaines@access.k12.wv.us'; 'tcbarnet@access.k12.wv.us'; 'tjriley@access.k12.wv.us'

Subject: RE: WV RTI Survey for Special Education Teachers

Good morning! A few weeks ago I sent the message below regarding a survey to be shared with your special education teachers. If you have not received a packet of surveys for distribution, please let me know and I will make sure you receive one. If you have distributed the surveys, I would greatly appreciate any follow-up you could provide with your teachers in terms of completing and returning the survey. Just to clarify, please distribute surveys to all special education teachers on your staff – even those who do not participate in the RTI process - as that information is valuable to me as well.

Thanks to each of you for supporting this work. Please know that I am very appreciative!

Linda Palenchar

Appendix I: Final Email to Principals

From: Linda Palenchar [mailto:LPalenchar@suddenlink.net]

Sent: Sunday, June 05, 2011 10:28 PM

To: ANDREW TOKARZ (atokarz@access.k12.wv.us); APRIL KEARNS (akearns@access.k12.wv.us); BARBARA CARLTON (bcarlton@access.k12.wv.us); BRENDA HORNE (bthorne@access.k12.wv.us); BRUCE WILLIAMS (brwillia@access.k12.wv.us); BRYAN PARSONS (grdaniel@access.k12.wv.us); CHERYL ALTIZER (caltizer@access.k12.wv.us); CONNIE MIZE (cmize@access.k12.wv.us); DAVID NULL (danull@access.k12.wv.us); DEANN BENNETT (dnbennet@access.k12.wv.us); DEBORAH SMITH (dbrsmith@access.k12.wv.us); ELIZABETH GREEN (ehgreen@access.k12.wv.us); EUGENIE AYERS (cfbennett@access.k12.wv.us); GROOM JR JOSEPH R (jgroom@access.k12.wv.us); JEANNIE WADE (jmontgom@access.k12.wv.us); JOHN HANNA (jhanna@access.k12.wv.us); JUDITH SHORT (jcshort@access.k12.wv.us); KIM COOPER (kcooper@access.k12.wv.us); LAURA COOPER (lcooper@access.k12.wv.us); LEE JONES (lrjones@access.k12.wv.us); LISA ALEXANDER (lalexand@access.k12.wv.us); MARION WARD (mkward@access.k12.wv.us); MARTHA EVANS (MBEVANS@ACCESS.K12.WV.US); MICHELLE PAXTON (jstephens@access.k12.wv.us); MYNES JR BOYD C (bmynes@access.k12.wv.us); PAMELA BAILEY (plbailey@access.k12.wv.us); PAMELA MULLINS (phmullin@access.k12.wv.us); R PATRICK O'NEAL (roneal@access.k12.wv.us); ROBERT BONAR (rbonar@access.k12.wv.us); ROBIN HARMON (rharmon@access.k12.wv.us); STEVEN RHODES (swrhodes@access.k12.wv.us); TERRY PORTER (tporter@access.k12.wv.us); THEODORE DIXON (tdixon@access.k12.wv.us); TIMOTHY HARDESTY (thardest@access.k12.wv.us); TINA BURNETTE (tburnette@access.k12.wv.us); VIKI CALDWELL (vcaldwel@access.k12.wv.us)

Subject: Thank you!

Elementary Principals:

Thank you very much for distributing the Special Educator RTI Survey (SERTII) for me! This dissertation work would not be possible without your support and please know I am very grateful. Since school will be finished sometime this week for most of you, I am asking one last favor – ***please forward this email to your special education teachers.*** Thanks so much!

Elementary Special Educators:

Thank **YOU** very much for responding to the SERTII! As West Virginia moves forward with RTI and considers how best to proceed, your responses on the survey are invaluable. If you have not yet returned the survey your principal distributed for me, ***it's not too late.*** Please use the postage-paid envelope provided and return the survey to me before you begin your summer vacation. Also, if you did not receive a paper copy of the survey, it is attached. Should you choose to complete it, please fax it to me at **(304) 558-3741**. Again, thank you West Virginia special education teachers!! Sincerely,

Linda Palenchar

MUGC Doctoral Student

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CURRICULUM VITAE
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EDUCATION

Marshall University
Doctor of Education in Curriculum and Instruction, 2012

West Virginia College of Graduate Studies
Master of Arts in Specific Learning Disabilities, 1987

Moravian College
Bachelor of Arts in Elementary Education/Psychology, 1980

PROFESSIONAL EXPERIENCE

2011 – Present	Director of Special Education, Fayette County Schools, Fayetteville, WV
2005 – 2011	Learning Disabilities Coordinator, West Virginia Department of Education, Office of Special Programs, Charleston, WV
2000 – 2005	Compliance Coordinator, West Virginia Department of Education, Office of Special Programs, Charleston, WV
2003-2006	Adjunct faculty, Marshall University Graduate School, Curriculum and Instruction- Special Education, Teaching Students with Learning Disabilities
1995-2000	Special Education Specialist, Kanawha County Schools, Charleston, WV
1990 – 1995	Special Education Teacher, Kanawha County Schools, Chamberlain Elementary School, Charleston, WV
1993-Present	Certified trainer, University of Kansas Strategies Intervention Model
1980 – 1990	Special Education Teacher, Kanawha County Schools, Rand Elementary School, Charleston, WV

CERTIFICATION/LICENSURE

State of West Virginia, Elementary Education, Grades 1-6
State of West Virginia, Specific Learning Disabilities, Grades K-12
State of West Virginia, Mental Impairments, Grades K-12
State of West Virginia, Behavior Disorders, Grades K-12

AWARDS

2006 West Virginia Association of School Psychologists, Special Friend of Children Award
2003 West Virginia Council for Exceptional Children, Member of the Year

PROFESSIONAL MEMBERSHIPS

Council for Exceptional Children – Division for Learning Disabilities (DLD)
West Virginia Council for Exceptional Children
Association for Supervision and Curriculum Development (ASCD)
International Dyslexia Association (IDA)
International Reading Association (IRA)

PUBLICATION

Palenchar, L. & Boyer, L. (2008). Response to intervention: Implementation of a statewide system. *Rural Special Education Quarterly*, 27, 18-26.

PRESENTATIONS

2011 Presenter, Council for Exceptional Children Conference and Expo, National Harbor, MD
2010 Council for Exceptional Children Webinar, *The Role of Special Education Teachers in RTI: Voice, Value, and Opportunity*
2010 Council for Exceptional Children Webinar, *Using the Lexile Framework for Reading: What Special Educators Should Know, Understand, and Do to Support Struggling Readers*
2008 American Council on Rural Special Education (ACRES), 28th Annual Conference, Charleston, WV
2007 Council for Exceptional Children Convention and Expo, Louisville, KY
2007 RTI Summit, Arlington, VA