

# Examining the Role of the Special Educator in a Response to Intervention Model

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*The purpose of this study was to examine the role of the special educator within a response-to-intervention (RTI) framework and to examine what instructional behaviors special educators evidence most frequently in the advanced RTI tiers (i.e., tiers beyond tier 1). Specifically, these two issues were investigated with regard to: (a) proportion of the special educator's time spent in the four key roles as defined by the literature (i.e., collaborator, interventionist, diagnostician, manager); (b) the behaviors special educators evidence most frequently within each role; (c) instructional practices that are used most frequently by special educators; and (d) instructional practices used by special educators that are aligned with effective instructional practices that have been identified in the empirical literature. Seven special educators participated in this study. Over 7000 minutes of observational data were collected focusing on role components and instructional practices. Interviews were also conducted with all participants. Role component observational data showed that special educators are required to perform a wide array of tasks in various settings in collaboration with multiple professionals, students and parents. Instructional observational data showed that special educators are using their limited amount of instructional time in practices which produce the greatest effects, but there were little differences noted between instructional practices in the advanced tiers of instruction.*

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Comprehensive school reform (CSR) encourages schools to focus on all aspects of their school's operations when making improvements. Rather than implementing isolated programs that may or may not improve the academic performance of all students, schools engaged in CSR implement comprehensive school improvement models that provide methods and strategies for teaching, learning, and school management. One CSR model that has emerged in recent years is response-to-intervention (RTI), a multi-tiered intervention framework (Hoover, Baca, Wexler-Love, & Saenz, 2008). RTI functions as a multi-level prevention system to maximize student achievement and to reduce behavior problems (Jimerson, Burns, & VanderHeyer, 2007; National Center on Response to Intervention, 2010). RTI is a school wide process that integrates instruction, intervention, and assessment. There are numerous districts that either have or are adopting an RTI framework (Hoover, et al., 2008; Jimerson, et al., 2007; Vaughn et al., 2010). Recently, a survey of district administrators found that 61 percent had implemented an RTI educational

framework or were in the process of implementation of RTI throughout their districts. In respondent districts that had sufficient data to determine the impact of RTI, 76% indicated RTI has led to an improvement in Adequate Yearly Progress (AYP) vs. 24% that indicated it has not led to an improvement in AYP (Samuels, 2011).

In spite of these successes and large scale implementation efforts, there are several concerns that stakeholders have raised or areas that have been identified where more attention must be focused to ensure the success of RTI. Among the issues to be addressed are (1) what is the role of the special educator in an RTI framework? and (2) what does instruction look like in the advanced tiers of RTI (that is, tiers beyond tier 1)?

Reschly (2003) presented a four tiered model of RTI and acknowledged that roles of teachers would have to change, but neglected to provide sufficient details as to exactly which personnel would have responsibilities for the various components of instruction and the model's implementation. In 2007, the Council for Exceptional Children (CEC) addressed the impact that RTI implementation can potentially have on the role of the special educator. CEC proposed that special educators should have an integral role and a strong and clear identity in the RTI process. The organization further stated that general educators should be the primary interveners with special educators as members of problem solving teams in tiers 1 and 2. Conversely, special educators were seen as the primary interveners in tier 3 or the highest tier. Although the CEC takes a position on the "unique" role of the special educator in an RTI framework, it provides no empirical evidence to support this position.

More recently, Simonsen et al. (2010) asserted that the role of special educators should be redefined as interventionists within a school wide model of instructional and behavioral supports to (a) support all students, and (b) effectively address the intent to provide a free appropriate public education in the least restrictive environment. Simonsen and colleagues go on to state that the success of a school wide RTI model requires the participation of special educators in and across all tiers of intervention and instruction (Simonsen et al., 2010) which, in turn, requires a shift in the special educators' role from solely providing services to students with IEPs to providing services to all students who are struggling to achieve. Finally, Simonsen and colleagues believe that special educators can be "integrated seamlessly" into a school wide RTI model but they emphasize repeatedly the critical need for research to substantiate these roles and configurations.

Finally, questions have been raised as to what exactly constitutes instruction at the advanced tiers. Some RTI models have as few as two tiers of instruction; whereas, others have as many as four tiers (D. Fuchs, Mock, Morgan, & Young, 2003). The nature of the academic intervention is to change at each tier, becoming more intensive as students move across the tiers (D. Fuchs, Compton, Fuchs, Bryant, & Davis, 2008). Ideally, increasing intensity is achieved by (a) using more teacher-mediated, systematic, and explicit instruction; (b) creating smaller and more homogeneous student groupings; and/or (c) using teachers with greater expertise (L. S. Fuchs & Fuchs, 2006). If the premise of having a tiered model is to provide instruction which intensifies as students move across the tiers based upon student need then what should operationally define the specific instructional practices that constitute "intensity" at each tier? Studies have been conducted regarding the grouping of students (Little,

2009; Mellard & Johnson, 2008) and the instructional intensity and duration of instruction in different RTI tiers (Vaughn & Roberts, 2007), but specific studies have not been conducted regarding the specific instructional practices (e.g., modeling, questioning, feedback, monitoring) that constitute the instruction at the advanced tiers of RTI models.

Thus, the general purpose of this study was to examine the role of the special educator in an RTI framework. Specifically, the study was designed to first examine the overall role of the special educator and then to look specifically at the instructional practices that are used by special educators and in particular how those instructional practices differ in advanced tiers of instruction in an RTI model.

### PARTICIPANTS & SETTING

The teacher participants in this study all taught in the state of Kansas. Kansas was selected because of the state's long-standing commitment to a multi-tiered intervention system. Kansas' Multi-Tiered Systems of Support (MTSS) was one of the first state-wide RTI initiatives, and it continues to grow in its adoption and implementation throughout the state (Kansas State Department of Education, 2010). Because the meaning and practices referred to as RTI vary from a narrow viewpoint such as the identification of students with specific learning disabilities under IDEA (e.g., Donovan & Cross, 2002), to a broad view point as an educational change paradigm or an inclusive school reform model (e.g., Shores & Chester, 2008) and since all models labeled RTI do not always embody the same purpose or practices, Kansas has intentionally chosen to call its model the Multi-Tiered Systems of Support (MTSS). The MTSS approach provides a framework to create a single system that offers a continuum of multiple supports for all students. This approach aligns the Kansas MTSS framework with the broad educational reform movement of RTI (Kansas State Department of Education, 2010).

Table 1 describes each school that participated in this study, in terms of enrollment, socio-economic status, and special education population. Each school met all standards for Adequate Yearly Progress (AYP) for the most recent three consecutive school years.

**Table 1. School Descriptors**

School	Grade Levels	Total Enrollment	% of SPED Students	% of Free and Reduced-Price Lunch
1	PK-5	514	12.34	35.6
2	K-6	359	10.58	11.14
3	K-5	385	16.62	56.62
4	K-6	274	9.49	23.72
5	PK-6	359	7.52	45.4
6	K-6	533	8.26	79.92
7	K-6	366	4.37	4.64

The participants in this study were seven special education teachers. The teacher participants were selected based upon the following criteria: (a) the teacher provided instruction in both the general education and resource settings during the typical school day; (b) the teacher and principal confirmed MTSS implementation at their school as evidenced by school-wide screening for academic and behavior concerns, tiered academic and behavioral interventions, progress monitoring, and checks for intervention integrity; and (c) the teacher consented to participate in the study. Participants were five females and two males. The number of years of teaching experience varied slightly, with six of the participants ranging from 5-10 years and one participant having over 20 years of teaching experience. There was no minority representation; each teacher participant was Caucasian.

### DESIGN

This study was conducted in three phases, pre-observation, observation and post-observation. During the pre-observation phase, participants were selected. During the observation phase, each teacher was observed for three consecutive, full school days (i.e., five minutes before the first bell of the day until five minutes after the last bell of the day). During each observation day, the researcher focused on two aspects of the role of the special educators: what tasks their role consisted of and what instructional practices they used throughout their day. Two measurement instruments were used during the observation phase, the Role Observation Instrument and Instruction Observation Instrument. During the post-observation phase, the researcher conducted interviews with each participating teacher using the Teacher Post-Observation Protocol. The researcher also contacted teacher participants via phone to ask follow up questions as necessary.

### MEASURES

There were two measurement instruments with which all the observation data were collected (Role Observation Instrument, Instruction Observation Instrument). Other instruments (Initial Contact/Criteria Determination Instrument, Principal and Teacher Interview Protocols) were used to pre-screen participants for the study and to validate data recorded during observations.

#### ***Role Observation Instrument***

The development of the Role Observation Instrument was based on a comprehensive literature search of the empirical and prescriptive literature regarding the role of the special educator in an RTI framework. Beginning with ERIC, PsycINFO, and Dissertation Abstract International online databases, the following keyword search terms were used: *special education and RTI*; *role of special educator*; *tasks of special educator* and *tier three and special education*. From this body of literature, seminal articles were identified and used for ancestral searches.

Role specific tasks (e.g. completing paperwork, composing and sending email, implementing assessment etc.) were identified and for each task, a brief definition was written based upon the literature. A matrix was created which allowed the researcher to place the tasks into similar categories. Next, tasks were reviewed and evaluated by elementary-level special educators with more than 10 years' teach-

ing experience. The tasks were reviewed using a rubric to ensure that each task was appropriate and indeed a task that a special educator in an elementary setting may be engaged. Finally, the instrument was field tested in two elementary schools in two different school districts to ensure that the instrument included all tasks a special educator would be engaged in throughout the school day. Based on the results of these field tests, additional tasks were added because they occurred with considerable frequency across teachers and settings during the pilot test. The final list of tasks was divided into four categories: Interventionist, Diagnostician, Collaborator, and Manager.

The purpose of the Role Observation Instrument was to document each task the special education teachers engaged in throughout the school day. Observations began five minutes prior to the first bell at the beginning of the school day and ended five minutes after the final bell at the end of the school day. The observer used the Role Observation Instrument throughout the school day, continuously recording how the teacher spent his/her time.

### ***Instruction Observation Instrument***

The purpose of this instrument was twofold: (a) to document the teacher's instructional practices during the school day; and (b) to examine the instructional practices that took place during advanced tiers of RTI (i.e., any tier beyond Tier 1).

The Instruction Observation Instrument was administered during all instructional activities, including activities occurring in (a) the general education classroom, (b) a resource room or (c) other supplemental instructional settings. The instrument had three foci. The first focus was to determine the proportion of engaged time spent in each of 20 types of instructional activities identified on the instruction observational instrument. These 20 types of instructional activities were grouped into the following categories: (a) modeling, (b) monitoring and questioning, (c) review, (d) feedback, (e) reading, (f) formal assessment and (g) not engaged in instruction. The second focus was to determine the learning arrangement of the classroom. Several types of learning arrangements are possible, ranging from whole-group instruction to independent work being completed by one student. The third focus was to determine what portion of each class period was spent in major transitions. Major transitions are those transitions that occur while the class moves between places, activities, phases of a lesson, or lessons.

Observations where the Instructional Observation instrument was used were conducted over a three-day time period with each teacher participant. The observer was trained on data collection procedures of momentary time sampling (MTS). MTS is an interval recording method. An interval recording method involves observing whether a behavior occurs or does not occur during specified time periods (Alvero, Struss, & Rappaport, 2007). Once the length of an observation session is identified, the time is broken down into smaller intervals that are all equal in length. In this study, instructional time was separated into intervals that were 30 seconds long.

In MTS, the observer looks up and records the behavior which occurs at the very end of the given interval. A timer, such as an alarm on a handheld watch or a tape recording with a sound indicating the end of an interval, can be used to alert the

observer that it is time to look up, observe whether a behavior is occurring, and record the result on a data sheet. In this study, a stopwatch was set to continuously run 30-second intervals, and the observer watched the timer to determine when to record a behavior on the data sheet. Data collection was conducted in real time using MTS beginning when the teacher began instruction and ending when the teacher stopped instruction. Data were collected during 30-second intervals in each of the three foci.

### ***Inter-Observer Reliability***

Initially, the researcher and another observer (i.e., a special education doctoral student with 10 years of public school teaching and administrative experience) obtained reliability using the Role Observation Instrument and Instruction Observation Instrument by reading and discussing the operational definitions written for each task and instructional practice included in each of the instruments. The researcher and other observer also spent more than 20 hours watching videos of teachers conducting instruction; finally, they spent three school days observing a special educator until reliability of 80% or better was established.

In order to establish inter-observer reliability, two observers present during the observation phase for at least 20% of total observation minutes. To determine inter-observer agreement, the two data collectors independently observed and scored 22% of the time sample intervals. Inter-observer percent reliability agreement was calculated using the following formula:  $\text{Percent Reliability} = (\text{Number of Agreements} / \text{Number of Agreements} + \text{Disagreements}) \times 100$ . Inter-observer agreement across all intervals was 98% reliability for the Role Observation Instrument and 95% for the Instruction Observation Instrument.

## **PROCEDURES**

### ***Pre-Observation Phase***

First, the researcher contacted the director of special education for the state of Kansas and asked for a list of schools within the state that were implementing RTI. Ten school districts were nominated, seven district directors of special education responded and district approval was granted. Of the seven school districts where approval was granted, nine individual schools were identified by the district directors of special education. This nomination process served as the first opportunity to screen for RTI implementation. A second screener for RTI implementation was a pre-observation interview with each principal where the Initial Contact/Criteria Determination document was used to get a better picture of RTI implementation. During that same interview, the principal of each school was asked to choose which special education teacher (if there was more than one in the school) that he/she would suggest participate in the study, keeping in mind the following guidelines: (a) the teacher spends time during the school day in the general education classroom, (b) the teacher provides skill and or strategy instruction in the resource/pullout setting and (c) the teacher is willing to participate in the study. After the pre-observation interview with each principal and teachers were chosen for the study, a pre-observation interview was then conducted with each teacher to obtain a third source of information regarding RTI implementation and a time was scheduled to visit the school to meet with

the special education teacher who would participate in the study. During the pre-observation interview with the teacher the following occurred: (a) written informed consent was obtained from the teacher, (b) the researcher was oriented to the school's physical layout, (c) a typical school day schedule was discussed, and (d) dates for formal observation were scheduled.

### ***Observation Phase***

Each teacher participant was observed for three consecutive full school days (i.e., from five minutes before the first bell of the day until five minutes after the last bell of the day). Each observation day consisted of 350-450 minutes for a total of at least 1,000 observation minutes per teacher participant. During each observation day, the researcher recorded data using both the Role Observation Instrument and the Instruction Observation Instrument.

Observations began five minutes before the first bell of the day. The researcher identified the task the teacher was engaged in by choosing from a list of codes on the Role Observation Instrument. Once the task and corresponding code were identified, the timer was started and the start time was recorded; when the task was completed, the researcher stopped the timer and recorded the stop time along with the total time spent on that specific task. For each task, the researcher also recorded at which tier of intervention the task took place and if the students the teacher was working with had IEPs. If the task code was an instructional task, such as implementing strategy instruction, re-teaching, co-teaching or assisting in the general education classroom the researcher used the Instruction Observation Instrument to collect additional observation data.

Data collection for the Instruction Observation Instrument adhered to the following procedures. After the teacher began instruction, the researcher started the timer. After 30 seconds, the researcher marked the first observation with the appropriate code. The observation was completed within 30 seconds, and the next observation began when the timer reached 0. The Instruction Observation Instrument contained three categories of observation variables listed along the top row of the matrix (1-Learning Arrangement, 2-Transition Time, and 3-Instructional Activity). At each observation interval, the researcher made one mark in each category so that every row contained three marks.

### ***Post-Observation Phase***

At the end of the school day on the third day of observation, a 45- to 60-minute interview was conducted with each teacher participant. These interviews were conducted in person in a quiet, private location and were audio-recorded.

**Table 2. Research Phases and Measurement Instruments**

Measurement Instrument	Initial contact/ criteria determination	Principal pre-observation	Teacher pre-observation	Role observation	Instruction observation	Teacher post-observation
Phase	Pre-observation	Pre-observation	Pre-observation	Observation	Observation	Post-observation
Where	By phone	In person/phone	In person/phone	School	School	School
How	By researcher	By researcher	By researcher	By researcher & reliability partner	By researcher & reliability partner	By researcher
Why	*Selection for study data *RTI implementation data	*Selection for study data *RTI implementation data *SPED teacher role data *Administrative support data	*Selection for study data *RTI implementation data *SPED teacher role data *SPED teacher knowledge of RTI data	*SPED teacher role data	*How different does instruction look in tiered levels of intervention	*SPED teacher role data * Member check



## DATA ANALYSIS

The study employed both quantitative and qualitative methods. A mixed-method approach served to converge findings and extend the breadth of the inquiry (Creswell, 1994). Specifically, quantitative methods were employed to analyze observational and MTS data found on the Role Observation Instrument and Instruction Observation Instrument. Qualitative methodology was used because of its broad approach to understanding and explaining the meaning of social phenomenon in a naturalistic setting (Marshall & Rossman, 1999; Merriam, 1998). Data were collected from five sources in three phases. Table 2 provides an overview of the data collection methods.

For the Role Observation Instrument, the data were analyzed in three phases. First, data were analyzed to determine the percentage of time spent in the four role categories (i.e.,

Collaborator, Interventionist, Diagnostician, and Manager). Second, for each of the role categories, additional analysis was conducted to determine which tasks were included in each category. Lastly, data from each teacher for the four role components and tasks included in those components were disaggregated to reflect differences across all teachers.

For the Instruction Observation Instrument, the data were analyzed in three phases. First, data for all the teachers included in the study were compiled to determine the various instructional practices used by special educators and the frequency of their use. Second, for each, teacher data were analyzed to determine their individual use of instructional practices and frequency of those instructional practices. Third, instructional practices data were analyzed in order to compare and contrast instructional practices in the advanced tiers of RTI implementation.

The interview data collected during this study were analyzed in the following manner. First, interviews were recorded in transcripts of narrative data, and the transcripts were analyzed using the modified version of the Glaser and Strauss (1967; Strauss & Corbin, 1990) constant comparative method as recommended by Lincoln and Guba (1985) and Skrtic, Guba, and Knowlton (1985). It involves four operations: unitizing, categorizing, filling in patterns, and developing a narrative report (Miles & Huberman, 1994; Skrtic, et al., 1985).

Unitizing is the process of identifying units of information, and categorizing is the process of organizing these units into sets of like and related information forming an overall taxonomy of data. Both of these analytic processes were conducted manually by printing narrative data on 3-inch by 5-inch index cards, and then sorting and categorizing the cards. Each participant's interview data were analyzed separately to maintain site-specific findings. Then, a cross-case analysis was performed to identify common themes across all seven research sites.

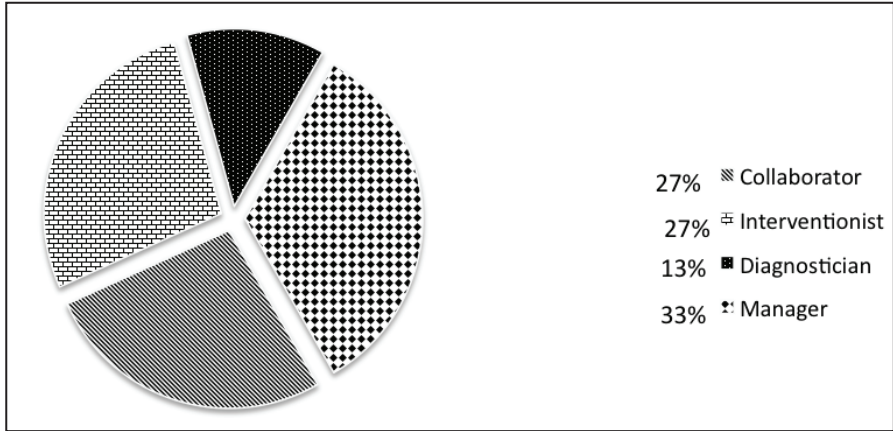
## RESULTS

### *Key Role Component Findings*

This study confirmed the role of the special educator as described in the professional literature as being comprised of four key components within an RTI framework (i.e., collaborator, interventionist, diagnostician, manager). Figure 1

shows the combined role component data for the seven teacher participants. A total of 7,622 minutes of observation (i.e., 3 school days per teacher or 21 school days) was recorded.

**Figure 1. Key role components data, all teachers combined.**



Across the seven teachers, the percentage of time spent in the *Collaborator* role component ranged from 17% to 37% (mean 26.3%,  $SD = 8.56$ ). The percentage of time spent in the *Interventionist* role component ranged from 17% to 45% (mean 27.57%,  $SD = 10.01$ ). The percentage of time spent in the *Diagnostician* role component ranged from 0% to 25% (mean 14.14%,  $SD = 11.78$ ). Teacher 3 and Teacher 4 were not observed engaging in tasks that were a part of the *Diagnostician* role component. The percentage of time spent in the *Manager* role component ranged from 15% to 51% (mean 32%,  $SD = 11.87$ ).

**Manager role.** Within each role there were tasks that were identified and recorded, Table 3 illustrates the tasks with corresponding percentages that comprised the Manager role. The *Manager* role component contained three major categories of tasks, doing paperwork and email, providing student transport (i.e., supervising students as they walk from general education to special education), and engaging in off-task behaviors (i.e., engaged in activities that are not job related). Consistently, all teachers were engaged in tasks that constituted paperwork and email more than 50% of the total time observed within the Manager role component. Six of the seven teachers engaged in off-task behaviors less than a quarter of the total time observed in the Manager role, whereas Teacher 6 was not observed engaging in any off-task behaviors. Finally, all teachers were engaged in transporting students from the general education setting to the special education setting.

Teachers reported that between a quarter to half of their day was spent engaged in tasks involving paperwork. Furthermore, teachers suggested that the proportion of time spent in tasks involving paperwork would be higher if they did not take work home with them to complete at night. One teacher stated, “I think the

paperwork ... that is huge ... being the only [special education] teacher in the building ... my situation (i.e., one person to complete all required paperwork) is a lot of missed instruction time ... a lot.”

**Table 3. Percentage of Time Spent in Manager Role Components Tasks**

Tasks Within Manager Role Component	Percentage of Time Spent
Doing Paperwork	53%
Conducting Meetings/Administrative Duties	13%
Providing Student Transport	10%
Doing Email	7%
Gathering Materials for Instruction	7%

**Diagnostician role.** The Diagnostician component of the special educators' role was 13% of their total role. Illustrated in Table 4 are the tasks which were included in the *Diagnostician* role.

**Table 4. Percentage of Time Spent in Diagnostician Role Component Tasks**

Tasks Within Diagnostician Role Component	Percentage of Time Spent
Explaining/Discussing Assessment Results in RTI Team Meeting	24%
Explaining/Discussing Assessment Results in IEP Team Meeting	20%
Participating in Professional Development/Basic Skill Assessment	20%
Identifying Proper Accommodations/Modifications with Team	10%
Identifying Proper Level of Intervention with Team	8%
Participating in Professional Development/Functional Skill Assessment	6%
Implementing SPED Eligibility Test	6%
Implementing Basic Skills Assessment	5%
Implementing Functional Skills Assessment	1%

Tasks included in the Diagnostician role component can be categorized into the following: (a) implementing assessment; (b) explaining/discussing assessment; and (c) learning assessments. Among the five teachers who were observed in tasks within the Diagnostician role component, several differences were noted. First, Teacher 2 and Teacher 7 did not implement assessments at all during this observation; conversely, Teacher 1 was only observed implementing assessments. Second, Teacher 2, Teacher 5, Teacher 6, and Teacher 7 were observed engaged for a large proportion of their time in tasks within the Diagnostician role that required explaining and discussing the results of assessments. Finally, Teacher 1, Teacher 2, and Teacher 6 were not observed in tasks in which they were learning to implement assessments. Teacher

7 was observed engaged in tasks where she was learning to implement an assessment more than a quarter of the total time observed within the Diagnostician role, whereas Teacher 5 was observed engaged in tasks related to learning to implement assessment more than half of the total time observed in the Diagnostician role.

Interview data pertaining to the Diagnostician role component were important for understanding observational outcomes for this component because of the low likelihood of the researcher observing tasks within this component during the limited amount of time spent on observations. All teachers reported that school-wide use of computer-based data tracking systems such as Dynamic Indicators of Basic Early Literacy Skills (DIEBELS) (Good & Kaminski, 2002) and AIMSweb (AIMSweb, 2010) helped not only in keeping track of data but with instructional decision making. A few teachers reported that they kept large notebooks of student data or in one case a Wiki page was used to share data school wide.

Additionally, most teachers commented on the fact that the school district had adopted a treatment protocol that included a prescriptive list of interventions to be used when needed. One teacher stated, "We have that list of interventions (district mandated), and then I typically look at where the student's needs are ... Our building is unique in that we have Corrective Reading that was just a program that we really thought we needed because we were having so many older non-readers who didn't have the basic phonics ...". However, one teacher who did not have access to evidence-based interventions, and thus was not observed using any evidence-based interventions. No discrepancies were found between what the researcher observed and what the teachers reported during interviews about their knowledge and use of evidence-based interventions.

Also during interviews, the teachers were asked questions about their knowledge and implementation of assessments. Their responses to these questions can be divided into two categories: Those who conducted formal special education eligibility assessments and those who did not. Three teachers reported using achievement and IQ tests for special education eligibility, and of those teachers only one actually conducted those assessments. The school psychologist was the person who conducted the assessments in the other two cases. The remaining four teachers reported only the use of curriculum-based measures for special education eligibility. One teacher stated, "I have heard of it, but I have never actually seen one ..." when asked about conducting achievement tests such as the Woodcock Johnson III for special education eligibility.

**Collaborator role.** The Collaborator component of the special educators' role was 27% of their total role. Illustrated in table 5 are the tasks which were included in the Collaborator role.

**Table 5. Percentage of Time Spent in Collaborator Role Component Tasks**

Tasks Within Collaborator Role Component	Percentage of Time in Specific Task
Assisting in Classroom	23%
Consulting with Students/IEP	20%
Consulting with Students/Behavior	15%
Consulting with Paraprofessional/Student	10%
Consulting with Related Service Providers	9%
Scheduling and Managing Paraprofessional	7%
Providing Support to General Educators/Special Education Characteristics	6%
Providing Support to General Educators/Accommodations	5%
Communicating with Parents/IEP	3%
Providing Support to General Educators/Assessment and/or Intervention	1%
Providing Support to General Educators/ Pedagogy	1%
Planning with General Educators	.4%

As shown previously, the proportion of time spent within the Collaborator role did not vary greatly from teacher to teacher. Nevertheless, the tasks in which the special educators were engaged within the Collaborator role showed large areas of variance, in particular, with *whom* the teachers were collaborating. Teacher 1, Teacher 3, and Teacher 7 spent a proportion of their time in the general education classroom while the remaining four teachers were not observed in the general education classroom, these remaining four teachers (i.e., Teacher 2, Teacher 4, Teacher 5, and Teacher 6) were engaged in tasks that required collaboration with students, parents, paraprofessional, and related service providers. Teacher 1 (52%) and Teacher 2 (37%) used a significant proportion of their time within the Collaborator role collaborating with paraprofessionals, Teacher 4 (19%), Teacher 5 (21%), and Teacher 6 (25%) used a moderate proportion of time collaborating with paraprofessionals, whereas Teacher 3 was not observed collaborating with paraprofessionals.

All the teacher participants reported the following as ways in which they collaborate with general educators in their building: (a) participating in grade-level team meetings; (b) emailing; and (c) engaging in informal communication (i.e., discussions while passing in the hall, lunch room conversation). Only two of the seven teachers referred to co-teaching with general educators as a way that they engage in collaboration. These teachers reported their role during co-teaching to be one of support to the general educator during whole-group instruction. During small-group instruction, teachers in this study would take students with IEPs to a different loca-

tion and conduct instruction. When asked if they felt accepted by general educators, teachers responded favorably that, in fact, they felt a part of the team. However, one teacher felt the opposite; she stated "... they are wonderful teachers, but I see that line in the sand and I said 'Ok' and came back to my side. I am still waiting, kind of standing there ... but at this point, it is definitely, it is two different things (i.e., special education and general education). It is two different islands." Responses regarding collaboration from all teacher participants corroborate findings from researcher observations.

**Interventionist role.** The Interventionist component of the special educators' role was 27% of their total role. Table 6 shows the tasks which were included in the Interventionist role. These tasks were examined further and specific instructional practices were identified. These instructional practices will be explained further.

**Table 6. Percentage of Time Spent in Interventionist Role Component Tasks**

Tasks Within Interventionist Role Component	Percentage of Time Spent
Using Evidence-Based Practices	42%
Providing Intensive Instruction	29%
Providing Supplemental Instruction	24%
Doing Ongoing Progress Monitoring	5%

Teacher 2 (63%), Teacher 5 (66%), and Teacher 6 (88%) were observed engaging in instruction that used evidence-based interventions a significant proportion of their time, which was recorded in the Interventionist role component. Teacher 4 (24%) and Teacher 7 (18%) engaged in instruction that used evidence-based interventions a moderate proportion of time within the Interventionist role, whereas Teacher 1 and Teacher 3 were not observed engaging in instruction that utilized evidence-based interventions. Also of note, Teacher 3, Teacher 5, and Teacher 6 were not observed engaging in ongoing progress monitoring. The remaining four teachers were engaged in ongoing progress monitoring less than a quarter of their total instructional time: Teacher 1 (7%), Teacher 2 (10%), Teacher 4 (5%) and Teacher 7 (16%).

**Instructional Practices Findings**

When teachers were engaged in instruction they were observed using the Instructional Observation Instrument and the types of instructional practices they used were recorded. The findings from this part of the study will be reported using the same methodology as Hattie (2009) in a synthesis of more than 800 meta-analyses of instructional practices. Cautioning against labeling effect sizes as small, medium, and large, Hattie explained that some variables that show small effect sizes may, indeed, be important. He used the following example from the medical field:

Rosenthal and DiMatteo (2001) demonstrated that the effect size of taking low dose aspirin in preventing a heart attack was  $d = 0.07$ , indicating that less than one-eighth of one percent of the variance in heart attacks was accounted for by using aspirin. Although the effect size is small, this translates into the conclusion that 34 out of every 1,000 people would be saved from a heart attack if they used low dose aspirin on a regular basis. (p. 9)

Hattie concluded that the effect size of 0.40 sets a level where effects enhance achievement in such a way that real-world differences are noted. He refers to this as the hinge-point or h-point. Furthermore, he states that all the influences above the h-point ( $d = 0.40$ ) have the greatest effects on student achievement and those below the h-point have typical effects or reflect accomplishment that would be realized in a typical year of schooling. In this study, for data analysis and report of findings, Hattie's h-point was used as a division between instructional practices which have greatest effects and those with typical effects.

The teacher participants in this study engaged in tasks related to instruction for a total of 2,826 total minutes out of 7,622 minutes of total observation. Thus, only 19% percent of the teachers' time was spent in some phase of instruction. Of those minutes, 77.63% of the instructional time was spent in instructional practices with greatest effects in student achievement. Tasks included: (a) feedback (11.93%) (i.e., simple and elaborated teacher feedback); (b) exposure to reading (11.38%) (i.e., reading aloud or silently by the teacher or student); (c) manipulate/generalize (10.21%) (i.e., using a previously taught skill/strategy or content knowledge applied to a situation other than where it was learned); (d) fact/concept review (9.29%) (i.e., teacher reviews previously learned fact or concept); (e) give directions (8.95%); (f) on-going assessment (8.20%) (i.e., progress monitoring, tests, quizzes); (g) skill/strategy review (6.67%) (e.g., teacher reviews previously learned skill/strategy by reviewing steps); (h) modeling (4.53%) (i.e., teacher implicit model by demonstration only and teacher explicit model by demonstration and explanation); (i) questioning (3.24%); (j) video (1.96%); (k) listening (1.06%) (i.e., teacher listening to students verbalization of content); (l) graphic devices (0.07%) (i.e., graphic organizers); and (m) describe skill/strategy (0.04%) (i.e., teacher presents new strategy information).

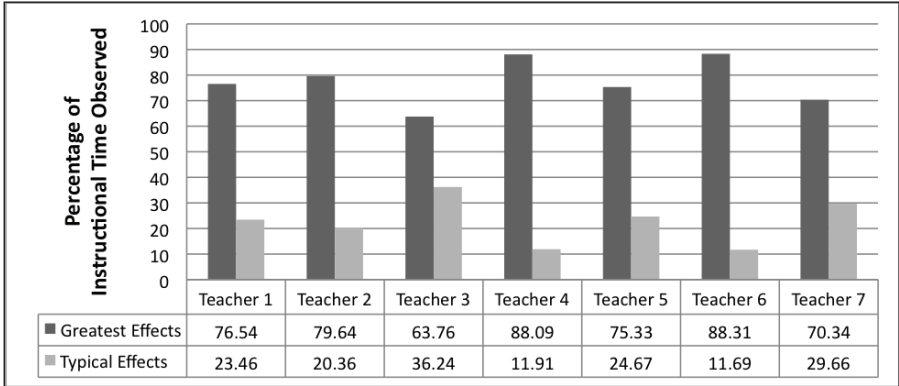
The remaining 22.37% of the teachers' instructional time was spent engaging in instructional practices that produce typical effects in student achievement. These tasks included physical observation (11.08%), teachers not engaged in instruction (9.24%) (i.e., off-task), and lecture (2.05%) (i.e., teacher presenting new material by simply talking at the students).

Across the seven teachers, the percentage of time spent engaging in instructional practices that produce the greatest effects in student achievement varied as illustrated in figure 2.

**Instructional practices, differences across advanced tiers.** Table 7 shows a comparison between the proportions of time teachers spent engaging in instructional practices that produce the greatest effects and those that produce typical effects in Tier 2 vs. Tier 3 of an RTI model. None of the teacher participants conducted instruction in Tier 1 of an RTI model and only four of the seven teachers conducted instruction in Tier 2. All of the teachers conducted instruction in Tier 3. In Tier 2, teachers

engaged in physical observation almost four times more than they did in Tier 3. In Tier 3, teachers engaged almost twice as much in ongoing progress monitoring, six times more in skill/strategy review, and almost one third more time not engaged in instruction than in Tier 2.

**Figure 2. Instructional Practices, Greatest Effects versus Typical Effects**



During the post-observation interview, each teacher was asked, “What do you feel are your instructional strengths?” This question was posed in order to check discrepancies between what the teachers in the study *said* in interviews and what they actually *did* during observations. Only the answers of two teachers included actual instructional practices even when redirected and prompted by the researcher. This is illustrated in the exchange below:

*Researcher:* What do you feel are your instructional strengths? For example, modeling, questioning, giving feedback...

*Teacher:* I don’t think I am really strong at anything (laughs) ... this is difficult to ...

*Researcher:* Well, how about if you could pick one that you do a lot ...

*Teacher:* Organized and being focused?

*Researcher:* Being focused? (Clarifying question)

*Teacher:* Yes, really trying to narrow where we are going with it (instruction) ... and trying to organize the way to get there (achievement) ... and try to work more preventive ...



**Table 7. Percentage of Time Spent in Greatest Effects and Typical Effects Instructional Practices in the Advanced Tiers**

	Instructional Practices with Greatest Effects			Instructional Practices with Typical Effects		
	Tier 2	Tier 3		Tier 2	Tier 3	
Feedback	11.32%	12.64%		19.63%	5.71%	
Exposure to Reading	12.82%	10.73%	Physical Observation	6.63%	9.98%	
Manipulate/Generalize	11.41%	11.22%	Not Engaged in Instruction	1.68%	2.34%	
Fact/Concept Review	8.40%	10.41%	Lecture			
Give Directions	9.37%	8.25%				
On-going Assessment	5.48%	9.32%				
Skill/Strategy Review	1.50%	9.06%				
Modeling	5.84%	3.57%				
Questioning	2.92%	2.74%				
Video	0.97%	2.97%				
Listening	2.03%	0.89%				
Graphic Devices	0.00%	0.12%				
Describe Skill/Strategy	0.00%	0.06%				
	<b>Total</b>	<b>Total</b>		<b>Total</b>	<b>Total</b>	
	<b>72.06%</b>	<b>81.97%</b>		<b>27.94%</b>	<b>18.03%</b>	

Other teachers simply listed their positive attributes (i.e., caring, make students feel safe) when asked about instructional practices. Of equal interest, both teachers who responded to this question with an actual instructional practice mentioned giving feedback. Both teachers commented on how they were trying to improve the quality of their feedback from simple feedback such as “good job” to more specific feedback for each student.

Also during the post-observation interview, every teacher was asked, “How does instruction differ in Tier 2 and Tier 3?” Four of the seven teachers referred to the amount of instructional time the students received as a way to differentiate instruction. For example, one teacher responded “... Tier 2 is strategic intervention and that is 30 extra minutes and tier 3 is intensive so that is 60 extra minutes ... so it [tier 3] is kind of an extension of that first 30 minutes [tier 2] ...” One teacher suggested that the only difference between tier 2 and tier 3 instruction was more progress monitoring was done in tier 3. Another stated that she “... doesn’t look at it according to tiers but tries to get a sense of what each student’s needs are ...” Yet another teacher responded that she was confused about tier 3, “Tier 3 to me, constantly changes,” confiding that the distinction between tier 2 and tier 3 was hard for her to understand.

## CONCLUSIONS

The results of this study show that special educators working within schools that are implementing an RTI model are being utilized in various roles and behavioral tasks that are in alignment with what the literature says about the role of the special educator in an RTI model. Several conclusions can be drawn from the results of this study. First, special educators were found to spend over a third of their total time engaged in managerial tasks such as paperwork and emails. Of their time spent in managerial tasks 55% of time was spent completing paperwork which amounts to about 17% of their total time spent as special educators. This is equal to about one day per week spent completing paperwork. This was not surprising. Special educators are known to have a substantial amount of responsibilities that include a large “paperwork” component (Mainzer, Deshler, Coleman, Kozleski, & Rodriguez-Walling, 2003; Wasburn-Moses, 2005; Werts, Lambert, & Carpenter, 2009).

Second, special educators spent about a fourth of their time in the role of Collaborator but the specific tasks they engaged in that constituted collaboration varied. Three of the seven teachers spent a proportion of their time in the general education classroom while the remaining four teachers were not observed in the general education classroom at all. The teachers who collaborated with general educators shared responsibility with general educators in each tier of instruction within RTI. The four teachers who did not collaborate with general educators saw their role as only providing services in tier 3 where collaboration was required with students, parents, paraprofessional and related service providers. Additionally, collaboration with paraprofessionals constituted a significant proportion of time spent in the Collaborator role by all but one of the teachers in this study. Teachers were responsible for the management and scheduling of as few as two paraprofessionals to as many as eight. All teachers reported that this was a daily struggle and constituted a significant proportion of their time.

Third, in as much as the special educators in this study were working within RTI models, the way in which students with disabilities were identified differed from traditional methods. Four of the seven teachers did not administer achievement or IQ tests to make special education eligibility decisions but instead they were responsible for gathering and analyzing curriculum based measures to identify students with needs. Two of the three teachers that were still using achievement and IQ tests, expressed that the longer their school implemented RTI and the more experienced they became with curriculum based measures the less their role would require them to use the traditional methods of identification.

Fourth, only one quarter of the special educators' time was spent engaged in tasks related to instruction. Out of that fourth, three fourths of the instructional time was spent engaging in instructional practices which produced the greatest effects (Hattie, 2009). This means that only 19% of their total role was spent in instructional practices that previous research has shown to yield the greatest effects. Again this is equivalent to approximately one day per week being devoted to effective instructional practices.

Finally, instruction in tiers 2 and 3 were found to be generally the same with the exception of the occurrence of the special educator engaged in physical observation substantially more in tier 2 than tier 3. This occurrence can be explained by the fact that those teachers who were engaged in Tier 2 instruction were being used in the general education classroom by the general educator to conduct physical observation of students during the general educators' delivery of instruction.

#### LIMITATIONS

Several limitations apply to this study. First, the number of participants and minutes of observation was limited. Although there were 7622 minutes of observation conducted during this study, this study was restricted by the number of participants and observation hours.

Additionally, the participants were all situated in schools which were nominated as being exemplary in their implementation of RTI. All seven teacher participants taught in the state of Kansas and had received not only high quality professional development to help them implement RTI at their school but they each received one-on-one peer coaching from a RTI specialist from the state of Kansas to support them in performing their role within an RTI framework.

To address these limitations, future observational studies must be conducted over longer periods of time at different points during the school year and must include larger numbers of participants with a variety of experience and skill sets. Additionally, similar data need to be collected in middle and high school settings. Teachers to be included in future studies should be those who are both experts at RTI implementation and those who are struggling with implementation. To aid in the understanding of the role of the special educator regardless of the presence of an RTI model, research must seek to compare and contrast both special educators who are and those who are not functioning within an RTI model. This research could then be used to explain aspects of the special educators' roles which are specific to RTI implementation and those aspects that are specific to the role of the special educator in general.

Additionally, future research should focus on linking student achievement to the teacher participants' instructional practices. Researchers should create measures of student achievement so as to take into account and analyze existing measures of student achievement. Research focused on connecting individual teacher instructional practices with student achievement and more specifically connecting instructional practices that take place in the advanced tiers of RTI with student achievement would be essential information for guiding the future refinement and evolution of the role and instructional practices of special educators functioning within an RTI system.

### IMPLICATIONS FOR EDUCATION

In order for the results of this study to effectively be put into practice, four issues need to be considered: (a) ensuring that there are clear role definitions for all stakeholders when implementing an RTI school reform model; (b) preparing future special educators to be effective time managers; (c) preparing future special educators to be effective managers of paraprofessionals; and (d) defining, modeling, and providing practice and feedback opportunities on high effect size instructional variables.

Because RTI, when implemented as a school reform model, requires participation by all stakeholders (i.e., general educators, special educators, principals, district administrators), it is imperative that all roles and responsibilities be clearly defined and communicated. Both general educators and special educators possess certain knowledge and skills that the other does not and their specific role within RTI should reflect their expertise. Principals and district administrators are integral to ensuring that each teacher is functioning in an effective and efficient manner that compliments the RTI model that is being implemented. Finally, special educators' roles will change with RTI implementation (e.g., special educators' use of curriculum based measures for special education eligibility determination) and ensuring that all stakeholders understand these changes and responds to them in a sufficient manner is crucial.

The results from this study suggest that there are several areas of focus for future special educators. One such area is related to the management and scheduling of paraprofessionals. This issue needs to be addressed by pre-service educators so that future special educators are aware of this job responsibility and have adequate skills and strategies so that they are effective managers of paraprofessionals. Additionally, pre-service educators should address time management skills with future special educators. The results from this study show that special educators are required to perform a variety of tasks in a variety of different settings. Without the skills to manage time effectively special educators will not be able to function in the various roles required of them. Furthermore, effective time management could help address the issue of limited time (19%) spent in instruction with greatest effects evidenced by teachers in this study.

Finally, the interview data and observational data from this study showed that special educators are not certain what instruction should consist of in tier 2 and tier 3 of RTI. During interviews with the teacher participants several teachers suggested that they were confused on the differences between instruction in tier 2 and tier 3. Observations confirmed that there were very little difference in instructional

practices implemented during Tier 2 and Tier 3. Distinctions between instruction in tier 2 and tier 3 should be clearly defined. Special educators that are currently implementing RTI would benefit from these distinctions. At the same time future special educators would benefit if they are informed about RTI not only about instruction in the advanced tiers but about the construct of RTI as a school reform model.

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