

Response to Intervention (RtI) in a High School:
A Case Study of Implementation

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ABSTRACT

Response to Intervention's (RtI) original design was implemented as a kindergarten through third grade intervention for struggling readers. Therefore, it is difficult to conceptualize RtI as an intervention model to be used for high school students. Nevertheless, high schools have adopted RtI as an intervention model.

The purpose of the study was to investigate and describe how one high school implemented RtI. The researcher utilized qualitative research methods to conduct the study. The two overarching research questions for the study were: Were the essential components of Response to Intervention implemented in this high school? Was the Response to Intervention framework implemented with fidelity?

Research-based practices found in the literature that have influenced the implementation of RtI were (a) a structured focus on prevention for academic failures, (b) the use of the suggested RtI model consistently and with fidelity, and (c) a strong consideration for adoption of the suggested framework using the essential components of RtI (RtI Action Network, 2013). The essential components of RtI found in the literature were universal screening, data collection, progress monitoring, a problem solving team, data-based decision making, and evidence-based interventions. The study attempted to determine if the high school implemented the essential components of RtI with fidelity, defined as "implemented RtI as it was intended by the program developers" (Mellard & Johnson, 2008, p. 240).

The study found that not all essential components of RtI were implemented with fidelity in the high school. All participants interviewed stated that the screening tools that were being utilized were not screening tools that were described in the literature. Participants identified the use of data collection and progress monitoring, but did not express a consistency in the practices. Because these two components were not implemented consistently, participants noted that the three-tiered system lacked evidence-based practices and interventions. Based on the participants' responses, the researcher concluded that the high school's implementation of RtI lacked fidelity. Through review of CHD High School's historical records, it appeared that the implementation of RtI only provided a minimal amount of improvement in students' academic grades, dropout rate,

and standard assessments scores. Implications and recommendations for practice and future research are offered in Chapter 5.

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CHAPTER 1

INTRODUCTION TO THE STUDY

The reauthorization of the Individuals with Disabilities Education Improvement Act (IDEA) (2004) introduced the first notion of RtI when it stated that a portion of federal special education funds could be used to coordinate and implement Coordinated Early Intervention Services (CEIS) for students who have not yet been found eligible for special education services, but who do need additional academic support. IDEA encouraged schools to use a student's "response to scientific, research-based interventions" (p. 155) to determine if the student has a Specific Learning Disability (SLD) instead of relying on the IQ-achievement discrepancy approach. Batsche et al. (2006) explained that "response-to-intervention (RtI) involves providing high-quality instruction and intervention matched to student need, monitoring progress frequently to make changes in instruction, and applying child response data to important educational decisions" (p. 3). The research that has identified essential components and fidelity needed for implementation of RtI has primarily been focused in elementary school settings. However, RtI is currently being implemented in high schools in a variety of academic areas and is also being used to address behavioral issues (Burns & Gibbons, 2008, p. 10).

Muoneke and Shankland (2009) pointed out that even if high school personnel can find small amounts of research to guide their implementation of RtI, "strong evidence identifying exemplary practices for high school RtI is not yet available" (p. 1). The high school studies that have been done do not identify the essential components or fidelity assessment that would be crucial for RtI high school planning teams to know for appropriate implementation. Also, within the limited high school studies, there does not seem to be a common agreement among researchers on practices and procedures such as how long an intervention should be in place (Gresham, 2001), the degrees of intensity for interventions (Barnett, Daly, Jones, & Lentz, 2004), and the types of interventions that have been consistently successful within the high school curriculum (Bender & Shores, 2007). One example of this lack of agreement can be seen in a study by Kratochwill and Shernoff (2004). They explored the implementation of interventions that were defined by a school division as "research-based" within the high school setting. Kratochwill and Shernoff concluded that within the RtI tiers of intervention staffs were defining 'research-based' interventions differently and so the interventions were being implemented inconsistently. The researchers also noted that the high school staffs implementing

the ‘research-based’ interventions consistently questioned the “requirements to certify an intervention as researched-based” supporting the idea that staff members were not provided clear and consistent vocabulary defining this essential component of RtI (Kratochwill & Shernoff, 2004, p. 45)

While the essential components and fidelity of implementation of elementary RtI have been researched extensively, the question of whether those interventions would prove successful if used in with middle or high school students remains largely unanswered. Even the International Reading Association Commission on RtI (2009) cautioned against the “proclivity of some districts and schools to institute RTI at the secondary level based on primary/elementary approaches” (p. 7). With the same reservations, Gresham (2001) noted that if interventions are implemented to support high school students they should be monitored to make sure that they are “carried out with integrity” (p. 468). Gresham’s idea of intervention integrity suggests that each component of RtI should be systematically implemented whole and undivided (p. 469), which is similarly defined by Mellard (2010) as fidelity. Mellard identified fidelity of implementation as interventions and strategies that should be utilized consistently and accurately as the developers of the plan had intended (p. 2). Similarly, National Research Center for Specific Learning Disabilities (2003) also specified that fidelity must also “address the integrity in which screening and progress monitoring are completed” to ensure that the decisions are data driven (p. 42). Teachers, administrators, and support staff ensure fidelity of implementation through plan development and clear communication of vocabulary and expectations.

Bianco (2010) explored the elements of implementation fidelity of RtI in an elementary setting. Bianco’s study described how one elementary school established a model of RtI including three support structures to enhance data-driven instruction and fidelity of implementation. The focus of the study was to explore student achievement through the use of student intervention tracking forms, reading coaches, and teacher-made video clips. The participants were able to implement RtI with fidelity by clearly defining the elements of implementation as instructional interventions, frequency of the interventions, duration of the interventions, intensity of the interventions, and how the interventions deviated from the intervention plans (Bianco, 2010, p. 3). Giving staff this framework to assess the quality of instruction and productivity of the interventions allowed the RtI model to adhere the plan as it was intended.

Although the structure of RtI at the elementary and secondary levels may not be identical, Bianco's study on fidelity implementation identified elements that may be a necessity. Noell and Gansle (2006) addressed fidelity by noting that "even with high quality components of RtI, the system must guarantee implementation of interventions as intended," (p. 37). Similarly, D. Fuchs and Deshler (2007) pointed out that when implementing RtI that it is vital to use procedures that promote fidelity of implementation (p. 159). Fidelity of implementation of RtI at the high school level is not as simple as taking the elementary RtI design and dropping it into a high school. The high school environment has unique characteristics and design elements that present challenges to the basic approach of RtI.

Nevertheless, RtI is a model that does provide an opportunity for high schools to utilize interventions to support struggling students if implemented with fidelity. Implementation within a RtI framework at a high school level is challenging because "by the time some students get to middle school, they already have a history of academic failure that often worsens in high school" (Burns, 2007, p. 298). Carnine and Carnine (2004) noted that in some secondary schools, 75% to 85% of the students struggle with academic text (p. 208). Perie, Grigg, and Donahue (2005) explained that "26 percent of eighth graders and 23 percent of twelfth graders are unable to demonstrate the overall understanding of what they read with fewer than one-third of eighth and twelfth graders reading at levels necessary for school success" (p. 293). High school teachers expect that ninth-grade students will arrive in high school able to apply basic skills to the rigor of the curriculum without difficulty. Oftentimes this is not the case. Even when RtI is implemented as a support for high school students, 2% of the high school population continues to be unsuccessful academically and requires specialized instruction to access the general curriculum (Burns, Appleton, & Stehouwer, 2005, p. 383).

The high school curriculum focuses on specialized subject matter and is taught at a very quick pace. If high school students do not have a solid foundation of basic skills to engage in grade level curriculum, they will continue to work below grade level. The National Council of Teachers of English (NCTE) (2004) noted that the academic discourse and disciplinary concepts in such fields as science, mathematics and the social studies entail new forms, purposes, and processing demands that pose difficulties for some adolescents (p. 5). Literature comparing high school and elementary RtI suggests that implementation of successful RtI elementary practices may not be feasible in high schools or that these practices may require adaptation to be

successful in high schools (Bradley, Danielson, & Doolittle, 2007; Vaughn, Mathes, Linan-Thompson, & Francis, 2005). Because RtI originated as an intervention for elementary school students the question arises: Can RtI can be successful as an intervention in high schools if the essential components of RtI are implemented with fidelity?

Statement of the Problem

RtI is a practice intended to move educational resources toward the delivery and evaluation of instruction and away from classification of students with disabilities. The success of RtI depends on the timely delivery of research-based instruction by highly qualified instructors. Although RtI can be implemented at any grade level, it is utilized more often in the development of language and literacy skills in the early grades, kindergarten through third grade. However, RtI is currently being used as an instructional reform to improve the academic skills and as a positive behavioral support for high school students despite the limited research-based guidance for the fidelity of implementation within the RtI framework with older students. Dickman (2006) identified the essential components of RtI for elementary students as follows: screen, teach, intervene, probe (progress monitoring), chart and adjust (p. 5). Dickman also identified the elementary RtI framework as having three tiers: Tier 1 being identified as general education, Tier 2 being identified as early intervention services, and Tier 3 being identified as intensive intervention. Dickman also outlined components of RtI for the elementary level, but there are no high school studies that define the essential components of implementation at a secondary level. Without specific blueprints of RtI that provide concise definitions for components, common language for the implementation process, and fidelity assessment for the process, RtI implementation at the secondary level lacks clarity and purpose.

Current Context of the Need for RtI for High School Students

If a high school student graduates with mastery of critical skills, then the student has a better chance of competing in the global economy for employment. The skill set needed for today's technology and job skill competencies is vastly different from that needed to maintain employment 50 years ago. Toffler (2004) noted that businesses will no longer ask if graduates can read and write, but will ask "Can you learn, unlearn and then relearn?" (p. 3). So within the high school setting students are expected to successfully master complex subject matter. Teachers have the intricate task of designing instruction, adhering to a brisk pace, prioritizing

content details, assessing mastery, and understanding the success of each student. Many high school students come to high school struggling to perform in their classes due to weak basic skills. Those struggles continue throughout their high school career unless the students are given interventions to prevent failure.

Because of these issues, it is estimated that by the time they enter high school “between 40 and 60 percent of students chronically disengage from school, not counting those who have dropped out” (Klem & Cannell, 2004, p. 263). Seven thousand students leave high school without a regular diploma; the graduation rates for low-income students and students of color are at 50%; and in 1,883 of the lowest-performing U.S. high schools, fewer than 60% of students graduate on time (Alliance for Excellent Education, 2010). Students who have a pattern of failure throughout middle school without support will transfer those same habits and decision making skills into the ninth grade. The Alliance for Excellent Education (2010) noted that over one-third of the dropouts in the United States occur in ninth grade. Many students are not given the extra support needed to successfully transfer from eighth grade into high school students who leave high school with no diploma earn over \$260,000 less than their peers who graduate high school (Alliance for Excellent Education, 2010, p. 3). The students who dropped out in the 2010 school year alone will account for \$337 billion of lost wages (U.S. Department of Labor, 2010, p. 17).

Not only are there fiscal impacts to society when students drop out but not graduating also increases the possibility that dropouts will be more likely to receive public assistance, to have children at a younger age, and to be a single parent. One research study noted that “dropouts make up a disproportionate percentage of the nation’s prisoners and death row inmates” (Perie, Grigg, & Donahue, 2005, p. 4). To ensure that students do not become one of these statistics, educators need to identify the students who have a pattern of failure and who may be on a path to dropping out and engage them. Students who are not actively engaged in the learning process or who are not connected to the school that they are attending can struggle to be motivated. High school students are not little adults who make thoughtful decisions. Oftentimes they do not have the prerequisite life experiences to make smart and insightful decisions. So students who have not experienced consistent academic success or who have not been recognized for positive decision making make the choice to retreat from school or to cause disruption to the learning environment. Duffy (2010) suggested that implementing more targeted, instructional practices through RtI would allow high schools to meet the needs of struggling

students (p. 4). Johnson, Smith, and Harris (2009) specified that when educators use RtI to engage high school students who are academically struggling, that engagement also provides success for schools by increasing demands for a diverse student population to meet rigorous standards for graduation which ultimately supports school improvement to improve outcomes for all students (p. 3).

For a high school students achieve success through the RtI process, a high school must define and communicate each of the components to the staff who is responsible for implementing the framework. To achieve that level of acceptance, RtI must be part of both the culture and the climate of the school (National Center on Response to Intervention, 2009, p. 17). How the implementation of RtI within a high school setting affects the school culture and climate was explored within this case study. The National Center on Response to Intervention (2010) defined school climate as the specific tone of school building that is set by the expectations and school culture as the shared belief or attitude of the personnel within a school (p. 44). A shared belief and common RtI framework may strengthen high school academics because there is an understanding among the staff of how to assist students through increasing the intensity of interventions. These climate and culture practices should assist building-level administrators and teachers in determining how to engage struggling high school students in an efficient manner (Zirkel & Thomas, 2010, p. 56).

Need for the Study

When high school students are struggling to keep academic pace with their peers, the students are often too quickly referred for a comprehensive evaluation for specialized instruction (Burns, 2007, p. 299). Implementing the essential components of RtI as defined through a schoolwide initiative begins with high quality instruction in general education classroom to address the weaknesses that high school students may bring with them. However, the essential components of RtI and fidelity of implementation have not been examined in high schools through many research studies. In an attempt to support students, high school teachers are working in a trial and error model that actually may be detrimental to secondary students. This circumstance may be because of a “sense of urgency” for students who are struggling academically (Duffy, 2010, p. 1). However, there are very few research studies of high school RtI models with essential components, clearly identified elements of fidelity of implementation, and recommendations for developing a schoolwide foundation of academic support.

Consequently, there is a need for research into the implementation of RtI models that do exist in high schools.

In an effort to meet the need for additional research, this study investigated and described how one high school implemented RtI. The study focused on the essential components of RtI and the fidelity of implementation.

Purpose of the Study

The purpose of the study was to investigate and describe how one high school implemented RtI. As an assistant principal of a high school, the researcher's interest is in defining the essential components of high school RtI as they relate to program planning for supporting a secondary schoolwide initiative for student achievement and school improvement to support students who have experienced academic failure in high school.

Research Questions

There were two research questions for the case study: Were the essential components of Response to Intervention implemented in this high school? Was the Response to Intervention framework implemented with fidelity?

To address the guiding research questions, the following questions were addressed:

- Why did the school decide to implement RtI?
- How did the school define its schoolwide, multi-level instructional and behavioral system for failure prevention?
- What were the universal screening tools that the school used?
- What were the strategies that the school used to monitor student progress?
- How were data collected for use in making decisions for instruction, movement within the multi-level system, and disability identification?
- Was RtI implemented in the framework that it was designed to be delivered as determined by the countywide plan?

Significance of the Study

Scholarly Significance

Sansosti, Telzrow, and Noltemeyer (2010) wrote that “in order for RtI to be successful at the secondary level, the presence of clearly designed components of RtI is a necessary condition”

(p. 2). Identification of the essential components through research has been shown to be effective in elementary schools, but research studies at the high school level do not provide a rigorous implementation model that identifies components and specifies elements of fidelity. If implemented with fidelity, the RtI model could be a tool for educators to assist struggling students at the secondary level. Identifying essential components at the high school level is intended to contribute to an understanding of the design of RtI at the secondary level. Danielson (2008) noted that “there is much to be learned regarding the mechanics of this model [RtI] and how it is effectively implemented on the high school level, as implementation appears to differ vastly at this level in scope and makeup from the elementary school level” (p. 3). The difference that Danielson mentioned implies that the design of RtI at the high school level is different. Although the implementation of RtI would seem to support intervention efforts for struggling students in high school, there are practical challenges that are present when the model is used at the secondary level (D. Fuchs & Deshler, 2007, p. 159). With that being noted, it is important for educational staff who work on program design and implementation to use the essential components of RtI and to monitor for fidelity. Bianco (2010) noted that “when researching the effectiveness of an intervention, it is critical to be able to report the fidelity with which it was implemented so that any resulting gains in student achievement can be accurately attributed to the intervention” (p. 6). Monitoring fidelity allows for adjustments to be made with the use of consistent data or replication of interventions that assist with student achievement.

Danielson (2008) states that RtI has a “potentially powerful framework for organizing, allocating, and evaluating educational resources that assists with meeting the instructional needs of all students and prevent long-term school failure” (p. 13). However, the research for components of RtI is based in elementary school literature. Given the differences in the structural design of high schools, the information produced through elementary literature provides limitations for implementing RtI at the high school level. The essential components may be the same, but “how they are translated into effective practice and integrated into high school’s process may differ from the elementary school model” (Johnson et al., 2009, p. 7). Mellard and Johnson (2008) also state that with the RtI system in place at the elementary school setting, students should leave the elementary school with skills that allow them to be independent learners. For high school students, not all students come to the secondary setting ready to meet the rigorous standards because they have entered high school without strong basic academic

skills and are at risk for academic failure across content areas (Johnson et al., 2009, p. 2). This is evident by “an increasing number of students enter secondary schools ill-prepared to meet the demands of a challenging senior high curriculum” (Jerald, 2006, p. 37). This, compounded by the structural differences of the high school environment provides challenges with implementing an elementary model of RtI into the secondary setting.

This study investigated both the implementation of the essential components of RtI at the secondary level and the fidelity of their implementation. Thus, the study contributes to the limited body of literature about RtI as an intervention for high school students in need of academic support.

Practical Significance

For secondary schools, student success is complicated. Oftentimes students come to high school with a long history of failure that develops into a dislike for school. RtI could provide a systematic approach to assist high school students. In doing so, the RtI tiered approach could narrow the achievement gaps experienced by many high school students often due to lack of academic skills while maintaining the rigor of the curriculum for the students. Ehren, Lenz, and Deshler (2004) wrote that support at the high school level “involves the packaging of research-validated practices” for teachers to use as organized instructional interventions that increase in intensity as required by struggling students (p. 603). The researcher would propose that this case study could assist practitioners with identifying the essential components of high school RtI and the fidelity of their implementation. High school educators who want to utilize RtI to improve student achievement may find research to support elementary RtI practices. However, the ways in which RtI components are operationalized in high schools depend on the design of high school, which is vastly different from that of elementary and middle schools design. This study examined and described the implementation of RtI in one high school and identified a number of considerations for secondary RtI design planners to ensure fidelity.

For many high schools, RtI is an innovative plan to support students who are not doing well academically. For RtI to be useful there must be a clear understanding and ownership of the essential components that are necessary to support the effective implementation (National Center on Response to Intervention, 2010, p. 1). To begin the process, school administrations must “prioritize resource allocations to support the effort,” as well as “offer professional development” to ensure that the philosophical ground work is embraced by the personnel

involved with the RtI initiative. (Alliance for Excellence in Education, 2011, p. 7). Once professional development is delivered, there is a broad impact of the RtI model on the school because there is a systematic effort to execute RtI with fidelity. However, unless the essential components of RtI that are identified in the literature are clearly defined with common language to all participants, the RtI model may lose focus and not provide the intended support to students. Professional development also allows special and general education staff to work through each component collaboratively in an effort to support students. Both types of teachers can closely observe student responses to the tiered interventions and then develop additional interventions based on the data collected through progress monitoring. Witt (2006) noted that through the use of the essential components of RtI, general and special education teachers “adopt new ways of thinking, collaborating, and acting together” and in doing so they will need to “assume new identities based not on their job descriptions or funding source for their position, but rather on the roles they play in helping each individual student achieve” (p. 3).

Theoretical Framework

The theoretical framework on the research design begins with the reauthorization of IDEA in 2004. The language in the reauthorization provided educators the ability to use federal monies that had otherwise been designated for special education services, to be used for responsive interventional models. There is both a generally agreed upon set of components and fairly robust literature base to document the support RtI’s use as an intervention strategy for students who are at risk of academic failure and/or behavioral problems at the elementary level (Bender & Shores, 2007; Berends, Bodilly, & Kirby, 2002). However, the literature does not give consistent intervention strategies for secondary schools that are at risk for academic failure. Therefore, they are seeking intervention models to address those needs (Burns, 2008, p. 14). There does appear to be some characteristics of high schools that require different approaches than elementary schools (L. Fuchs & Fuchs, 2007, p. 16). Despite that fact and the fact that there is a lack of research to support commonly agreed upon components, some high schools are implementing the RtI model. There does, however, seem to be literature that would suggest that the commonly accepted components of RtI should be implemented and implemented with fidelity in order to be successful in the high school (National Center on Response to Intervention, 2009). This research student wishes to test that idea by investigating the implementation of RtI at one high school deemed to be successful by the division’s central administration.

Definitions

The following definitions are presented to indicate their meaning as used in this study.

Data collection: Planning a time for and following through with appropriate assessments to set baselines and monitor student progress (RtI Action Network, 2013).

Data-driven decision making: a process of collecting, analyzing, and summarizing information to answer a question and to guide development, implementation, and evaluation of an action. Data-based decision making is continuous and regular, and most importantly linked to educational/socially important questions (RtI Action Network, 2013).

Evidence-based practice: educational practices/instructional strategies supported by relevant scientific research studies (RtI Action Network, 2013).

Fidelity of implementation: implementation of an intervention, program or curriculum according to research findings and developers' specifications (RtI Action Network, 2013).

Intensive interventions: academic and behavioral interventions that are identified by increased length, frequency, and duration of implementation for students who struggle significantly (RtI Action Network, 2013).

Intervention: the systematic and explicit instruction provided to accelerate growth in an area of identified need. Interventions are provided by both special and general educators, and are based on training or expertise. The interventions are designed to improve performance to a specific goal and require ongoing student progress monitoring (RtI Action Network, 2013).

No Child Left Behind (NCLB): NCLB is the Federal law that requires that schools achieve high levels of proficiency and meet adequate yearly progress targets (NCLB, 2001).

Primary level of intervention (Tier 1): Interventions that are prevention and proactive; implementation is school-wide or by whole classroom (RtI Action Network, 2013).

Problem-Solving Team (PST)/Student Consultation Team (SCT): Group of education professionals coming together to consider student-specific information, discussing strategies/interventions, and develop a plan of action to address the students' needs (RtI Action Network, 2013).

Progress monitoring: Scientifically based practice to assess students' performance and evaluate the effectiveness of instruction (RtI Action Network, 2013).

Research-based intervention/instruction: Instruction or intervention that has been found to be reliable, trustworthy, and valid based on evidence that suggests that when the program is used with students, they can be expected to make achievement gains. If there is no evidence, then the instruction or intervention must be considered “best practice” based on available research and professional literature (RtI Action Network, 2013).

Response to Intervention (RtI): RtI is defined as structured, systematic approaches for decision-making based on instructional practices that are driven by data collected through universal screening (Batsche et al., 2006).

School Climate: The specific tone of school building that is set by the expectations and instructional design of the building leader (National Center on Response to Intervention, 2010).

School Culture: The shared belief or attitude of the personnel within a school building (National Center on Response to Intervention, 2010).

Secondary Levels of Intervention (Tier 2): Interventions that relate directly to an area of need different from and supplementary to primary interventions; are often implemented in small group settings; may be individualized; are often connected to supplemental tier of a tiered intervention model (RtI Action Network, 2013).

Secondary school setting: The term is defined as an educational facility that houses grades 9, 10, 11, and 12 (Batsche et al., 2006).

Specific learning disability: A disorder in one or more of the basic psychological processes involved in understanding or using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations, including such conditions as perceptual disabilities, brain injury, minimal brain dysfunctional dyslexia and developmental aphasia (Burns, 2007, p. 300).

Tertiary Levels of Intervention (Tier 3): Interventions that relate directly to an area of need; are supplementary to and are different from primary and secondary interventions; are usually implemented individually or in very small group settings; may be individualized and are the most intense (RtI Action Network, 2013).

Tiered instruction: Levels of increased intensity of intervention to support students’ weak areas, monitored to ensure progress or to proceed with referral for evaluation to determine if

special education and related services are warranted (National Dissemination Center for Children with Disabilities, 2011).

Universal screening: A brief assessment to determine all the students' current level of performance in a content or skill area. Administration three times per school year is recommended (RtI Action Network, 2013).

Delimitations and Limitations of the Study

Delimitations

Delimitations are factors that may affect the study over which the research generally does not have some control. Delimitations describe the scope of the study or establish parameters or limits of the study (Glatthorn & Joyner, 2005, p. 168). Delimitations are defined as restrictions that the researchers impose prior to the inception of the study to narrow the scope of the study.

The primary delimitation of the study is the researcher's choice to investigate the implementation of RtI in one high school in a Central Virginia school system. This location was chosen because the school was identified by the central office RtI planners as the one high school in the school division that was utilizing the essential components of their RtI model and that was doing so with fidelity of implementation. Because the study was delimited to one high school in one school division in Virginia, the results of the study may or may not be representative of other high schools in Virginia or high schools in other states.

A second delimitation was that the participants for the study were selected from three categories of school division employees: (a) central office staff, (b) school administration and (c) faculty. Nine people were interviewed. No effort was made to include the perspectives of students, parents, or any other group. A third delimitation for the study was that the participants included only those individuals who had worked at the school or within the school district during the beginning of implementation of RtI and who were still working at the school at the time the study was conducted.

Limitations

Limitations are factors, usually beyond the researcher's control, that may affect the results of the study or how the results are interpreted. Identifying the limitations of a study is useful for the readers because they provide a method to acknowledge possible error or difficulties in interpreting the results of the study. Acknowledged limitations should not be

considered excuses but simply factors or conditions that help readers of research get a truer sense of what the study means and how widely the research can be generalized (Creswell, 2003).

The primary limitation of the study was that the data were self-reported by the participants. Because the participants were asked to recall facts from the beginning of the implementation of RtI in 2007, they may have exercised selective memories or simply not have been able to recall the experiences completely or at all. Also, because the participants were employees of the school or school division, their responses may have been truthful, yet limited in specific details because of apprehension of being reprimanded in some way for their responses. To assist with this limitation, the participants' names were not used and the data were coded to ensure anonymity (example as Participant 1 would be coded P1). Finally, because the participants served in different roles, each person had a different perspective on the implementation of RtI so the answers to their questions may have been based on limited knowledge.

Although the researcher worked hard to establish a rapport with the participants, the participants may not have answered each interview question with confidence because the researcher was new to them. The researcher tried to assist with this by scheduling the interviews at the participants place of work and at a convenient time for the participant and by putting them at ease in the initial stages of the interviews.

The building level principal recommended which personnel to be interviewed based on knowledge of the staff and their involvement with the implementation of RtI at CHD High School. The building level principal's recommendations were followed by the researcher. This may be a limitation to the study because the participants were not selected randomly.

Overview of the Research Methodology

The researcher used qualitative methodology to investigate and describe the implementation of RtI in one high school through a descriptive case study approach. The case study approach was used to give an in-depth examination of the school's attempt to implement RtI. The qualitative approach of a case study allowed the researcher to understand in depth the process of the implementation of RtI in the high school and to gain details about which essential components of RtI that were used in the high school's RtI design. Rossman and Rallis (2003) explained that a case study is an "exploration of an event, process, organization, group, or

individual in an attempt to understand the larger phenomenon through close examination of a specific case therefore focus on the particular” (p. 104).

The primary data sources for the study were interviews with the participants who were involved in the implementation of the school’s RtI model, documents associated with the implementation, and information in the researcher’s field journal. The interviews were conducted with a combination of school based personnel and central office staff. As part of the descriptive study, documents were reviewed. The document review included examination of professional development materials, intervention protocols, SOL data and academic reporting sources such as annual report cards of the students. The document review allowed the researcher to triangulate interview data with other objective sources and thereby achieve a more complete and accurate description of the school’s RtI implementation experience. The study methodology is explained in detail in Chapter 3.

Organization of the Study

The study is organized into five chapters, a reference list, and appendixes. Chapter 1 is the introduction to the study. Chapter 2 presents a review of selected literature dealing with the origin of Response to Intervention, its implementation in elementary settings, its use in high school settings, the essential components of RtI, and a discussion of the concept of fidelity of implementation. Chapter 3 details the research design and methodology of the study. An analysis of the data and discussion of the findings are presented in Chapter 4. Chapter 5 contains the summary, conclusions, and recommendations for practice and future research.

CHAPTER 2

LITERATURE REVIEW

Chapter 2 presents an examination of the literature related to the implementation of RtI. The literature review includes information regarding educational accountability and special education, the origin of RtI, the essential components of RtI. This chapter also explores RtI at the secondary level by describing the essential components and describing the fidelity of implementation through in-depth reviews of three studies of secondary RtI implementation.

Search Procedures and Results

The services of the Virginia Tech Library were used to conduct online searches and on-campus exploration of relevant literature. Combinations of the following search terms were used for the literature review: secondary intervention, leadership roles in school reform, special education history, and RtI. The following databases were initially searched: ERIC, Mega File, Electronic Collections Online, Periodical Abstracts, Westlaw, and EBSCO. The initial search also included a general web search using the Google search engine, focusing on the following sites: the Virginia Department of Education, Learning Disabilities Research, Historical Aspects of Special Education, Response to Intervention, RTI Model, Education Today, Leadership in Public Education, Reform in Public Schools, the Center for Change in Public Education, the Rural School and Community Trust, the Center for the Study of Secondary Schools, the Virginia Association Secondary Principals, and the Council for Exceptional Children.

The following databases were used for the refined search: Academic Search Complete, Education Research Complete, Teacher Reference Center, Psychology and Behavioral Studies from EBSCO, Psyc INFO Project Muse, and JSTOR. However, limited information on RtI in the secondary setting was located. A further refined search was completed using combinations of new search descriptors of reading strategies for secondary students, literacy, and implementation of RtI, secondary RtI, middle school and junior high implementation of intervention, reading strategies, secondary-level reading interventions, and reading in secondary content areas. The searches produced approximately 250 usable documents, including research studies, program evaluations, policy briefs, reform proposals in public education, and anecdotal case examples dating back to 1950.

Educational Accountability and Special Education

In 1983, *A Nation at Risk* called on local school districts, state education agencies, and the federal government to take an honest look at public schools with regard to student performance. The report said that schools should put into place more rigorous and measurable standards. Schools were asked to implement standards-based curricula. The report gave rise to a number of proposals for educational reform that increased educational accountability. Public schools were expected to establish clear goals that they intended to meet. Although there were many programs implemented after *A Nation at Risk* was published, there was no immediate change in the way that students were identified for special services for a specific learning disability. However, students with disabilities were held accountable in the standardized testing that was later used to measure progress toward meeting the standards and goals (Wedl, 2005, p. 1).

In 1990, Public Law 94-142 (20 U. S. C. 1400 et seq) was amended. At that time, it was renamed the Individuals with Disabilities Education Act (IDEA). The idea behind the name change was to put the person before the disability. Another difference in the legislation was that the terminology “handicapped child” child was replaced with the term “child with disability.” Within IDEA, the procedure for identification of students with specific learning disabilities did not change. The professional debate about how to identify students with potential learning disabilities continued to be based on the belief that the discrepancy model was only one way to explain low achievement and that there was the possibility of false positive identification (McKenzie, 2010, p. 163). The discrepancy model has historically referred to the identification of a Specific Learning Disability (SLD) through a combination of cognitive and academic testing. When a “severe discrepancy” between ability and achievement is indicated through formal testing along with an identification of informational processing issues, a learning disability can be identified and special education services can be provided. Each state determines its own formula for determining the definition of severe discrepancy (VanDerHeyden & Burns, 2010, p. 37).

IDEA was rewritten and signed into law again in December 2004. The 2004 reauthorization of IDEA provided the opportunity for schools to change the way students with specific learning disabilities were identified. The law specified that in the process of identifying students with Specific Learning Disabilities (SLD) local educational agencies were no longer

required to take into consideration a severe discrepancy between achievement and ability. Although educational professionals were in agreement that a change was needed to the process of identification of children with LD, no guidance had been identified through federal law as to the criteria that should be used (Scruggs & Mastropieri, 2002). However, IDEA (2004) did authorize schools to use what became known as the Response to Intervention model by stating that schools “may use a process that determines if the child responds to scientific, research-based interventions as a part of the evaluation procedure” (Burns & Gibbons, 2008, p. 1). Although this change appeared to show concern for accurate identification of students with LD, the “regulations appear more concerned with adequate instruction than accurate SLD identification” (Kavale & Spaulding, 2008, p. 169).

In January 2002, President George W. Bush signed federal legislation known as the No Child Left Behind (NCLB) Act, which actually was a reauthorization of the Elementary and Secondary Education Act. NCLB required each state to design a “school accountability system” to assess all students’ achievement, including that of students with disabilities, to evaluate if schools were making adequate yearly progress (AYP) towards achievement based goals. The basic theory behind this reform was that high stakes test performance could improve the focus and output of public schools (Nichols & Berliner, 2007). Because of the accountability mandates of NCLB, high schools revised high school graduation requirements and adopted more rigorous content requirements (Guthrie & Springer, 2004). With such high expectations, many students could conceivably be viewed as having a learning disability NCLB included requirements that 100% of all students would be proficient in reading and mathematics by 2014 and that schools make AYP toward that goal. NCLB also required that students with disabilities had to be included in state testing. Prior to NCLB becoming law, students with disabilities could be excluded from such standardized assessments. While RtI generated from IDEA, NCLB gave it impetus by requiring the assessment of all students’ educational skills and separate reporting of the progress of several subgroups of students, one of which was students with disabilities. This concept of measuring student learning “is consistent with the data-based decision-making movement that began in the 1970s and was endorsed by the President’s Commission of Excellence in Special Education” (Burns & Gibbons, 2008, p. 14). Therefore, because both laws required scientific, research-based intervention, NCLB and IDEA were the first laws to establish

a contextual basis for RtI and to recognize the importance of not waiting until students fail academically before implementing an intervention.

The Origins of Response to Intervention

In 1997, the large number of students referred for full evaluation for specific learning disabilities in reading under IDEA had educational professionals concerned about possible overidentification of students (Burns, 2007, p. 299). The Reading First initiative in NCLB questioned if the high number of referrals for comprehensive evaluations were the result of over identification of suspected disabilities or whether there was a need for improved core classroom instruction. In the absence of quality classroom instruction, was there a possibility that students were being referred for a special education evaluation for what was only perceived to be a specific learning disability in reading? The challenge of answering the question was only compounded when educational professionals continued to disagree about the “inadequacies of the ability-achievement discrepancy criterion – which was a component of Individuals with Disability Education Act of 1997 for identifying learning disabilities” (Gresham, 2002, p. 470). RtI, although developed out of special education law, was also considered in NCLB to assess student learning through evidence-based instruction and support.

The 2004 IDEA reauthorization provided a springboard for the promotion and adoption of the philosophy that all students can learn. The National Center on Response to Intervention (2008) provides the following description of RtI:

Response to Intervention integrates assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavior problems. With RTI, schools identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student’s responsiveness, and identify students with learning disabilities. (p. 59)

Another purpose suggested within the literature for the use of RtI was constructed to provide a valid means of identifying students with specific learning disabilities, giving both clear standards and sound instructional practices (Dickman, 2006). The RtI model is utilized with students to implement “individualized, highly structured, research-based interventions designed to remediate their deficiencies” (Mellard, Layland, & Parsons, 2008, p. 1). RtI is defined as structured, systematic approaches for decision making based

on instructional practices that are driven by data collected through universal screening (Batsche et al., 2006). When properly implemented, RtI provides general and special education teachers an opportunity to collaborate on instruction and intervention strategies that can be tailored to match student needs. Frequently monitoring progress assists with guiding decisions concerning changes in instruction or goals.

The RtI model has typically been used at an elementary level to identify students with reading difficulties. All students entering kindergarten would be assessed using an early literacy skills assessment such as The Primary Reading Inventory developed by the Texas Education Agency in 2005 or the Phonological Awareness Literacy Screening developed by the University of Virginia. These types of assessments give a benchmark of a student's ability measures and allow educational professionals to identify those students who might be at risk for having reading difficulties. With the use of the RtI model, teachers can monitor student progress closely and can provide more intensive instruction in the early literacy skills (O'Connor, Fulmer, Harty, & Bell, 2005). If students do not show improvement, teachers can provide more support using small-group intervention. When the small-group intervention has been implemented with fidelity and students do not make measurable progress, then they did not "respond to the intervention" (Quinn, 2010). The students who have not responded to intervention should be given the opportunity to be referred for an evaluation to see if they qualify for special education services.

Components of RtI

As with any education program or instructional plan, RtI should be implemented with an understanding of the research and evidence-based practices that support the framework. To implement RtI with this understanding, personnel should have a concrete understanding of the essential components of RtI. The National Center for Response to Intervention (2010) identifies these essential components as high quality instruction in the general education classroom, a universal screening tool, data collection through progress monitoring, support through the tiered model, researched-based interventions, a Problem Solving Team with clear leadership, and data-based decision making (p. 7). These essential components make up the framework of RtI that the school staff would implement with clear planning and procedures that serve to support the students. L. Fuchs and Fuchs

(2007) did, however, caution professionals not to implement too quickly because “oftentimes schools implement a plan too quickly and each of the components is designed ineffectively, which frustrates everyone involved” (p. 25).

High quality instruction in the general education classroom, identified as Tier 1, is given to all students with the philosophy that all children can learn when provided effective instruction. According to Vaughn and Fuchs (2003),

If the growth rate of students within the class is significantly less when compared to other classes and schools, then it can be assumed that the problem lies in the instruction rather than in the students. If this is the case, the instruction would need to be improved. (p. 143)

Teachers should use high quality instruction such as differentiation within the curriculum to support all learners. The ability of the teacher to use high-quality research-based instruction and interventions provides a “systematic process of student outcome data that can be monitored and allows there to be instructional adjustments” (Bender & Shores, 2007, p. 67). Once the teacher identifies that classroom instruction does not support the success of the student, there is consideration for a universal screening to determine specific interventions that may need to be put into place.

Universal screening is formalized assessment that is used for identifying students at risk of either academic or behavioral failure. Jenkins, Hudson, and Johnson (2007) described an ideal screening tool as one that “can be evaluated on accuracy, efficiency, and consequential validity” (p. 2). The universal screening is given to all students. The screening is to be conducted three times during a school year. The first screening would be completed at the beginning of the school year and would be done to identify the areas of weaknesses that would need to be supported with interventions. The second screening would be completed in the middle of the year to assess both the integrity of the interventions being used and to assess the identified skill set. The third screening would be completed at the end of the year to determine if the skills have improved with the support of the interventions (Burns, 2007, p. 300). This screening would also provide data to support the development of specific goals that would be set for the student identifying the academic or behavioral weaknesses and the interventions that would support them.

If the student continues to struggle, then a team of professionals identified in the literature as the Problem Solving Team comes together to discuss the student's needs. Problem Solving Teams are typically constructed of content teachers who have knowledge of the student, a special education teacher, a school psychologist, a guidance counselor, an administrator, the parents of the students being screened, and the student, if the student's inclusion is age appropriate. The Problem Solving Team collects data by progress monitoring the student for a specified time. The literature on elementary RtI suggests that progress monitoring data is collected on a daily basis and reviewed by the team every three to four weeks (Burns & Gibbons, 2008). The team also uses the data to recommend research-based interventions to support the student, to assess the quality of instruction, or to determine the need for a comprehensive evaluation for special education services.

The Problem Solving Team recommends interventions through a tiered model. The model contains three tiers. As noted previously, Tier 1 is made up of high quality instruction that is provided in the general education classroom (Noltemeyer & Mcloughlin, 2009, p. 4). Tier 1 instruction is given to every student in the class. The whole-class instruction must involve a research-validated curriculum and teachers must provide accommodations for student differences through differentiation. In Tier 1, the Primary Universal Tier, 80% of the students will meet their academic goals and their weaknesses will be remediated (Burns & Gibbons, 2008, p. 34).

Roughly 20% of students will require additional support (Brown-Childsey, Bronaugh, & McGraw, 2009, p. 26). These students will be given additional support through supplemental, research-based, small-group intervention at Tier 2, the secondary strategic tier. Tier 2 matches the students' targeted weaknesses to specific research-based interventions that are selected by the teacher or support staff. Data should continue to be collected and utilized to monitor progress weekly. At a reporting interval decided on by the Problem Solving team, it would be determined whether the implemented interventions have made significant differences. If the data suggest that support in Tier 2 provides academic success, then the student should continue with this level of intervention. The literature on intensity of interventions recommends that all interventions should be in place for at least eight weeks (Dickman, 2006, p. 44) Intervention strategies can be modified or changed at any time; however, if the data that are reviewed show that there is little to no progress, then the student would proceed to Tier 3 (Riley-Tillman & Burns, 2009).

Roughly 3% of students will not be successful at Tier 2, (Brown-Childsey et al., 2009, p. 16). Tier 3, the tertiary intensive tier, provides the most intense intervention strategies for students who are significantly below grade level. If a student has reached Tier 3, the assumption is that the problem is not a result of instructional practices but rather a particular need of the student. The identified students could be given a specific remediation intervention or be referred for special education determination.

The Problem Solving Team makes recommendations for intervention intensity based on data. This data must be systematically collected through progress monitoring. Progress monitoring is the collection of data used to evaluate the students' academic performance to "quantify a student rate of improvement or responsiveness to instruction and to evaluate the effectiveness of the instruction" (Bradley et al., 2007, p. 486). Progress monitoring can be done with an individual student or can be done with an entire class. The National Center on Response to Intervention (2010) indicates that there should be a strong focus on "fidelity of implementation and selection of evidence based tools" (p. 27). The collection of data and consistent progress monitoring also lays the foundation for researched-based interventions to be put into place. Researched-based interventions are defined as interventions that are supported through rigorous, systematic, and objective procedures to obtain reliable and valid knowledge of education activities and programs (Torgesen, 2004, p. 76).

Tackett (2009) completed a study of the implementation of RtI at five different sites to support reading in students suspected of having a reading disability. Tackett indicated that students, who received one-on-one fluency and decoding reading strategies, which are researched-based interventions, with a frequency of two times a week, improved their reading levels by at least one grade level. Tackett indicated that this research-based intervention was done with the data collected through progress monitoring, which allowed for very specific interventions to be implemented with the students. Tackett identified this process as data driven decision making, which again, refers to allowing the data collected to present evidence of a specific weakness so that specific interventions can then be implemented (p. 122).

Response to Intervention at the Secondary Level

The RtI literature indicates that the essential components for RtI and the fidelity of implementation have been effective in the elementary setting (Bender & Shores, 2007; Dickson & Bursuck, 1999; Elbaum, Vaughn, Hughes, & Moody, 2000). Implementation of RtI with

students in a secondary setting is not as well documented. The studies that have been published to date with high school students mainly focus on interventions and not on the systematic implementation of RtI. An example would be a study of the effectiveness of RtI's Tier 2 interventions with sixth graders who were struggling with reading completed by Vaughn et al. (2010). In their study, they noted that there was very little "research-based guidance for effective implementation of tiered intervention with older students and for effective reading interventions for older students" (Vaughn et al., 2010, p. 4). They provided professional development to the content area teachers and researcher-delivered interventions to the students. Although this study involved 241 students with Tier 2 interventions and Vaughan et al. (2007) reported that the "results were positive," (p. 340) the study did not provide information on implementation of RtI as a systematic effort in secondary schools.

Researchers point out that implementation of RtI in middle and high school presents challenges different from those present in elementary schools (Burns, 2008; Hall, 2008; Mellard et al., 2008; Quinn, 2010). D. Fuchs, Fuchs, and Compton (2010) noted that "Many researchers avoid middle and high school entirely because of the scheduling problems and compliance issues often encountered when working with adolescents" (p. 22). The implementation of RtI at a secondary level is based on a framework that was designed for an elementary setting. In the elementary model, the teachers are to "move students to increasingly intensive levels of the prevention system when those students reveal a failure to respond to more normal or standard forms of instruction" (D. Fuchs et al., 2004 p. 26). However, due to the short amount of time that students are in high school, teachers should consider a comprehensive evaluation for special education services (L. Fuchs & Fuchs, 2007, p. 17).

Mellard et al. (2008) noted that teachers at the secondary level are certified in specific content areas and the subject concentration of secondary teachers therefore shifts their focus from individualized attention to teaching specific skills within a content area. Whole-group teaching, often employed at the secondary level, may not lend itself easily to identifying a struggling student or identifying weak academic skills.

RtI, therefore, is fundamentally opposite when it is implemented at the secondary level. In the implementation of RtI in elementary schools, teachers are asked to identify those students who are at risk of failure, to implement interventions, and then to monitor the students' progress with the premise that the intensity of the intervention increases when the teacher recommends

that the students go to the next tier. The concentration for accountability for secondary teachers is on “reducing and eliminating already existing, sizable academic deficits” (Zirkel, 2010, p. 58). Secondary teachers work to decrease the intensity of the intervention and work to a more standard or grade-level prevention system for the identified student. Sugai (2004) noted that implementing RtI in a secondary setting is a challenge because “changes in organizational structure, a shift in academic focus, and increasing non-school responsibilities for students represent the strongest contrasts between elementary and secondary schools, and therefore, the strongest obstacles to overcome” (p. 2).

When RtI is implemented to provide students with the best opportunity to succeed in school, the implementation becomes a change to the school culture and climate. Windram, Scierka, and Siberglitt (2007) described that the implementation of RtI in a high school must begin with the school culture belief that all children can learn and achieve high standards as a result of effective teaching and that all students must have access to a rigorous, standards-based curriculum through research-based instruction (p. 43). D. Fuchs and Deshler (2007) also suggested that a high school principal must ensure that an RtI climate embrace the comprehensive system of tiered interventions that is essential for addressing the full range of student needs found within a high school setting (p. 158). If a high school’s culture and climate is designed within the RtI framework, then high school students will benefit from collaboration among educators for effective problem-solving and instructional decision making centered on improving the academic achievement of children. Therefore, it is important for all members of the school community to continue to gain the common knowledge and cultural development in order to gain a climate that has sustainability of RtI.

Implementation

Research has suggested that even when supported by legislation or policy, similar educational reforms that involved tiered interventions have experienced limited implementation success (Berends et al., 2002, p. 11). Sansosti, Noltemeyer, and Gross (2010) noted that for the essential components of RtI to be accepted by educators and implemented with fidelity, there must be clear expectations, common language, a philosophical understanding of the model, and professional development must be provided to the educators responsible for RtI’s implementation (p. 290). Currently, there are limited established universal standard for implementing the essential components of RtI for secondary schools. However, IDEA

regulations (2004) do include the recommendation for school personnel who are a part of the Student Consultative Team. According to Zirkel and Thomas (2010), local education agencies should consider data-based documentation of repeated assessments of achievement at reasonable intervals, reflecting formal assessment of student progress during instruction. IDEA (2004) recommends the use of RtI to provide high-quality, research-based instruction that increases support for students in a regular educational setting. Quinn (2010) noted that not assigning time for professional development and implementation of RtI “is a recipe for partial ineffective implementation” (p. 2). Quinn also stated that “too many schools love the idea of RtI but do not reallocate the time necessary for proper training and implementation” (p. 3).

Quinn (2010) argued that schools can successfully implement the essential components of RtI with fidelity of implementation as an organizational structure for the support of students. If teachers appropriately implement the tiered strategies, then the tiered instruction process will allow the students to increase their learning and motivation. RtI should not be viewed as a program but as a structured intervention. Building-level principals should ensure that professional development training on RtI is a consistent part of its implementation. Professional development for the RtI team should center on selection, implementation, and monitoring of scientifically validated interventions. Schoolwide professional development creates an opportunity for RtI to become a culture in the school (Quinn, 2010).

RtI takes time and continual assessment to assure fidelity of implementation (National Center on Response to Intervention, 2008). Teachers need extra time to conduct scientifically validated interventions and to monitor progress. Because RtI utilizes a collaborative team, specialists will also need to take time that they formerly used to test students in a discrepancy model and to reallocate the time to check fidelity and observe students in the RtI model. Paraprofessional staff may also be utilized as part of the RtI team to assist teachers in progress monitoring and small-group intervention.

RtI should be grounded in strong instruction and tiered interventions (Brown-Childsey & Steege, 2010, p. 27) meaning that the framework is given to school teams as a highly structured plan that does not leave room for flexibility in regards to the essential components and fidelity of implementation. An example of this expectation would be the fact that the three-tiered model makes no allowances for variation in implementation in different school locations. Also noted in the literature is a concern about educators’ knowledge base (Mellard et al., 2008). There is a

belief that there should be a “set of principles” that do not change but that may have “critical features that may look different from one site to another” (Brown-Childsey et al., 2009, p. 19).

In the literature, the RtI model was described as having produced improvements in student achievement at the elementary level that may not be similar in the secondary setting. Since RtI originated as an early intervention strategy for students with learning challenges, there are questions as to whether the framework for organization can meet the needs of students on a secondary level (Quinn, 2010). Sansosti et al. (2010) stated that there is a need for validated intervention models and reliable educational decisions in all grade levels. They pointed out that since there are still some weak areas, secondary schools may have some challenges implementing RtI with consistent success (p. 61).

Quinn (2010) pointed out that the pitfall that school districts fall into is “to follow the same model of RtI at the secondary level that worked for them at the elementary level” (p. 2). RtI must be implemented at the secondary level with the characteristics of a middle and high school in mind, such as subject area content, block scheduling, graduation requirements, and career and technical education interests. Samuels (2008) indicated that there is significant research on RtI in elementary schools, however, “when it comes to research on how to best implement the process for students in middle and high school...the flame abruptly fizzles out” (p. 24). Not all students can keep pace with standard-based curriculum or rigor. When students come into a secondary school setting unprepared because they do not have basic skills, they are at a higher risk for academic difficulties that could be misinterpreted as an SLD (Johnson & Smith, 2008, p. 48).

Importance of Fidelity

RtI is a model that is used to assist with student achievement. However, if RtI is implemented inconsistently, then schools will be less likely to achieve the goal of student success. RtI should be implemented with fidelity according to research findings and developers’ specifications (RtI Action Network). Mellard and Johnson (2008) defined fidelity of implementation as “the degree to which teachers and other program providers implement programs as intended by the program designers” (p. 240). The fidelity of implementation also addresses the integrity of the essential components of RtI. Dane and Schneider (1998) referred to fidelity as having expectations for program implementation and stated that fidelity would mean, “to the extent to which the intervention, as realized, is ‘faithful’ to the pre-stated intervention

model explicit expectation of the implementation of the program components” (p. 26). Dane and Schneider identified five aspects of intervention fidelity: (a) adherence: program components delivered as they are prescribed; (b) exposure: amount of the program content received by participants; (c) quality of the delivery: theory-based ideals in terms of processes and content; (d) participant responsiveness: engagement of the participants; and (e) program differentiation: unique features of the intervention that are distinguishable from other programs. With consideration for these five aspects, implementing RtI with fidelity is important for achieving student success and “high quality implementation is more likely when core program components” are universally understood and executed (Gresham, 2002 p. 16). There are few studies that address particular parts of the essential components of RtI at the secondary level in terms of fidelity.

Curriculum-Based Measurements in Mathematics

Lembke and Stecker (2007) completed a study exploring the procedures for implementation of RtI through a Curriculum-Based Measurement (CBM) model for secondary students in the area of mathematics in five middle schools. The CBM model was used with students in sixth and seventh grade. There were 154 sixth graders and 128 seventh graders involved with this model. The researchers described procedures for implementation of CBM by first defining it as an evidence-based system of screening and progress monitoring that teachers used on a frequent basis to screen all students in a school, grade, or class which assessed the effects of instruction on student performance (Lembke & Stecker, 2007, p. 10).

Lembke and Stecker (2007) identified an RtI framework that could be implemented with secondary students in the area of mathematics. The researchers described the framework as a Curriculum-Based Measurement (CBM). The researchers noted that decisions for students should not be made on test scores alone and noted that decisions should be made within “an integrated system of data-driven decision-making” (Lembke & Stecker, 2007, p. 7). Within the study, the researchers concluded that schools should provide frequent, timely estimates of student performance, so that decisions about instructional effectiveness and student performance can be made routinely to assist with identifying students who are successful and who are at-risk. Lembke and Stecker recommended formative assessments that need to be done on a frequent basis and so summative data can be collected from annual assessments (p. 1). The support for the

mathematics concepts was identified as mathematical computation and applying basic computation into problems such as algebraic expressions.

As in the recommended components of RtI, the CBM model begins with universal screening for all students to determine the effectiveness of the curriculum and identify students who might be struggling. Once the screenings are completed, the tests results are utilized to develop goals for students who scored poorly. Lembke and Stecker (2007) recommended that this screening occur three times a year to make sure the students continue to stay on target to meet the specified goals. After the screening and after goals are set for the students, then formative assessment data are collected and teachers are asked to report their data weekly or if the student continues to be academically unsuccessful in the area of the goal, the reporting may occur twice a week. Progress monitoring is done by the students' mathematics teachers. The mathematics teachers are asked to administer alternate forms of mathematics probes on a frequent basis, score the probes, and then graph the results to use in the decision-making for instructional strategies and intervention implementation.

After collecting four weeks of data, the teachers compare the trends of the graph. If the student's data trend is far below the goal line, the teacher may implement an instructional change. The assessment of the data and change in instruction can be made by the teacher alone or can be done through a team meeting. Lembke and Stecker (2007) indicated that change in instructional strategies was left up to the building leaders. The researchers also noted that when teachers implemented interventions that they utilized resources that were supported by research such as National Council of Teachers of Mathematics and Linking Research to Practice Initiatives because "using research-based practices to support students with diverse learning needs in the general education setting helps to maximize instruction and outcomes for students" (Lembke & Stecker, 2007, p. 13).

Lembke and Stecker (2007) reported that CMB has a structure of important components that include selecting and administering reliable and valid measures, using consistent administration procedures, and using data and progress monitoring to make data-based decisions. CMB also monitors student progress and allows the teachers to adjust intensity through the use of researched based interventions. The researchers noted that CBM uses curriculum sampling and robust indicator approaches. Curriculum-sampling measures incorporate content that should represent the curriculum expectations across the year. Curriculum-sampling measures would

mean that the teacher monitors the student who is in a particular grade and monitors the mastery (Fuchs, 2007, p. 158). The robust-indicator approach provides a similar indicator of mathematics proficiency, just as the curriculum-sampled measures do, but are developed using a task that is “robustly related to many mathematics component skills” (Skiba, Magnusson, Marston, & Erikson, 1986, p. 55).

There were 45 sixth graders and 36 seventh graders who were identified as at-risk for failure in the area of mathematics through the universal screening. When the mathematics teachers provided research based interventions with consistency, the students did improve in the mathematic skills. In the sixth grade sample, 41 of the 45 students improved on the universal screening assessments and then passed the annual assessment. In the seventh grade, 34 of the 36 students improved on their universal screening assessments and then passed the annual assessment. Lembke and Stecker (2007) did note that CBM allowed for weakness identification and development of student specific interventions. Within the study, the researchers also reported that the CBM model could be used to monitor the effectiveness of prereferral interventions that may be implemented prior to referral to special education.

Lembke and Stecker’s (2007) study suggests that the RtI framework through CBM model can assist middle school students in the area of math. Lembke and Stecker did caution that their study is only one of a few research studies that had been completed with middle school students at the time of its completion. They indicated that CBM has been used more in the elementary mathematics setting, however, they did state that the important components for middle school RtI implementation would be made up of the “of the same process or very similar” (Lembke & Stecker, 2007, p. 27). Lembke and Stecker indicated that there are essential components needed for the implementation of CBM. They identified the need for universal screening, data collection, progress monitoring, adjustment in instruction through varied levels of intensity, researched-based interventions, and when appropriate, the need for a team to review the data. With these components implemented, Lembke and Stecker noted that “educators will continue to be held accountable for the progress of their students, and CBM is an important tool that can be utilized to examine student progress” (p. 21).

RtI in High School

Fisher and Frey (2011) completed a two-year study of a small high school that implemented RtI. In the study, the researchers focused on assuring the quality of core instruction

to prevent student failure, adopting RtI as a schoolwide approach, and developing curriculum-based assessments to make effective interventions. Fisher and Frey reviewed literature on implementation of RtI in secondary schools and found very little evidence of high school organization for schoolwide implementation of RtI to address the challenges of adolescent learners. The purpose of their study was to investigate the impact that RtI could have on a high school in terms of student achievement and the process of implementation. Fisher and Frey used a case study design for their investigation.

The high school selected for the case study enrolled 444 students in grades 9-12. Sixty-two percent of the students received free or reduced price lunch. The high school operated as a career-focused urban school. The student body was 44% Latino or Hispanic, 22% Black, 16% Asian, and 18% White. There were 23 teachers who participated in the study. This was 100% of the teaching staff. This level of participation in the study was taken as evidence of commitment to the RtI framework.

Field notes detailing the classroom observations, staff development, faculty meetings and IEP meetings were collected and reviewed by the researchers. Interviews were scheduled during the second year of the study. The teacher interviews focused on the components of the RtI system that was emerging, their implementation efforts, and the successes and challenges of their experiences. All teachers were interviewed at least one time, and nine were interviewed a second time to follow up with specific examples of items. Over the two-year period, the researchers studied achievement data, progress monitoring data, grade point averages, and attendance records. The researchers then independently analyzed the interviews and data for themes.

The findings of this study were positive. A three-tier model of RtI was used with a focus on quality core instruction and systematic interventions. The faculty developed an understanding of assessments used to identify areas of strengths and weaknesses as well as how interventions could address students' needs. The teachers' understanding moved the focus from individual teachers working on student achievement to the faculty designing a systematic focus on core instruction as well as supplemental and intensive interventions. Professional development sessions and peer coaching for the teachers were delivered as classroom instruction, which were identified as Tier 1 strategies. . The professional development allowed the researchers to observe a great deal of teacher modeling during the two-year study. In all the observations that were done, teacher lectures lasted no longer than 20 minutes. During the lecture, teachers would

model strategies that they learned from their professional development. By the end of the study, 50% of instructional time was devoted to student-to-student interaction with content.

Progress monitoring dramatically changed during the course of the study. At the beginning of the study, Fisher and Frey (2011) could not find evidence of progress monitoring in place in the school. Grades were given based on work completed and teachers attempted to meet the diverse needs of the students the best way that they could. At one point in the study, 55% of the students at the high school had at least one F on their progress report. By the end of the two-year study, only 12% of the students had not passed a class and were enrolled in the extended school year to make up work. Tier 2 interventions were designed as small group supplemental remediation and were designed with progress monitoring. Through a review of the data gathered when progress monitoring took place, a positive change in student academic achievement was noted. Students were more appropriately placed in small group remediation based on weaknesses identified through the monitoring. This allowed the students to get the help they needed thereby providing academic success. A reading specialist was hired to work with teachers and track students who needed supplemental interventions. The reading specialist also focused her time on reviewing the school's academic components of after-school programs, supervising peer tutors and providing intensive interventions. The reading specialist working with students was a part of the schoolwide approach to adopting RtI to maximize intervention impact. During the two years of the study, the intervention teacher or reading specialist focused on intensive interventions and scheduled time within English classes for specific students to work on computer programs as Tier 3 interventions.

Overall, student achievement improved over the two-year study. Although Fisher and Frey (2011) wrote that the implementation of RtI was not the sole cause of the improvements, they did note that the student achievement accelerated with the development of RtI system. The high school outperformed state-identified similar schools by 11%. Student achievement increased by 4% on state achievement measures. The overall grade point average increased by 2.89 to 3.36. Attendance improved from 90.4% to 95.6%. Fisher and Frey concluded that even with these improvements, the implementation of the RtI framework at the high school level was difficult. With the implementation, the case study school attempted to use this model for identification of disabilities as well as for school improvement. The school faculty did agree that

this process was necessary for their students. One teacher interviewee stated, “I can’t imagine schools could operate any other way. I just couldn’t let my students fail” (p. 15).

RtI Implementation in High Schools

Throughout the literature review, there continued to be an enormous amount of RtI research found in the elementary setting and very little in the secondary setting, specifically with high school students. Duffy (2007) noted that elementary research might be useable for high school implementation because RtI is implemented in high schools with the same essential components of elementary RtI, but that the strategies used in the high school setting are different due to the “unique culture, structure, and organization” of high schools (p. 16).

A comprehensive study to address high school implementation of RtI was completed by the National High School Center, the National Center on Response to Intervention, and the Center on Instruction (2010). The organizations worked together as the High School Tiered Intervention Initiative (HSTII) team. The HSTII team recognized that much of the research surrounding RtI in high schools was limited, provided very few recommendations, and was focused primarily in the area of literacy (National High School Center, National Center on Response to Intervention, and Center on Instruction 2010, p 1). In an attempt to “enhance understanding of how tiered intervention models are emerging in high schools across the country,” HSTII (2010) completed a descriptive case study (p. 3).

HSTII (2010) investigated the implementation of the tiered approach as specified through research and “professional wisdom.” They visited high schools to determine the conceptualization, implementation, and translation to practice of the essential components of RtI as they are integrated into the high school’s structure and operations in comparison to the elementary RtI model. For the purpose of their study, the HSTII team noted that RtI exists in different models but all the models maintain the same conceptual framework of high-quality instruction and increasing intensity of intervention through the tiered approach. The increase in intensity is based progress monitoring and data collection to assist with decision making.

HSTII (2010) contacted 51 high schools, interviewed 20 high school administrators, convened Technical Advisory Groups, and conducted eight site visits. The schools’ student populations ranged from 450 students 3,400 students. The schools’ free/reduced price lunch programs had a range of 13% to 75% participation. Four high schools were on block schedules, four high schools had traditional six to eight period days, and one high school had a hybrid class

schedule while the other 42 high schools used a traditional seven-period day. The intervention model in most of the schools focused on 9th and 10th grade students. All schools observed implemented either a three-tiered model with the primary goal of improving student achievement. The schools defined the lack of student achievement as failing classes, failing state mandated tests, and students dropping out of high school. There were high schools that also identified secondary goals of using RtI to improve student attendance and to increase literacy skills. One school identified the use of RtI to decrease the number of referrals to special education.

HSTII (2010) observed Tier 1, Core Instruction, as “high-quality, evidence-based primary, or core, classroom instruction provided to all students” (p. 3). The team reported that there is strong researched-based core curriculum in elementary literature; however, they specified that there is an absence of a research-based curriculum in the high school literature. They also identified that the design of Tier 1 strategies presented a challenge because there is very little research in other content areas except for adolescent reading. Reading research is prominent in the elementary RtI models. That research does not assist high school teachers who would be teaching Biology, Algebra, or Government. HSTII suggested that this absence of research-based curricula would force teachers to “draw guidance from research topics such as school improvement, alignment, and effective instruction” for their content area (p. 4).

In the elementary model of RtI, universal screening is identified as an effective practice for identifying the areas of deficit (Fuchs & Fuchs, 2007 p. 14). There is a lack of high school research studies that identify which universal screening tool should be used. The high schools that were visited by HSTII (2010) utilized state tests given at the end of eighth grade to determine the appropriate level of intervention at the beginning of the students’ ninth grade year. Another data source that schools used as a universal screening for students was an examination of what they identified as “multiple failures.” Multiple failures were defined as students who had “failed one or more English and/or Algebra classes” (p. 4). Although these methods are considerably different from the universal screening method suggested in the elementary research literature, the screening was used with the philosophy that if a student is continually unsuccessful in the academic setting, then the student is at risk for dropping out.

HSTII (2010) observed progress monitoring in the study sites. They indicated that there were a variety of methods that the schools used: diagnostic measures, curriculum-based

measures, class grades, class quizzes and tests, high school graduation tests, and benchmark tests. The frequency of progress monitoring also varied from site to site; however, the overall time frame was identified to occur at least twice a month in Tier 2 and Tier 3. All the high schools used the tiered model in reading, English/Language Arts, and mathematics. Some of the schools used the tiered approach with students who received services for English Language Learners (ELL). Half the schools provided Tier 2 and Tier 3 interventions during separate classes and the interventions were provided for a semester. The other half of the schools provided the tiered interventions through collaborative classes, seminars or other academic supports throughout the students' day.

The data collection was observed by HSTII (2010) in the schools as being used initially to determine where students should be placed within the tiers. Data collection was used also to make decisions about the intensity of the interventions or if the interventions had been successful. Data were also used to differentiate instruction within the classes. HSTII noted that in all schools decision making took place through meetings. The participants in the meetings were typically stakeholders, teachers, instructional coaches and administrators. Some schools also asked students to be a part of the meetings.

HSTIII (2010) researchers emphasized that the implementation of RtI in high schools must include the "same set of essential components as the RtI framework commonly implemented in the elementary schools" but then cautioned that the strategies implemented in the high school may "look very different due to a high school's unique culture, structure and organization (p. 2). This research study identified essential components of implementation as having universal screening, high quality instruction, a three-tier model with increasing intensity, data collection, progress monitoring, interventions, a committee of people to problem solve, and decisions based on collected data (p. 6). They noted that without these components, the implementation of RtI could not be accomplished with fidelity.

The factors that were identified by HSTII (2010) as necessary supports for the implementation of RtI at the high school level were leadership, intervention providers, professional development and coaching, and evaluation. The common high school implementation challenges that were identified by HSTII were lack of staffing, master scheduling, lack of educational resources, lack of funding for resources, and lack of domain-specific knowledge required of the program evaluator to determine the fidelity of the

implementation. HSTII also reported contextual factors that would need to be considered before the RtI model was implemented in a high school: (a) defining a focus of the tiered model, (b) exploring the culture of the school, (c) defining staff roles, (d) organizing a common instructional design, (e) student cooperation/motivation with participation, (f) graduation requirements, (g) stakeholder engagement, and (h) instruction and assessment resources. The recommendations from HSTII were that to implement RtI in a high school setting there must be an organized, collaborative team willing to engage in the research and practices of a model that uses the essential components and continually assesses if it is being implemented as the team has intended.

Summary of the Secondary RtI Studies

Three research studies that addressed the implementation of RtI in the secondary setting were reviewed in depth. The first study explored the implementation of RtI through the CBM model. The study reflected on the essential components that were necessary for the success of the CBM model in working with middle school students in the area of mathematics. The second study was a two-year case study of the schoolwide implementation of RtI at a small high school. Throughout the study, the essential components were addressed; however, the schoolwide climate change of the implementation was also addressed. The third study explored the components essential for RtI to be implemented successfully at the high school level. The HSTII (2010) study noted that implementing RtI at the high school level “involves more than just cutting and pasting the essential components of the elementary to the high school” (p. 13). In all three studies, the implementation was a schoolwide approach that was new to the schools. There was an example of student improvement and teachers’ attitude changes with instructional design change (Fisher & Frey, 2011; HSTII, 2010; Lembke & Stecker, 2007). Although the process of implementation was difficult, all three studies showed that if implemented with fidelity that students and staff can benefit from RtI.

In summary there is limited research on how to implement the RtI framework in high schools. The majority of research for reading interventions focuses on elementary school students. There were inconsistent trends in practices to promote achievement and success for secondary students with the use of the RtI model. However, the three studies that addressed secondary students recommended (a) a structured focus on prevention for academic failures, (b)

the use of the suggested RtI model consistently and with fidelity, and (c) strong consideration the adoption of the suggested framework using the essential components of RtI.

CHAPTER 3 METHODOLOGY

Introduction

The purpose of the study was to investigate and describe how one high school in one school division implemented Response to Intervention (RtI). RtI is defined as structured, systematic approaches for decision-making based on instructional practices that are driven by data collected through universal screening (Batsche et al., 2006). The essential components of RtI identified in the literature were (a) universal screening: (b) data review by a problem solving team, (c) targeted interventions monitored through (d) data collection, (e) intensity of interventions through a tiered approach, and (f) a referral method for students who do not respond to intervention (Fisher & Frey, 2011; HSTII, 2010; Lembke & Stecker, 2007). Lembke and Stecker (2007), Fisher and Frey (2011), and HSTII (2010) recommended three key practices for implementation of RtI at the secondary level: (a) a structured focus on prevention for academic failures, (b) use of the suggested RtI model consistently and with fidelity, and (c) strong consideration for adoption of the suggested framework using the essential components of RtI.

The guiding questions for the study were:

- Did the high school implement the essential components of RtI?
- Did the high school implement the RtI framework with fidelity?

To address these questions, the following research questions were addressed:

- Why did the school or school district implement RtI?
- How did the school define its schoolwide, multi-leveled instructional and behavioral system for failure prevention for high school students?
- What were the universal screening tools that the school used?
- What were the strategies that the school used for progress monitoring?
- How were data collected to use used in making decisions for instruction, movement within the multi-level system, and disability identification?
- Was RtI implemented in the framework that it was designed to be delivered as determined by the countywide plan?

Assumption and Rationale for a Qualitative Design

The practices identified in the literature review and the implementations of RtI at the high school level were studied by conducting a case study using a qualitative research design. Using qualitative research methodology in a natural setting allowed data collection that focused on the participants. Rossman and Rallis (2003) stated that qualitative research provides the framework for researchers to “gather what they see, hear, and read from people and places and from events and activities” (p. 4) and thereby answer questions. Using qualitative methodology allowed the researcher to answer the research questions, to learn about the experiences of the school staff, and to present any new understandings of the practices that were realized through the implementation of RtI at the high school.

Research Design

The research design for this proposed study was a qualitative case study to answer the guiding questions of: “Were the essential components of Response to Intervention implemented in this high school?” and “Was the Response to Intervention framework implemented with fidelity?” According to Yin (1994), case studies are the “preferred method when (a) “how” or “why” questions are being posed, (b) the investigator has little control over events, and (c) the focus is on a contemporary phenomenon within a real-life context” (p. 4). Lincoln and Guba (1985) reasoned that a case study must have a specific framework structure of identifying a problem, having a context of the problem, a possible resolution of the identified issue and a “lesson learned” (p. 36). Asmussen and Creswell (1995) stated that “a case study is chosen to study a case with clear boundaries so that the researcher has contextual materials, a wide array of information, and an in-depth picture available to describe the setting” (p. 575). According to Yin (2004), a case study is completed because there is “desire to understand a real-life phenomenon in depth, but such understanding encompasses important contextual conditions” (p. 18). A qualitative case study creates an opportunity to explore the implementation of RtI in a high school and to understand if the RtI design was implemented with fidelity through interviews, documents, and observations.

The researcher used qualitative methodology to document the implementation efforts and the outcomes in one school through a case study approach. Qualitative methods provide for an understanding of complex situations and “assume that reality is ever-changing, that knowledge consists of understanding, and that the goal of research is examination of processes” (LeCompte

& Preissle, 1993, p. 46). This case study was designed to discover and describe through interviews and document reviews how instruction, interventions, and the other identified essential components of RtI were implemented in a high school environment.

Selection Procedures

The selection of the school and school system and the participants who participated in this study are described in this section. Access, confidentiality and consent procedures are explained.

Site Selection

The setting for this study was a high school in a Central Virginia school division. To provide confidentiality for the school division, the school division will be referred to by the pseudonym MSB Public Schools. For the same reason, the high school will be referred to by the pseudonym CHD High School. The school was selected based on the recommendation of the Secondary Lead Teacher (SLT), who is a central office staff member assigned to work with all high schools in the MSB Public Schools in the area of special education. The SLT recommended CHD High School because of the SLT's own perception and the perception of other central office administrators of the high school's organization of their implementation of RtI as "an effective high school RtI model." Consistent with case study methodology, cases are purposefully selected because they offer an opportunity to examine specific phenomena in the natural setting (McMillian & Wergin, 2010, p. 92). The researcher was interested in studying a high school that had implemented an organized approach to the RtI intervention strategy to explore if the essential components and implementation fidelity noted in the research (Mellard, 2010; Quinn, 2010) were utilized and how they were designed.

Table 1 shows the academic results that students at the high school achieved during the period when RtI was implemented. CHD High School housed 1363 students in grades nine through twelve at the time of the study. According to the Virginia Department of Education (VDOE) (2007) 373 students were ninth graders, 351 students were tenth graders, 317 were eleventh graders, and 322 were twelfth graders. Fifteen percent of the school's population were members of ethnic minorities, 5.9% were identified as students with disabilities, and 13.2% were identified as economically disadvantaged. CHD High School had 610 White males, 550 White females, 59 African American males, 53 African American females, 19 Hispanic males, 16

Table 1

CHD High School

	2009-10	2010-11	2011-12
Accreditation Pass Rate Combined			
English	95%	98%	96%
Math	95%	92%	66%
Percentage Passing SOL Reading Assessments Combined			
All	95%	99%	98%
Black	95%	96%	96%
SWD	89%	94%	73%
SES	89%	98%	100%
Percentage Passing SOL Algebra I			
All	95%	96%	55%
Black	94%	100%	50%
SWD	75%	68%	29%
SES	95%	87%	55%
Percentage Passing SOL Geometry			
All	95%	93%	80%
Black	94%	90%	70%
SWD	82%	82%	60%
SES	94%	94%	72%
Percentage Passing SOL Algebra II			
All	81%	84%	64%
Black	-- ^a	67%	46%
SWD	-- ^a	-- ^a	-- ^a
SES	-- ^a	85%	46%

Note. SWD = Students with Disabilities; SES = Socioeconomic Status (Free or Reduced Lunch)

^aToo small to report.

Hispanic females, 31 Asian males, and 21 Asian females in its student body. Four students are missing from the student totals received from the VDOE. There is no reason identified as to why these students were not reported in the categories within the total count; however, their omission may be due to the fact that four students chose not to identify themselves with any of the specific ethnic groups. There were one principal and three assistant principals working in the school.

A secondary factor for the school's selection was the proximity of the school to the researcher. The location of the school facilitated travel to and from the school. The location also

afforded the researcher the opportunity to spend more time at the school to conduct the interviews and review documents for the study. CHD High School provided an environment in which the researcher could easily access interviews of the participants while unobtrusively collecting data.

Participant Selection

Each person selected to participate in the study had direct experience in the implementation of RtI at CHD High School and a valuable perspective on its planning and operation. The Director of Instruction and the Director of Special Services were selected as interview participants because they were the personnel who initiated RtI within the school division as an instructional strategy for the high schools to use. The Support Lead Teacher of Special Services (SLTSS) was chosen as a participant because the SLTSS was one of the three personnel who delivered the professional development for RtI's implementation in the high schools and who subsequently monitored the schools' progress in its implementation. The Secondary Lead Teacher was chosen as a participant because the SLT was responsible for assisting with overall instructional leadership at the case study high school. The school psychologist was chosen to be a participant because the psychologist has been a part of the RtI team in both the case study high school and in a second high school in the county that implemented RtI. The assistant principal, a general education teacher, and a special education teacher were all chosen to be participants because they had worked in the case study high school since RtI was implemented. The SCT Coordinator was chosen to be a participant because the SLT identified the SCT Coordinator as the person responsible for implementing the essential components of RtI and for working to ensure the fidelity of implementation.

Gaining Access and Entry

The first step to gaining access and entry into the high school as a research site was to email the superintendent of the school division to explain the nature of the study and request approval to conduct it. The superintendent referred the researcher to the Director of Testing who referred the researcher school district's website to complete a Research Study Request. Once the request was completed, the researcher submitted the request to the school district's research panel for review. The research panel reviewed the application which included the rationale for the study, the purpose of the study, and a description of the methodology of the study. The

research panel sent a letter of approval for the study to be completed at the proposed site to the researcher. Copies of the correspondence with the superintendent and testing director are in Appendix A. The completed application and approval letter from the research panel can be found in Appendix B.

Approval from Virginia Tech's Institutional Review Board (IRB) was obtained before conducting the proposed study. The researcher submitted an informed consent form with the request to conduct the study to the IRB. The IRB confirmation email and approval letter from Virginia Tech Institutional Review Board for Case Study 12-611 is in Appendix C. The informed consent form is in Appendix D. Following receipt of approval of the study from the IRB, the researcher obtained from the Director of Special Services a list of personnel who were based either at the high school or at the central office level and who were actively involved in the implementation of RtI at the high school level, including CHD High School. The list given to the researcher included the names of 38 staff members who had worked with the implementation of RtI at CHD High School. Following receipt of the list of 38 CHD High School staff members, the researcher spoke with the case study high school principal to determine which personnel from the original list of 38 CHD High School staff members were involved with RtI on a daily or weekly basis. The principal suggested the school psychologist, the Student Consultation Team (SCT) Coordinator, the Secondary Lead Teacher for the school, one math teacher, one assistant principal at the high school, and one special education teacher. The principal identified the specific personnel because each of the individuals supported RtI when it was implemented into the school. The researcher was given the names of these individuals by the principal so that the researcher could speak with them to set up the interviews. The principal also suggested the Director of Instruction, the Director of Special Services and Support Lead Teacher because all three were involved with the implementation of RtI at the district level. These nine participants were selected to participate in the study. The staff was selected to ensure representation of high school staff and central office staff with knowledge of the implementation of RtI at CHD High School.

The nine participants were initially contacted by phone by the researcher. The researcher used the informed consent form that was approved by IRB (found in Appendix D) as a script to describe the research study. Also, at the time of the phone call, the researcher indicated that each participant would receive a letter. The researcher reviewed the information within the letter with

each of the participants to clarify any questions or concerns that each of the participants might have. After the phone conversation, a letter detailing the rationale for the study, the purpose of the study, the description of the methodology, and written consent was mailed to the nine participants. The participants were asked to keep the written consent until the day of the interview. This allowed the researcher to review the information with the participant again and to keep the copy of the written consent with the interview information in an organized, secure fashion. A copy of the letter appears in Appendix E.

Completion of the steps above provided access and entry into the high school to conduct the study and provided the individuals with a clear purpose of the study and allowed sufficient time to conduct the research.

Researcher's Role

Rossman and Rallis (2003) explained that a researcher creates new understanding for a specific topic. Rossman and Rallis also noted that “researchers are learners; they have assumptions; and these assumptions shape how they go about doing their project” (p. 33). In a qualitative study, the researcher is actively involved by being in the field and developing meaning from what is learned there. The researcher sees the data “filtered through the researcher’s unique way of seeing the work- his lens or worldview” (Rossman & Rallis, 2003, p. 36). Because of the particular duties of the researcher in qualitative research, the researcher must understand his or her own thoughts involving the data and have thoughtfulness in regards to their interpretation. A researcher should have strong understanding of qualitative skills such as “seeing, listening, reading, and making sense of their perceptions” (Rossman & Rallis, 2003, p. 36).

The researcher is currently an assistant principal in a rural high school within the same school division as the case study high school. She has been in this role for three years. Prior to becoming an assistant principal, the researcher was a special education lead teacher for this same school division for three years. The researcher taught for a neighboring school division for 13 years as a special education teacher in both middle and high school. These experiences have given the researcher a solid foundation for understanding academic weaknesses for secondary students and to develop research questions that have a clear relationship to the goal of the study. The researcher kept a journal log of the details including the process of gathering, analyzing and interpreting the data. The study met standards for acceptable and competent practice, and there

was a concerted effort to make sure that the study was credible, systematic, and beneficial (Rossman & Rallis, 2003).

To offset any bias that could possibly influence the research design, the researcher used a critical friend to review the themes and categories that emerged from the case study. According to Burge (2010) bias in research is anything that produces systematic, but unexpected, variation in research findings. A critical friend is a “trusted person who asks provocative questions, provides data to be examined through another lens, and offers critique of a person’s work as a friend” (Costa & Kallick, 1993, p. 50). For the purpose of this study, this person agreed to serve as the “critical friend.” The critical friend is the Supervisor of Secondary Instruction for a neighboring Public School in Virginia. The critical friend has been an elementary and secondary teacher in special education and general education and has served as a supervisor for special education, English, Title I, and Title III programs.

The researcher met with the critical friend on two occasions to review the data. During the first meeting, the data were reviewed. As a result of those discussions, two of the appendixes were changed. One change was that the essential components of RtI were placed in alphabetical order. The second change was that the domains for fidelity were reorganized to clarify which domains were the essential components of RtI and which were philosophies from the research literature. The second meeting was to review the final data as they related to the literature and research. This meeting was to ensure that the data were collected, assembled, and presented in a clear, accurate, and concise manner to support the case study. Based on her thorough review and discussion with the researcher, the critical friend concluded that the data must be organized in so that future researchers would be able to utilize this study as a framework to structure their research. The researcher agreed with the critical friend and followed her suggestions for organization of the data into clear domains.

Assurance of Confidentiality and Consent

A consent form that explained the purpose of the study, procedures, and the future use of the data was submitted to the Virginia Tech Institutional Review Board (IRB). The IRB approval of the study, including the consent form, is found in Appendix B. All participants signed consent forms that explained confidentiality assurances that were obtained before the collection of the data began which can be found in Appendix D. Thus, informed consent from all the study participants was assured and achieved.

The researcher kept confidential the school division's name, the school's name and the names of all the participants. The school division was given a pseudonym, MSB County Public Schools. The high school was also given a pseudonym, CHD High School. To provide anonymity for the participants, the researcher used a coding system to identify the data. Ensuring confidentiality was important to gaining meaningful data from the participants. The researcher identified the participants with a coding system by designating each participant with a number: Participant 1, 2, 3, etc. that will be explained more in depth in the analysis section of this chapter. The collected data will be secured in a locked filing cabinet in the researcher's home for 5 years after the study is completed.

Data Collection Procedures

The researcher collected data from several sources to create a complete picture of the case. A case study through qualitative design allows the researcher having the experiencing to "retain the holistic and meaningful characteristics of real-life events" (Yin, 1994, p. 4). There were multiple sources of evidence used through the data collection process. Patton (2002) noted the need for multiple sources of data to provide strength to the case study in an attempt to "corroborate the same fact or phenomenon" (p. 56). The sources of evidence that were used for the case study were: interviews, review of documentation used for the RtI implementation process, and archival records. Once each of these was completed, the data was divided into groups to analyze and coded for meaning (Maykut & Morehouse, 2003, p. 101).

Field Test of Interview Questions

Prior to interviewing the study participants, the researcher completed two field test interviews using the methods proposed for use in this study in another high school in the same school district. The pilot high school had similar demographics to the school proposed for the study and had implemented RtI on the same timeline. However, the pilot school did not match all the characteristics of the school and was not recommended by central office as a school that had an organized implementation of RtI. The researcher interviewed two staff members. The field test was an important tool for providing information and experiences that were not anticipated by the researcher. Field testing assisted in preparing the researcher for the actual interviews. In the pilot study, the participants were digitally recorded (Creswell, 2003). The recordings were then transcribed and the participants were allowed member checks. After reviewing the data, the

researcher met with each participant individually to discuss the interview protocol. The suggestions given by the participants were vital in assessing changes that needed to be made to the questions for the actual research study. Three questions were reworded for clarity and one question was dropped because the pilot participants questioned if the participants for the actual study would have the research knowledge needed to answer the question accurately. The field test was helpful in adjusting the questions for the actual study. The field test demonstrated to the researcher that those questions were repetitive. The field test of the interview questions revealed that the researcher needed to be clear with the intentions of the questions and needed to be prepared for further explanation if the participants were unclear about the meaning of the question.

Interview Protocol and Procedures

Interviews were the primary means of data collection and assisted the researcher with identifying which documents to review. The interviews were conducted as a guided conversation from the researcher's knowledge of working with secondary students who have a history of struggling through academics. This allowed the researcher to develop an interview protocol that was directly related to the implementation of RtI at the secondary level. The interviews were completed through conversations in which the participants were asked about their experiences and their opinions. This allowed the participants to give their own insight into the implementation of RtI.

The researcher interviewed nine staff members from the high school and the school division central office. The researcher scheduled personal interviews with the central office staff first, then with lead staff, and then with the high school staff. The researcher contacted the participants by phone and email after the interviews to clarify protocol, obtain documents, and member checks of the transcripts. Each participant was interviewed once. Due to the depth of the questioning and the time spent with each participant, a second interview was not necessary. The interviews were conducted in locations designated by each of the participants to ensure that the comfort level of the interviewee. The interviews for each of the nine participants were digitally recorded. Each interview required approximately 2 hours and 30 minutes. The interview questions were developed based on the essential components of RtI and recommendations for fidelity implementation found in the literature. The interview questions appear in Appendix F.

The interviews were scheduled at the convenience of each individual participant. At the start of the interview, the written consent for each of the participant was read and explained to ensure understanding and purpose of the interview. The goal of each interview was to establish a rapport and then to actively listen to each participant to obtain specific detail regarding the implementation of RtI at the high school level. While the participants were answering the protocol questions, the researcher recorded the data and took notes as a means of organizing the information.

Once each interview was transcribed, the researcher contacted each participant to give them the transcription for a member check. Member checking is an opportunity for the interview participants to check or approve the transcription of their interview (Curtin & Fossey, 2007). It is a way to “find out whether the data analysis is congruent with the participants’ experiences or reporting” (Curtin & Fossey, 2007, p. 92). The participants were asked to edit, clarify, elaborate, or delete their own words if they felt they needed to strike the information. Creswell (1995) noted that member checking is a way to assure trustworthiness of data and findings (p. 71). The researcher transcribed all nine interviews personally and saved the results on both computer and external flash drive. All other data collection materials are stored in a locked filing cabinet. These documents will be maintained in the locked area for five years. After this time, the documents will be destroyed and then disposed of.

Document Review

The researcher maintained a field journal which was updated daily (Yin, 1994). The purpose of this journal was to ensure that the researcher kept an accurate account of ideas, trends, and reflections throughout the interview and document review process. The researcher’s approach was to organize the journal as it related to the research questions, guiding questions, documents needed for review and questions that may need further research. As part of the journal, there were field notes that were collected which consisted of strictly observations that were seen throughout the interview process. The researcher also kept a section in the journal that was titled “Interpretations or Commentary.” This section was for the researcher’s opinions or notes of possible trends or biases during the interviews. This section was shared with the critical friend, as a means of ensuring that biases were not present in the data.

The researcher obtained documents from the participants through personal communication and delivery. Responses from the participants guided document requests and

selection. The researcher reviewed documents for the three year period specified for this study. The researcher began the document review by examining the list of students who had been identified by the SCT Coordinator as high school students who had been supported through the RtI process for the three year time period identified for this case study. Once the researcher identified 18 students that were currently still enrolled at CHD High School, a review of their intervention plan was completed. Each student had an individual plan completed. The plan was completed by the SCT Team. The plan identified the student's particular weaknesses and goals were developed from the academic reports given by the participants of the SCT Team. The researcher reviewed all 18 student plans for an understanding of what essential components of RtI were used through this process.

Because the students that were selected to participate in the high school RtI process were all struggling with academics, the second set of documents reviewed were historical grades. Historical grades were identified as the final number and letter grade given to the student at the end of the year as a final grade. These grades were also entered on an official transcript. The researcher was looking to see if the support through RtI improved the students' grades. After reviewing the historical grades, the researcher determined that further exploration of student's grades were necessary. The researcher then reviewed the identified students' grades for each nine week period. This process gave the researcher four sets of nine weeks grades to review instead of just the final grade. This assisted the researcher in establishing trends of support given to the students through the high school RtI process as it related to student academic achievement.

High School students are required to obtain verified credits to graduate with a high school diploma. To earn a verified credit, high school students must not only pass the class, but they must also pass specified Standards of Learning tests. Because of this, the researcher also reviewed the 18 identified students' Standards of Learning (SOL) history. The SOL tests are given at the end of the course to allow students to master the content. Reviewing the SOL history of the students allowed the researcher to examine the SOL scores for students who were on intervention plans and to focus on if the interventions that were put into place for remediation assisted in increasing SOL scores for the students. From the review of the SOL scores, the researcher reviewed CHD High School dropout report for the three year period to examine if the implementation of RtI assisted in decreasing the dropout rate for the school.

The researcher then reviewed professional development and training agendas to examine the training that staff was given before, during and after the implementation of RtI. The researcher reviewed twenty-six documents that were used to educate and train staff. These documents were generated by both central office and building level staff. During this process, the researcher also reviewed “sign in logs” that were completed during trainings to determine which staff was given training and also to determine if the training goals were consistent across different professional developments. This information assisted the researcher in determining if RtI was implemented with fidelity.

The last group of documents that the researcher reviewed involved referrals for special education comprehensive evaluations. The literature for RtI suggests that if implemented properly, RtI will decrease the referrals for comprehensive evaluations and assist with accurately identifying Specific Learning Disabilities (Vaughn, Linan-Thompson, & Hickman, 2003, p. 401). The researcher reviewed comprehensive evaluation reports for CHD High School for the three year period to examine if the RtI process decreased the referrals for evaluations. This report also identified which disability category that students from CHD High School were found eligible and what type of services they received.

Data Analysis Procedures

The data analysis and interpretation was based on Maykut and Morehouse’s Constant Comparative Method. Maykut and Morehouse (2003) noted that the Constant Comparative Method uses coding of the text to reveal information for “meaning from the words and actions of the participants in the study, framed by the researcher’s focus of inquiry” (p. 127). In qualitative research designs, “units of meaning are identified” through the field notes, interviews, and document reviews (Maykut & Morehouse, 2003, p. 102). Taylor and Bogdan (1984) identify using units of meaning as “discovery” of the recurring ideas. This discovery process allows the researcher to “begin to search for the important meanings in what people have said in the interviews” and allows for the initial step for analyzing the data (p. 167).

Maykut and Morehouse’s (2003) Constant Comparative Method guided the analysis. The first step in the process is to unitize the data. After all the data have been photocopied, the researcher will need to identify the chunks or unit meaning in the data, ‘unitizing’ the data. This will later help as the basis for defining larger categories of meaning. This could be short responses to questions or descriptive paragraphs. The units of meaning are identified by carefully

reading through transcripts, documents, and researcher's journal. Index cards are used as the units of meaning are cut and taped onto them. With this, on the back of the cards will be gender, job in school or school system, and grade level. Maykut and Morehouse then recommend the use of the discovery process: The journal is a place where the researcher records recurring ideas, questions, and thoughts. The purpose of this is to identify substantial experiences, ideas, concepts and themes in the data. This discovery process continues throughout the collection process to determine where the recurring words, phrases, and topics in the data are found.

The Constant Comparative Method uses the analysis of each new unit of meaning as it was compared to the other units of meaning and grouped within similar meanings. If there were no similar units, a new category was created. Categories were changed, merged or omitted depending on what the researcher found throughout the analysis of the data. The researcher then categorized and coded the units of meaning to develop a set of categories that provide a sound configuration of the data collected. The constant comparative model included: (a) inductive category coding and simultaneous comparing of units of meaning across categories, (b) refinement of categories, (c) exploration of relationships and patterns across categories, and (d) integration of data yielding an understanding of people and settings being studied (Maykut & Morehouse, 2003).

Using this method, units of meaning from the transcribed interview texts were coded inductively. Inductive category coding is when the researcher took individual pieces of data that have common characteristics and grouped them into segments, categories and themes. This assisted the researcher from moving the analysis from the specific to general. Other units of meaning were then categorized and coded, new categories formed, and then categories were continuously refined as the researcher created a reasonable reconstruction of the data that included themes. The individual interviews were separated to make each participant's information easier to identify. Categories were then grouped by writing 'rules of inclusion,' which were used to identify or exclude certain data by developing meaning into the category (Maykut & Morehouse, 2003). The researcher's rules of inclusion criteria were devised by organizing categories into essential components of RtI, fidelity of implementation of RtI, and the process of implementation of RtI. The completed "rules of inclusion" (Maykut & Morehouse, 2003, p. 42) describe the outcomes of the research which were grouped into main headings as discussed in Chapters 4 and 5.

Verification of Procedures

To ensure consistency of the results from different sources and methods, qualitative research must have validity, reliability, and objectivity (McMillian & Wergin, 2010). McMillian and Wergin (2010) recommended that researchers completing a qualitative study ensure that they have verification of procedures such as: persistent observation, triangulation, member checks, and thick descriptions (p. 93). In this case study, the researcher used triangulation of data from multiple sources, member checks, and thick description. When different methods or information from different sources have similar findings, the convergence of the information adds strength to the results. To determine trustworthiness, the researcher collected data through interviews, field notes, document reviews. This type of information also assisted with providing credibility to the data by allowing the researcher to examine whether or not the research findings represented a factual representation as compared to the themes as seen in the literature such as the components of RtI and the fidelity of implementation (Mellard, 2010; National Center on Response to Intervention, 2010). The researcher did review the process with Dr. Poff, critical friend, who offered feedback. Confidentiality was maintained by using coding for the participants and not identifying them by gender. A journal was kept as all notes, transcripts, data, and analysis have been organized and archived.

Summary

Chapter 3 began with the researcher restating the purpose of the research and the specific practices used to guide the study. The researcher then presented the rationale behind the selection of a qualitative design using a case study approach. The research context and participant selection was described to explain the selection of the school. The section also addressed the issues of site selection, participant selection, access and entry, confidentiality, and informed consent. Data collection procedures were described along with a description of the field test of the interview questions and changes that were made to the questions before the interviews were completed. The interview procedures and protocols were discussed. An extensive description of which documents were reviewed and the rationale for why particular documents were chosen were discussed. A description of Maykut and Morehouse's Constant Comparative Method as it related to the researcher's data was detailed, as was content validity and trustworthiness of the study's design.

CHAPTER 4

FINDINGS

The purpose of the study was to investigate and describe how one high school implemented Response to Intervention. The investigation focused on program implementation practices recommended in the research literature: (a) a structured focus on prevention for academic failures, (b) use of the suggested RtI model consistently and with fidelity, and (c) strong consideration for adoption of the suggested framework using the essential components of RtI (RtI Action Network, 2013). The qualitative research design used for this case study allowed for the emergence of other practices during the analysis process too.

There were two overarching questions for the study: Were the essential components of Response to Intervention implemented in this high school? The second research question for the study was: Was the Response to Intervention framework implemented with fidelity? There were six research questions guiding the data collection for the study:

- Why did the school decide to implement RtI?
- How did the school define their schoolwide, multilevel instructional and behavioral system for failure prevention?
- What were the universal screening tools that the school used?
- What were the strategies that the school used for progress monitoring?
- How were data collected to use in making decisions for instruction, movement within the multi-level system, and disability identification?
- Was RtI implemented in the framework that it was designed to be delivered as determined by the countywide plan?

To set the context for the findings, professional information about the participants is also shared. The description specifically provides information on the backgrounds of the participants. Following that section is a review of the findings and description of categories that emerged from the interviews and document review.

Data collection occurred from November 2012 to February 2013. Data collection procedures consisted of individual interviews and a review of school documents to gather information on the research questions. Interviews were conducted with the Director of Instruction, the Director of Special Services, and the Support Lead Teacher for Special Services,

Secondary Support Lead Teacher, a high school assistant principal, a school psychologist, the SCT Coordinator, a general education teacher, and a special education teacher.

The constant comparative method (Maykut & Morehouse, 2003) was used to analyze the data that were collected from the high school and from the central office. The interviews and document analyses were used to form the categories, establish the boundaries of the categories, and summarize the content of each category. The categories were then grouped into the practices of essential components of RtI, components necessary for fidelity, and the process of implementation.

Profile of the Study Participants

All of the participants interviewed were working either in the school division or in the high school during school years 2009-10, 2010-11, and 2011-12. The group differed in terms of gender, race/ethnicity, and experience. Demographic information was verbally collected from the study participants at the interviews. The information is found in Table 2:

Table 2

Professional Information of the Interview Participants

Participant	Code	Total public education experience	Years of teaching experience
Director of instruction	P1	20 years	6 years
Director of Special Services	P2	24 years	None
Support for Special Services	P3	20 years	2 years
Secondary lead teacher	P4	12 years	6 years
School psychologist	P5	14 years	None
Assistant principal	P6	17 years	10 years
Student consultation team leader	P7	8 years	8 years
Special education teacher	P8	10 years	10 years
General education teacher	P9	11 years	8 years

The participants had a wide range of years of experience in public school, teaching experience, principal experience, and experience with the implementation of RtI at the high school level.

Interviews and Document Analysis

A code was developed so that quotes could be attributed to the different interviewees. Each interviewee was assigned a number, 1 through 9. Transcripts were similarly numbered and followed by numbers that identify the specific participant and page number of the transcript. For example, (P4/T4-5) indicates data that came from Participant 4, whose transcript was the fourth interview transcript completed, and that the specific data cited was found on page 5 of the corresponding transcript. This code is used to identify the source of quotations throughout Chapters 4 and 5.

Multiple documents that were within the three year period identified for this study were reviewed during the research study process:

- Researcher's Field Journal
- CHD High School's list of students who were actively involved with the RtI process.
- Intervention Plans for the CHD High School students who were actively involved with the RtI process.
- Historical grades of the CHD High School students who were actively involved with the RtI process.
- Nine week grading reports of the CHD High School students who were actively involved with the RtI process.
- SOL history of the CHD High School students who were actively involved with the RtI process.
- CHD High School's dropout report.
- MSB Public School's professional development and training agendas. The attendance logs were reviewed for these professional developments and trainings.
- CHD High School's Special Education internal report that identified comprehensive evaluation referrals and Special Education disability classifications.

All document sources were examined and analyzed as part of the document review process.

Overview of the Results

Through the review of field notes, transcripts of the digital recordings of the interviews, and documents, the researcher transferred raw data into clear and organized forms for data analysis. The data analysis provided the researcher with various ways of coding the information. The coding of the data assisted the researcher in “chunking the meaning” for analysis to determine patterns (Marshall, 1981, p. 54). The researcher used the two overarching research questions to unitize the data. This process allowed the researcher to frame the data information based on the focus of inquiry of the study of RtI. The unitized data sets were identified through patterns defined by the guiding research questions. The patterns were developed by the researcher rereading the data to determine which words, phrases, and topics recurred in the data and to determine which guiding research question they answered.

The researcher grouped research-based practices recommended for secondary school RtI implementation found in the into the three major categories. The three major categories that emerged were (a) a structured focus on prevention for academic failures, (b) use of the suggested RtI model consistently and with fidelity, and (c) strong consideration for adoption of the suggested framework using the essential components of RtI (RtI Action Network, 2013). The researcher was always open to other categories emerging during the interviews and the data analysis process. The three categories were supported by the data and corresponded to the practices found in the literature. The first two categories appeared as factors in the implementation of RtI throughout the three-year adoption of RtI at CHD High School. The third category developed and began to influence the school in 2010-11 school years.

Description of the Findings

Data from the interviews, documents, and field journal were grouped into the three categories: (a) a structured focus on prevention for academic failures, (b) use of the suggested RtI model consistently and with fidelity, and (c) strong consideration for adoption of the suggested framework using the essential components of RtI (RtI Action Network, 2013). Within each category, patterns were identified and are reported as findings.

Category: Essential Components of RtI

The National Center for Response to Intervention (2010) identified that “rigorous implementation of RtI includes structured elements that provide educational staff with a

blueprint of implementation” (p. 6). Throughout the interviews, participants identified categories of essential components; however, some of the participants’ perceptions and understandings of the components differed. The participants’ responses are shown in Table 3.

Pattern: Universal Screening

RtI should begin with an assessment to determine the level of mastery of age-appropriate skills (RtI Action Network, 2013). Universal screening is an assessment given to an entire class to determine if the students might be at risk of failure. The elementary and high school definition of at-risk would be expected to be different. Through the review of the literature, interviews, and document reviews, the definition of at-risk for the case study high school was based on whether or not a student struggles to achieve the credits necessary for graduation. Screening should occur at least three times a year to determine the students’ level of proficiency with specific

Table 3

Essential Components Identified

Participants	Universal screening tool	Data collection	Progress monitoring	Problem solving team	Data based decision making	3-tiered model high quality instruction	Evidence-based interventions
P1	YES	YES	YES	YES	YES	YES	YES
P2	YES	YES	YES	YES	YES	YES	YES
P3	YES	YES	YES	YES	YES	YES	YES
P4	YES	YES	YES	YES	YES	YES	YES
P5	YES	YES	YES	YES	YES	YES	NO
P6	YES	YES	YES	YES	YES	YES	NO
P7	YES	YES	YES	YES	YES	YES	NO
P8	YES	YES	YES	YES	YES	YES	YES
P9	YES	YES	YES	YES	YES	YES	NO

skills. The universal screenings allow a Problem Solving Team to establish target areas to increase intensity of the interventions.

All of the participants interviewed reported that the universal screening that was completed at CHD High School was not the universal screening as described in the literature. All participants, except Participant 4, identified the use of another data source to assess lack of progress or failure. Participants 1, 2, 6, 7 and 8 identified the use of SOL scores as a source of data. However, they all reported that SOL score analysis could not be used as a screening method because SOL tests assess the student's content knowledge, not the lack of skills. According to Participant 1, "High school students are coming into high school with eighth grade English end-of-course test and some standardized math tests, but they are very much based on curriculum" (P1/T1-3). Similarly, Participant 6 suggested, "There are no real universal screening tools here at the high school." Participant 6 also noted that "It [universal screening] would be based on progress in the classrooms and the SOL tests or just the sheer fact that they have failed their SOLs historically, but that really isn't a universal screen" (P6/T6-11). Participant 7 also mentioned the use of SOLs by stating "The referral packet asks for data of failure and that might be SOLs, current grades in class, but really that is just failure of content, not of skills" (P7/T7-3). Participant 8 noted the same concern by stating "There is no actual universal screening being used in high school. Benchmark tests and SOLs may be used, but they are not assessing skill deficits" (P8/T8-7). Participant 2 also noted a lack of screening tools at the high school level but did suggest, "Reviewing what the past testing has been completed, such as SOLs, PALs and the grade history shows where the student has had trouble in the past, but might not identify areas of weakness in a struggling student" (P2/T2-8).

There was mention of the STAR test being used in CHD High School to assess reading levels.

Participant 3 discouraged the use of STAR:

As a diagnostic tool, STAR is a poor, poor instrument because it is a group administered online measure of essentially reading vocabulary. There is no qualitative skill analysis to that instrument, whatsoever. A better way to assess reading skills is for teachers to have running records on the students. (P3/T3-3)

Universal screening to assess student weaknesses was nonexistent in the RtI model implemented at CHD High School according to the study participants.

Pattern: Data Collection and Progress Monitoring

Data collection is the process of collecting information over a specified period of time that identifies students' performance. The data collection process is used in each of the tiered levels to assess the appropriateness of the students' instruction and the need for intervention changes and to identify continued weaknesses in academics. Progress monitoring is used to assess a students' academic performance, to quantify a student's rate of improvement or responsiveness to instruction, and to evaluate the effectiveness of instruction. Progress monitoring must reflect an accurate picture of the student's academic learning profile, which may also show the student's rate of learning as compared to peers.

The participants all reported that data were collected for students and that progress monitoring was completed. Several of the participants mentioned progress monitoring through a data collection chart that was found in the "referral packet" that is required for a student to be involved in the SCT process. The referral packet is the school district's formal "Request for Assistance from School Consultation Team" form, which can be seen in Appendix G.

The referral packet presents academic information that portrays academic skill deficits. After several participants mentioned the "referral packet" as a document that was used through the RtI process, the researcher reviewed the "Request for Assistance From School Consultation Team" form, which was the referral packet that was used as the data tracking and progress monitoring form for struggling students. Several of the participants noted that the referral packet assisted with organization. Participant 7 noted that the referral packet provided "a chart where it discusses what the current goal is for the student, if it's been effective, how long it's been in use, and would the teacher continue to use it or strike it" (P7/T7-5). Similarly, Participant 8 stated that this form was given to the high school from the central office and that the "SCT Coordinator requests the forms be filled out to show what interventions have been tried and how long the interventions have been done" (P8/T8-11). Participant 9 stated that "The teachers are given a sheet to keep track of what strategies are used and what was the date of the implementation and what is seen as a result and just really any suggestions." Participant 9 also mentioned that the "SCT Coordinator will contact the teachers as a reminder to make sure the information is brought to the meeting" (P9/T9-4).

The use of the referral packet described by the participants would suggest that there is a districtwide protocol that is being used in the high school and that the SCT Team Coordinator is

the person responsible for ensuring that the data are completed in this packet to assist with decision making for the struggling students.

Pattern: Problem Solving Team

A Problem Solving Team is a collaborative team of professionals and the student's parents that meet to problem-solve in an effort to develop academic and behavioral interventions to assist at-risk students (Brown-Childsey & Steege, 2010, p. 45). The purpose of a problem solving team is to put into place decision-making processes that will lead to the development of instructional and intervention strategies to be utilized by a schoolwide support design of interventions to be used for struggling students (Windram et al., 2007, p. 44). The participants all recognized that there was a Problem Solving Team. All participants mentioned the following people as members needed on the team: general education teachers who know the student, a special education teacher, the student's guidance counselor, an administrator, the school psychologist, and the student's parents. All participants mentioned that the Problem-Solving Team must have a strong leader to move the recommendations into practice. There was agreement that the Problem-Solving Team may have other individuals to join the meetings, but participants varied in their judgments as to who might be invited and for what reasons. The participants all stated that the Problem-Solving Team met when data indicated that the student was a "struggling student." The common definition of a struggling student was a student who was failing academic classes with a 69% or lower, failing end-of-course Standards of Learning assessments, and students who were at risk of not graduating due to other factors such as attendance or mental health issues.

Several participants noted the psychological effects on students who have been involved in chronic failure in their school careers. Participant 1 stated that "Not having a solid foundation in reading could cause academic struggles in science and in history. Those failures layer on emotional issues and depression that definitely affect self-esteem" (P1/T1-5). Participant 6 noted that if parents put pressure on students to achieve and the student truly continues to struggle then the student "is in a big argument with himself or herself and the parents, which causes them not to want to even try so the depression comes into the picture" (P6/T6-8). Participant 8 stated, "the poor kids, they can't do the work so they just tread water or try to fake it to make it and then their self-esteem takes a nose dive" (P8/T8-10).

Participant 1 noted that “If the issues are specific to other needs, there might be other specialists who may need to be involved, like therapists and folks that parents want to bring with them for another set of ears” (P1/T1-4). Participant 2 reported that “The year’s previous teachers may be invited because they would be able to report out weaknesses that they might have addressed in reading or in math or any behavioral issues that they might have seen and implemented a strategy that worked (P2/T2-10).

Pattern: Data-Based Decision Making

The participant interviews confirmed that data collected through the progress monitoring process are analyzed to make decisions about instruction, movement of students within the tiers, interventions, and disability determination.

I think we need to make an effort to study an individual student’s needs and profile, particularly identifying challenges to learn or behaviors that may be in place, using a team of diverse and qualified people to examine that need and challenge and generate strategies that can help the student overcome the challenge in a data driven way, and then making attempts at interventions to support the student. (P1/T1-1)

Progress monitoring isn’t about giving a test all the time. It is about taking the data that we have and translate it into a lesson plan to support weak skills of particular students, or even developing an intervention strategy that might work with that student (P3/T3-6).

The interventions that students are given, in philosophy, should be done every day, but if the data collected by the teacher indicates that the interventions should only be given like during notes, or oral presentations, or something like that, then the intervention could be used in just that situation (P7/T7-4).

Pattern: Tiered Instruction

In providing a systematic approach to supporting at-risk high school students, RtI is designed to provide high quality instruction of intervention with increased intensity. The levels of intensity appear in a three-tiered model (Vaughn & Linan-Thompson, 2003, p. 397). In each tier, there are interventions that are defined by the school or school district to ensure fidelity of philosophy, vocabulary, and program design. All the participants reported that the RtI model used at the case study high school was a three-tiered model. The participants reported that all students begin on Tier 1 within the general classroom. The curriculum is based on quality

instruction that is delivered by the classroom teacher. All the participants noted that if students are not being successful on Tier 1, the interventions provided to the struggling student should be more individualized and intensified within Tier 2.

All of the participants reported that if the student continues to struggle, then the student should be moved to Tier 3 and interventions are again intensified. A common understanding among the participants was that students for whom Tier 3 interventions do not provide success should be considered for a comprehensive evaluation for a suspected disability. Participant 3 gave an extensive explanation of interventions, emphasizing that before a school can talk about tiered interventions that there needs to be for a common language throughout the school.

Intervention is traditionally viewed in that tiered structure and understanding that universal interventions are delivered to the entire student body. This is done through curriculum selection and delivery, good practices and strategy utilization, differentiated and cohesive model of instruction. If the student continues not to achieve, then the support needs to be intensified. (P3/T3-2)

Participant 8 suggested that interventions have a specific purpose because “Interventions put in place in tiers to try to pull a child that may be struggling up to grade level means pulling up to passing (P8/T8-10).

Pattern: Evidence-Based Interventions

Evidence-based instruction in RtI is defined as an educational intervention or instructional strategy that has been demonstrated through one or more research studies to be effective (Burns & Gibbons, 2008, p. 66). Several participants made reference to specific instructional practices that were used as intervention strategies, so the researcher reviewed the districtwide professional development logs from both the Instruction Department and the Special Education Department of the school systems’ central office. Three particular instructional initiatives were mandated as districtwide trainings for teachers and instructional support staff kindergarten through 12th grade. Those initiatives were evidence-based intervention trainings in Thinking Maps, CRISS, and differentiation. There were other trainings provided for teachers and instructional support staff dealing with instruction, however, these three were the only ones designated as mandated countywide trainings over the last four years. Participant 1 gave an extensive explanation of evidence-based interventions by stating:

Thinking Maps were defined through professional development information as visualizing. Thinking allows having a concrete image of our abstract thoughts. Visual representations enhance the brain's natural ability to detect and construct meaningful patterns. Thinking Maps reduce anxiety by providing familiar visual patterns for thinking and working with complex ideas and situations. This training provided each trainee with a notebook of graphic organizers and explanations of how to use them. **CRISS (CREating Independence through Student-owned Strategies)** is a professional development program designed to help all students read, write, and learn more effectively. Differentiation training for the county focused on the belief that students learn best when they make connections between the curriculum and their diverse interests and experiences, and that the greatest learning occurs when students are pushed slightly beyond the point where they can work without assistance. We use Thinking Maps as a Tier 1 strategy for students to become more proficient or organize and think through information at the high school level (P1/T1-1).

Participant 3 also mentioned specific examples by stating, “There is good evidence behind instructional methodologies like Thinking Maps because there is clear research base for cognitive structuring for template organization” (P3/T3-10). Participant 7 mentioned the concept that collaborative teaching provides “two teachers that can address the curriculum and the strategies to differentiate the curriculum” (P7/T7-5). This was the only participant that mentioned collaborative teaching as an evidence-based intervention.

Category: Elements of Fidelity

The implementation of RtI must consistently and accurately use the curriculum and instructional practices as they were intended by the districtwide personnel (D. Fuchs & Fuchs, 2007, p. 19). Participants were asked questions based on the research literature about the fidelity of implementation of RtI at the case study high school.

Pattern: Adherence

A pattern identified in the category of fidelity was adherence, which is defined for the purpose of this study as how faithful the high school remained to the districtwide and schoolwide blueprints. The participants all agreed that CHD High School implemented RtI and was currently

using RtI to support students; however, the participants reported concerns about adherence to the loosely designed plan. Participant 1 suggested that

I think we have tried to be more systematic so that we are using the data sources we have and that every student who meets a certain criteria can have the kind of access to the support they need, that's when we have been successful. (P1/T1-3)

Participant 2 showed concern by stating, "I think MSB Public County Schools implemented RtI well, but I think that RtI at MSB High School needs improvement by updating instructional resources for teachers to be able to put their hands on strategies quickly " (P2/T2-2). Participant 3 also noted concerns by stating, "High schools do not use the Problem Solving Team to work through strategies and interventions as a team of people who have a set time and date that they meet to discuss student issues." Participant 3 also noted that there was a need for the teachers to do a better job of progress monitoring effectively and that goal setting is weak at the high school (P3/T3-7). Participant 4 noted mixed results in regards to the high school adherence by stating, "The tiers are used to assist the students and I think high schools are doing that, but I am not sure that there is data collection is being done in a consistent way among teachers" (P4/T4-9). Participant 5 went into more detail by stating,

I think that in high school you see a different set of problems because you're dealing with kids at a different developmental level. I think that when you are talking about a successful intervention for RtI at the high school, I think you are really looking at graduation. At the high school level you see the monitoring, you see the interventions, but there is not the personnel to make sure it is being done so it is not being done well. (P5/T5-6)

Participant 6 also described the high school's commitment to adherence through a detailed account.

I think that there is a level of commitment to RtI, but I don't know how open people are to hear that certain parts of it don't work. I think they would give you a reason or justification of why it would work for everyone and why you're just not implementing it correctly or what you need to do to insure it's implemented correctly, not the fact that it really doesn't work. It is like the RtI model can fix everything. Parts of it are good but nobody has designed anything for a high school. (P6/T6-22)

Participant 7 expressed a concern that there was no clear definition specified to the staff, which causes a problem.

I feel like unless you have the education of what RtI really is, then it is nothing more than just a bank of strategies. RtI in philosophy is fine, but we have not been fully trained and so teachers and administrators in a secondary setting just feel like students should be fixed and they are not willing to work on skills. I don't believe that a solid plan has trickled down with proper understanding to all teachers. (P7/T7-13)

Participant 8 also suggested that there is a problem with adherence by stating, "In high school, you don't have time to waste. RtI uses too much time to go through tiers and you only have four years. Teachers are using interventions, but do not have time to keep the data and so I am not sure they are actually progress monitoring daily data." (P8/T8-22)

Participant 9 also stated that the high school was not adhering to a true RtI model by saying, "Interventions are based on grades primarily. I feel like RtI can help students but the way that we are doing it is kind of a hybrid model and not all of the components are exactly like the RtI framework." (P9/T9-12)

Pattern: Duration and Exposure

Duration and Exposure relate to how long the progress monitoring intervals are and how often a student receives interventions (Mellard, 2010, p. 12). Specifically, duration refers to how long a student receives an intervention and exposure refers to how often the interventions were given at CHD High School. The participants noted that there were data collection, progress monitoring and intervention implementation, however, they indicated that there did not appear to be a consistent understanding of how often a student should receive the intervention or for how long progress monitoring intervals should be in place. Participant 1 noted that high school students

Should be monitored and receive interventions where the time is bound because when the process goes on too long, it's frustrating to everyone like students and teachers. So, I don't know what the answer is and it probably depends on what the intervention is but I would think a matter of weeks, whatever seems reasonable along those lines. Enough for it to take hold, but not so long that you're not monitoring it. (P1/T1-4)

Participant 2 stated that the duration and exposure needs to be intensified by stating,

I think the intensity of both the duration and the exposure needs to be more than once a week. I mean it needs to be two to three times a week at least, but then I think you look at it every three to four weeks. I don't think you let it go too long before monitoring the progress. I would say that three to six weeks would be my cap. But before you skip from Tier 3 to the next thing, if you haven't hit on all the bases with the student's weaknesses, you really need to do that. It is not the process or my preference, but you can do RtI during the eligibility process, which is 65 days. (P2/T2-10)

Participant 3 also explained that there have not been precise timelines in regards to duration and exposure by stating,

I would love to give you a decisive answer on when you need to intensify the interventions of what would fall into best practice based on data, charts, aim lines and that type of thing, but it is not. I would like to be able to say that at any grade level we make those distinctions based on clear projection of our aim line; this is how much progress we need to see each week to get there, we didn't so we intensify. It is a subjective kind of timeline. (P3/T3-5)

The aim line that this participant referred is the baseline data needed to distinguish weaknesses of a student.

Participant 4 specified specific time periods that the participant believed to be part of the RtI model by stating,

The duration of the progress monitoring and the amount of time an intervention is put into place really depends on the student and how that student responds. It may be as often as daily or maybe even one a week, but it should not be longer than four to six weeks. (P4/T4-12)

Participant 5 stated that regardless of a timeline that may have been suggested,

I think realistically speaking, we wait too long before we use the progress monitoring to intensify the interventions. When RtI was introduced, there really wasn't any staff added to either monitor it or even to do the interventions. And I think that the interventions at the high school level tend to fall back on the classroom teacher who already has more to do than he or she can say grace over. So there is really a limit in my mind as to what we can realistically expect from the teachers in respect of progress monitoring and interventions. (P5/T5-16)

Participant 6 suggested the same timeline as Participant 4 by stating that

We meet every four weeks to go over the data and discuss interventions. The SCT Coordinator is very good about ensuring that we meet to review the interventions and review the progress monitoring. In the very beginning of the interventions, we do not meet quite as frequently. (P6/T6-8)

Participant 7 stated that there has not been a duration specified, however,

I think ideally students should be getting the interventions daily in terms of things like redirection and repeating instructions. However, I think it would be safest to say that they're implemented as frequently as needed. I mean in an ideal world we would like to say interventions were done five days a week, every class period, but there may also be a class period where there is silent reading and that would be based on progress monitoring every day. I am not sure that this is happening at the high school level. (P7/T7-9)

Participant 8 did mention a timeline for the duration of interventions, but also noted a concern.

The interventions are put into place and data is still collected through the monitoring. The rest of the time it is based on what the SCT team feels like the student needs and how often. It is very student specific and it is usually still longer than I would think necessary. Sometimes it's like six weeks, and I just think, and I know you need the data, but some interventions you don't need every day. But I still fear that at the high school level, it is too long because the students are already so far behind. (P8/T8-18)

Participant 9 said "I am not aware of a standard timeline of how long an intervention should be done or how long it should be monitored for, but it is usually around four to six weeks (P9/T9-6). That was the most commonly mentioned timeline.

Pattern: Quality of Delivery

Quality of Delivery relates to the value of the curriculum and interventions the instructional staff deliver (Mellard, 2010, p. 16). The participants said that there was an expectation that the teachers would use good teaching practices for all students.

Participant 1 responded to the interview question about quality of delivery in the greatest detail by stating,

At the high school, staff needs to collaborate more so that whatever remediation intervention efforts are going on they are really related to and are tied to the students' experiences in the classroom. Then they are considered together and a core group of

individuals [is] paying attention to that student's needs. In some high schools, staff has been dedicated to doing that kind of tracking and that has been successful, but in some high schools that is not happening. In high schools, we are not doing a particularly good job of differentiating instruction to meet a real diverse range that exists in every classroom. High School classrooms do not have a lot of small group instruction or evidence in lesson plans of special activities designated for certain groups of students who are struggling with certain concepts. (P1/T1-5)

Participant 2 noted that

MSB Public Schools has worked hard to work through a team concept to work together to help all kids in an effort to improve instruction. RtI allows staff to work through the tiers to go from general curriculum to more individualized instruction variations, to more intense prescribed level of instruction. (P2/T2-2)

Participant 3 agreed with Participant 1 by stating that "Teachers are trained in good teaching practices and strategy utilization. Our staff is trained in things like Thinking Maps, instructional strategies for math, and we bring technology into the classroom" (P3/T3-6). Participant 4 mentioned a level of ownership within the evidence-based teaching by saying, "The teachers continue to improve their teaching by [using] evidence-based teaching strategies knowing that this will help all students. The intent of the content areas is to deliver high-quality instruction in reading or math to establish known outcomes that improve skill development" (P4/T4-12).

Participant 5 expressed a concern by stating,

There needs to be a strong emphasis on skills that students need in the area of math and English. There are also some really good instructional strategies used in the area of mathematics such as cognitive strategies. One that is used is "cognitive foldable," which allows the students to use and come back to when they are learning new concepts. They make a foldable and then reference them in learning with respect to the declarative memory but also the concepts in terms of procedural memory. (P5/T5-11)

Participant 6 stated that teachers need to invest in working with struggling students.

The first step is that teachers are going to start to take steps that help specifically the group of students that seem to be lacking skills. A lot is done in the classroom that is above and beyond for the students. Automatically the use of differentiation is used and a lot of different learning and multi-sensory ways of teaching can give greater success and

engagement. If there is success and engagement, then students are willing to participate and ask questions during the class. The curriculum maps lend themselves to the differentiation and things that RtI is ideally working towards and it is up to the teacher to put in the time to look at the map and concepts and find ways to implement the different strategies. (P7/T7-9)

Participant 8 indicated a difference in high school RtI from the elementary model of RtI by stating that “RtI at the high school level is content-based, not skills-based. Teachers are teaching skills that are good for all students and implementing the interventions that they have seen be successful with students” (P8/T8-14).

Participant 9 specified that teachers are attempting to use good teaching strategies. The participant stated,

I think that teachers just do good teaching with strategies incorporated. Things like copies of notes, study guides, checking for understanding and things like that make students start to help students. Teachers are doing remediation and they go back and help students look at things such as tests, that they have done poorly on to help them see what they did wrong. (P9/T9-11)

Pattern: Specificity/Differentiation

Specificity and Differentiation relate to how materials and interventions are added to the original blueprint that was not identified from the beginning of the implementation of RtI. CHD High School was not given an original blueprint or model to follow. Participants noted that there was not a clear plan of instructional strategies, interventions or curriculum expectation when RtI was implemented districtwide and within the case study high school. The participants stated that they independently interpreted the components and added or deleted what they personally felt was necessary or unnecessary.

Participant 1 made strong statements regarding the way that high schools are structured and how those structures relate to RtI.

I don't think that high schools' structure was designed to pay attention to student needs. Big schools are structured by time and by discipline and job for staff. Curriculum is broken down into parts to have to be accumulated over time for students. The way high schools deal with students who are struggling is to put them into the next lower class. So

in a way, RtI is trying to pay attention to individual students and trying strategies in a flexible way, but I think that is a big challenge for some big high schools. (P1/T1-2)

Participant 2 noted that “reading specialists were at every school and they assisted with tracking students, interventions and progress and this was a support for RtI. About two years ago, the reading specialist was taken out of all the high schools” (P2/T2-6). Participant 5 said that if “there was more staff to assist with tracking the information, then maybe high school teachers would not feel that RtI is a burden” (P5/T5-8). Participant 4 also expressed concern.

Depending on the student and depending on the classroom will determine if there are differentiated instructional strategies and evidence-based things like thinking maps. It depends on the dedication of the teacher and his or her willingness to implement new things. (P4/T4-16)

Participant 3 noted that the high school is not implementing RtI as the literature would suggest by stating,

RtI is the implementation of a conceptual understanding of what interventions are and how to deliver them into practice with the necessary intensity. Quite Frankly, I am not seeing this at the high school. There is not a consistent idea of what good instruction looks like. Collaborative teaching really helps with this because there are two teachers who can collect data and monitor progress and then immediately implement the strategies. I am just not sure this is being done at the high school level. (P3/T3-7)

The response from Participant 6 suggested that there may be a need to clarify specific strategies for the teachers. Participant 6 stated,

I am not sure about the strategies that we are supposed to use, but the successful ones that we are trying is remediation, chunking information, organizational tools for students, communication with parents and stuff like that. We also have collaborative teachers who use a bunch of different learning things to help students learn. A lot of resources are really geared towards elementary and not high school. (P6/T6-12)

Participant 7 also expressed concern about high school RtI implementation in this statement.

RtI at the high school is challenging because I do not think that people were educated to use it and I think that the only people who truly differentiate or use really good strategies are people who are directly involved with special education students in the least restrictive environment of the general education classroom or who teach student with

disabilities in a self-contained classroom. I don't think the general education teachers truly understand good teaching practices when it comes to RtI. (P7/T7-14)

Participant 8 questioned,

I am not sure that there was ever a step-by-step plan for RtI ever shown to me. I think a lot of what is done is just good teaching and common sense. When you try something with a student and it does not work, and then try the next strategy that may work. It is not that the teachers are willing to change a lesson or differentiate; it is just that they may not call it differentiation. (P8/T8-9)

Participant 9 similarly questioned,

Since RtI was implemented, I feel that there has been some training in instructional practices and differentiation like Thinking Maps, but nothing that was brand new to many teachers. The teachers are already doing much of what was supposed to be new strategies to support RtI. (P9/T9-15)

Pattern: Student Responsiveness

Student Responsiveness relates to how well the students are engaging in both the curriculum and the interventions to assist with academic failure or other “at-risk” areas that the Problem Solving Team has identified as a goal for the student (RtI Action Network, 2013). The participants indicated that high school students can often be resistant when they have had a long history of failure. However, some participants noted that when teachers establish a rapport with students, the students are more willing to try new things. Based on the interviews with the participants, the researcher identified that the “at-risk” factors for high school students were: failure of classes, failure of SOLs, and the likelihood to drop out. The researcher reviewed the VDOE website to examine CHD High School’s annual report card regarding CHD High School’s Standards of Learning testing outcomes and the annual progress report to establish end of year failure rates for the three years. Also, the researcher reviewed the Comprehensive Evaluations for Special Education services to determine how many students who went through the RtI intervention model were identified as having a disability. This information will be discussed in depth Chapter 5.

Participant 1 stated that “I think students are reactive to curriculum and lessons. Even the need for RtI and remediation is based on when students are already failing” (P1/T1-3).

Participant 2 also suggested that high school students provide a unique challenge because “High

School students are hard to engage and if they are performing at a C, D, or F level they, to me are struggling learners. These are the students who are hard to engage in learning and interventions” (P2/T2-17). Participant 4 made a positive comment about working with high school students by stating, “If a student attempts something that does not come naturally to them like mathematical concepts or writing an essay and they see success with it, they are more likely to keep using that strategy (P4/T4-12). Participant 9 suggested that although high school student can be hard to engage, “Students usually work very hard for teachers they like, even if they really don’t want to do something like remediation or staying after school” (P9/T9-16).

Participant 3 noted that high school and elementary school approaches to RtI may be seen differently by saying,

RtI is a student-centered approach which allows the teams to meet with more meaning and deliberation. I can tell you that the referrals that come from an elementary level are way different from the high school referrals. It does not seem that high school students are willing to engage as willingly to the suggested interventions or new learning strategies. (P3/T3-14)

Participant 5 had a different perspective on high school students by stating,

High school students are just sometimes not customers for what we are selling when it comes to looking at their failures and putting in supports to help. But that also depends on the student and the support they have at home. Sociocultural factors play a major role in if students are going to actively engage in intervention and even just learning for that matter. (P5/T5-14)

Participant 6 suggested that high school students could benefit from RtI.

Students really do put forth the effort and there are times when they are just making Cs and some parents will argue that this is not their ability level and that they should be doing better. You can tell the student is engaged when the things that the team has implemented is improving behaviors and grades. (P6/T6-12)

Participant 7 explained that there is a distinct pattern in high school students’ lack of academic progress that RtI could support.

RtI is used at the high school level because there are students who are clearly still struggling to understand. There are students who are missing skills in elementary school, but can cope with those challenges. Then they get older, those gaps in learning become

larger and more apparent. So in order not to lose the student, we give them interventions to help them feel more accomplished and feel like they can achieve and it's just a matter of going back and helping where there are gaps. Students will work with teachers if they know the teacher is invested in them. (P7/T7-16)

Similarly, Participant 8 indicated that the students could benefit from RtI.

Our teachers are really good with working with students who just can't keep up or they are not doing their homework. And a lot depends on the student. To be perfectly honest, high school students do not want to learn one more strategy. They have had so many through the school years, when we are teaching those learning strategies or behavior strategies, they just start tuning us out. (P8/T8-18)

Category: Process of Implementation

Mellard (2010) specified that the school district and high school leaders must clearly define the essential features of Response to Intervention by utilizing current research and practices. The school district and building level administration begins this process by laying out a clearly-articulated and meaningful philosophy for the implementation and by providing a common understanding for consistent practices across all settings. By offering a clear statement of philosophy and providing common understandings for consistent practice, both the district and building leaders create a culture of honest evaluation and consideration to support schoolwide improvement efforts involving student achievement (Mellard, 2010, p. 7). The researcher reviewed professional development logs to determine to what extent CHD High School staff members were trained in a schoolwide model of RtI prior to its implementation. Based on the review of these documents, the researcher developed interview questions that were intended to establish what the process of implementation entailed. Findings from the document review and interviews follow.

Pattern: Clearly-Articulated Philosophy

The common patterns that emerged out of the interviews regarding why RtI was implemented CHD High School was to implement strategies and interventions to support students who were academically struggling. The Director of Instruction and the Director of Special Services noted that RtI was influenced by federal and state law. There were some differences of philosophy reported by all the participants. The Director of Special Services,

Supervisor for Special Services, Secondary Lead Teacher, and the School Psychologist suggested that the school division utilized RtI as a pre-referral process to ensure that there was not an overidentification of students for special education services, while one participant noted that “this approach was consistent with the philosophy of differentiation to help students meet high expectations of curriculum” (P1/T1-1). The SCT Coordinator and the assistant principal reported that the philosophy of RtI implementation at CHD High School was to move through the SCT process and to work through the achievement model instead of the discrepancy model.

Pattern: Meaningful Definition of RtI

The definitions of RtI reported by the participants had several common themes including addressing the students’ individual needs and weaknesses by setting goals based on data. The strategies that were used were those that should be utilized in the general education setting before moving to a more intense intervention. Participants used different terminology and vocabulary in their definitions for similar concepts or components of CHD School’s definition of RtI, which would suggest that a common definition has not been established for a schoolwide approach to RtI’s implementation.

Participant 5 identified RtI as a “pre-referral methodology or technique to ensure that as much as possible has been done for students in general curriculum before the child is referred for a comprehensive evaluation to be considered for Special Education services. I see it as a general education strategy” (P5/T5-2). Participant 8 identified a different definition of RtI as “Interventions that we put into place, in tiers from the most minimal to the maximum to try to pull a child that may be struggling up to grade level or at least passing now that we’re in high school” (P8/T8-3).

Participant 3 combined the ideas of both Participant 5 and Participant 8 by stating: There does not seem to be a conceptual understanding of universal interventions is in Tier 1 and I am not sure they are being delivered to the student body. Tier 2 is when students are not responding and need more intense intervention. Tier 3 is used for students who are really struggling and need further intense intervention. Intervention model first and then Response to Intervention is where we then take a student and layer them into that framework. (P3/T3-4)

Pattern: Clearly Defined Essential Components of RtI

All participants were able to describe their own understandings of the components of RtI. Through their interviews, the researcher found that all of the participants had different concepts and different operational vocabulary for the essential components that were identified by the researcher through the literature. The participants reported that although they had a basic concept of the RtI components, CHD high school did not have clear statements of what those components were or how they should be implemented. The essential components identified by the interview participants were: screenings, data collection, progress monitoring, a problem solving team that used data to determine interventions through a tiered approach, and evidence-based instruction and interventions. All participants reported that there was no universal screening used at any time during the school year to monitor progress. All participants agreed that there were tiered interventions, data collection, progress monitoring that assisted with decision making, and a Problem Solving Team. The one component that participants did not agree on consistently was evidence-based interventions. Four participants reported that the interventions being used were not evidence- or researched-based. Five participants reported that all interventions being used were evidence- or research-based.

Pattern: Common Understanding of Consistent Practices

When asked about consistent practices of RtI at CHD High School, participants reported inconsistent practices. Participants' working knowledge of consistent practices did have some common themes.

Participant 1 reported,

RtI is the effort to study an individual child's needs and profile, particularly identifying challenges to learn or behavior that may be in place using a team of diverse and qualified people to examine that need and generate strategies that can help the student overcome the challenges in a data driven way and making an attempt to monitor the student for a duration of time. Then you take the data and go back to the table and decide if that has been helpful and then cycle through other attempts with increasingly, maybe intensive supports if those initial strategies are not being successful. (P1/T1-1)

Participant 7 reported,

When a student cannot access the general curriculum through what's available to every student is when a teacher steps in to start to be more individualized to the student's specific struggles so then they are giving them something structured because what's out there for everyone else is not enough. So Response to Intervention would be to move into something more specific to that child's needs. (P7/T7-2)

Participant 2 reported,

Response to Intervention means that a child can learn something in general instruction that works for them individually based on their learning needs and that special education may not be necessary. The Student Consultation Team meets to develop goals to address the weaknesses and interventions are developed. (P2/T2-1)

Pattern: Culture/Climate Change

To establish a schoolwide cultural change, the implementation of RtI must provide a shared belief or attitude in regards to using the intervention framework as an accepted interventions model to support students (Vaughn et al., 2010, p. 18). Also, the RtI model provides support for a climate change within the high school by providing a specific "tone" of the high school building which can affect the high school negatively or positively. The participants recognized that RtI was introduced as a new model. Six of the participants noted that RtI implementation at the high school level was a cultural and climate change.

Participant 1 was critical of the high school design in regards to RtI by saying: I don't think that high schools structures were designed to pay close attention to student needs. Curriculum is broken up into parts that have to be accumulated over time. The typical way that high schools help a student do better is usually to help them find the next lowest level class that they could take. There is very little flexibility built in for students who are taking six, seven, or eight classes to have any flexible time if they need additional time to learn a particular subject or concept or if they need a different approach. (P1/T1-7)

Participant 2 noted the need for staffing support for RtI to be successful.

RtI was a radical change because historically the kids that weren't getting it in Tier 1, which were in the general classroom, would be pulled out to work with someone else. High schools used to have reading specialists that worked with

these kids. The reading specialists were the staff that tracked the data and looked at the interventions and then took the students through SCT. They also would work with the content teachers. Then the reading specialists were taken out of the high schools because of budget. I always thought it would be challenging to implement RtI at the high school level because if you look at the tools for interventions and strategies, they are all elementary in nature. (P2/T2-4)

Participant 3 noted that the RtI model can be utilized in the elementary setting:

RtI naturally lends itself to elementary schools especially with PALS [a reading assessment given in the primary grades in Virginia], reading specialists, all of those structures. What happened in the high school was that when working with instruction we are really not differentiating what we're doing for kids. The RtI Toolkit resource was given to elementary and middle schools, but it didn't filter up to the high schools. I don't know if this school division has had a uniformed model of RtI presented to the high school setting. (P3/T3-8)

Both Participants 4 and 5 noted a common theme by stating that RtI is a fundamental change at the high school because they did not believe that the current programming for high schools can easily support such a change like RtI (P4/T4-7, P5/T5-6).

Participant 6 said that RtI at the high school level was a fundamental change because now that RtI is in the high school.

I feel like now you have to have a lot of data now to go to SCT in order to successfully complete the referral packet that is needed to get to the SCT process. You really have to implement things in the classroom, track them, and have data on them, whether it was successful, not successful, and what else you implemented. (P6/T6-2)

Participant 9 did feel that RtI was a fundamental change because

Students that were failing used to go immediately to SCT or begin referral to special education, but now I actually feel like there are more students going through the RtI process than before it started. I feel like before RtI, the teachers would maybe take more responsibility for the problems that the students were having. Now, any student who is failing a class or not being successful, they automatically go to the SCT or begin the referral process of RtI. (P9/T9-2)

Participants 7 and 8 did not see the implementation of RtI at CHD as a culture or climate change because there was no formal plan put into place through the implementation process, so there was a lack of commitment.

Participant 7 stated,

I don't think people were educated on it and I think the only people who truly understand or have any form of understanding of what RtI is are the people who teach the special education students in the least restrictive environment of the general education classroom or who teach them in a self-contained classroom or things of that nature. I don't think the general population of teachers understands truly what RtI is or what a 'good teaching practice' is versus a good strategy of intervention is. So I don't think there has really been a climate change because I don't think truly people know what it means. (P7/T7-4)

Participant 8 said,

I feel like there is more frustration from the general education teachers when they are using RtI because it gives them one more thing that they have to do. Teachers are overburdened in some ways. We have so much paperwork and this is just one more piece of paper. It's not enough to have anecdotal notes like in the past. Now, teachers have to write down every time they use that strategy and the students then refuse the strategy. It is not radically different than what we were doing before. I mean, honestly, how many strategies you can get once you get to high school that you had not had before? By the time they get to high school, those kids are so frustrated that they really don't want to try new strategies. (P8/T8-7)

Pattern: Student Achievement

In high school, student achievement is measured by accumulation of credits earned when a student successfully completes a high school class, by successfully passing state assessments to earn a verified credit, and ultimately by graduating. A common theme reported by participants was that RtI was implemented to support students academically. The participants identified reasons that a student would be engaged with the RtI process as academic failures and poor results on standardized assessments that would prevent graduation and result in students dropping out. A review of the 2009-10, 2010-11, 2011-2012 VDOE assessment results for CHD High School was completed to analyze Standards of Learning tests scores for English Reading, Writing, Geometry and Algebra to determine if the implementation of RtI assisted with

improving SOL scores. A review of the semester and final grades for the 2009-10, 2010-11, and 2011-12 school years was also completed to explore if the support of the RtI model decreased failing grades in classes.

Although the general understanding of the purpose of RtI's implementation at CHD High School was to teach strategies and put interventions in place to support students academically, the participants were all unclear if students' grades or SOL test scores actually had improved. One participant even noted, "I don't know if RtI has reduced the academic failures, but in defense of the high school, we should track that" (P2/T2-3). Similarly, another participant stated, "I am not 100% sure on that but I would believe that if it hasn't reduced the failures, it has absolutely shown some form of improvement" (P7/T7-5). Both of these statements would suggest that there was no evaluation of the effectiveness of the implementation. No record of an evaluation of the RtI program at CHD High School was found in the documents reviewed by the researcher either. According to the document review of VDOE assessment information, there was little improvement of SOL scores from 2009-10 and 2010-2011. The assessment information for 2011-12 indicated a significant decrease in Geometry and Algebra 1 SOL scores. The declines in mathematics scores paralleled results across Virginia and were attributed by many school leaders to changes in the assessments.

Participants were also unclear as to if RtI may have had a positive effect on the dropout rate of CHD High School. A participant indicated, "I am not sure because the majority of students by the time they are seniors have either been weaned off RtI because they have been able to implement the strategies by themselves or they graduate" (P7/T7-14). Another participant just admitted, "I can't tell you because I don't know" (P2/T2-19). A review of CHD High Schools' dropout rate indicated that six students dropped out in 2009-10, five students dropped out in 2010-11, and five students dropped out in 2011-2012.

The literature reviewed for the case study indicated that the RtI intervention model was used in lieu of the discrepancy model often used to determine a Specific Learning Disability. A review of CHD High School's documentation of referrals for full evaluations on students who went through the RtI model was completed by the researcher to determine if students were found to have Specific Learning Disabilities and to determine if the RtI process decreased the number of full evaluations completed at the high school. If a disability was suspected, the Problem Solving Team would refer the student for a comprehensive evaluation to determine if the student

would be eligible for specialized instruction. Once the RtI process was implemented in the 2009-10 school year, the Problem Solving Team assessed the level of need for students and then continued to monitor them to determine the progress the students were making. This process meant that the students were involved with an intervention plan and continued to need support, but were showing signs of improvement.

In 2009-10 there were 44 students involved with RtI. In 2010-2011, the Problem Solving Team had success with 23 students and released those students from their intervention plans. Five students went through a comprehensive evaluation for special education services. Sixteen were on a “continue to monitor” status. In 2011-12, 11 students were released from the intervention plans. Two went through full evaluations. Three new referrals to the Problem Solving Team were started. No comprehensive evaluations were completed. Based on these data, it would appear that the RtI implementation assisted with providing support for students and decreasing the number of comprehensive evaluations. When the comprehensive evaluation data were reviewed, the seven students who went through a comprehensive evaluation were found eligible for special education services, but not for Specific Learning Disabilities. Four students were found eligible for services through a disability category of Other Health Impaired, secondary to Attention Deficit Disorder with Hyperactivity. Three students were found eligible for services through the category of Emotional Disability.

Summary of the Findings

Three categories emerged from the interviews that were completed. These categories included: (a) a structured focus on prevention for academic failures, (b) use of the suggested RtI model consistently and with fidelity, and (c) strong consideration for adoption of the suggested framework using the essential components of RtI. For essential components of RtI, the following patterns were found: working knowledge of universal screening, data collection and progress monitoring, Problem Solving Team, data-base decision making, tiered instruction, and evidence based interventions. Within fidelity, the patterns were adherence, duration and exposure, quality of delivery, specificity and differentiation, and student achievement. The process of implementation patterns were: clearly articulated philosophy, meaningful definitions of RtI, clearly defined essential components of RtI, common understanding of consistent practices, school culture and school climate, and student achievement. The participants all agreed that RtI was put into place to assist struggling students. “Response to Intervention starts in the classroom

when a student is struggling” (P6/T6-13). The lack of understanding for a common working vocabulary for strategies, interventions, and procedural protocols did not allow for consistent execution the implementation. However, there were several common instructional practices such as Thinking Maps and Differentiation Strategies that were mentioned by participants. The participants were not aware of the positive outcomes of RtI implementation in terms of student achievement.

As a result of the analysis of data, relationships across the categories could be seen. The use of essential components of RtI could be seen in team approach of progress monitoring to ensure that data were collected to assess both the instructional and student weaknesses so that goals could be developed and interventions put into place to assist struggling students. The practices of implementation did seem to be inconsistent and there did not appear to be a clear framework given to the school from the central office level. Several participants interpreted this inconsistency as a lack of support and as the result of suggestions about the RtI implementation process falling on "deaf ears” (P7/T7-11). From the lack of inconsistent implementation, the perception of lack of support, and the perception that the participants had no voice with respect to what needed to be changed, participants expressed concern about whether the RtI model was appropriate at the high school level.

The document review and analysis provided rich data that yielded the categories and patterns. The implementation of RtI in a high school should have a clear framework with common vocabulary. The Problem Solving Team had a referral packet that would give a complete description of the student and an assessment of the areas of weakness or failure. The referral packet assisted in bringing professionals together to set goals and interventions to provide scaffolding for the student to access success. The review and analysis also gave credence to the fact that the staff was willing to provide assistance to the students by trying new instructional strategies and interventions and by working as a team for the success of struggling high school students.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to investigate and describe how one high school implemented RtI. This chapter begins with a discussion of the findings of the study and continues with the presentation of conclusions derived from the data. Following the findings and conclusions, implications and recommendations for school leaders are described. Recommendations for future research are offered along with personal reflections about the study.

Discussion

The theoretical framework of this study was based on the implementation of RtI practices identified in the literature. The three practices that were identified were (a) a structured focus on prevention for academic failures, (b) use of the suggested RtI model consistently and with fidelity, and (c) strong consideration for adoption of the suggested framework using the essential components of RtI (RtI Action Network, 2013). These practices guided the development of the interview questions asked of the participants in the study. The interview questions were also used to guide the review and the analysis of the documents. The interviews and the document review data were used to answer the two overarching research questions: Were the essential components of Response to Intervention implemented in this high school? Was the Response to Intervention framework implemented with fidelity? Categories and patterns emerged from the data analysis are discussed in the sections that follow.

Essential Components of RtI

Universal Screening

The participants all reported that there were no universal screening tools used at the high school. The literature review performed for the study was clear that if a universal screening tool is used in RtI, teachers have baseline data that show strengths and weaknesses that allow them to plan strategies that will help students (National Center on Response to Intervention, 2010). These same universal screenings are recommended in the RtI literature to be given two or three times throughout the school year to assess student progress (Burns, 2008). In the absence of a universal screening tool, the participants explained that they were using alternative data sources. The alternative data sources used by the participants were demographic information, review of standardized assessments given to students, review of the confidential records to determine if any

psychological or educational testing had been completed, reviews of students' academic history, benchmark scores, SOL scores, and informal observations of the students in class.

Data Collection and Progress Monitoring

All of the participants suggested that both data collection and progress monitoring were used inconsistently. From the participants' responses, it would appear that a clear expectation of what data to collect, how often to collect the data, in what format to record the data, or how often to meet to discuss the progress of a student was not part of the RtI implementation plan at CHD High School. Participant 9 said, "I really feel like that this is something that's, for the most part, is probably done the day of the meeting" (P9/T9-4). Participant 4 also noted an area of concern and stated that "Data collection and progress monitoring depend on the particular team that is meeting as to when they meet and what data is reviewed" (P4/T4-14).

Similarly, Participant 7 noted that

Once a meeting is scheduled to discuss the student, the teachers then fill out the data sheets. This is why data collection and progress monitoring at the high school may not always be the most reliable, but it is the only form teachers have been willing to even attempt to try. (P7/T7-5)

Participant 8 indicated that there was inconsistency by stating,

We do not always meet every four weeks; it just depends on what we think the student needs. Sometimes we meet every six weeks because it is student specific. Some of the things you do not do every day, so you may need to take longer to collect the data on it. (P8/T8-11)

Every participant interviewed, except for one, described a districtwide referral packet, which appears in Appendix G the formal referral packet had been developed by the Special Education Department. The packet contained the official forms that were required of all schools, including the case study high school, for use when a student was going through the RtI process. The researcher reviewed the entire packet, entitled "Request for Assistance from School Consultation Team (SCT)." The document included the statement that, "The teacher making the referral is responsible for the data collection, organization of the data and the presentation of the data to the SCT Team." The referral packet is to be completed and given to the SCT Coordinator prior to the meeting to discuss the student. The researcher found this document to contain a thorough and organized format for the teachers to follow easily. However, the approximately 10

pages of information for the referring teacher to complete were described by as “very lengthy” and “very extensive” by several participants (P 6/T6-13, P7/T7-11, P8/T8-15, and P9/T9-14). Although the participants seemed willing to collect data and indicated there was value in meeting to discuss the progress monitoring, the participants indicated that data were being reported the day of the meeting. This procedure would indicate the need for reporting “quick data” during the class time with a more extensive reporting source to quantify a student’s rate of improvement or responsiveness to instruction, and to evaluate the effectiveness of instruction which teachers can complete during planning periods or at other times of the day when they are afforded time for reviewing data. Participant 6 and Participant 7 referred to “quick data” as a quick and easy checklist that the teacher could check “yes” or “no” if the intervention was used and if the intervention provided the struggling students with an opportunity for success. There was a reference to reading specialists in high schools by one participant. That participant indicated that in past years, the reading specialists assisted with data collection and progress monitoring once an intervention plan was put into place.

Problem-Solving Team

A Problem Solving Team was reported to be in place at the high school, but the participants differed on the exact personnel involved. A unique perception that was reported by just one participant was that

School Consultation Teams in the high school should be a standing committee like a yearbook committee, or any other kind of committee. It should have the same people on it every time it meets. These people are trained and they understand the purpose of the team. (P3/T3-8)

Another participant noted a concern that

Some parents that come to meetings are more obstructionist than an asset. When parents have such prominent issues themselves that they really are not equipped to do much or be much help to their child, then I think that they are incapable of being big contributors to the team. (P5/T5-6)

Berends et al. (2002) identified that strong leadership is necessary for an effective implementation of RtI. The need for leadership throughout the process of implementation of RtI did emerge as a pattern when speaking to the participants. The participants spoke about leadership with very strong emotion and with very clear ideas about what is needed. While the

participants described the personnel that made up the Problem-Solving Team, all participants mentioned the need for leadership.

The leadership that the participants referenced was both at the district level and the building level. Direction and management at the district and building level seemed to be critical to the participants because they all mentioned that the implementation of RtI at the high school level was a significant change that affected the entire school's climate and culture. At the district level, participants strongly stated that both the district and school leaders must recognize and commit to the implementation of RtI so that building level administration can support the school through the allocation of resources, staffing, training, and time. At the school level, the participants noted that administration must move the focus of RtI from a plan for implementation to actual schoolwide practices.

There were several participants who strongly questioned the district's commitment to RtI and the building level administration's understanding of RtI. This concern would suggest that when school districts are considering implementation of RtI at the high school level, the personnel designated as the leaders of the initiative must be willing to engage in the problem-solving processes of transformational leaders, to employ strategies for fostering teacher leadership and to build teachers' commitment to change. This engaged leadership then creates the conditions for growth in teachers' professional knowledge and skill in regards to RtI. The participants' inconsistent detailing of the personnel needed on the Problem-Solving Team would also suggest the need for district wide specification for required personnel for a team.

Data-Based Decision Making

All the participants showed commitment to assisting students. The participants observed that students who continually fail are more likely to leave high school without a diploma. All the participants agreed that having information to support interventions or instructional strategies was necessary for an effective support plan for students. Participant 3 said, "Data-based decision making is done with Problem-Solving Teams; however at the high school level, I think we have room to improve" (P3/T3-8). There did seem to be a consistent concern among the participants that although "teachers want to assist students to use strategies that will help them," some teachers may be unwilling to learn new strategies (Berends et al., 2002, p. 45). Several participants attributed this reluctance to adopt new approaches to teachers wanting to complete the pacing guides so that students can be prepared for end-of-year assessments. These concerns

would support the idea of providing additional time or additional staff to assist with data collection, progress monitoring and instructional strategy implementation.

Tiered Model

The participants reported that there was use of a three-tiered model. However, no evidence of a common vocabulary or common description of each level of interventions was apparent in the interview data. The participants reported using three levels, which increased with intensity to support the struggling student. The participants reported different reasons for moving a student to the next level of intensity. There did not appear to be a consistent conceptual understanding of the structure of the tiers. This inconsistency became evident when Participant 6 was asked to describe each level of the tiers and responded with “I’m a little cloudy with Tier 1 and Tier 2 because they seem to mesh together” (P6/T6-3). When asked the same interview question, Participant 7 stated, “The specific interventions for each tier, again, I think are very ambiguous in terms of what the school believes is beginning, middle, or end before moving on to the next step of the process” (P7/T7-3).

Evidence-Based Interventions

Participants indicated that interventions were utilized in the classrooms; however, some participants were unclear if the interventions they were using were evidence-based. Participants who were central office staff indicated that evidence-based interventions were used with clear understanding at the school level. The researcher reviewed documents from the professional development trainings that were completed for the three years designated for the study. When reviewing the professional development information, it would appear that the only three instructional strategies were presented to the school division and they were differentiation training, CRISS training, and Thinking Map trainings. These trainings were delivered districtwide for all teachers. In the training documents, there was specific language about these instructional strategies being used with struggling students through the school-based SCT Teams. However, there was no evidence of consistent professional development given to all personnel who were involved with the implementation of RtI at CHD High School.

Participants who were based in CHD High School did report the use of interventions, but did not feel confident in reporting the interventions as evidence-based interventions. One participant stated “the progress that the student does not show in the classroom is what the

teacher uses to determine interventions. I'm not real sure if the teachers worry about if they are evidence-based" (P6/T6-13). This response was similar for Participants 7, 8, and 9. The participants who were school-based all indicated that they have not been through specific RtI training at all, so they were unclear as to what the district was using to define "evidence-based instruction." This would indicate the need for professional development, not only in regards to interventions specifically, but on RtI as the district intended for it to be implemented.

Fidelity of Implementation

The literature regarding the implementation of RtI consistently mentions the need for fidelity (Brown-Childsey & Steege, 2010; Mellard, 2010; National Center for Response to Intervention, 2010). Implementing RtI with fidelity is defined as "using the curriculum and instructional practices consistently and accurately, as they were intended to be used" (Mellard, 2010, p. 3). For this case study, there were five organizational elements that were the focus.

Adherence

The participants were not asked a specific interview question about adherence, however, they did share information about how well the RtI design implemented at CHD High School adhered to the original philosophy and design. The four districtwide participants all had similar philosophies and reasoning for why RtI was implemented at the high school level. Major differences arose when the same questions were asked of the school-based participants. All the school-based participants reported that no blueprint or framework was communicated with staff from the district level. The school-based personnel indicated that there was a need for a more systematic approach. It was evident from the inconsistent reports that there was little to no understanding of an organizational design in the areas of intensity of tiered levels, instructional strategies, interventions, and data collection procedures. This lack of knowledge and understanding would suggest that if a high school were to implement RtI, a cohesive plan that has been extensively discussed and mutually agreed upon should be put into a written plan with professional development to follow. Such a plan would allow the school district to have operational procedures and common vocabulary to ensure the adherence to the school district's blueprint for RtI.

Duration and Exposure

All the participants noted that there should be a timeline for interventions and progress monitoring; however, the timelines reported varied. The concepts of duration and exposure of the implementation of RtI refer to the length of the intervals of intervention between progress monitoring and how often the students received the interventions (Brown-Childsey & Steege, 2010; Mellard, 2010; National Center for Response to Intervention, 2010). One participant noted that the timeline depended on the intervention but suggested it would be a matter of weeks (P1/T1-3). Another said that intensity needs to be more than one a week (P2/T2-6). A third stated that duration of progress monitoring and the amount of time an intervention is put into place really depend on the student, but should be no longer than four to six weeks (P4/T4-9).

Participant 3's response to the question was particularly interesting to the researcher because of the ownership the participant took in the lack of a clear timeline for duration and exposure.

I would love to give you a decisive answer on when you need to intensify the intervention and of what would fall into best practice based on data, charts, aim lines and that type of thing, but I cannot. I would like to be able to say that at any grade level we make those distinctions based on clear projection of our aim line and stating that this is how much progress we need to see each week to get there, we didn't so we intensify, but it is a subjective timeline. (P3/T3-4)

Participants 7, 8, and 9 indicated that they did not know what the timeline was that should be used for interventions or progress monitoring. This would suggest the need for specific timelines.

Quality of Delivery

One theme that was consistently reported by the study participants was that collaborative teaching models assisted with supporting struggling students. The concept quality of delivery is described as how well the interventionist and instructional staff deliver the curriculum (Brown-Childsey & Steege, 2010; Mellard, 2010; National Center for Response to Intervention, 2010). Several participants noted that if there are two teachers actively engaged in a classroom through collaboration, then the likelihood of the suggested interventions, data collection, and good instructional strategies improves. Participant 1 reported, "At the high school, staff needs to

collaborate more so that whatever remediation intervention efforts that are being presented in the classroom can be tied to the individual needs of the students” (P7/T7-2).

Participants 7, 8, and 9 noted that the quality of delivery also very much depended on the dedication of the individual teachers. The participants said that if teachers are invested in the students’ ability to improve, then they will try any strategy to get the student to be successful. These statements would suggest that there was no form of accountability to ensure that teachers are implementing the recommended interventions or instructional strategies. This absence of accountability indicates that CHD High School could benefit from an assessment to ensure a consistent delivery of researched-based practices in curriculum and instruction.

Program Specificity

After completing the interviews of all the participants, it was evident that there was no formal, written RtI plan used in CHD High School. There were general explanations of components, instructional strategies, interventions and data collection that served as a de facto plan. Program specificity as it relates to fidelity determines if the resources and interventions that were identified in the RtI plan were used or if other resources and interventions that were not identified in the RtI plan were used instead (Brown-Childsey & Steege, 2010; Mellard, 2010; National Center for Response to Intervention, 2010). The concepts behind program specificity are (a) to ensure that there is no contamination of the original plan and (b) to take care not to add new components to the accepted model. The inconsistent answers that the participants reported suggest that there is a need for a formal RtI plan to be developed. Program specificity was difficult to determine because there was no defined program reported in the interviews.

After the interviews with the participants, the researcher requested from the district office the RtI plan for the high school. The researcher was given examples of the referral packets, special education referral information, and academic records for CHD High School. The researcher requested from the CHD High School administration a copy of the RtI plan for the high school and was told that there was no specific plan, just the district approved process manual for the SCT Team. The researcher reviewed the SCT manual. The manual only outlined procedures for conducting a meeting and how to recommend a comprehensive evaluation for a possible disability. Based on the review of these documents, program specificity could not be determined.

Student Responsiveness

After interviewing the participants, the researcher reviewed CHD High School's testing information from the VDOE website. The researcher also reviewed academic failures and dropout rate information for the first and second semesters and the end of the year for CHD High School for each of the 2009-10, 2010-11, and 2011-12 school years. The researcher also reviewed the SCT information and the referral rate for a comprehensive evaluation and identification of students with disabilities. All the participants reported that RtI was put into place at CHD High School to support struggling students; however, none of the participants could say with certainty if the implementation of RtI improved SOL scores, decreased the dropout rate, or decreased the number or percentage of failing grades.

Five participants indicated that they "did not know" if RtI assisted struggling students with decreasing the number of failing grades. Seven participants reported that they "did not know" if RtI assisted with preventing students from dropping out of school. However, when reporting about the reduction of special education referrals, six participants reported that they did believe that implementing RtI at CHD High School had decreased the number of referrals and that the referrals for a comprehensive evaluation were more accurate in terms of identifying disabilities. The disabilities that were identified at CHD High School were not Specific Learning Disabilities. The disabilities that were identified were Attention Deficit Disorder with Hyperactivity and Emotional Disabilities.

Participant 7 reported the implementation of RtI at CHD High School has increased the number of referrals for full evaluation for special education because prior to the implementation of RtI, students would "sit in SCT for years." This participant also noted that an active Problem-Solving Team may initiate three to five referrals annually for a comprehensive evaluation if interventions do not prove to be successful. Based on the CHD High School referral data (Table 4), there did appear to be an increase of students being referred to the SCT Team once RtI was implemented in 2008-09. All three students who were identified as new referrals to the RtI

Table 4

Tracking RtI Outcomes

Year	New referrals to RtI	No further action	Continue to monitor	Refer for comprehensive evaluation	Students identified for support for the next school year
2007-2008	1	10	24	8	15
2008-2009	15	4	20	6	29
2009-2010	13	7	24	5	30
2010-2011	3	7	26	3	23
2011-2012	1	13	29	8	21
					2012-2013

process in 2010-2011 were ultimately referred for a full evaluation by the end of the school year. This result would suggest that as the staff became familiar with interventions and data collections and progress monitoring, they were able to improve their knowledge for identifying students with possible disabilities.

Based on the review of the VDOE information, during the three-year period that RtI was implemented, there does not seem to be a difference in the SOL scores of students identified as being involved with RtI. CHD High School has a low dropout rate. However, CHD High School’s dropout rate did not improve during the years that RtI was implemented.

When questioned about high school students’ willingness to engage in the RtI process, participants did report a certain level of unwillingness on the students’ part. One participant indicated that high school students are more “reactive to the curriculum and lessons” if they have struggled for long periods of their educational career (P1/T1-2). A second participant indicated that high school students who are “struggling learners are hard to engage in learning and interventions” (P8/T8-10).

Participant 7 made a clear argument for why high school students sometimes often need intervention even if they do not want them by saying,

RtI is used at the high school level because there are students who are clearly still struggling to understand. They are the students who are missing skills taught in elementary school and they sometimes can cope but when they get older, those gaps in learning become larger and more apparent. (P7/T7-13)

Several participants noted that even if a student does not want to work through the intervention process, establishing a rapport with teachers is crucial to having the student engaged in the learning process.

Implementation Process

Before RtI can be implemented into a high school, the people who will be directly involved with the process must clearly understand the rationale for the key changes that are incorporated with RtI implementation. The National Center on Response to Intervention (2009) noted that to be successful with implementation of RtI there needs to be shared knowledge and understanding of the philosophy and reasoning for RtI's implementation, development of the structure of RtI that contributes to the positive change in the high schools' culture and climate, and finally an organized implementation of RtI to support student achievement (p. 24). Including all three of these components gives a solid foundation for understanding the integration and sustainability of practices within the RtI design. The researcher designed interview questions surrounding the process of implementation.

Philosophy and Common Definitions

The researcher asked the participants about the philosophy and the reasoning behind the district wide implementation of RtI at CHD High School. It was evident from the participants' responses that neither a clearly-articulated philosophy nor common definitions for a shared understanding of RtI and consistent practices for its implementation had been established among all participants. Mellard and Johnson (2008) argued that RtI can be applied at any developmental level if it is clearly developed through philosophy and practical implementation. Some of the participants interviewed did not have an understanding of the philosophy.

I'm not sure if there's a definite philosophy behind it [RtI] but I have always assumed that it was done so that you have students that have learning difficulties but it may not be directly related to a disability. (P9/T9-19)

I think it was to try to change it from the discrepancy model of ability vs. achievement. (P8/T8-17)

I am not really sure why they did it [RtI]. From my understanding, it is only research-based in elementary school reading. I don't know that there is much data to back it up as how it works in high school setting. (P6/T6-11)

The researcher asked to examine the districtwide philosophy given to CHD High School at the time that RtI was implemented. The documents that the researcher was given had a definition of RtI that included phrasing such as “interventional model to support the success of students” and “tiered pyramid that provides support for students who continue to struggle within the classroom” (MGB Public Schools’ Document 5.03 Response to Intervention/Study Skills, 2013) but the documents did not identify a districtwide philosophy or mission statement nor specify common vocabulary. Therefore, due to the lack of a philosophy, participants were unable to report common vocabulary or definitions for the essential components of RtI at CHD High School. This fact also interfered with the participants’ ability to consistently report about the elements of fidelity of implementation.

Culture and Climate Change

When asked if the implementation of RtI at CHD was a culture and climate change, six of the participants said that they did believe RtI was a culture and climate change. Those same six participants reported that high schools are not designed to support RtI as a model.

Mellard (2010) stated that every school, regardless of grade level, has a distinct climate and culture that defines the building (p. 6). Mellard specifically defined a school RtI culture as when, “RTI provides a shared belief or attitude in regards to using the intervention as a daily framework within the high school” (p. 13). Mellard continued by defining school RtI climate as when, “the RtI model provides a specific tone of the high school building by providing support for students. RtI can affect the high school either positively when implemented with sincerity or negatively when it is implemented poorly” (p. 15).

Participant 1

“I don't think that high school structures were designed to pay close attention to student learning needs” (P1/T1-2).

Participant 2

“I always thought it would be challenging to implement RtI at the high school level because if you look at the tools for interventions and strategies, they are all elementary in nature” (P2/T2-3).

Participant 3

“RtI naturally lends itself to elementary schools. The RtI Toolkit resource was given to elementary and middle schools, but it did not filter up to the high schools” (P3/T3-5).

Participant 4

“It is a fundamental change at the high school level. I do not believe the current programming easily supports a high school model of RtI” (P4/T4-2).

Participant 6

You have a lot of data, but it really hinders people from going to SCT because teachers have 120 students and there is no way they can track data for that many students, even if there are only 50 students that are struggling, that is still a lot of time. (P6/T6-2)

Participant 7

I feel like before RtI, the teachers would maybe take more responsibility of the problems that the students were having. Now, any student who is failing a class or not being successful, they automatically go to the SCT or begin the referral process of RtI and I don't think there has really been a climate change because I don't think truly people know what RtI means. (P7/T7-2)

The other three participants all reported a common belief that RtI was a structure for doing what “we were already doing” and therefore RtI was not a culture or climate change for CHD High School. This belief would suggest that the RtI model that was being used at CHD High School may not have been communicated and the expectations may not be monitored by school leaders if personnel are not changing what they had been doing prior to the implementation of RtI.

In light of the participants' responses, the researcher reviewed the SCT Team process, RtI referral packet, and teacher reporting documents. Based on the review of these documents, there did appear to be an expectation of data collection, progress monitoring, and a formal process to

refer students who are struggling to the SCT Team for support through the RtI model (CHD High School Referral list, CHD High School SCT Team procedural manual, CHD High School Request for Assistance from School Consultation Team (SCT). However, there did not appear to be any accountability measures for noncompliance.

Student Achievement

When asked about if the participants believed that the high school RtI model assisted students with improving grades, improving standardized assessment scores, and assisted with identifying students with disabilities (Table 5), the participants had varied responses. RtI is a practice intended to move educational resources toward the delivery and evaluation of instruction and away from classification of disabilities. However, Countinho and Waswald (2004) noted that when high school students are struggling to keep academic pace with their peers, the students are often referred for a comprehensive evaluation for specialized instruction (p. 23). RtI integrates assessment and intervention within a multi-level prevention system to make the most of student achievement. However, when asked if RtI improved assessment scores, helped prevented students from dropping out, increased academic grades, or even decreased students being referred for a comprehensive evaluation, participants were unsure.

Table 5

Student Outcomes

Partici- pants	Reduction of failing grades	Reduction of dropouts	Reduction of special education referrals
P1	“I don’t know if RtI has reduced the academic failure.”	“I don’t know if RtI has reduced the dropout rate.”	“I don’t know if RtI has reduced referrals.”
P2	“I don’t know if RtI has reduced the academic failures, but in defense of the high school, we should track that.”	“I would say I hope so, but I don’t know that for a fact.”	“It has decreased the special education referrals. I don’t know if it has decreased referrals.”

table continued

Table 5 (continued)

Partici- pants	Reduction of failing grades	Reduction of dropouts	Reduction of special education referrals
P3	“I don’t know.”	“I can’t tell you because I don’t know.”	“RtI has decreased the number of referrals that are being made and, more importantly, the referrals that are made tend to be kids who qualify for full evaluation. The high school students who are found eligible tend to be more ED or OHI secondary to ADD/ADHD, not SLD.”
P4	“I do not agree with the statement that RtI reduces failing grades.”	“I do not know the exact data on that, but I do not feel that RtI has assisted with the dropout rate.”	“RtI helps to make referrals for a comprehensive evaluation more accurate, but I do not think it reduces SLD referrals.”
P5	“I don’t know if it has helped with reducing failing grades for students.”	“I don’t know graduation rates.”	“The high school referrals that have been found eligible are OHI and that relates to ADHD. I would not say that I’m seeing a dramatic increase of SLD in high school referrals.”
P6	“I think that once a student gets to SCT, RtI helps with failing grades. It is almost like common sense kicks in when we meet with parents and students.”	“I don’t know but most of the dropouts tend to be the students who can do the work, they just get side tracked by life. I just don’t think the kids we help are the ones thinking about dropping out.”	“I definitely see a decrease in special education referrals and when they do go through I see ADHD or ED. SLD is not the predominant one.”
P7	“I am not 100% sure on that but I would believe that if it hasn’t reduced the failures, it has absolutely shown some form of improvement.”	“I am not sure because the majority of students by the time they are Seniors have either been weaned off RtI because they have been able to implement the strategies by themselves or they graduate.”	“RtI has not decreased the special education referrals, it has increased it. Students that were on a ‘monitoring’ status through SCT just stayed on ‘monitoring’ but now if there is a problem and RtI’s data show the need, there is a referral for special education evaluation made.”

table continued

Table 5 (continued)

Partici- pants	Reduction of failing grades	Reduction of dropouts	Reduction of special education referrals
P8	“RtI has not necessarily decreased the failures, but I am not exactly sure.”	“RtI may help the dropout rate, but I’m gonna say that RtI as it is right now is just not effective at the high school.”	“I don’t know totals but I would have to say no that RtI has not decreased special education referrals.”
P9	“I’m not sure if it has decreased the failures but I will say that it has definitely caught a lot of students that might have fallen through the cracks if it wasn’t there. I definitely think the whole process is a useful tool.”	“I’m not sure about the dropout rate, but I would like to think that it has helped because those students who may not have been helped now have gotten assistance.”	“I would like to think RtI has decreased the referral rate for special education, but I’m not sure number wise.”

Conclusions

In this study, data about CHD High School’s implementation of RtI were obtained from one interview session with each of nine participants and from document reviews and analyses. The categories for the data themes came from the literature. These data that emerged from the interviews and from document review and analysis were organized around the components found in the literature. These were (a) a structured focus on prevention for academic failures, (b) use of the suggested RtI model consistently and with fidelity, and (c) strong consideration for adoption of the suggested framework using the essential components of RtI (RtI Action Network, 2013). Each category had data that were unitized and placed into patterns not only from the interviews, but also from the documents reviewed. The results of the study confirmed and added to the findings of the research studies discussed in the literature review.

CHD High School did not have an RtI blueprint or framework that specified a philosophy or common vocabulary that identified the essential components of RtI. CHD High School did not identify specific practices to ensure fidelity of implementation or an identified process of how to implement RtI. A universal screening tool was not available to screen high school students. CHD High School did not employ a common curriculum or instructional practices consistently because personnel were given limited training on these topics.

CHD High School did use a referral packet, data tracking charts, and progress monitoring protocols. These assessment trackers were designed for the districtwide use of RtI data

collection. Some of the participants that were interviewed were trained on how to use these protocols, although not all participants were trained. By reviewing the professional development information, the researcher ascertained that the personnel that had been trained in the use of the information were SCT Coordinators, districtwide administration, school principals and assistant principals. Through the interview process, the researcher discovered that expectations specified in Document 5.03 Response to Intervention/Study Skills, Director of Instruction, and the Supervisor for Special Services were that these personnel would go to CHD High School and train the entire staff. The SCT Coordinator was the only staff who had been through formal training. When interviewed, the SCT Coordinator stated:

The SCT Coordinators were trained the first year. The SCT Coordinators were pulled together in an attempt to clarify things about RtI and then bring it back to the schools, but from someone who went to those meetings and listened and attempted to bring it back, one person is not enough. (P7/T7-10)

According to the CHD High School SCT Coordinator, the information was brought back and shared with one assistant principal. The information was then shared as a brief training, approximately five minutes, at one faculty meeting. The lack of knowledge would explain why the progress monitoring protocols are not being utilized consistently. The inconsistency of data collection did not provide clear data-driven decisions for intervention intensity.

A three-tiered model was used by CHD High School SCT Team. A Problem Solving Team, called the Student Consultation Team (SCT), met to discuss the students who were referred; however, the participants who were interviewed did not have a clear timeline for when the team would meet. The absence of a meeting schedule also interfered with a consistent implementation of interventions discussed by the team. The participants interviewed did discuss interventions utilized through the RtI model; but there was not a common understanding of what interventions should be used at a particular tier of intervention. The review of the professional development documentation suggested that there was no training on universally used interventions and/or tiered intensity of interventions.

The lack of a clear, organized, and well communicated RtI blueprint was a consistent theme throughout the interviews. In response to being asked what essential components were used in CHD High School's implementation of RtI, participants were unable to identify a

documented districtwide plan. In the absence of an official plan, the staff conceptualized each essential component of RtI based on their own professional experiences. This fact confirms Mellard and Johnson's (2008) suggestion that RtI must be implemented as it was intended by the program developers (p. 240).

Implications and Recommendations for Practice

Readers of this study will have to judge for themselves whether the findings and recommendations are transferable to other settings. As a case study, the research cannot be generalized. However, several implications and recommendations for practice that may be helpful for school leaders are listed below. The implications and recommendations are drawn from the findings and presented here.

Implication: The participants interviewed indicated that the RtI data collection process was extensive and difficult to complete on a daily basis.

Recommendation: This implication would suggest the need for additional staff to support the classroom teachers.

Implication: The participants reported that the Problem Solving Teams/SCT Teams did not meet consistently.

Recommendation: This implication would suggest a need for a specific calendar or timeline to be used designated that the team would meet using the same intervals of time.

Implication: Based on the data obtained from the interviews with the participants, it appeared that there was little or no fidelity of implementation of RtI at CHD High School.

Recommendations: This apparent absence of fidelity of implementation would suggest that CHD High School should create a system to ensure and monitor fidelity of implementation. If the recommendation was accepted, the RtI program at CHD High School could increase program credibility, provide consistent positive student outcomes, and increase the motivation of the staff.

Implication: Response to Intervention (RtI) is a student-centered model of instructional intervention designed to provide to provide timely and targeted assistance to learners and to match the intensity of that assistance to each individual student's level of need.

Through this case study, the researcher noted that a particular implementation issue clearly surfaced at the school. There seemed to be a disconnect between the central office

and the school due to a lack of a clear blueprint or framework for the implementation of RtI at the high school level.

Recommendation: Develop, communicating, and distributing a clear blueprint of implementation of RtI at the high school level which includes common vocabulary, clear expectations, and an evaluation process to ensure fidelity. This blueprint would provide both the central office and high school personnel a clear definition of RtI that would steer schoolwide staff development and give essential details guiding intervention resources and staff supports. This blueprint would provide cohesive plan for academic support for struggling high school students

Implication: When RtI is implemented with a clear philosophy and organized expectations, it provides staff a description of procedures, techniques, vocabulary, and also allows the staff to provide feedback and clear decision making.

Recommendation: By making the RtI model a priority, the school district could develop a blueprint for the implementation of RtI that would identify the essential components for CHD High School to follow. By having a blueprint to follow, CHD High School can implement RtI with appropriate training, resources, leadership and accountability for program evaluation.

Implication: Providing appropriate professional development on RtI would empower the teachers to make educated decisions which could be a positive for high school students which could in turn result in increased student engagement and higher academic achievement.

Recommendation: The school leaders should provide professional development opportunities for all of CHD High School. When school staff has a common understanding and a working knowledge of RtI, then RtI can become a part of both the culture and climate of CHD High School.

Implication: For high school students to achieve academic success, school staff must have an operational definition of academic success and have identified the target or goal that must be achieved. Without this knowledge, teachers will not be able to identify if RtI has been a successful tool in student achievement.

Recommendation: The Problem Solving Team or Student Consultation Team needs to begin every student centered meeting with a description of the academic weakness or by

identifying why the student is unable to access the general curriculum successfully. From that discussion, instructional strategies, interventions, the collection of data and a goal to be mastered can be designed. This plan design should be mutually developed and clearly articulated to all members of the team.

Implication: All the participants interviewed indicated that there was no universal screening tool used at the high school level to assess individual student's academic weaknesses.

Recommendation: There needs to be a districtwide identification of a universal screening tool that is appropriate to use with students in high school. Once the universal screening tool is identified, all high school personnel involved with the RtI process should be trained on how to give the assessment and how to interpret the results.

Recommendations for Future Research

The findings from the study could be used as the basis for action research in high schools that are implementing RtI to support student achievement. Future researchers are encouraged to replicate this study in high schools in other locations and at other secondary levels to see if similar results are described by other districtwide and school level staff. High school and middle school teachers may have different perceptions of how their own RtI models can provide support to struggling students. Replicating this study at any secondary school level could be beneficial to middle or high schools investigating the implementation of RtI. Extending the research to high schools outside the state of Virginia would also increase the research knowledge on the essential components needed for the fidelity implementation of RtI.

The data in this study were obtained through one-on-one interviews and document analysis. In future studies, observations of teachers who work with high school RtI and struggling high school students in their classrooms might yield additional or different findings. The inclusion of observation data would provide more description about particular strategies and interventions used for the academic success of struggling high school students. A replication of this study using quantitative methods could attempt to determine the statistical significance of the RtI practices in the academic achievement of struggling high school students. Another recommendation for future research is to conduct a follow-up study three to five years from now at CHD High School to see if there have been any other changes within the way that RtI is being

implemented and to explore if the students who have been involved in the RtI process have been successful.

Further study of the staff development practices in high schools implementing RtI is recommended to see if those practices might have implications for the success of struggling high school students. The professional development of teachers could become a factor in improving the instructional/ intervention strategies and curriculum delivery which could have a positive effect on struggling high school students.

Personal Reflections on the Research Process

Reflecting on the process used to conduct this study, I can now identify some areas that I think would help future researchers if they decided to replicate the study. First, I would try to prepare for the study in the summer before the school year. This would allow for completion of field study questions and editing the original interview questions if necessary. I had to do my interviews in January and in February. My interviews began during CHD High School's examination schedule at the end of the first semester. This was a very busy time for the teachers, so I had to reschedule interviews a couple of times for the convenience of the participants. Because I am a high school administrator, rescheduling the interviews caused disruptions in my work expectations and deadlines associated with exams and the ending of the semester. Another problem was the school system had scheduled benchmark testing during the time period when I was gathering data. Changes in schedule for testing had to be accounted for as well. A better schedule for the interviews would have been to start in early September and to complete them by the end of October.

Secondly, I would have attempted to talk with all the instructional staff who were involved in the district wide decision to implement RtI. Some instructional staff members were working at the district level at the time of implementation had been reassigned to building level administration for the district or had left the district to pursue other jobs. I believe other researchers should attempt to talk to not only the district wide instructional staff, but also all personnel who were involved in pioneering RtI at the district level.

Finally, the input of students and parents who were at CHD High School during that time could serve as an additional data source for triangulation for further researchers. Getting in touch with former students would likely prove difficult, but would provide another, important

perspective on the school's practices with RtI. I believe the students may be able to offer insight to the teachers, administrators, and district level personnel did not recognize.

Concluding Statements

Over the last 30 years in education, how we address the needs of high school students has evolved. Educators have changed their thinking on how each high school student is taught and how they learn. These discoveries have resulted in new methods of instructional practices. RtI is the practice of providing high-quality instruction/intervention matched to high school students' needs. Teachers are using students' learning rates over a period of time and the students' level of performance to make informed educational decisions. The views the participants involved with the implementation of RtI at CHD High School showed that educators want high school students to be successful in school and be ready to transition to the work world as productive members of society. The participants of this study shared several practices that they believed assisted struggling high school students become successful academically.

The identified RtI practices and implementations that were found in CHD High School were supported by researchers whose works were analyzed in the literature review such as Burns and Gibbons (2008); Canter, Klotz, and Cowan (2008); Mellard and Johnson (2008), and Fuchs and Fuchs (2007). In looking at the success of the implementation of RtI at the high school level at CHD High School, I concluded that a clear and organized blueprint is a vital component in implementing an intervention model that ultimately becomes a school culture and climate conducive to the academic success for struggling high school students.

My advice to district and school leaders comes from the researchers L. Fuchs and Fuchs (2007) who reported that "RtI can only be implemented with success when all of the participants know what RtI is, know how to implement RtI, and can openly discuss what is wrong with the model if success is not achieved" (p. 44). This shared knowledge was not observed in its entirety at CHD High School, but the participants interviewed who were working with the struggling high school students certainly were invested in trying to support students.

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APPENDIX A
EMAIL COMMUNICATIONS TO THE SUPERINTENDENT

Attachments to the email

July 5, 2012

Kathleen Skelding-Dills
kskeldin@aol.com
Home number

Superintendent
Street Address
City, State, Zip Code
Email address
Work number

Dear _____,

My name is Kathleen Skelding-Dills and I am a research student from Virginia Tech working on a dissertation in the area of Response to Intervention at the high school level. The purpose of the case study will be to investigate Response to Intervention (RtI) in the hopes of determining what are the essential components of Response to Intervention (RtI) used in your school/school division and to determine if these essential components of Response to Intervention (RtI) are the same when implemented in an elementary school setting and a high school setting.

I would like to respectfully request that my case study be done at CHD High School. Please let me know how I can begin this process by contacting me at the above email address or phone number.

Thank you for your consideration in this matter,

Kathleen Skelding-Dills

EMAIL COMMUNICATIONS TO THE DIRECTOR OF TESTING

Attachments to the email

July 7, 2012

Kathleen Skelding-Dills
kskeldin@aol.com
Home number

Director of Testing
Street Address
City, State, Zip Code
Email address
Work number

Dear _____,

My name is Kathleen Skelding-Dills and I am a research student from Virginia Tech working on a dissertation in the area of Response to Intervention at the high school level. The purpose of the case study will be to investigate Response to Intervention (RtI) in the hopes of determining what are the essential components of Response to Intervention (RtI) used in your school/school division and to determine if these essential components of Response to Intervention (RtI) are the same when implemented in an elementary school setting and a high school setting.

I would like to respectfully request that my case study be done at CHD High School. Please let me know how I can begin this process by contacting me at the above email address or phone number.

Thank you for your consideration in this matter,

Kathleen Skelding-Dills

APPENDIX B

RESEARCH REVIEW COMMITTEE APPLICATION

Research Review Committee Application

Sam Fay

DEPARTMENT OF PLANNING & ASSESSMENT

Application to Conduct Research Studies and Data Collection

The Department of Planning and Assessment accepts applications to conduct research studies and data collection throughout the year, and reviews the applications two times a year. Applications must be received by the cycle deadline, or the application will not be reviewed until the next cycle deadline. Cycle deadlines are August 1 and December 1 of each year.

Research studies/data collection involving the participation of [redacted] students will not be permitted from May 1 to September 30 of each year.

The applicant must provide 3 copies of the application and all required enclosures. Complete application packets should be sent to:

Research Review Committee
Department of Planning and Assessment

- Research study/data collection participation by [redacted] students or staff is voluntary and the anonymity of the participants must be preserved.
- The research study/data collection must not impose an undue burden to [redacted] resources or on the instructional time of its students. The research study/data collection must align with the strategic goals and/or objectives of [redacted].
- The review of the application to conduct research studies/data collection by the Research Review Committee in no way obligates [redacted] to approve the research study/data collection proposal. Any applicant approved by the Research Review Committee must abide by the policies and regulations of [redacted]. Failure to do so will result in the termination of the research study/data collection activity.
- If the research study/data collection is approved, a copy of the findings must be submitted to the Research Review Committee within 45 days of completion of the research study/data collection at no charge to [redacted].

Applicant's Signature:

[Handwritten Signature]

Date:

7/12/12

Name: Mrs. Kathleen Skelding-Dills
Home address: 1714 Fairfield Road, Bedford, VA 24523
Home or cell phone: (540) 587-6845 Email: kdills@bedford.k12.va.us
Employer: Liberty High School, Bedford County Public Schools
Work address: 100 Liberty Minutemen Drive
Professional position/title: Assistant Principal Work phone: (540)586-2541

Is the study to fulfill a graduate school requirement? Yes (If not, skip to next section.)

If so, for what purpose: Graduate class Graduate thesis Doctoral dissertation

Other, explain: _____

Applicant's university affiliation: Virginia Tech

Applicant's university advisor: Dr. Wayne Tripp

Advisor's phone: (540) 231-9728 Advisor's email: wtripp@vt.edu

Advisor's address: Department of Educational Leadership and Policy Studies Virginia Tech (Mail Code 0302) 207 R

Is the study in association with your current place of employment? (If not, skip to next section.)

If so, provide a point of contact at your place of employment:

Contact name: _____

Contact's position: _____

Contact's phone: _____ Contact's email: _____



Title of research:

A Case Study: Components of Response to Intervention when Implemented in High School

Major research questions/problems to be addressed:

The proposed research questions for this study are:

- (1) What are the essential components of Response to Intervention?
- (2) Are the essential components of Response to Intervention the same when implemented in an elementary school and a high school?

Will there be additional researchers involved aside from applicant?

If so, list: My advisor is supervising the study, Dr. Wayne Tripp

How will the research be financed?

No financing is needed, all expenses will be paid for by researcher.



Schools involved: Elementary Middle High Alternative Ed.

Number of schools needed: 6-8 Specific grades needed: n/a Number of students needed: 0

Specific characteristics of students needed:

- Racial Background
- Gender
- Achievement Level
- Special Education
- Other

Explain: no students will be used in this study

Amount of time needed with students: N/A

Student files needed: Yes If yes, what type: Review of RtI plans that were written by elementary and

Number of staff members needed: 12 Amount of time needed with staff members: approximately 4 hours

Specific characteristics of staff needed:

- Racial Background
- Gender
- Degree/Content
- Special Education
- Other

Explain: personnel assigned to elementary schools and high schools

School Division's Approval Letter

July 23, 2012

Dear Mrs. Kathleen Dills,

Your application to conduct research studies and data collection has been approved. Please note the following:

- Research study/data collection participation by students and staff is voluntary and the anonymity of the participants must be preserved.
- The research study/data collection must not impose an undue burden to resources or on the instructional time of its students. The research study/data collection must align with the strategic goals and/or objectives of the site.
- The review of the application to conduct research studies/data collection by the Research Review Committee in no way obligates the site to approve the research/data collection proposal. Any applicant approved by the Research Review Committee must abide by the policies and regulations of the school district. Failure to do so will result in the termination of the research study/data collection activities.
- When the research study/data collection is completed, a copy of the findings must be submitted to the Research Review Committee within 45 days of completion of the research study/data collection at no charge to the school district.

If you have any questions or concerns, please feel free to contact the Research Review Committee.

Thank you and good luck

APPENDIX C
INSTITUTIONAL REVIEW BOARD APPROVAL

Institutional Review Board Approval



Office of Research Compliance
Institutional Review Board
2000 Kraft Drive, Suite 2000 (0497)
Blacksburg, VA 24090
540/231-4808 Fax 540/231-0958
email irb@vt.edu
website <http://www.irb.vt.edu>

MEMORANDUM

DATE: July 13, 2012
TO: Wayne Tripp, Kathieen Dills
FROM: Virginia Tech Institutional Review Board (FWA00000572, expires May 31, 2014)
PROTOCOL TITLE: A Case Study: Components of Response to Intervention when Implemented in High School
IRB NUMBER: 12-811

Effective July 13, 2012, the Virginia Tech Institutional Review Board (IRB) Chair, David M Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

<http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: Expedited, under 45 CFR 46.110 category(ies) 6,7
Protocol Approval Date: July 13, 2012
Protocol Expiration Date: July 12, 2013
Continuing Review Due Date*: June 28, 2013

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

Invest the Future

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
An equal opportunity, affirmative action institution

APPENDIX D
WRITTEN CONSENT SIGNATURE

Written Consent Signature

I confirm that the purpose of the research, the study procedures, the possible risks and discomforts, as well as, the benefits have been explained to the participant. All questions have been answered. The participant has agreed to participate in the study.

Signature of Person: _____

Print Name of Person: _____

Obtaining Consent Date: _____

The participant agrees to be audio-taped: YES NO Initial: _____

The participant agrees to be photographed: YES NO Initial: _____

The participant agrees to be videotaped: YES NO Initial: _____

☪ The participant would like his/her name to be used: YES NO Initial: _____

Witness Signature Date: _____

APPENDIX E
LETTERS SENT TO PARTICIPANTS

Letter Sent to Participants

Kathleen Skelding-Dills

Date: _____

Dear: _____,

Thank you so much for agreeing to participate in an interview. As we discussed in our phone conversation, I am doing a qualitative case study on the essential components of Response to Intervention (RtI). In practice, RtI has been used as an early intervention strategy used for detection, prevention, and support system that identifies struggling students and assists them before they fall behind. There is research to support the implementation of RtI in elementary schools; however, there is very little research of the implementation of RtI at the secondary level. The purpose of my study will be to investigate RtI to determine what the essential components of RtI used in your school/school division and are the essential components of RtI the same when implemented in an elementary school and a high school.

To assist with answering these questions, you have agreed to participate in an interview process. As we discussed, the initial interview will take approximately 2 hours. Once you review the consent form, I will contact you to schedule the time and date. Once you have signed the consent and I complete the initial interview, I will take the information that we discussed and transcribed them into research notes. I would like to then schedule a follow up interview with you to ask any questions that may transpire out of our first conversation. The audiotapes ad

transcriptions will be stored securely in the researcher's home. The information will be transcribed into research notes. I would like to schedule a brief meeting with you to review the research notes.

When I report the data from all of my interviews, the names of the interviewees will not be used. Each person will have a letter that will be used in a coded system. Your professional title will be used; however, the name of the school division/base school will be changed to assist with privacy and confidentiality. However, if you wish to be quoted by name on anything in particular, I am also happy to accommodate this request. Please know though that you do not have to answer any questions or discuss any topics that make you feel uncomfortable.

Should you decide at any time during the interview or discussion that you no longer wish to participate, you may withdraw your consent without prejudice. There are no direct costs involved with participation. There are also no direct benefits to you. However, your participation will contribute to the professional understanding of the implementation of RtI in the high schools.

You may ask more questions about the study at any time. Please contact Kathleen Skelding-Dills by email or you may call me at 540-400-4737.

Thank you

APPENDIX F
COPY OF QUESTIONS

COPY OF QUESTIONS

Interview
Interview Questions

Good morning and thank you for participating in this interview. To get started, I wanted to share with you Response to Intervention's (RtI) originally designed was implemented as a kindergarten through third grade intervention for struggling readers; therefore it is difficult to conceptualize RtI as an intervention model to be used for high school as well. Today, I would like to talk with you about your thoughts on what you feel are the essential components of RtI are and how you visualize the implementation of RtI in a secondary setting such as Buster High School.

1. What is your position in the school/school district?
2. Can you please define Response to Intervention as you understand it?
3. What do you think is the basic principle is for implementing RtI?
4. Do you think that the implementation of RtI at the high school level is a fundamental change (cultural, climate)?
5. If yes, how do you see it as a fundamental change?
6. In what areas are RtI used (academic, behavioral, break out the content area).
7. How many Tiered levels does the high school utilize?
8. Can you tell me about each level? Describe for me what is done in each level? Name of each level?
9. What universal screening tools are used through RtI framework?
10. Who is on the "Problem Solving Team"? How was this decided?
11. Define "struggling student".
12. How do you identify the struggling students who are referred to be involved with the RtI framework for intervention?

13. What do you use to collect data for the team to review?
14. How are the scientifically based interventions developed and implemented?
15. How do you determine when the interventions should be intensified?
16. How is the intervention strategies implemented?
17. How do you monitor progress?
18. What are the factors that you use to determine if a student should move from tier 1=tier 2=tier 3.
19. What scientifically based curriculum is used in your high school?
20. When is a student referred for Special Education eligibility?
21. How often does a student receive intervention?
22. How long do you monitor the intervention?
23. How do you measure student success?
24. Who benefits from the implementation of RtI? Who are the stakeholders?
25. What do you feel should be changed in regards to the implementation of RtI at the secondary level?
26. What professional development has your high school had on RtI?
27. What is your SBO school wide professional plan for RtI?
28. Does your district show commitment and support for implementation of RtI?
29. Has the implementation of RtI improved your dropout rate?
30. Has the implementation of RtI in high schools assisted with identifying students with Specific Learning Disabilities?
31. Has the implementation of RtI in high schools reduced the number of student/class failures?

32. Has the implementation of RtI in high schools reduced the number of students dropping out?

33. Do you feel that RtI is successful? Can you tell me why or why not?

34. Do you have anything further to add about RtI?

Researcher's Notes from Interview

Date:

Person:

Notes:

APPENDIX G
REFERRAL PACKET

Referral Packet

Student ID:
PTE Number:
Student Testing ID:
Date of Birth:



Meeting Notice

To: _____ Letter Dates: _____
Student's Name: _____ Date Sent To Participants: _____

This is to notify you that a team meeting has been scheduled for the above student. Your participation and attendance at this meeting are very important. The purpose of this meeting is to:

This meeting has been scheduled for: Date _____ Time _____ Location _____

The following are invited to attend and participate in the meeting:

The parent/adult student or school division may invite individuals who have knowledge or special expertise regarding the student, including related services personnel, to participate. The determination of the knowledge or special expertise shall be made by the person/party extending the invitation. If you, the parent or adult student, are bringing other individuals to the meeting, please let us know. This will ensure that the meeting space will accommodate all team members.

If you have any questions or would like additional information or assistance to help you prepare for this meeting, please contact _____ at _____ email _____

To the Parent/Student

Student: _____ Date of Meeting: _____

Please check your choice. Detach and return this section to _____ Fax: _____

- _____ I, the parent, _____ I, the student, will attend the meeting as scheduled.
- _____ I, the parent, _____ I, the student, cannot attend the meeting as scheduled. Please consider rescheduling this meeting.
- _____ I, the parent, _____ I, the student, do not wish to attend this meeting even though I understand the importance of attending. You may hold this meeting in my absence.
- _____ I, the parent, _____ I, the student, would like my preferences, interests, and concerns shared with the team.
- _____ I will provide my input to you by: _____ mail, _____ telephone, _____ or other means: _____ prior to the meeting.

I will need the following accommodations for this meeting:

Parent Signature _____ Date _____ Date received by the school _____



Student ID:
FTE Number:
Student Testing ID:
Date of Birth:

Meeting Minutes

Student's Name: _____ Student No: _____
First Middle Last

Date of Referral: _____ Race: _____

Parent Notification:

Telephone Date _____ By Whom _____
 Letter Date(s) _____ Conference Date _____

Contact Name _____ Work Phone _____

Contact Name _____ Work Phone _____

Home Address _____ Home Phone _____

Date of Birth _____ School _____ Grade _____

*Family Doctor or Pediatrician _____

*Clinic Affiliation _____

Child Study Committee Meeting Date: _____

Referring Source _____ Relationship _____

I. Reason for request: (attach copy of the interim reports and current report card)

II. Summary of Strategies used to date and the effectiveness of strategies on student's achievement and/or adjustment
(include input from parents and those persons who have worked with the student)

III. Present instruction levels:

Reading:

Math:

Written Language:

Strengths:

Needs:

IV. Minutes

V. Goals and Strategies

Date	Area Specific Goals and Strategies	Method of Evaluation	Personnel Responsible

VI. Recommendation _____

VII. Individual responsible for parent notification (if not present at meeting) _____

Meeting Minutes

Page 2

Student ID:
FTE Number:
Student Testing ID:
Date of Birth:



Meeting Minutes

VIII. Individual designated to inform referring source (if not present at meeting) _____
IX. Projected Date of Review _____ Case Manager _____

Child Study Committee Members

Date	Date

Meeting Minutes



Page 3

Student ID:
FTE Number:
Student Testing ID:
Date of Birth:

Medical Permission

Student: _____ Date of Birth: _____
School: _____

Dear Parents:

Medical Examinations are required for some of the students being evaluated to determine eligibility for special education or Section 504 determination.

If your child has a significant medical history, please utilize the Release/ Exchange of Confidential Information form to enable your physician to communicate and share records with our agency.

If your child has HAD a physical within the past twelve (12) months, this may be used as the medical component. Please complete Part I of the Health Information Form (MCH-213-D) and have your physician complete Part II of this form or send a copy of the complete physical to your child's school.

Sincerely,

Principal or Designee

If your child requires a new physical, you may have your child examined by your own physician at your expense or by a _____ no expense to you. Please check the option you prefer, sign and date.

- I prefer to have my own physician examine my child at my own expense.
- I hereby give permission to _____ provide a complete medical examination for my child at no expense to me. I understand that I am responsible to schedule my appointment and transportation and transport my child to the physician.

Parent / Guardian / Surrogate

Date

Return to Clinic Attendant/School Nurse at your child's school as soon as possible

Student ID:
FTE Number:
Student Testing ID:
Date of Birth:



Prior Notice

Student's Name: _____

Student's Number: _____

Date of Birth: _____

Dear Parent(s):

 required to provide written notice to parents when the schools propose or refuse to initiate a change in the identification, evaluation, or educational placement for the provision of a free appropriate public education (FAPE) for your child.

The following meeting was held regarding your child:

Date of Meeting: _____

Nature of Meeting:

- Child Study
- Eligibility
- Plan

1. Actions proposed or refused by 

2. Rationale for why actions were proposed or refused:

3. Other options considered:

4. Reason other options were rejected:

5. Description of any assessment data or reports used to make the decision:

6. Other factors relevant to proposal or refusal:

7. Follow-up meeting date, if appropriate: _____

