EDUCATOR PERCEPTIONS OF AN APPLIED RTI MODEL: SCHOOL-LEVEL CONDITIONS THAT SUPPORT OR INHIBIT EFFECTIVE RTI IMPLEMENTATION

A Thesis Presented
by
Marian Gonzales

to
The School of Education

In partial fulfillment of the requirements for the degree of
Doctor of Education

in the field of
Education

College of Professional Studies
Northeastern University Boston,
Massachusetts
February 2014
Abstract

This study uses educational change theories and a case study research methodology to describe educator perceptions of a Response to Intervention (RTI) model following ongoing implementation in one rural Alaskan elementary school. Informed by educational change literature, the research questions were developed to explore and describe current cultural and structural conditions that support or inhibit effective school-level RTI implementation. This study is guided by three research questions: (1) What are educators’ understandings, perceptions of value, and efficacy beliefs associated with the RTI model and its essential components as applied within one rural Alaskan elementary school?; (2) What are educators’ perceptions of essential RTI structures currently in place within the school?; and (3) How do current cultural conditions, as indicated by educator perceptions, support or inhibit effective application of RTI within the context of the school?

The findings of this study suggest that educator understanding, beliefs, and perceptions of RTI’s essential elements can be used as indicators of contextual conditions that either facilitate or challenge achievement of desired implementation outcomes. This study identified a number of contextual themes perceived to facilitate or challenge effective implementation of instruction, assessment, and data based decision-making systems within the RTI model. The results provide insight for implementers responsible for RTI implementation or improvement. The findings also add to the growing body of research knowledge on effective RTI application and maintenance within individual schools of similar context.

Keywords: Response to Intervention, RTI, educator perceptions, understanding, beliefs, cultural conditions, structural conditions, implementation, application, maintenance
Acknowledgements

I am grateful to my family. To my husband Wayne, I appreciate the encouragement and support you provided throughout all my educational pursuits over the years. I know we can now look forward to more walks, fishing, traveling, and renovations. To Graham, Kyle, Jim, and Zoe, I hope you see through my pursuits that it is possible to find meaning and satisfaction in the work you enjoy.
# Table of Contents

**Abstract**  .................................................................................................................. 2  
**Acknowledgements** .................................................................................................. 3  
**Table of Contents**  ..................................................................................................... 4  
**List of Tables**  .......................................................................................................... 7  

**Chapter I: Introduction**  .......................................................................................... 7  
  Problem of Practice ......................................................................................................... 7  
  Significance .................................................................................................................... 11  
  Practical Goals ............................................................................................................. 13  
  Intellectual Goals ......................................................................................................... 14  
  Research Questions ..................................................................................................... 14  
  Theoretical Framework ............................................................................................... 14  
  Educational Change Theory ....................................................................................... 15  
    Significant Reform .................................................................................................. 16  
    Educators as Critical Actors ................................................................................... 16  
    Educator Capacity for Change ............................................................................... 17  
    Building Individual and Collective Capacity ....................................................... 21  
    Implementation Approaches ................................................................................... 25  
    Contextual Complexity in Implementation ........................................................... 32  
  Implications for Change Leadership ......................................................................... 32  
  Summary ..................................................................................................................... 34  

**Chapter II: Literature Review**  ............................................................................... 35  
  The RTI Model ........................................................................................................... 35  
  Student and System-Level Outcomes ....................................................................... 38  
  Impact of RTI Implementation ................................................................................... 40  
  Implications for Change Leadership ......................................................................... 54  
  Summary ..................................................................................................................... 59  

**Chapter III: Methodology**  ................................................................................... 60  
  Research Questions ..................................................................................................... 60  
  Rationale for Qualitative Case Study Design ......................................................... 61  
  Participants .................................................................................................................. 64  
  Data Collection .......................................................................................................... 67  
  Data Analysis ............................................................................................................. 68  
  Validity and Credibility .............................................................................................. 69  
  Protection of Human Subjects .................................................................................... 72  
  Summary ..................................................................................................................... 73  

**Chapter IV: Report of Research Results**  ............................................................... 74  
  Introduction .................................................................................................................. 74  
  Study Site .................................................................................................................... 75
Findings ................................................................................................................... 79

Research Question 1: What are educator understandings, perceptions of value, and
efficacy beliefs related to the RTI model in general as applied within one rural Alaskan
elementary school ................................................................. 79
Summary ......................................................................................... 94

Research Question 2: What are educators’ perceptions of essential RTI structures as
currently implemented within the school? ...................................................... 96
Summary ...................................................................................... 104

Research Question 3: How do current cultural conditions, as indicated by educator
perceptions, support or inhibit effective application of RTI within the context of the
school? ....................................................................................... 105
Summary ....................................................................................... 119

Summary of Research Results ............................................................. 120

Chapter V: Summary of Findings and Recommendations .................... 121
Revisiting the Problem of Practice ....................................................... 121
Research Questions ........................................................................ 123
Summary of Findings .................................................................... 123
Discussion of Major Findings ............................................................. 125
Findings in Relation to the Theoretical Framework ............................. 129
Findings in Relation to the Literature Review .................................... 132
  Desired Implementation Outcomes .................................................. 132
  RTI as a General Education Model ................................................ 133
  RTI and Special Education Eligibility .............................................. 135
  RTI and Educator Efficacy Beliefs .................................................. 138
  Structural Supports and Challenges ................................................. 146
  Cultural Supports and Challenges .................................................. 150
  Role Conflict and Confusion .......................................................... 157
  Leadership .................................................................................... 159
  Implementation Control ................................................................. 160
Limitations ...................................................................................... 162
Conclusion ....................................................................................... 163

References ....................................................................................... 166

Appendix A: Professional Development: 2012-2013 .......................... 178
Appendix B: Focus Group and Individual Interview Guiding Questions ...................................................... 180
Appendix C: Superintendent of Schools Permission to Conduct Research .................................................. 182
Appendix D: APC President Permission to Conduct Research .................. 184
Appendix E: Educator Signed Consent Form ................................. 186
List of Tables

Table 1: Themes in relationship to the question: What are educator understandings, perceptions of value, and efficacy beliefs related to the RTI model in general as applied within one rural Alaskan elementary school? ............................................. 79

Table 2: Themes in relationship to the question: What are educators’ perceptions of essential RTI structures as currently implemented within the school? ............................................. 96

Table 3: Themes in relationship to the question: How do current cultural conditions, as indicated by educator perceptions, support or inhibit effective application of RTI within the context of the school? .......................................................... 106

Table 4: Major themes identified by paraprofessionals, classroom teachers, and certified support educators ................................................................. 126
Chapter I: Introduction

Problem of Practice

Educational reform has been a driving force of federal legislation since the publication of *A Nation at Risk* in 1983. Response to Intervention (RTI) is a continuation of such efforts. RTI development began with the reauthorization of the Individuals with Disabilities Education Act (IDEIA) of 2004. The stated academic goals of the model are twofold: (1) early intervention and prevention of later and more severe academic deficits, and (2) identification of learning disabled students who do not respond to a series of increasingly more intensive general education interventions (Fuchs & Fuchs, 2007; Bradley, Danielson, & Doolittle, 2007; Collier, 2012). Studies focused on the impact of RTI cite emerging evidence regarding the effectiveness of the model and its individual components (Fixsen, Blase, Horner, & Sugai, 2009). For example, RTI has been attributed to a reduction in referrals for special education (Burns, Appleton, & Stehower, 2005; Bender & Shores, 2012). Likewise, essential RTI components, like problem-solving teams, have been credited with providing needed services for a larger number of struggling students in general education settings (Kovaleski & Glew, 2006). RTI has also been described as a more humane and more cost effective means of serving students than the more traditional discrepancy model, sometimes referred to as a *wait to fail* method for special education eligibility (Bradley et al., 2007; Collier, 2012).

Despite the potential that RTI holds for earlier identification and support of students who experience learning difficulties and disabilities (Coleman, Buysse, & Neitzel, 2006; Hughes & Dexter, 2011; Hughes & Dexter, n.d.), inconsistent implementation can diminish the model’s effectiveness, eroding potential benefits students may experience through participation in more effective intervention services (Fuchs & Deshler, 2007). Specifically, while researchers and
practitioners believe RTI has the potential to improve learning for a greater number of students (Burns et al., 2005; Coleman et al., 2006; Hughes & Dexter, 2011, Hughes & Dexter, n.d.), applying the components of the model with fidelity is considered essential to its success (Fuchs & Deshler, 2007; National Center for Learning Disabilities, 2012).

At the same time, local contextual factors can threaten fidelity. For example, there is a marked potential for confusion among school-level educators regarding the purpose and goals of the model. Because RTI has its origins in special education reform legislation, some general practitioners may perceive RTI as primarily a special education reform effort. However, while one of the goals of RTI reform is to provide a more comprehensive method of identifying students with specific learning disabilities (Bender & Shores, 2012), the model has been more broadly defined as a general education initiative. In all variations of the model, identification and intervention services take place primarily within the general education setting. Early identification and intervention for improved instruction and services is the primary purpose for implementing RTI in the general education setting. The goal is to limit or prevent academic failure for students experiencing learning difficulties (Learning Disabilities Association of America, 2006; Bender & Shores, 2012). In all RTI models, students first receive targeted instruction provided primarily by general educators. The students’ response to this instruction is then used to help rule out or identify the existence of a learning disability (Bradley et al. 2007; Fuchs & Fuchs, 2007; Zirkel & Thomas, 2010; Bender & Shores, 2012; Collier, 2012). General educators who perceive the model to be primarily a special education program may fail to realize or understand the important role they play. Incoherence for RTI as a general education model can make it difficult to achieve system-wide consistency necessary for success within schools.
A lack of detailed federal and state guidelines for implementation of RTI is also problematic (Bradley et al., 2007; Collier, 2012). Legislation does not require specific assessment and instructional programs or strategies. It also does not mandate how the model will be implemented (Greenfield et al., 2010). The U.S. Department of Education likewise does not endorse any one model (Bradley et al., 2007) and states like Alaska provide only general guidelines that outline what RTI is and what it may look like (Alaska Department of Education, 2009). On the one hand, RTI legislation provides local implementers a great deal of latitude in customizing the model (Greenfield, Rinaldi, Proctor, & Cardarelli, 2010; Zirkel & Thomas, 2010; Bender & Shores, 2012). On the other, the lack of specific federal or state guidance leaves local-level implementers with the responsibility of ensuring the components of the model are well aligned with the needs of the school and effectively applied. Local implementers must ensure that educators understand the purpose and goals of the model and that they have acquired the capacity needed to systematically apply the model’s essential components across the school.

Local implementers looking to the RTI literature for guidance will find that the variety and complexity of models presented can pose a further challenge to achieving effective application (Fuchs & Fuchs, 2006; Fuchs & Fuchs, 2007; Fuchs & Deschler, 2007; Stoehr, Banks, & Allen, 2011; Bender & Shores, 2012; Collier). Meanwhile, perhaps encouraged by the prospect of providing earlier and more systematic regular-education intervention services or spurred on by a financial incentive to reduce special education referrals, a significant number of states, districts and schools continue to move forward with implementation of at least some of the model’s components (Fuchs & Fuchs, 2006; Jenkins & Hudson, 2007; Greenfield et al., 2010; National Center on Response to Intervention, 2011; Stoehr et al., 2011).
Because successful implementation of the RTI model is reliant on developing school-level educators’ shared understanding, capacity, and responsibility for consistently applying the model’s essential components; implementers will likely benefit from improved insight into educators’ understanding, perceptions of value, and efficacy beliefs associated with ongoing implementation of the model within the real context of a school. It would also be beneficial to consider these perceptions as indicators of contextual conditions that support or inhibit effective implementation. However, while there is presently a wealth of theoretical literature describing what RTI is and what it should look like in concept, there is relatively little research examining educator perceptions associated with ongoing implementation efforts. There is also limited research available examining school-level educator perceptions of the implemented model as indicators of contextual conditions that support or challenge effective application of the model. At the same time, such information could support more effective implementation at the school level (Noell, 2012).

The researcher addressed this problem of practice through a research project that described the understandings, perceptions of value, and efficacy beliefs of educators attempting to enact the model’s essential assessment and instructional components within one rural Alaskan elementary school. Educators’ perceptions of contextual factors that facilitate or inhibit effective application were also considered. Insights yielded from the study may better equip effective local-level implementation efforts (Hughes & Dexter, 2011; Hughes & Dexter, n.d.) and inform future research concerned with improving the effectiveness of RTI implementation within the context of existing school environments.
Significance

While RTI has the potential to improve student academic achievement rates for a greater number of struggling learners (Burns et al., 2005; Bender & Shores, 2012), the success of the model depends on its effective application at the school level. School-level educators must have a clear and well-fixed understanding of the purpose and goals of the model and its components. Educators must also possess the collective capacity for effective application of the components. Unfortunately, challenges to developing a shared understanding and consistent, systematic application of the model can arise due to variation and complexity of the model’s components, limited federal and state guidelines, or ill-suited implementation efforts (Burns et al., 2005; Harlacher & Siler, 2011; Bender & Shores, 2012). Similarly, the complexity of RTI components increases the possibility that implementation efforts will leave educators feeling overwhelmed and underprepared. This again endangers effective application of the model within the school. In the least, implementation efforts that do not take into account how educators’ experiences and associated efficacy beliefs, understanding, perceptions of value, or perceptions of implementation support run the risk of implementing inadequate iterations of the model. Ultimately, local-level implementers who do not ensure that educators develop a shared understanding and capacity as a part of the implementation process run the risk of diminishing the commitment and knowledge needed to work through inevitable local roadblocks toward successful application of the model.

This problem is significant within both the context of the proposed research site and also the broader community of RTI practice and research. In the broader context of planned change and education reform literature, confusion and negative efficacy beliefs are factors often described as challenges to effective implementation and are commonly associated with educator
withdrawal and resistance leading to the failure of past educational reform efforts (Hargreaves, 2004; Fullan, 2007; Piderit, 2009; Wedell, 2009; Johnson et al., 2011).

Locally, it was an opportune time to examine current educator perceptions, beliefs, and values associated with RTI at the study site. Implementation efforts at the school were still ongoing. While the district initiated efforts to develop and implement common benchmark and progress monitoring procedures and protocols in 2007, individual schools were responsible for independently selecting and introducing new intervention programs, developing intervention schedules, and assigning and organizing personnel who would be responsible for assessing, data-based decision-making, and instruction within the model’s three tiers. Between 2007 and 2011, the special education teacher was primarily responsible for organizing benchmark and progress monitoring assessments, making decisions about which instructional interventions students would receive, and working with the paraprofessionals to coordinate and provide tiered instruction. Most intervention services were then provided by the special education teacher or paraprofessionals.

As the new school year began in the fall of 2012, further efforts were made to include classroom teachers more completely in the processes of data collection and analysis, data-based decision making, program planning, and intervention delivery. Efforts were also made to improve classroom teacher and paraprofessional understanding of the purpose, goals, and protocols associated with the assessment and instructional components within the general education setting. Instructional programs and strategies, once available only to the special education teacher and paraprofessionals for use outside of the classroom, were being newly provided to classroom teachers for use during in-class small group and differentiated instruction times. Prior to the fall of 2012, reading and math were the only two subject areas addressed
through the RTI model within the school. However, as the new school year began, additional efforts were made to include writing as a subject area to be addressed within the model. New efforts were also made to more systematically provide students with research-based Tier 2 interventions within the classroom. Thus, as implementation efforts continued, an exploration and description of educator understandings, perceptions of value, perceptions of implementation support, and efficacy beliefs served to provide greater insight into local conditions that may be affecting educators’ commitment and capacity to effectively apply the model’s essential components.

The researcher conducted a case study to explore and describe the current impact of RTI implementation on building-level educators’ understandings, perceptions of value, and efficacy beliefs related to the model and to the current assessment, decision-making, and instructional structures within one rural Alaskan elementary charter school. The findings were considered as indicators for further implementation leadership. Although the unique nature of the study site did not allow for the generalizability of findings, researchers may consider the results as indicators for future research and practice focused on understanding and improving RTI implementation when applied within the unique contexts of schools.

**Practical Goals**

One goal of the research was to utilize educator feedback as part of an iterative RTI implementation process at the proposed study site. This included utilizing educator perceptions to gain insight into current cultural and structural conditions supporting or challenging educator capacities to effectively apply the model’s essential components within the current context of the school. A second goal of the research was to consider ongoing RTI implementation strategies
that may more appropriately address specific cultural and structural conditions found within
school context.

**Intellectual Goals**

The first intellectual goal was to explore and describe educator understanding, beliefs,
and perceptions of the RTI model as implemented within one rural Alaskan elementary school.
The second goal was to examine participant understandings, beliefs, and perceptions as
indicators of structural or cultural conditions supporting or inhibiting successful application and
maintenance of the RTI model’s essential components.

**Research Questions**

1. What are educators’ understandings, perceptions of value, and efficacy beliefs related
to the RTI model and its essential components as applied within one rural Alaskan
   elementary school?
2. What are educators’ perceptions of essential RTI structures as currently implemented
   within the school?
3. How do current cultural conditions, as indicated by educator perceptions, support or
   inhibit effective application of RTI within the context of the school?

**Theoretical Framework**

RTI is an education reform initiated through legislative policy. Legislation does require
schools to use research-based assessment and instructional practices (Bender & Shores, 2012;
Collier, 2012). However, it does not mandate specific assessment and instructional programs or
strategies nor does it prescribe how the model will be implemented (Greenfield et al., 2010).
Specific programming and implementation decisions are left up to local district and school
administrators. Because educational change theories serve to explicate the complex and
unpredictable nature of reform implementation within the context of an already existing school environment, they will provide a useful lens by which to explore and describe educator perceptions and to examine the structural and cultural conditions associated with ongoing RTI reform implementation within the context of one elementary school.

Within the current research, educational change theories were used to inform an analysis of existing contextual conditions that may serve to facilitate or inhibit effective application of the model’s essential components within one rural Alaskan elementary school. Specifically, educational change theories provided a useful framework for gathering, organizing, and analyzing data on educator understandings, beliefs, and perceptions of the RTI model and its essential components as implemented within the school context. Finally, educational change theories served to inform consideration of the implications for further leadership practice and research. The aim of the review was fourfold: (1) to shed light on the nature and purpose of significant school reform, (2) to explicate the critical role educator commitment, engagement, and capacity play in school reform efforts, (3) to shed light on how local conditions that result from varied implementation efforts can affect educator understandings, beliefs, and perceptions of reform, and 4) to inform the design and analysis of the proposed study.

**Educational Change Theory**

Educational change theory is founded on the premise that change processes, practices, and initiatives will alter teaching and learning in schools (Hargreaves, Lieberman, Fullan, & Hopkins, 2005). While some theories focus on explaining the principles and goals of educational reform and corresponding implementation efforts, others focus on examining the processes, outcomes, and impact of initiating change innovations within schools (Fullan, 2000; Hargreaves et al. 2005). Most theories reviewed in this paper describe educational change as a necessary
process of ongoing improvement and learning reliant on knowledgeable, adaptive, collaborative and responsive educators and change leaders.

**Significant reform.** Significant reform is the primary goal of educational change. Significant reform is defined as a systematic, whole-school, or school-wide change that permeates the school’s operating core (Sergiovanni, 2005; Fullan, 2007). Significant reforms fundamentally shift the way educators think and act professionally about teaching and learning (Sergiovanni, 2005; Fullan, 2007). Such reforms require educators to collectively develop new skills, learn new teaching approaches, and expand conceptual understandings “… about what and why something should be done, and to what end,” (Fullan, 2007, p. 36). In order to successfully achieve significant reform in schools, the desired processes and practices of reform must permeate the school’s teaching force so that the mindset, skills, and knowledge needed to enact the essential elements of the reform becomes a part of the school’s normative culture and operations (Sergiovanni, 2005; Fullan, 2007). Significant reforms, according to Fullan (1992), simultaneously develop and connect the main system components of “curriculum, teaching and teacher development, community, student support systems, and so on…” (p. 751). Due to their highly complex nature, significant reforms are continuous educational change propositions (Sergiovanni, 2005; Fullan, 2007).

**Educators as critical actors.** What educators believe, think, and understand about teaching and learning influences their professional actions (Fullan, 1994, 2000; Darling-Hammond, 2005; Sergiovanni, 2005). In organizations, certain individuals whose commitment is essential to the success of proposed organizational changes are considered critical actors (Brager & Holloway, 1992). In schools, where reforms require new conceptions of instruction and new forms of professionalism, educators take on this role (Fullan, 2003, 2005; Darling-
Hammond, 2005; Sergiovanni, 2005). As Levin (2005) puts it, educators have to be willing to “get on board and stay committed over time,” (p. 266). In order to garner commitment, therefore, reform is not something that can be imposed upon educators (Sergiovanni, 2005; Fullan, 2007; Levin, 2009; Wedell, 2009).

**Educator capacity for change.** Educator perspectives (understandings, beliefs, and perceptions) about reform are key factors in generating the capacity and commitment needed to enact desired changes of educational reform (Leithwood, Menzies, & Jantzi, 1994; Hargreaves, 2004; Darling-Hammond, 2005; Sergiovanni, 2005; Fullan, 2007). As Leithwood et al. observed of school-wide reforms two decades ago, “To stand much chance of success, curriculum reforms associated with most current school restructuring efforts will require high levels of commitment to change on the part of many teachers. And such commitment cannot be assumed; it must be earned,” (p. 40). Similar sentiments are reflected in the more recent scholarly works of Darling-Hammond (2005), Sergiovanni (2005), and Fullan (2007). Leithwood et al. define educator commitment to change as, “teachers' desires to be involved or to identify with efforts to improve school and classroom structures and processes,” (p. 57). Likewise, educators must possess the understanding, knowledge, and skills needed to enact a desired reform innovation (Sergiovanni, 2005; Fullan, 2007). Thus efficacy beliefs, perceptions of reform value and implementation support along with educator understanding, knowledge, and skills are conditions that affect educator motivation and capacity to enact a desired reform (Leithwood et al.; Hargreaves, 2004; Darling-Hammond, 2005; Sergiovanni, 2005; Fullan, 2007).

**Efficacy beliefs.** Efficacy beliefs fuel educator commitment (Leithwood et al., 1994). Educators must believe themselves to be capable of achieving the educational goals set by an implemented reform. Feeling successful in initial implementation efforts is one of the conditions
that generates positive efficacy. Citing Albert Bandura, Leithwood et al. point out that one the most important types of capacity-beliefs associated with commitment to a reform innovation is positive self-efficacy. Educators will be more success oriented and will increase their efforts in the face of performance difficulties, if they believe themselves capable of achieving the reform goal(s). Educators with positive self-efficacy respond to potentially threatening tasks, such as implementation change, with less anxiety and a more positive problem-solving attitude (Leithwood et al., 1994). Leithwood et al. believe that positive self-efficacy also contributes to a positive sense of collective efficacy.

**Context beliefs.** Educators’ commitment to reform is also fueled by perceptions of coherence between personal and professional goals and the goals of the innovation (Leithwood et al., 1994; Hargreaves, 2004). Reform goals considered by educators to be more closely aligned with personal or professional “aspirations, needs, [and] wants,” (Leithwood et al., 1994, p. 43) are more highly valued (Leithwood et al., 1994; Hargreaves, 2004) and generate greater feelings of personal desire and commitment to achieve the reform effort (Leithwood et al., 1994; Hargreaves, 2004; Sergiovanni, 2005; Fullan, 2007; 2009).

Moral commitment, the obligation to improve student learning, is a primary educational responsibility, reform goal, and object of educator commitment (Leithwood et al., 1994; Sergiovanni, 2005; Fullan, 2007). Thus, in order to generate motivation and build capacity for reform, educators must understand how the reform initiative will help them to achieve their responsibility to moral commitment. As Fullan puts it, educators must understand “…conceptually what and why something should be done, and to what end,” (Fullan, 2007, p. 36). Educators must therefore understand the goals of the reform, understand the processes and practices being put in place to achieve those goals, and believe that a reform makes sense and
adds value to practices of teaching and learning within the context of their classroom and school (Evans, 1996; Hargreaves, 2004; Darling-Hammond, 2005; Sergiovanni, 2005; Dufour, 2007; Fullan, 2007). Likewise, educators will be moved to support a desired reform innovation only when they understand or appreciate that there is “a significant gap between their current levels of practice and those implied by the changes being proposed within their schools” (Leithwood et al., 1994, p. 45). In other words, educator motivation to enact a reform is dependent on perceptions that the innovation can improve their professional ability to ameliorate student learning.

A school’s culture and structure make up existing contextual conditions within which reforms are introduced (Leithwood et al., 1994; Bolman & Deal, 2003). Boyd-Dimock (1992) defined school structure as “… aspects of the school that are not living, but nevertheless affect its inhabitants. The resources available, policies and rules, and size of the school are examples of this dimension of school context…,” (Creating a Context for Change, para. 4). The school’s culture makes up the second contextual element. The culture is made up of the beliefs, attitudes, relationships, and norms of the educators within and between schools (Boyd-Dimmock, 1992). A school’s contextual conditions modify and are modified by the process of reform implementation (Boyd-Dimock, 1992). Educator perceptions of a school’s contextual conditions in relation to an implemented reform may either facilitate or inhibit educator motivation, commitment, and effort to implement a particular reform (Leithwood et al., 1994; Hargreaves, 2004). For example, Leithwood et al. believe that negative beliefs or perceptions about contextual conditions can manifest into negative perceptions of the change initiative.

Leithwood et al. (1994) outline some of the contextual conditions that generate positive perceptions as well as motivation and commitment for a particular reform effort:
1. Teachers' perceptions of an overall school culture and direction that is compatible with their personal goals and not overly controlling of what they do and when they do it (feelings of discretion)…

2. Teachers' perceptions that their working conditions permit them to accomplish their school's change initiative and that information is available to them about the expectations of relevant others (e.g., principals, superintendents), constraints on what is possible, policies or regulations that must be considered and the like (Kushman, 1992; Reyes et al., 1989; Tarter et al., 1989a).

3. Teachers' perceptions that the human and material resources that they will need to achieve their goals for change are available (Leithwood et al., 1992; Louis & Smith, 1991).

4. Teachers' perceptions that the interpersonal climate of the school, provided by leaders and teaching colleagues, is a supportive, caring, and trusting one… (Leithwood et al., 1992, p. 48)

In summary, positive contextual conditions help develop clarity for the specific goals of the change effort and improve educators’ ability to cope with and adapt to efforts meant to improve understanding and the knowledge and skills needed to enact the innovation (Leithwood et al., 1994; Fullan, 2007). Negative perceptions of contextual conditions can in turn generate negative perceptions of the reform that diminish educator motivation and commitment to support the effort (Leithwood et al., 1994; Hargreaves, 2004). As Boyd-Dimock (1992) states:

Teacher concerns about how change will affect them personally and the practicality of change are areas to be addressed by leaders… Taking time to ensure that the reasons for the change, the practicality of this program for the specific problem being addressed, and
the philosophical basis for the effort are well understood by everyone involved will enhance the likelihood of lasting implementation. (Attitudes, para. 3)

In order to build educator capacity and commitment for reform, those leading the implementation must consider whether the school’s culture and structure support effective application of the reform innovation (Sergiovanni, 2005; Fullan, 2007; Fullan & Hargreaves, 2008; Darling-Hammond, 2009).

**Building individual and collective capacity.** Some cultural reform strategies build educators’ individual and collective capacity to cope with new reform structures (Fullan, 1992). Likewise, some restructuring processes make it easier to accomplish the necessary tasks, to engage in the new professional relationships, and to accomplish the different demands generated by significant reform efforts (Dufour, 2007). Successful restructuring creates the framework needed to “change the way teaching and learning occur” (Elmore, 1991, p. 11). For example, supportive structures can move educators away from norms of external accountability (such as summative measures of progress) to those that generate collective professional responsibility for improved student learning (Fullan, 2007; Darling-Hammond, 2009). Restructuring can also move teachers away from prescriptive or personal methods of responding to student needs (Darling-Hammond, 2009) to more collaboratively and professionally-oriented methods of inquiry and problem-solving (Sergiovanni, 2005; Fullan, 2007; Darling-Hammond, 2009).

**Cultural support.** Taking a cultural approach to reform implementation means changing the ways in which people perceive their behavior and the ways in which they relate to one another. When the cultural objectives of a whole-school reform innovation are successful, the schools’ operating core will acquire new teaching and learning orientations more consistent with
significant reform innovation objectives (Sergiovanni, 2005; Fullan, 2009; Darling-Hammond, 2009). In defining a professional organizational culture in general, Morgan (2006) says:

Shared values, shared beliefs, shared meaning, shared understanding, and shared sense making are all different ways of describing culture. In talking about culture we are really talking about a process of reality construction that allows people to see and understand particular events, actions, objects, utterances, or situations in distinctive ways. These patterns of understanding help us to cope with the situations being encountered and also provide a basis for making our own behavior sensible and meaningful. (p. 134)

For Sergiovanni (2005) the school’s culture is made up of a “network of assumptions, beliefs, regularities and traditions that comprise norms which define, and then provide, meaning for teachers” (p. 297). Similarly, for Bush (2003), an organization’s culture is comprised of members’ ideas and value-preferences that influence how people behave and how they view the behavior of others. The process of re-culturing involves building new conceptions about instruction (e.g., teaching for understanding and using new forms of assessment) and new forms of professionalism (e.g., building commitment to continuous learning and to problem-solving through collaboration) (Fullan, 2007). This can mean expanding educator insights about teaching and learning (Sergiovanni, 2005; Fullan, 2007). It can also mean challenging educators to adopt new values, beliefs, and norms for teaching, learning, and professional interactions aimed at improvement (Sergiovanni, 2005; Fullan, 2007; Darling-Hammond, 2009). For some schools, re-culturing will necessitate overcoming unhealthy cultures of autonomy and individualism where professional isolation and program fragmentation is the norm (Fullan, 2005; Fullan & Hargreaves, 2008). It may also require replacing cultures of bureaucracy where norms of prescribed or standardized teaching and learning exist (Darling-Hammond, 2009) or where
little attention is given to pedagogical and assessment inquiry (Fullan, 2000, 2007). In sum, for whole-school reforms that rely on collective coherence and sustained motivation to succeed, cultures of professionalism help to generate the needed capacity for commitment by creating norms of shared professional understanding, knowledge, collegial reflection and problem-solving that make transparent the obligations and collective commitments to moral purpose (Darling-Hammond, 2005; Sergiovanni, 2005; Fullan, 2007).

**Indicators of personal and cultural capacity.** Educator perceptions can be indicators of a reform’s individual and cultural impacts (Evans, 1996; Hargreaves, 2004; Darling-Hammond, 2005; Sergiovanni, 2005; Fullan, 2007; Wedell, 2009). As noted by Leithwood et al. (2004), teachers’ cultural perceptions play an important role in their ability and willingness to support a reform effort. Much of the educational change literature focused on educator response as an indicator of impact reveals the negative perceptions educators have of reform. For example, Hargreaves (2004) found that educators viewed many reforms as being externally-driven, poorly designed, and poorly implemented. Others were viewed as unwarranted, repetitive, frustrating, disappointing, irrelevant, or even harmful. Hargreaves concluded that such reforms were perceived as exclusive of educators’ individual or collective needs or were perceived as incompatible with their own ideas about teaching and learning.

**Structural support.** Restructuring changes the way teaching and learning are organized in schools (Elmore, 1991). New structures, “… help build the capacity of the members of the group to accomplish what they have been asked to accomplish,” (Dufour, 2007, High Leverage, ¶ 3). In whole-school reforms focused on collaborative inquiry and problem-solving, for example, new roles, structures, models, or other mechanisms may be needed that enable the new professional culture to thrive (Levin, 2005; Sergiovanni, 2005; Dufour, 2007; Fullan, 2007;
Darling-Hammond, 2009). In addition, clear parameters and priorities may be needed to help teachers stay focused on the right topics (Dufour, 2007). The desired knowledge base must also be readily accessible, and there must be models or templates that help guide the work and assess its quality (Dufour, 2007). According to Dufour, one of the most important questions reformers must ask themselves is, “What can I do to give people in this organization the tools and skills to ensure their eventual success as they undertake this [implementation] challenge?” (High Leverage, ¶ 5).

**Indicators of structural capacity.** As noted by Leithwood et al. (1994), teachers' perceptions of their working conditions affect their capacity and commitment to effectively enact significant reform. Payne also (2010) cautions implementers to recognize and address contextual issues related to organization and resources that can negatively affect educator perceptions of reform. Payne identifies some of these as a lack of time for planning, limited training, lack of collegial information sharing, an inappropriate implementation pace, and an inability or unwillingness to use formative assessments to change instruction as common indications of structural problems.

Educator understanding, beliefs, and attitudes about the reform should be of primary concern during the process of implementing reforms (Leithwood et al., 1994; Hargreaves, 2004; Darling-Hammond, 2005; Sergiovanni, 2005; Fullan, 2007). This is especially true for reforms dependent on considerable educator development and those “…advocated on theoretical or ideological grounds,” (Leithwood et al., 1994, p. 39), or those presented as vague or flexible. Leithwood et al. contend that while such reforms have ambitious aims, they lack a “codified knowledge about how such aims are to be approximated,” (p. 57). As a result, these efforts place a greater burden on local educators to apply contextually sensitive action and will require a well-
managed implementation process that involves building educator commitment, engagement, and capacity to support the desired reform (Levin, 2005; Sergiovanni, 2005; Fullan, 2007). Thoughtful and responsive cultural and structural implementation strategies must be utilized to build educator capacity, motivation, and commitment for change (Darling-Hammond, 2005; Sergiovanni, 2005; Dufour, 2007; Fullan, 2007). However, as Elmore (1991) points out, “Changing the conditions of teachers' work requires a high degree of school-level problem solving, and problems are likely to differ from one school to another,” (p. 17). A variety of strategies will likely be needed.

**Implementation approaches.** Reforms are introduced to educators through the process of implementation (Fullan, 2007; Levin, 2009). Implementation is defined as the purposeful selection and application of specific process strategies “… designed to put into practice an activity or program of known dimensions,” (Fixsen et al., 2009, p. 5). One criticism of educational reform implementation is that many approaches ignore the phenomenology of change (Fullan, 2007; Wedell, 2009). The phenomenology of change encompasses how educators interpret the meaning and value of reform as its enacted content begins to alter normative school and classroom processes and practices. As reform content interacts with educators’ prior assumptions about teaching, learning, and student needs, their experiences shape perceptions of implemented reform. Due to this phenomenology, Fullan argues, “How people actually experience change [can be] distinct from how it might have been intended…” (p. 8). Different implementation approaches can positively or negatively affect educator perceptions and capacity (Leithwood et al., 1994; Sergiovanni, 2005; Fullan, 2007; Darling-Hammond, 2009).
Educator perceptions are influenced by prior assumptions about teaching and learning and “the thousands of subjective realities embedded in people’s individual and organizational contexts and their personal histories” (Fullan, 2007, p. 37) as well as the strategies used put the desired reform into practice. Effective implementations promote educators’ sense of purpose and individual sense of responsibility, commitment, and motivation to enacting a particular reform (Sergiovanni, 2005; Fullan, 2007). They also provide educators with a sense of clarity about the meaning and relevance of change within educators’ classroom and school practices.

Historically, different approaches to implementation have resulted in varying impacts on educators’ perceptions and motivation to enact school reforms (Fullan, 2000; Hargreaves, 2004; Sergiovanni, 2005). Three common implementation approaches described in the literature are: top-down, bottom-up, and lateral (Fullan, 1994; Hargreaves, 2004; Darling-Hammond, 2005; Sergiovanni, 2005; Wedell, 2009). Top-down approaches utilize external sources of power, authority, and control to direct change within schools (Fullan, 2000; Hargreaves, 2004; Sergiovanni, 2005). Bottom-up approaches rely on school educators and administrators to initiate and direct the change process (Fullan, 1994, 2000). Lateral approaches are characterized by the use of information sources and collegial relationships to drive changes focused on student improvement (Darling-Hammond, 2005; Sergiovanni, 2005).

**Top-down implementation strategies.** Two top-down variations are power-coercive and empirical-rational (Chin & Benne, 1985). In power coercive efforts, reforms are designed at the governmental, administrative, or empirical levels and then handed down to schools in a prescribed fashion through commands, rules, policies, protocols, standards, or procedures (Chin & Benne, 1985; Evans, 1996; Bolman & Deal, 2003; Sergiovanni, 2005; Fullan, 2007). Within empirical-rational efforts, “explanation, training, [and] mandates” (Evans, 1996, p. 8) accompany
prescribed reforms. Using this approach, it is assumed that because educators are rational individuals, they will see the logic in these reforms and put the preconceived designs into practice.

The problem with many past reform efforts, according to Fullan (1994, 2007), Evans (1996), and Sergiovanni (2005), is that change initiators have relied too heavily on top-down approaches while failing to address the local factors that would help put hoped-for reforms into practice. One fatal flaw to past reform efforts, Fullan (2000) notes, is that top-down reforms have not developed educators’ personal and collective meaning of the change effort. While meaning development must be a constructive rather than a mandated process, past bureaucratic implementations have not been mindful of educators’ normative professional values or beliefs about teaching and learning (Sergiovanni, 2005; Fullan, 2007). These efforts have also failed to address educators’ learning needs or to develop educators’ collective identity and shared ownership of reform (Fullan, Cuttress, and Kilcher, 2005). Top-down efforts alone cannot adequately address issues of educator understanding, motivation, and skill that build capacity to support and facilitate change efforts (Evans, 1996; Fullan, 1994, 2000; Hargreaves, 2004; Darling-Hammond, 2005; Sergiovanni, 2005; Wedell, 2009). In all, according to Sergiovanni and others (Evans, 1996; Hargreaves, 2004; Fullan, 2007), top-down approaches have failed to adequately address the cultural and operational implications of reform implementation.

Despite past criticisms, some top-down implementation approaches can be used effectively to provide the pressure and support needed to mobilize educators to become both “adept and comfortable” (p.57) with change (Fullan et al., 2005). The trick is to apply top-down strategies in ways that enable educator participation rather than “smothering it in prescriptions for implementation” (Darling-Hammond, 2005, p. 375). Likewise, Darling-Hammond believes that
effective top-down reform approaches use policies that apply pressure for improvement but that also support internal drivers of change. This dynamic can be achieved through development of infrastructures that promote adaptive, learning-centered teaching and assessment practices and that provide educators with opportunities and resources that enable them to engage in continuous learning (Darling-Hammond, 2005, 2009). Put another way, top-down strategies can be used to shift the center of change to schools (Dufour, 2007). Dufour suggests that leaders use these strategies to develop a cultural framework that creates norms of collaboration, cooperation, shared responsibility, and interdependence. Such a framework creates the school-level conditions necessary for educators to engage in collaborative, focused professional relationships that foster reflective practices and build capacity to engage in adaptive change processes (Dufour, 2007). However, even when applied effectively to foster coherence for reform, top-down efforts should be accompanied by the use of bottom-up and lateral strategies that are more likely to secure educator motivation and build local capacity for change (Darling-Hammond, 2005; Fullan et al., 2005; Sergiovanni, 2005; Fullan, 2007).

**Bottom-up implementation strategies.** Bottom-up strategies have historically provided local stakeholders with great decision-making autonomy regarding the governance and direction of school reform (Darling-Hammond, 2005; Fink & Stoll, 2005; Fullan, 2005; Sergiovanni, 2005). Critics of past bottom-up reform efforts cite their failure to focus educators’ collective energies on improving student learning (Fullan, 1994; Darling-Hammond, 2005; Hargreaves, 2009) and for failing to change fundamental teaching and learning practices required by significant reform innovations (Fullan, 1994, 2005). As Fullan puts it, “The autonomy to act is not the same thing as capacity” (2005, p. 10). Bottom-up strategies, in other words, do not generate enough pressure to modify the autonomous culture in which many educators work.
Without norms of cooperation and interdependence, according to Sergiovanni, “… people are likely to pursue incongruent goals,” (p. 298). Continued norms of autonomy can thus inhibit professional collaboration, inquiry, and learning from becoming forces for significant improvement.

In summary, change scholars believe that bottom-up strategies can be used effectively to take advantage of educators’ professional judgment, innovation, and know-how as well as to empower, energize and motivate reform efforts. However, there is also common agreement that bottom-up strategies should not be used in isolation. Instead, change scholars suggest they be used in conjunction with other strategies more likely to move educators in a more collectively-focused direction (Fullan, 2000; Darling-Hammond, 2005; Fink and Stoll, 2005). As Darling-Hammond puts it, “both local invention and supportive leadership are needed, along with new ‘horizontal efforts’ that support cross-school consultation and learning,” (p. 366).

**Lateral implementation strategies.** Lateral strategies help develop educators’ collective coherence for the purpose, goals, processes, and practices of reform, and they establish the collaborative norms needed to support desired reforms (Fullan & Miles, 1992; Fullan, 2000; Cuttress, & Kilcher, 2005; Darling-Hammond, 2005; Fullan, 2009). As Fullan (2009) explains, lateral strategies help generate a “clear overall picture of the purpose, nature, and rationale of the reform” (p. 278). Finally, lateral strategies create “standards of expertise, codes of conduct, collegiality, felt obligations, and other professional norms,” (Sergiovanni, p. 299) that act as levers for change to individual and group behavior. Lateral strategies also provide needed program coherence (Fullan & Miles, 2002; Fullan, 2007). This means not only clarifying the purpose of the reform effort but also how it will be achieved (Fullan, 2009). Shared leadership and shared learning practices are two effective lateral implementation mechanisms (Fullan, 2000;

Formative student assessment data is believed to be an important lateral change mechanism (Fullan, 2000, Darling-Hammond, 2005; Fullan, 2007). Formative assessment inquiry acts as a change mechanism by altering educator understanding, attitudes, and beliefs about student learning needs and their own teaching practices (Darling-Hammond, 2005; 2009; Moss and Brookhart, 2009). As Moss and Brookhart explain, “Formative assessment operates at the nexus of what teachers believe to be true about teaching and learning, how those beliefs shape the ways teachers choose to teach, and the effects of instructional decisions on student achievement and motivation to learn,” (p. 18). Thus, formative assessment utilized as a reform strategy acts as mechanism for continuous improvement (Fullan & Miles, 1992; Fullan, 2009). As educators interact around student data, they begin to expand their awareness of student need and are increasingly motivated to engage in change problem-solving practices to improve student learning (Darling-Hammond, 2005; Fullan 2009).

Collaborative learning and planning processes also act as important lateral change mechanisms (Allen and Glickman, 2005; Fullan, 2009). Educators who engage in collegial learning develop an increased awareness of the emergent and continual nature of systematic improvement efforts (Fullan, 2009). As educators engage collaborative professional
relationships, they develop collegial norms of practice that work to shift beliefs, ideas, and attitudes in favor of significant reform efforts.

As is true of other implementation approaches, lateral strategies alone do not ensure educator capacity and commitment to the changes of significant reform (Fullan, 2005). Instead, implementation strategies must be combined and applied thoughtfully to meet needs of educators working within the unique contexts of the schools in which the desired reform innovations are implemented. As Fullan observes, “People need the right combinations of pressure and support to become adept and comfortable with the new right way,” (p. 57) to carry out significant, whole-school reforms. The tricky part is finding the right combination for a particular school. As Fink and Stoll (2005) caution, “… contextual differences between schools are one of the greatest challenges for improvement [because] one size clearly does not fit all,” (p. 27).

In summary, three main implementation strategies are used to introduce significant school improvement reforms; top-down, bottom-up, and lateral. Instead, varied implementation strategies should be used to: provide educators with opportunities to tap into local knowledge to address local variation and need, focus on changing the school structures to create the right conditions collective capacity building, focus on creating a school culture where collaboration and collegiality focused on improving student learning is a normative expectation, develop coherence of and build support the desired reform, develop both individual and school capacity. However, schools are unique entities, shaped by their individual history and context. As such, no one change strategy or approach will work best in all schools. The tricky part of implementation is finding the right combination of change strategies that will work within the unique environment of each school.
**Contextual complexity in implementation.** Levin (2009) believes that even when implementers account for the phenomenology of reform implementation, succeeding in developing educator capacity to support the effort will continue to be a challenge. According to Payne (2010), whole school reform movements have generated hundreds of different reform models. Payne believes the problem with current reform efforts is that “too many schools haven’t the capacity to implement any of them with reasonable fidelity to the intent of the reform” (p.157). Fullan (2001) argues that change leaders must *arm themselves* with change-process knowledge and continually refine it through reflective action to improve the chances of implementation success. As Fullan (1994) puts it:

Success in school change efforts is much more likely when problems are treated as natural, expected phenomenon, and are looked for… The absence of problems is usually a sign that not much is being attempted. Smoothness in the early stages of a change effort is a sure sign that superficial or trivial change is being substituted for substantial change attempts…. Since circumstances and context are constantly changing, sometimes in surprising ways, an imbedded spirit of constant inquiry is essential. (p. 26)

**Implications for change leadership.** Educator inaction or resistance to school improvement reforms is foremost a problem of capacity for change (Leithwood et al., 1994; Darling-Hammond, 2005; Sergiovanni, 2005; and Fullan, 2007; 2009). As Fullan suggests, “…one reason the situation is not working is that people do not know how to improve it, or they do not believe it can be improved,” (Fullan, 2007, p. 58). Building educator capacity for the changes that embody desired school improvement reforms requires educational change leaders to attend to the contextual conditions of implementation that may give rise to it. Implementation must be approached in a thoughtful, intentional, and reflective manner (Leithwood et al., 1994;
Darling-Hammond, 2005; Sergiovanni, 2005; Fullan, 2007, 2009). This means that change leaders must aim to identify and address the cultural and structural needs of educators attempting to put desired changes into practice within the unique environments of their schools. As Fullan (2007) contends, “… innovators need to be open to the realities of others… sometimes because the others’ realities will expose the problems of implementation that must be addressed and at the very least will indicate where one should start,” (p. 109).

In some schools building capacity for improvement may accomplished by applying strategies that clarify reform goals or promote the development of personal meaning where confusion and lack of coherence are recognized (Leithwood et al., 1994; Fullan, 2007). In others, change leaders may apply strategies of collegial inquiry and problem solving where cultures of autonomy are found to exist. Where educators express cultural concerns, educational change leaders may apply strategies that allow educators to develop and engage in relevant and useful formative assessment or provide additional time to engage collaborative inquiry. Such strategies would be used to help educators “reexamine some of the assumptions about their work and rethink how it can be performed,” (Leithwood et al., 1994, p. 55). Where educators express structural concerns, change leaders may help identify those concerns and provide the needed resources and support to help work through them. Where educators express doubts about their ability to carry out the desired changes, change leaders may apply strategies that build educator knowledge that strengthens efficacy beliefs. The key is being able to determine which change strategies will best address the unique needs of the school and its educators (Fink & Stoll, 2005; Fullan, 2005).
Summary

Educator capacity for change plays an essential role in the success of school reform efforts. Educational change theories help to elucidate the nature, processes, and the potential impact of school reform efforts on developing educators’ capacity for change. In the cultural realm, indicators of positive impact include the development of educator coherence around the purpose and goals of a reform, expanded beliefs about student learning needs, and a positive mindset about collegial norms of professional practice that support the reform effort. Educators’ ideas about reform take shape during the process of implementation (Leithwood et al., 1994; Fullan, 2000; Hargreaves, 2004; Darling-Hammond, 2005; Allen and Glickman, 2005).

Effective implementation efforts build educator capacity through both the cultural and structural realms to improve the possibility, desirability, and credibility of a particular reform effort (Leithwood et al., 1994; Evans, 1996; Piderit, 2000; Allen & Glickman, 2005; Darling-Hammond, 2005; Sergiovanni, 2005; Fullan, 2007, 2009). Ineffective efforts, on the other hand, are believed to diminish capacity by making suspect the relevance, credibility, possibility, and desirability of a reform. Educator perceptions are closely associated with their intended and actual professional behaviors and therefore act as indicators of capacity for effective implementation.

The lens of educational change theory provides a relevant framework for exploring the impact of implementation on building-level educators’ perceptions of the RTI model within one rural Alaskan elementary school. Educational change theories serve to guide the research questions and data collection and analysis. Educators’ understandings, beliefs, and perceptions about the RTI model and its essential components will be collected and examined as indicators of implementation impact. The findings will analyzed to determine which aspects of the cultural
and structural realms demonstrate a positive impact on educator capacity to effectively enact the model’s essential components and which aspects provide implications for further change leadership.

**Chapter II: Literature Review**

This review of the literature is organized into three sections. The first provides an overview of RTI including the history and rationale, espoused purpose and goals, variations, and essential components. The second summarizes research focused on educator’s perceptions of the RTI model or its essential components as they have been implemented within schools. While RTI has been found to have positive impact on educator perceptions in these studies, concerns are also noted. The last section provides a review of the research and theoretical literature focused on leadership implications for research and practice.

**The RTI Model**

RTI is a whole-school reform innovation. It replaces a learning-disability discrepancy model previously used to determine special education eligibility (Hoover & Love, 2011; Bender & Shores, 2012). Rather than waiting until a student’s learning gap becomes great enough to signify eligibility for special education services, RTI is a preventative intervention model that strives to improve student learning within the regular education program (Bradley et al., 2007; Hoover & Love; Collier, 2012). Also foundational to RTI is the construct that problem-solving issues are centered on improving educators’ knowledge base, problem-solving practices, and instruction to support struggling learners as opposed to centering attention on identifying a student’s biological or family deficits while offering no guidance for instruction (Kozleski & Huber, 2010; Bender & Shores, 2012). In addition, the RTI model is founded on the premise that students who receive adequate instruction, targeted to their needs, will improve. Finally,
evident within some of the RTI literature, there is an underlying theoretical assumption that strong classroom instruction coordinated with early intervention and progress monitoring will reduce the discrepant numbers of students referred for special education services (Marston, Muyskens, Lau, and Canter, 2003; Kozleski & Huber; Rinaldi, Higgins-Averill, & Stuart, 2011; Bender & Shores, 2012). According to Greenfield, Rinaldi, Proctor, and Cardarelli (2010), “RTI is considered effective if (a) early intervention and universal screening improve academic achievement for students at risk, and (b) there is a decrease of inappropriate referrals and identification of minority students to special education,” (p. 57).

The goal of RTI reform is to provide additional academic support within the general education setting for students identified as at risk of later failure (IDEA Regulations, n.d.; Burton & Kappenberg, 2012). As Burton and Kappenberg explain:

RTI is a multi-tiered approach to identifying and supporting students with learning and behavior needs. Its goal is to provide high-quality, scientifically based instruction in the general education classroom. The RTI process includes ongoing student assessment and monitoring of individual student progress (progress monitoring) that tracks the results of targeted and “tiered” interventions. These interventions are introduced first to all learners (beginning at the elementary school level), and then increased for those who show a need for additional support. This additional support comes from a multi-tiered approach that provides differentiated instruction to develop their skills. (p.11)

In the area of academics, RTI’s tiered system is an educational model delineated by three or more instructional intervention levels (Stuart & Rinaldi, 2009). Student placement within one of these levels is determined by gaps in knowledge and skills. Targeted interventions and supports are then provided to address the needs of those students within the designated tier.
Within the RTI model, three approaches have emerged as a methodology for identifying students and making instructional determinations. They are the standard protocol, problem-solving, and mixed method approaches. In the standard protocol approach, academic skills such as fluency or comprehension are first categorized into protocols. Students are then placed in one or more of these protocols based on more general assessments, called screeners (Shapiro, 2009). In the problem-solving approach, after a screener is used to identify students who may have learning gaps, a closer analysis of the student is made using diagnostic assessments. These assessments help educators gather additional information about a student’s individual skill deficits and help decision makers plan a more customized set of instructional strategies matched to a particular student’s needs (Shapiro, 2009). In the mixed-method approach, students identified with less complex or severe deficits are served through a standard-protocol approach while those identified with more complex or severe deficits are served through the problem-solving approach (Christ, Burns, & Ysseldyk, 2005; Shapiro, 2009). Each approach contains three common features: 1) Formative assessments are used to determine student need and ongoing progress, 2) data-based decision-making teams are responsible for aligning instructional support and monitoring student progress, and 3) research-based, differentiated instructional programs and strategies aligned to student need are provided within the regular education program (Lau et al., 2006; Shapiro; Brown-Chidsey & Steege, 2010; Hughes & Dexter, 2011; Burton & Kappenberg, 2012).

During implementation, the model’s three essential components must be adapted to meet the needs of the unique school contexts in which they are applied (Hoover & Love, 2011). At the same time cultural and structural challenges that conflict with the principles of the model must be identified and addressed. For example, Ahram, Stembridge, Fergus, and Noguera (n.d.)
have identified the following barriers they found to impede successful RTI development in urban schools: 1) persistently low student achievement, 2) a lack of instructional coherence, 3) inexperienced teaching staff, 4) poorly functioning business operations, and 5) low expectations of students (Kincheloe, 2004, 2010; MDRC, 2002),” (Structural Challenges, para. 1). Similarly, cultural challenges cited by Ahram et al. include: “… perceptions of race and class as limiting predictors of school achievement; perceptions of different learning styles versus intellectual deficiencies; and lack of cultural responsiveness in current policies and practices,” (Cultural Challenges, para. 1).

In summary, RTI is a multi-tiered model of early instructional intervention aimed at improving the learning of at-risk students within the general education setting before more severe problems develop. While three distinct approaches are found within the model, all describe the use formative assessment, data-based decision making, and instructional tiers of service. The practices and processes that make up the components must be adapted to meet the unique needs of school contexts in which they are applied. At the same time, contextual barriers that impede achieving the model’s goals of improved learning for all students must be identified and addressed.

**Student and System-Level Outcomes**

Research focused on the efficacy of the RTI model has primarily demonstrated positive student outcomes. Numerous studies have targeted the model’s individual components, individual subject areas, or special populations of students served within the RTI model. For example, Vaughn et al. (2012) studied an intensive reading intervention provided to sixth and seventh grade students whose intervention response was considered inadequate despite two years of receiving intervention services. Their findings demonstrated students participating in the
researcher-provided reading intervention scored significantly higher than students who did not receive any intervention. The researchers noted that while most students continued to perform below proficiency, they did not experience a significant deterioration in their reading performance as did similar students not receiving interventions. Therefore, although the authors determined the intervention students’ did not “… close the gap with typically performing peers,” (p. 522), they concluded the intervention, provided as a part of the RTI model, was beneficial in maintaining reading levels of older students experiencing significant reading difficulties.

Similarly, summarizing their research on the efficacy of the problem-solving model, Marston et al. (2003) concluded that though the model improved the district’s ability to identify at risk students and increased the number of students receiving intervention support, there was no accompanying increase in student referral rates to special education. Rather, the authors argued, the model likely helped to contain the number of referrals. In follow-up to their original research, Lau et al. (2006) conducted a case study that examined the problem-solving process foundational to RTI. They determined that using response to intervention data to develop hypothesis of student need and to plan interventions within the problem-solving model was more helpful than using data obtained from a discrepancy table, one of the principal practices of the discrepancy model.

Although Marston et al. (2003) report positive results in utilizing the problem-solving model to operationalize decision-making norms and judgments, they also cautioned that because the model is complex, application may be “prone to inconsistencies” (p. 199). Specifically, Marston et al. explain that variation in local standards, norms, and expectations can lead to variation in which student referral and participation within schools in which the model is implemented. The authors conclude that “comprehensive and ongoing training on data-based
decision making, follow-up consultation, and a strong district-wide commitment to using data to create better instructional interventions for students” (p. 199) is foundational to successful implementation within schools.

Hughes and Dexter (2011) reviewed research studies focused on the efficacy of systematic implementation of the RTI model within elementary schools. The studies selected for review utilized instructional or intervention components in at least two RTI tiers. In addition, Hughes and Dexter included only those studies using quantifiable measures of student academic or behavioral outcomes and/or systemic outcomes such as referrals to special education and that provided complete descriptions of how the study data were gathered and analyzed. Sixteen studies met their research criteria. Hughes and Dexter concluded that while all studies demonstrated some level of student improvement in academic achievement or performance the findings of impact of RTI was emerging.

**Impact of RTI Implementation**

RTI is a theoretical school reform approach that requires context-sensitive implementation (Kozleski & Huber, 2010). This means successful implementation must address the needs and demands of the local contexts. In schools, cultural contexts are influenced by educators’ personal expectations and needs, professional development, and interactions. This context affects how educators perceive RTI (Kozelski & Huber, 2010). As RTI is introduced into the present school context, educators and RTI stakeholders face questions and challenges that can impede or restrain implementation. According to O’Connor and Freeman (2012), the culture and beliefs existing within a school are often overlooked as factors that affect RTI implementation.

Kozelski and Huber (2010) describe some common cultural challenges as follows:
… confusion about RTI implementation and purposes; lack of practitioner role clarity, knowledge, and preparation; lack of knowledge about how English language learners fit within a prevention schema such as RTI; and lack of knowledge of what counts as evidence-based practices and for student responsiveness (Klingner, Artiles, Baca, & Hoover, 2007). (pp. 259-260)

Educators within the school will make decisions about which students receive services within the school. How educators determine which students need support and what type of support is needed is likewise dependent on their experiences, understanding, and knowledge of the model as well as the existing cultural practices of the school. Kozleski and Huber (2010) argue that educators must make sense of such standards in locally meaningful ways “that generate improvement,” (p. 261). Addressing cultural and structural implementation issues at the practitioner and school level will be necessary to effectively implement and sustain the model (Kozleski and Huber, 2010). According to Kozleski and Huber, facilitative cultural conditions include perceptions of RTI as a within-classroom support system of early intervention and prevention as opposed to viewing it as a special education or pre-referral model. Sustainability will also depend on how schools structure time, support professional learning, interpret data, and provide resources that support practitioners. Finally, Kozleski and Huber contend that school principals will need to provide this leadership by addressing concerns and generating the necessary cultural and structural changes needed to apply and sustain RTI as a “core educational practice” (p. 262) within the school.

While much of the early RTI research focused on evaluating the technical aspects of implementation (Griffiths, Parson, Burns, VanDerHeyden, & Tilly, 2007; Rinaldi et al., 2011; O’Connor & Freeman, 2012), more recent studies have been conducted to determine educator
perceptions of the model (Hoover, Baca, Wexler-Love, & Saenz, 2008; Pyle, 2011; Rinaldi et al., 2011). As general education initiative, effective school-level application of the RTI model depends on the collaborative effort of many different school-based educators. The role of general education teachers and instructional support staff is especially critical (Howard, 2009; Mellard & Johnson, 2012; Fuchs & Bergeron 2013). School-based RTI teams often include classroom teachers, reading specialists, special educators, school administrators, school psychologists, and parents (Fuchs & Bergeron, 2013). As Mellard & Johnson point out:

Even with a solid research base, if teachers believe an approach will not be effective, or if it is inconsistent with their teaching style, they will not implement it well. RTI represents a paradigm shift for many teachers. The focus on ongoing progress monitoring, the increased reliance on the general education teacher to provide support for students at risk, and the routine collection and analysis of data to support instructional decision making are all very different from what many teachers may have been trained to do. As a result, staffs will need to continue to discuss their perceptions of RTI and to be encouraged to openly communicate if specific components present significant challenges to their teaching approaches or philosophy. These discussions can help find workable solutions to implementation. (p.166)

There is a growing body of research aimed at gaining insight into educator perceptions of RTI. Primarily these studies have investigated the perceptions of classroom teachers, school psychologists, and special education teachers. For example, Pyle (2011) explored issues related to implementation of RTI assessments as a method for identifying and serving Tier 2 students within four pilot schools in Ontario, Canada. Pyle found one of the central implementation challenges described by teachers was the lack of coherence between the model’s essential
elements and existing instructional practices that would, “facilitate the accomplishment of a common goal,” (Pyle, p. 69). In the classroom, one of the problems Pyle found was that educators viewed comprehension development as a primary and necessary target of current mandated reading assessment practices while RTI’s progress monitoring procedures in reading were perceived to focus mainly on assessing fluency. In addition, because instructional interventions aligned with the assessment results were not implemented at the same time RTI assessments were introduced within the pilot schools, educators perceived a lack of coherence between existing practices and the new model. Educators also expressed frustration with having to take additional time to complete the assessments and considered it detrimental to students because assessment administration took away from instructional time. Educators further expressed feeling overwhelmed by the number of assessments they now had to administer. This was exacerbated by the perception that educators must continue to administer assessments already in place in addition to the new RTI assessments.

At the system level, both classroom teachers and special educators expressed the belief that it would not be possible to conduct all necessary interventions in the classroom; however, due to the number of students already being served through the special education program, special education teachers did not feel they had the time or authority to provide support for those identified through the RTI process. Pyle (2011) determined that the problem stemmed from the special education model in place. This model, according to Pyle, did not recognize the use of RTI data in the identification of students for special education services. The researcher concluded that this lack of alignment between the RTI and the special education model used within the school district negatively impacted general and special education teachers’ perceptions of RTI’s feasibility as a viable avenue of support for students who needed Tier 2 and
Tier 3 services. Pyle also concluded that the incremental implementation and corresponding lack of coherence between RTI and existing assessment and instructional practices were additional local barriers to successful implementation. The author recommended further research into the types and intensity of instruction that would benefit students in Tier 2, the roles of educators, procedures for determining what interventions students would receive, exemplary RTI implementation cases and intervention models, and educator training.

Hoover and Love (2011) conducted an exploratory case study of the issues that teacher leaders faced when implementing RTI within their respective suburban elementary schools. At the time of the study, fifty percent of the schools’ English language learners had been recommended to receive Tier 2 instruction. The teachers were tasked with the responsibility of working with school teams to identify implementation issues within their particular schools and develop solutions that would meet the schools’ identified needs. One of the study’s researchers also held the position of an outside expert on RTI and thus provided consultative support to the three educators. At the time of the study, the researchers reported that the general school staff had received two days of professional developing outlining “… the general parameters of RTI and its main components,” (p. 42). Teacher participants in the study reported that the school’s general educators did not receive follow-up support. However, as lead teachers, they had received additional training in tiered instruction, research-based interventions, data-based decision making, and the use of RTI in the process of determining special education eligibility.

At the conclusion of the study, Hoover and Love (2011) identified six common issues associated with implementation in those settings. All issues related to the development of educator perception and understanding. Once the issues were identified, the researchers provided recommendations to teacher leaders on how to address the issues and then assisted the
leaders in preparing relevant information and support materials then presented to school teams. The researchers proposed strategies and solutions developed to address the issues came from current RTI literature, a reflection of the school teams’ previously attempted solutions, and the teacher leaders’ prior experiences within their respective school sites according to Hoover and Love.

One issue that arose from the inquiry, according to Hoover and Love (2011) was the need for team leaders to shift educators away from a mindset associated with pre-referral and discrepancy-based models of student identification where the primary focus is on identifying a student’s deficits. The researchers determined it was important for educators to understand that the RTI model attends more to identifying and addressing issues of instructional quality rather than making identification of the student’s deficit the primary goal.

Understanding RTI’s tiered system of instruction and the role of general and special educators within each tier was identified as another issue among participants in the study. The teacher leaders and researchers found it especially necessary to clarify Tier 2 instruction as supplemental to Tier 1. The researcher-consultant concluded that it was necessary to help educators characterize assessment and instruction processes and functions in Tiers 1 and 2 in response to this finding. The involvement of general educators’ in providing Tier 2 instruction and the collaboration between general and special educators' another issue identified. Collaborative planning among teachers, a push-in model of Tier 2 classroom instruction, and follow-up discussions among the school teams regarding these strategies were considered and implemented as strategies relevant to these identified needs. Participants who worked with colleagues to push-in Tier 2 instruction reported developing an increased understanding of how Tiers 1 and 2 were coordinated. Determining which tier was most appropriate for a particular
student was also identified as a source of confusion among all school team leaders participating in the study. The authors concluded that it was necessary to improve team leader and team member understandings of the model’s assessments and decision-making rules. Improving understanding of designated proficiency targets, expected progress rates, and the significance of the gap between students’ actual and expected proficiency were strategies applied to address these needs.

Understanding the use of RTI as an alternative process for referral to special education was identified by teams from the three schools. Hoover and Love (2011) note that the state in which the study took place was in the midst of eliminating the discrepancy formula used to identify learning disabled students. As a result, Hoover and Love contend there was confusion among educators regarding how the RTI process would be used to help determine eligibility. The researchers emphasized the need to help educators understand how students were identified, served, and monitored within the tiers prior to special education consideration. The researchers determined that it was necessary to develop educators’ shared understanding regarding the importance of fidelity in using research-based curricula and evidence-based interventions. Lastly, distinguishing between learning differences and disabilities in diverse learners was found to be an issue among study participants and their respective school teams. As noted, a large percentage of the English language learner population among these schools had been recommended for RTI services. The researchers determined that it necessary to improve educators’ use of the learner’s rate of progress in addition to his/her benchmark score when considering the distinction between learners with diverse needs and those who may have a potential learning disability.
White, Polly, and Audette (2012) conducted a descriptive case study to illustrate how state-level professional development impacted the capacity of one district school to implement RTI. Fifteen participants were selected for the study, including all ten members of the RTI school leadership team, the school’s lead teacher, and four district administrators. Prior to implementation, some educators participated in what was described as extensive professional development training while others attended a shortened training session. While some participants reported that the training content was at first overwhelming and that reaching a collective understanding took time and a great deal of discussion, the researchers described the existence of cultural conditions that would support implementation. For example, they report that the principal’s commitment to the model was perceived to be very strong by participants. In addition, several participants expressed trust in the principal and several stated they felt they were “free to share their concerns and disagreements with the Leadership Team,” (p. 85). Participants also reported that the principal expressed a desire to implement the RTI initiative “completely and with excellence,” (p. 85). Others reported that while the principal applied pressure, he also showed a willingness to “slow down the decision-making process to get it right,” (p. 85).

Reports by some participants revealed the belief that general educators were better prepared to solve problems and participate in data-based decision-making for instruction. In addition, they expressed the belief that the plans were working for students and that as teachers witnessed this success, they were motivated to buy-in to the new model. Some participants also expressed positive perceptions of specific components of the model. For example, participants felt that teachers had developed a better understanding of data and were sharing the information with students to foster motivation and to more clearly explain progress and concerns to parents.
In one participant’s opinion, the intervention process was more comprehensive. Another participant, a speech teacher, felt that speech and language instruction had become more integrated into general education as a result of implementation. Finally, White et al. (2012) reported that participants expressed a preference for the RTI model and expressed feelings of frustration with old models of providing intervention services. In addition, they found widespread support among all staff for the assessment data and reporting system.

Several contextual issues also emerged from the study. Some participants expressed efficacy concerns related to the complexity of interventions and lack of time to collaborate with fellow teachers. Some participants also expressed perceptions of feeling overwhelmed and fatigued and that the implementation was “too much too soon” (White et al., 2012, p. 87). Specifically, teachers reported feelings that the learning curve was steep. Many expressed the wish that they had been given time to learn the new assessment database system before starting implementation. White et al. concluded that because, “… some teachers did not at first understand need for timely data collection and entry,” (p. 87), delays in data entry negatively affected team reviews of student progress. The authors also report that due to the training schedule, some of the student assessment data was already old by the time it was entered. Teachers also expressed feelings of being overwhelmed by the amount of data that needed to be collected and entered.

Additional expressions of concern reported by White et al. (2012) included: teachers who felt they were taking on administrative roles in their new coaching positions they were not comfortable with; participants who felt the paperwork was time consuming; and participants who believed that the meetings were exciting but fatiguing. The researchers also reported that some educators’ feelings were hurt when certain issues were discussed. Additionally, there were
differing perceptions of who had the most expertise in RTI and other topics. Finally, participants expressed concerns that while RTI was being added, other assessments and district requirements remained in place. This included the expectation that teachers at the study site participate in all district professional development as well as the additional RTI training. Some teachers shared the concern that while they were expected to collect student performance data within the RTI model, they were also expected to continue to administer a district-mandated assessment. Some participants also expressed concern about continued funding for the program and the lack of student performance data based on state testing. White et al. (2012) concluded that the findings documented evidence of a district/school collaborative relationship that fostered excellent collaborative planning and implementation. They also determined that principal and team leadership and problem-solving were essential to the model’s successful application.

Prewett et al. (2012) conducted an exploratory case study of middle schools implementing RTI to “document and better understand middle school administrators’ and staffs’ conceptualizations of RTI, and the implementation, and current status of RTI and related practices in their schools,” (p. 137). The authors held initial telephone interviews with 40 schools, follow-up phone interviews with 20 schools, and group and individual face-to-face interviews at 12 of the original school sites. The authors found that while many schools were at different implementation stages, all school administrators interviewed believed the main purpose of RTI was to close gaps in student achievement through remediation in basic reading and math. Twenty schools interviewed were utilizing universal screening, progress monitoring, data-based decision making, and tiered instructional practices. Prewett et al. determined that several cultural and structural conditions present at all twelve schools visited facilitated implementation. However, staff support and buy-in was considered a key factor. Staff acceptance of differing
roles and responsibilities and the existence of a shared vocabulary and shared understanding regarding the model was another. Supportive structures noted by Prewett et al. included school-wide professional development, school-wide participation in data-based decision making, and systemic leadership.

Rinaldi et al. (2011) conducted a three-year study of ongoing RTI implementation in one urban elementary school. The school was described as having a large percentage English language learners. Eight of twenty-six teachers in the school self-selected to participate in the study. Within the three-year period, participants engaged in weekly professional development. In addition three yearly ninety minute professional development sessions were provided by an RTI specialist-researcher from the school’s partner university. During these sessions, participants received a general overview of RTI model components and implementation as well as in-depth training on collaborative planning and the use of scientifically-based instructional reading strategies, data analysis, curriculum-based assessments, instruction, and problem-solving in response to a student’s lack of progress. A researcher also attended monthly grade-level meetings where discussions centered on strategic instruction, individual interventions, and implementation fidelity. The researchers interviewed educator participants throughout this time period. Finally, participants were provided opportunities to engage in shared coaching.

According to Rinaldi et al. (2011), teachers’ perceived increased collaboration had occurred among all school educators, improved instructional delivery in each tier, and a positive view of being collective responsible for student learning. In addition, the researchers noted that while teachers viewed implementation as more of a directive in the first implementation year, teachers viewed themselves as change agents in the second year. Data from the third year indicated that participants, “… willingly took on challenges and assumed responsibility for the
model’s implementation and sustainability,” (p. 47). Teachers indicated that the RTI model improved the school’s core instruction, special education referral process, progress monitoring, and collaborative planning and instructional structures in their school as well as their ability to better report academic progress and problem solve instructional delivery methods for different students. In addition, Rinaldi et al. report that participants believed the progress monitoring assessments they used improved their ability to identify student needs. In the second year, participants also felt that they were using the data more effectively to plan core and supplemental differentiated instruction. Participants felt that taking shared responsibility for student’s learning also helped them gain greater insight into student needs and progress, particularly mentioning English language learners.

Participants indicated that the time they were given to participate in collaborative problem solving, the input they received peers during the implementation process, and the use of data to make instructional decisions attributed to the efficacy of the implemented RTI model. Teachers also described themselves as highly effective in reporting student’s academic progress by the third year. Rinaldi et al. (2011) also reported educators having an improved and more collective understanding of what RTI was between the first and third year of implementation. Rinaldi et al. also pointed out that while the referral rate for special education services the year prior to implementation was ten percent, in the third year of implementation the rate had dropped to 2.3%. Participants believed the drop was one a result of being given adequate time for progress monitoring and instructional as well as their use of appropriate interventions. Educators also expressed a greater satisfaction with the referral process as well as with the instruction provided for students receiving special education services in the third year. While in the first year of implementation educators expressed concern about the lack of coordinated planning time
among teachers, paraprofessionals, and interns; in the third year, collaboration was perceived to be an integral aspect of the school’s culture. One participant, for example, described the school as being like, “… a community with a goal,” (Rinaldi et al., 2011, p. 49). Participants also expressed greater self-efficacy in year three, stating they had “more knowledge about how to address the specific academic needs of all students using collaborative structures,” (p. 50).

Rinaldi et al. (2011) reported that while educators reported positive outcomes in the third year, there were lingering concerns. Some participants expressed concern for the continuation of the model without the ongoing leadership of the current principal. Participants also reported that some of the challenges they faced during implementation spurred staff turnover. They considered turnover a threat to fidelity of implementation in all tiers. Finally, participants expressed concern over the additional challenge to ongoing implementation of the model if more staff were required to teach the growing population of English language learners in sheltered English classrooms.

Rinaldi et al. (2011) concluded that implementation positively impacted the school’s culture. For example, they state that educators went from teaching working more independently at the beginning of the study to working collaboratively and taking shared responsibility for students in year three. They determined that participants’ engagement in the model as implemented provided educators with a greater sense of empowerment and self-efficacy. Rinaldi, et al. further concluded that specific structural changes supported successful implementation. These included: “…common planning time; shared leadership; and collaborative, data-informed problem-solving,” (p. 50). The authors further concluded that the provision of professional development and shared leadership facilitated successful implementation.
Swanson, Solis, Ciullo, and McKenna (2012) conducted a descriptive case study to understand special education teacher’s instructional practices and perceptions of a working RTI framework. The study took place in a district described as having successfully implemented the model. The researchers stated their desire to understand educators’ perceptions of the challenges and benefits of the model’s components. Study participants provided reading and math instruction to third through fifth grade students within the model. All elementary schools in the district had been implementing RTI in the district for three years. However, some pilot schools in the district were in their fifth year of implementation. A district-wide RTI coordinator was responsible for overseeing implementation and for providing professional development to schools. Seventeen special education teachers participated in the first year of the study, twelve teachers continued participation in the second year. Participants identified early identification of students’ academic needs as one of the benefits. They also expressed an increased ability to meet the needs of students not eligible for special education. Participants further perceived greater opportunities for collaboration and consultation, integration into the regular education community, and shared responsibility for students as additional benefits. The challenges described by participants included: 1) the additional time and paperwork added by participation in the model, 2) scheduling issues that include frequent removal from the classroom by different interventionists, especially for students receiving multiple interventions, and 3) a need for additional staff due to the increased number of students receiving intervention services.

To study how systematic training efforts in RTI implementation might work to influence teacher efficacy, Nunn and Janz (2009) gathered data from approximately 88% of the 429 teachers from K-12 teachers who were grouped into teams and received five days of RTI instructional best-practices training. The training was administered in six-week intervals over a
period a six month period. These teachers also received follow-up assignments to promote implementation in schools aimed at transferring knowledge learned to knowledge-in-practice. The authors’ data supported a significant association between teacher efficacy beliefs regarding the effect of his/her instructional and motivational skills had on a student’s learning and the teacher’s level of involvement in his/her team during implementation. However, the authors concluded, the teacher’s level of involvement did not affect his/her efficacy beliefs about external events perceived to influence a student’s learning.

**Implications for Leadership**

Schools across the country have implemented RTI. Some are in the initial stages. Others are a number of years into the ongoing process. Researchers and theorists reviewed in this paper provide a number of considerations for further research and practice. For example, Kozleski and Huber (2010) conclude that successful implementation requires that “principals understand the underlying precepts of RTI, engage the equity concerns that undergird RTI policy, and lead the instructional and cultural changes that are required to install and sustain RTI models,” (p. 262). In addition, the authors contend “For RTI to fundamentally change the ways in which special education supports the learning needs and outcomes of students with learning differences; it must be viewed by practitioners as a system of supports within the classroom, rather than a process of removal. It must change the role of special and general educator alike. And, in changing educator identities, it must help educators to engage inquiry driven protocols that examine the impact of the interventions they employ on the learning trajectories of their students,” (p. 262).

Prewett et al. (2012) considered school-wide professional development, establishing a shared vocabulary and understanding, school-wide participation in data-based decision making, and systemic leadership during the implementation process as important strategies for building
acceptance and establishing a climate, “… that facilitates a change in staff’s perceptions of roles and responsibilities” (p. 146). The authors also suggested building a generally supportive culture for RTI before attempting full scale implementation of all essential components. Teacher support or buy-in for the changes necessary to transition to the new RTI instructional framework was also noted in a study conducted by Hoover & Love (2011). Hoover and Love suggest that a school-based collaborative consultation team with trained team leaders would help to develop and maintain needed buy-in. The team would be responsible for identifying school-based implementation issues of direct relevance and concern to the school and would base solutions on the needs of the school. Similarly, Rinaldi et al. (2011) recommended professional development or pre-service education to help articulate “core curriculum, data collection and analysis, collaborative problem solving and teaching, intervention development and monitoring, and shared leadership,” (p. 51). In-depth and continuous professional development, teacher buy-in, administrative support, and meeting time were found to be facilitative factors common to most studies reviewed by Hughes and Dexter (2011). Hughes and Dexter suggested further research into factors that support development and maintenance of RTI programs was needed.

White et al. (2012) recommended establishing the following conditions to facilitate successful implementation: 1) coordinating the effort of the district and school, 2) garnering the support and coordination of general education and special education staff, 3) securing commitment among school and district staff, “… to cease an over-reliance on special education as the only remedial option…,” (p. 88), 4) securing the commitment of the principal and key educators for implementation, 5) establishing a team that can plan implementation and help resolve issues, 6) establishing a team that focuses on the cases of student. 7) developing full understanding of the rationale for RTI, including the understanding of the model as a preferred
alternative to prior special education pre-referral and referral models, 8) creating a manageable timeline for ongoing implementation in stages; i.e., beginning with the implementation of a student progress monitoring system and a system of differentiated instruction before full implementation, 9) establishing data sharing protocols that illustrate student success to maintain educator support, 10), establishing family confidence around the effectiveness of intervention through development of a plan for family participation in the planning process.

Finally, O’Connor and Freeman (2012) focus on district-level and systematic conditions that support successful implementation. They argue that a coherent system of district-level procedures can fosters positive cultural and structural conditions necessary to establish and maintain effective building-level RTI application. These system supports and structures include: district commitment to RTI, continuous knowledgeable leadership actions geared toward meaningful building-level implementation, an ongoing use of data in planning, purposeful staff recruitment, and strategic allocation of resources.

Successful application of the model is reliant on effective leaders who can establish a shared vocabulary and understanding regarding the purpose and rationale behind the effort and can help individual schools develop the model in more relevant, meaningful ways (O’Connor and Freeman, 2012). Therefore, leaders, including district and school stakeholders, must be knowledgeable about the principles and practices of RTI. Leaders must first understand and then communicate the “conceptual framework of RTI, the basic principles, and the rationale for a systematic and data-based process for decision making that allows for clear and specific support for RTI to be communicated,” (p. 300).

Secondly, according to O’Connor and Freeman (2012), school implementation efforts are supported by districts that establish and maintain clear communication of district objectives and
a routine district-level data-evaluation process used to determine whether a school is making progress toward district objectives. Effective leadership strategies include establishing routine decision-making protocols, explicitly communicating about these routines, and regularly utilizing them to analyze the effectiveness of results on a systematic level. According to O’Connor and Freeman, clear and consistent protocols keep school staff engaged in a coherent and coordinated action-oriented process.

In addition, O’Connor and Freeman (2012) argue that leadership must establish an organizational framework that fosters necessary conditions for continuous improvement. Processes of “…goal setting, analysis of needs, evaluation of progress, and revision as needed” (p. 302) are deemed to be important aspects of such a framework. Organizational frameworks help to define the results of current actions and to determine further actions needed to move forward. Without such frameworks, according to O’Connor and Freeman, it is difficult to, “…effectively assess, organize, guide, evaluate, and update different and complex efforts…” (p. 302).

Within this organizational framework, a well-articulated assessment framework should be used to help staff make sense of the information and use data effectively to guide instructional and professional development efforts (O’Connor & Freeman, 2012). An effective assessment framework clearly defines and coordinates the assessment processes and organizes summary data in ways that become useful to educators in making decisions about classroom and building-level program outcomes. It will also promote awareness and learning and support informed and responsive planning practices within the district and school (O’Connor & Freeman, 2012).

In order to establish RTI as a viable model in schools, attention must also be given to educators’ attitudes and beliefs (O’Connor & Freeman, 2012). In many schools, RTI will require
a paradigm shift. This includes shifting the mindset of educators in terms of how a student’s capacity for learning is perceived (O’Connor & Freeman, 2012). According O’Connor and Freeman, educators who believe they can effectively teach all or nearly all students, and educators who believe nearly all students can achieve specific learning targets with support is a cornerstone of RTI’s success. The authors note that in districts and schools where RTI has proven effective, educators expressed the belief that systematic data analysis of student response to interventions eventually helped them close student skill gaps. O’Connor and Freeman state that such beliefs fuel ongoing educator commitment to provide interventions and to participate in the data-based decision making and problem solving processes. To address beliefs and attitudes about student capacity and educator efficacy, O’Connor and Freeman suggest providing educators with opportunities to discuss their beliefs and to address their implications on effective implementation of the RTI model. Evidence that challenges the notion that all or most students can progress with support can then be shared to address mismatches between the principles of RTI and current educator beliefs that may be counterproductive to effective implementation.

O’Connor and Freeman (2012) also believe that effective implementation depends on educators who possess and can enact the necessary background knowledge and skills appropriate to assess and instruct students within an RTI model. Districts in which RTI has been implemented successfully have established a profile of the skills they are looking for in potential candidates for employment. In addition, specific questions and performance tasks have been added to the interview process to determine whether potential employees possess the knowledge and skills determined essential to a district’s particular RTI model.

Finally, successful RTI programs have established mechanisms that help to ensure adequate time, staffing, and resources are provided (O’Connor & Freeman, 2012). For example,
according to O’Connor and Freeman, in order to maintain effective models in difficult financial times, successful districts have established a clear link between district strategic plans and RTI efforts. This includes using data-based program evaluations to consider how the alteration of resources might affect student outcomes. Evaluations help determine which intervention programs have had a greater or lesser impact on student outcomes. This process provides information useful in determining whether to continue or discontinue a particular program during times when it is necessary to cut a budget. Similarly, while scheduling additional time for small group and individual interventions is always a challenge, O’Connor and Freeman argue that it is more manageable in districts where there is a shared belief in prioritizing interventions based on student need and where there are well-established and clearly-communicated protocols for scheduling and the provision of personnel.

Summary

Three main bodies of work were included in this review. The first focuses on literature that provides an overview of RTI including the history and rationale, espoused purpose and goals, variations, and essential components. Another body of research provides insight into how different implementation conditions and processes have impacted educator perceptions of the RTI model or its essential components in individual districts and schools. The review sheds light on current issues associated with the impact building-level implementation of RTI that will inform the researcher’s proposed descriptive, exploratory case study examining contextual conditions that promote or restrain development and maintenance of the model. The last body of research provides a review of leadership implications that will inform the researchers’ analysis and consideration of implications for further research and practice. Finally, the review informs
understanding of research methodologies that may be most appropriate for answering the research questions presented in this paper.

**Chapter III: Methodology**

RTI is a whole-school reform. Successful application of RTI is dependent on educators who are committed and able to apply the model within the unique contexts existing within their schools. Educational change theory views educator understanding, perceptions of value, context perceptions, and efficacy beliefs as cultural and structural conditions that positively or negatively affect educator commitment and ability to apply and sustain the RTI model within a school. Informed by educational change theory, the researcher explored and described educator understandings, perceptions of value, context perceptions, and efficacy beliefs associated with local RTI implementation efforts. The researcher then analyzed the findings to consider whether these perceptions indicated conditions that facilitated or challenged effective enactment and sustainability of the RTI model within the school.

The goal of the research was to gain insight into educator perceptions of contextual conditions that existed within the school during ongoing RTI implementation efforts and to consider the implications of these findings for further change leadership. The study findings may be used to inform future RTI implementation efforts within the school. They may also be used to inform efforts within other schools in similar situations. The findings further add to the growing body of research knowledge about effective implementation and maintenance of response to intervention within schools.

**Research Questions**

Three questions guided the design and analysis of this study:
1. What are educators’ understandings, perceptions of value, and efficacy beliefs related to the RTI model and its essential components as applied within one rural Alaskan elementary school?

2. What are educators’ perceptions of essential RTI structures as currently implemented within the school?

3. How do current cultural conditions, as indicated by educator perceptions, support or inhibit effective application of RTI within the context of the school?

As Maxwell & Loomis (2003) suggest, a good process question is designed to add insight about the data and the phenomena under examination by revealing, “…the context, process, and meaning for participants in the phenomena studied….“ (p. 12). Upon answering these questions, a more detailed picture emerged regarding how school-level RTI implementation has impacted educators’ perceptions, beliefs, and understandings. The study findings provided insight into whether educator beliefs, perceptions, and understandings reflect conditions that support or inhibit effective and sustained application of the model’s essential components within the school.

Rationale for Qualitative Case Study Design

Following the reauthorization of the Individuals with Disabilities Education Act in 2004, many schools across the country are implementing Response to Intervention models. Educational change and RTI implementation literature documents the importance of educator commitment and ability to apply and maintain the model’s essential components. The literature also documents the influence implementation efforts can have on educator understanding, contextual perceptions, and efficacy beliefs that in turn influence educator commitment and ability to effectively and systematically apply and sustain the model within a school. This study was undertaken to describe the impact of RTI implementation on educator perceptions within
one rural Alaskan elementary school. It was also undertaken to consider local contextual conditions that support or challenge effective application of the model at the school level. Taking a qualitative case study approach provided rich data useful for engaging in an in-depth analysis of the contextual conditions indicated by educator perceptions. The researcher analyzed educator beliefs, understandings, and perceptions as indicators of current contextual conditions facilitating or challenging educator capacity to effectively apply the RTI model’s essential components. The research findings inform and facilitate effective implementation and maintenance practices within the school. The findings can benefit other elementary schools in similar situations and add to the growing body of research knowledge on effective RTI application and maintenance.

A qualitative approach was taken for this case study design. Creswell (2009) describes qualitative research as a method by which: data is collected in a natural setting; multiple forms of data are collected by the researcher through document examination, interviews, or observations; data is reviewed for meaning and then organized by category or theme; data analysis is conducted as an inductive process where categories and themes are built bottom-up into increasingly more abstract information units; the focus of data collection and analysis is on discovering the meaning of the problem from the participants’ perspective; the research process is emergent thereby allowing the researcher to learn about the problem from participants in the field; a theoretical lens is often used to inform the research; the researcher interprets the findings of the study; and a holistic account of the issue being studied is used as the method of reporting the findings.

The research was conducted in the real-world setting of a rural elementary charter school. Data were collected through individual and focus group interviews using multiple data sources.
The data was reviewed to examine educators’ understandings, perceptions, and beliefs about the RTI model as implemented within one school. The lens of educational change theory informed data collection and supported analysis and interpretation of the findings. The analysis and discussion of the findings were presented in a narrative form using thick descriptions that paint a more holistic picture of the present implementation context.

The researcher used a case study approach to gain insight into the current perspective of school-level educators who have participated in the shared experience of implementing the model’s essential components within one elementary school. According to Yin (2009), Case studies support efforts “… to retain the holistic and meaningful characteristics of real-life events…,” (p. 4). The researcher used the case study method to collect thick, rich data to capture the contextual subtleties associated with educator understandings, perceptions, and beliefs that may not have been possible with other data-collection methods. According to Kyburz-Graber (2004):

A case study is appropriate for the analysis of a single phenomenon against the background of context in terms of personal, historical and life historical aspects (Lamnek, 1995). In the ongoing research process, those aspects will be linked to a general view, relevant influencing factors will be identified, and the observed interactions will be interpreted (Mayring, 2003). The aim is to understand the meaning behind the action and knowledge of the participants. (p. 54)

Yin (2009) also suggests that case studies are useful for describing an event or process in its natural ambit to help answer how, who and what questions. Using an exploratory, descriptive case study, the researcher attempted to discover; through insights gained into educators’
perceptions, understandings, and beliefs; the present cultural and structural conditions that support or inhibit effective application and maintenance of the RTI model within the school.

**Participants**

This study took place at a preschool through sixth-grade elementary charter school in rural Alaska. *Purposeful selection* was the strategy used for this case study. Maxwell (2004) describes purposeful selection as, “… a strategy in which particular settings, persons, or activities are selected deliberately in order to provide information that can’t be gotten as well from other choices,” (p. 88). One form of purposeful selection is the use of *panels*. Panels are described by Weiss (as cited in Maxwell), as “people who are uniquely able to be informative because they are expert in an area or were privileged witnesses to an event,” (p. 88). Certified faculty and paraprofessionals working to implement RTI at the school during the 2012-2013 school year made up this panel. The study participants were invited to take part in either one of two focus groups or an individual interview. The panel size was determined by the number of total RTI team members present at the school who voluntarily participated in the focus groups or interview.

The certified classroom and certified support educator focus group included five full-time classroom teachers and one part-time certified RTI coordinator. The Kindergarten teacher had sixteen years of experience in the position at the start of the 2012 school year. Ten of those years were spent teaching at the study site. This teacher was the only certified classroom participant to have received district-sponsored RTI training prior to the 2012-2013 school year. The fifth-sixth grade teacher participant was in his third year of teaching and his third year in the fifth-sixth grade position at the school. The two third-fourth grade participants were each in their second year of practice and in their second year at the school. The first-second grade teacher participant
was in her first year of teaching as the newest member of the certified teaching staff. One of the part-time certified support members was working in her second year at the school and her second year as a part-time RTI co-coordinator. This educator received her teaching degree in music education and worked part-time in that position for two years within the school as well.

The second focus group was made up of five full-time and one part-time paraprofessional staff members. All paraprofessionals had worked in the school between one and four years. Only one of the paraprofessional staff participants had received formal training in Tier 2 and Tier 3 programming provided in workshops by the district prior to the 2012-2013 school year. All paraprofessionals received training assessment administration training provided by the special education teacher or principal. Most received some training in the use of the Tier 2 programs used with students provided by the special education teacher or principal.

Paraprofessional A had worked in the school for two years conducting small-group and individual RTI interventions for part of the day. She also provided support in the one of the third-fourth grade classrooms where she worked with small leveled reading groups or monitored larger groups of students and provided help to individual students who needed it.

Paraprofessional B was a retired middle-school teacher. She was hired in September soon after the 2012 school year began. During the previous year, she had worked as a substitute teacher in the school. Paraprofessional B provided support in another third-fourth grade classroom where she monitored students and provided reading, writing, or math help to individual students who needed it. Paraprofessional B also supported the fifth-sixth grade teacher in the classroom during writing time and pulled students out for small group or one-on-one interventions.
Paraprofessional C worked part time as a Limited English Proficiency (LEP) paraprofessional. She worked with LEP students in a one-on-one setting and provided instruction using some RTI intervention programs.

Paraprofessional D worked for four years as a paraprofessional, all at the study site. She worked with both first-second grade classroom teachers in the morning, working with small groups of students during literacy center time. She also provided small group or one-on-one interventions to both primary and intermediate students.

Paraprofessional E began at the start of the 2012-2013 school year. She worked alongside paraprofessional D conducting small literacy groups in both of the first-second grade classrooms. For the remainder of the day, paraprofessional E worked with small student groups or one-on-one to provide RTI interventions.

Paraprofessional F began working at the school in the fall of 2012. She worked as an instructional paraprofessional at another district school prior to transferring to the study site. During the three years paraprofessional F was employed at another school, she provided intervention instruction within an RTI model. Paraprofessional F took a three-month leave of absence from her position during the 2012-2013 school year to student teach at the study site. While student teaching, paraprofessional F attended data retreat meetings with the regular classroom teacher and worked with Tier 2 students in the classroom. Before and after completion of her student teaching experience, paraprofessional F provided in-class support to the fifth-sixth grade teacher and provided RTI interventions to small groups and individual students.

An individual interview was conducted with support educator B, also the school’s special education teacher. Support educator B was co-coordinator of RTI programming during her first
and second years at the school. Prior to this, she had worked for twenty years as a special education teacher in various elementary, middle school, and high school settings.

**Data Collection**

Two ninety-minute focus groups and one semi-structured interview were conducted in June of 2013. One focus group interview was conducted with the certified faculty. The other was conducted with paraprofessional staff. One of the certified RTI support educators took part in the certified faculty focus group. The second RTI support educator was interviewed individually. Both focus group sessions and the individual interview took place at the study site immediately following the end of the school day to minimize the impact on educators’ lives. The interviews were conducted to elicit current educator understandings, beliefs, and perceptions of the purpose, goals, value, benefits, and challenges associated with the implementation and application of the RTI model within the school.

The researcher received permission from authors Rinaldi et al. (2011) to use focus group and individual interview protocols developed by the authors and published within their three-year study of teacher perceptions of Response to Intervention. These interview protocols were adapted by the researcher to elicit educator perceptions specific to the current study using Patton's (1987) protocol to ensure questions remained open-ended, clear, and neutral (see Appendix B). During the focus groups and individual interview, the researcher asked additional questions in order to clarify participant responses. All interviews were audiotaped. Two copies of electronic materials were securely stored; one on a computer and the other on a server. Any non-electronic files and audiotapes were stored in a secured file cabinet.

School documents relevant to the school’s application and implementation of the RTI model were collected for review. Documents included in-service agendas, minutes, and training
materials; staff meeting agendas, minutes, and informational materials; the RTI section of the school’s teacher handbook; written intervention plans, and the district’s RTI protocols and guidelines.

Data Analysis

Data were gathered to explore and describe educators’ understanding, beliefs, and perceptions of: program efficacy; educator efficacy; structural supports and challenges; and cultural supports and challenges. The data for the study were gathered from two ninety-minute focus group sessions and one sixty-minute individual interview. The first focus group session was conducted with six full-time paraprofessional educators. The second session was conducted with five full-time classroom teachers and one part-time certified RTI coordinator. The individual interview was conducted with the special education teacher who also shared RTI coordination and support duties with the part-time RTI coordinator. The sessions and interview were audio recorded and transcribed verbatim.

The researcher examined all interview transcripts and relevant school documents to look for patterns and categories. Deedoose software was used to help code educator perceptions of understanding and efficacy, perceptions of value, perceptions of support, and perceptions of the implementation culture in order to develop a theory of local contextual conditions supporting or inhibiting effective application of the model at the study site. All transcripts were initially coded using provisional codes (Saldana, 2013) developed by the researcher. Educational change theory and prior RTI research informed code selection. The initial codes were expanded and modified during the coding process to better capture the meaning of responses more specific to the current study. In-vivo coding was also used to gather rich descriptions of meaning and to help keep the researcher’s interpretations grounded by the words of the participants themselves (Saldana,
Following initial coding, the data was clustered into categories developed to address the research questions and then further subcategorized by participant group.

By examining data within and across these subcategories, participant response patterns were identified. Within-group patterns were identified when similar responses were shared by a majority of participants. Across-groups patterns were established by identifying response similarities shared by two or more participants. Participants discussed a wide variety of factors associated with their perceptions of RTI as implemented. However, through final analysis of the data, the most salient themes were identified (Saldana, 2013): These were: (a) Understanding, beliefs, and values for RTI as a general education model; (b) Understanding, beliefs, and values for RTI as an alternative model of special education identification; (c) role efficacy; (d) structural supports and challenges; and (e) cultural supports and challenges.

Using this qualitative case-study design resulted in a more detailed description and a greater depth of knowledge regarding participant understandings, beliefs, and perceptions. It also captured subtleties in the relationship between the context-specific conditions and participant beliefs, understandings, and perceptions that may not otherwise have been evident using a different methodology. Implications of the research findings were informed by salient themes that emerged from a review of foundational literature on educational change as well as prior RTI theoretical and research literature.

**Validity and Credibility**

Several issues associated with qualitative case study research were addressed to ensure the findings are valid and credible. Potential limitations associated with qualitative case studies of this type include the inability to apply statistical generalization of the findings due to the presence of unique contextual factors and the small panel size. However the results of the study
support theoretical generalization based on a comparison of findings documented in educational change theory and RTI implementation research literature.

Because the researcher was also employed as an administrator at the study site, there was an increased risk of bias. In order to address this risk, the researcher reflected on the researcher’s interest in the subject of the study and, as Seidman (2006) puts it, “… examine[d] it to make sure that the interest was not infused with anger, bias, or prejudice,” (p. 117). In addition, the researcher self-reflected and clarified any personal biases stemming from the researcher’s background (including socioeconomic origin, culture, gender, or history) that may shape interpretations formed during analysis (Creswell, 2009). The goal was not to let any bias for the school or its educators threaten the validity and credibility of the research. In this study, the researcher was an active participant, acting as the school administrator. Although the researcher had a vested interest in the success of the RTI model in the school and district, the researcher also understood that educator understanding and mindset plays a vital role in the model’s success. Therefore, the researcher had also vested interest in understanding educator concerns and the challenges they faced in applying the school’s RTI model.

In addition, to reduce the risk of bias and other threats to validity of the research data and better assure accuracy of the findings, the researcher employed data triangulation (Guion, Diehl, McDonald, 2011) and member checking (Creswell, 2009) validation strategies. The response to a single topic by different stakeholder groups is an example of data triangulation (Guion et al.). Maxwell (2005) suggests that data collection from a “variety of sources” helps the researcher gain a broader understanding. In the current study, the researcher triangulated data from the transcriptions of three different stakeholder groups to elicit their perceptions of RTI model application and implementation within the study site. The three stakeholder groups acting as
data sources were classroom teachers, instructional paraprofessionals, and certified RTI support staff. The researcher further triangulated the data by cross-checking the understandings, perceptions of value, efficacy beliefs, and context perceptions of all stakeholder groups. Further, participants provided feedback through member-checking for validity of the collected data. Participants were provided transcripts of the interviews and a draft of the researcher’s interpretation of participant responses and feedback was requested. None of the participants requested that changes be made to any statements or interpretations of those statements made by the researcher.

Because the researcher worked alone on the research project, there was an increased risk to validity and credibility of data. The researcher took sole responsibility for gathering, organizing, and analyzing the data and reporting on the findings. The large volume of tape recordings and documentation analysis required also increased the risk of documentation errors and coding drift (Creswell, 2009). To address these risks, the researcher employed a transcription service and used computer-aided data analysis software to help minimize the risk of errors and to improve the ability to maintain consistency while coding.

Documentation related to the school’s RTI implementation was also reviewed. District RTI protocols and guidelines, in-service materials and agendas, and staff meetings materials, agendas, and minutes were included in the review. Relying on documentation from the study site poses a risk. Documentation may be incomplete or inaccurate. However, because the researcher worked at the site, staff meeting agendas and minutes, in-service agendas and minutes, professional development documentation, and other informational documents were readily accessible and provided an “unobtrusive source” of relevant information (Creswell, 2009).
Protection of Human Subjects

The researcher was employed as the school administrator at the proposed study site at the time the research was conducted. Because the researcher worked closely with the participants in a leadership role and had invested time and energy into ensuring the success of the implementation under investigation, the potential for harm to the participants’ feelings of well-being and the potential for disruption to the participants’ daily lives were of primary concern. In order to diminish potential perceptions of pressure or coercion and to ensure participants felt comfortable about whether or not to participate, the researcher followed Northeastern University Internal Review Board guidelines by sending only one email notification inviting potential participants to attend one focus group session or one individual interview.

The researcher relied primarily on data gathered from face-to-face interviews and focus groups. Participants articulated their feelings and perspectives via focus groups or a semi-structured interview. To help ensure those who volunteered felt comfortable sharing challenges and concerns, a written consent form was provided to each participant before the focus groups or individual interviews were conducted. The form included a detailed description of the purpose and goals of the study (see Appendix E). The consent form detailed the researcher’s stance, the purpose and nature of the evaluation (Shaw, 2003), a detailed descriptions of the research goals and case study protocols (Yin, 2009), an explanation of why participants were invited and what they were being asked to do, how long the study would take, how the results would be used (Holm-Hansen, 2007), the potential benefits for participants and the larger community, and a written statement of the individual’s right to participate, not participate, or withdraw participation at any time (Creswell, 2009) were provided to help diminish any ethical concerns associated with any undue researcher influence on participants. None of the participants
retracted permission to be interviewed or retracted permission to use any part of their responses to the interview questions.

**Summary**

RTI holds promise for earlier identification and support of students who experience learning difficulties. It also provides a promising alternative to the deficiency model of learning disability identification. However, there are a number of potential prohibitive contextual conditions that, if not addressed, can endanger model’s success at the school level. The purpose of this case study was to explore and describe elementary school educators’ understandings, perceptions of value, and efficacy perceptions associated with ongoing RTI implementation within the school. It was also to examine educator perceptions as indicators of contextual conditions that support or inhibit effective implementation within the context of the school. The analysis and findings of the current study were informed by educational change theory and findings from prior RTI implementation research reviewed.

The research questions were intended to elucidate patterns and themes that would help to illuminate current contextual conditions associated with ongoing efforts to implement RTI as reflected by educator understandings, beliefs, and perceptions. They were also intended to reveal conditions perceived to support or inhibit effective application and maintenance of RTI within the school. Collecting data through the use of focus groups to answer these questions allowed for a deeper understanding of current structural and cultural conditions present within the school associated with ongoing RTI implementation efforts. The rich data results allowed for greater insight into the implications for school and district RTI leadership concerned with facilitating more effective implementation and maintenance of the model. The results also add to the
growing body of research aimed at improving effective local application and maintenance of the model.

Chapter IV: Report of Research Results

Introduction

This case study was conducted to explore and describe educator understanding, beliefs, and perceptions of RTI as implemented within one rural Alaskan elementary school. The school’s ongoing efforts to implement RTI formed the basis for the study. Initial implementation began in 2008, four years after the concept was reintroduced through the reauthorization of IDEA, and continued through the spring of 2013. The purpose of the research was to establish a foundation of knowledge for current contextual conditions associated with initial and ongoing implementation efforts within one rural Alaskan elementary school. The purpose was also to develop an understanding of conditions within the school that may facilitate or inhibit more effective application of the model. Two case study focus groups and one individual interview were conducted to accomplish these goals. The first section of this chapter provides a brief profile of the study site and brief history of RTI implementation within the school. The second section discusses the following research questions:

1. What are educators’ understandings, perceptions of value, and efficacy beliefs related to the RTI model and its essential components as applied within one rural Alaskan elementary school?

2. What are educators’ perceptions of essential RTI structures currently in place within the school?

3. How do current cultural conditions, as indicated by educator perceptions, support or inhibit effective application of RTI within the context of the school?


**Study Site**

The study took place in one rural Alaskan elementary charter school. The student population during the school year averaged 142 students. Forty-three percent of students were identified as Caucasian, 27% as Alaska Native, 14% as Multiethnic, six percent as Asian, five percent as Hispanic, one percent as American Indian, and less than one percent as African American. Approximately four percent of students were identified as eligible for special education services and five percent were identified as eligible for Limited English Proficiency services. The school was designated as a school-wide Title One school with approximately 59% of students meeting federal poverty guidelines to receive free or reduced-priced lunch. The school received a national award for excellence in 2012.

RTI implementation at the site was initiated in 2008 when a district-wide benchmark and progress monitoring system were introduced to all schools through the district’s special education department. All schools in the district were required to initiate benchmark screenings three times a year and to regularly progress monitor students receiving Tier 2 and Tier 3 interventions. Each school was allowed to independently select research-based instructional programs to provide Tier 1, Tier 2, and Tier 3 instruction. The Tier 1 programs selected met the research-based criteria established by the district curriculum department. The Tier 2 and Tier 3 programs selected met criteria established by the district’s special education department.

In most district elementary schools, reading specialists coordinated school-wide RTI implementation. No reading specialist was employed at the study site, however. Instead, the school’s special education teacher was assigned to coordinate and manage RTI services. Thus, ongoing implementation efforts were coordinated by the special education teacher with oversight from the school principal as well as the district special education director. A tiered system of
reading instruction was initiated in 2008. Tiered math interventions were added in 2009. Tiered writing instruction was added in 2012. Tier 3 support services were provided by either the special education teacher or instructional paraprofessionals using district-approved intervention programs and strategies with small groups of students and individuals in a pull-out setting. Classroom teachers were responsible for providing Tier 1 and Tier 2 programming.

In 2011, a new principal was hired and a new half-time RTI co-coordinator position added. The principal was responsible for continuing RTI implementation. The half-time coordinator was responsible for maintaining the AIMSweb assessment database and for supporting educators in implementing some of the technology-based intervention programs. The special education teacher remained responsible for coordinating all Tier 2 and Tier 3 intervention services. All Tier 2 and Tier 3 instructional intervention programs continued to be selected either by the special education teacher or the principal with guidance from the district special education director.

In the fall of 2012, a new Tier 2 data-team meeting protocols were introduced to the certified faculty by the principal as part of a two-day in-service training. Some of the approved Tier 2 reading programs and resources were also reintroduced to certified faculty for use in the classroom. Tier 2 identification and instructional protocols were also reviewed. Throughout the year, additional Tier 1 and Tier 2 programs and strategies were either introduced or reviewed with certified faculty and paraprofessional educators through half-day in-service and data-retreat sessions (see Appendix A).

The RTI model implemented during 2012-2013 included all three essential components of assessment, instruction, and data-based decision-making. Kindergarten through sixth-grade students were screened using AIMSweb benchmark protocols in the fall, winter, and spring.
Students performing at the 10th percentile or below the national average of performance for each benchmark period on the AIMSweb protocols were considered for Tier 3 interventions. Students performing at or below the 25th percentile were considered for Tier 2 interventions. Those students placed in Tier 3 interventions were monitored weekly for eight to twelve weeks. Those placed in Tier 2 interventions were monitored every two weeks for eight to twelve weeks. Students scoring above the 10th percentile for three consecutive weeks on any AIMSweb progress monitor graph were moved to Tier 2 support rather than Tier 3 for that subject area. Students scoring above the 25th percentile for three consecutive weeks on any progress monitor graph were released from Tier 2 progress monitoring.

Eight data-retreat meetings were conducted during the school year; one for each of the school’s multiage or single grade teams. The first meetings were held following administration of the fall benchmark assessments. The second were conducted following winter benchmark administration. Most data teams were made up of two classroom teachers, the school principal, and the two RTI co-coordinators. Because the school had only one single-grade Kindergarten, that team consisted of only one classroom teacher along with the principal and the two co-coordinators. During each data retreat meeting, the classroom teacher or teachers, the principal, and two RTI coordinators used AIMSweb, Developmental Reading Assessment (DRA), and other classroom-based assessment data to analyze student need, consider areas for improvement, and to create written in-class or pull-out intervention plan for each Tier 2 and Tier 3 student.

Following the second data retreat sessions, follow-up progress-monitor sessions were held to consider instructional changes for any student not making adequate progress, based on the progress monitoring scores, after four consecutive weeks of intervention. Students performing below the fifth percentile on winter and spring AIMSweb benchmark assessments
in the same subject area were to be considered for special education referral. Intervention and monitoring would then continue for two additional eight-week intervention periods to closely monitor intervention fidelity and student response. The data taken from these assessments was to be considered as part of the district’s eligibility criteria for specific learning disability.

The special education teacher was responsible for coordinating all AIMSweb benchmark and progress monitoring assessments. Classroom teachers were responsible for administering additional formative, diagnostic, and summative classroom-based assessments. Six full-time instructional paraprofessionals were tasked with administering the AIMSweb benchmark and progress monitoring assessments. Paraprofessionals also helped classroom teachers administer a diagnostic reading assessment in the fall and winter. These assessments were reviewed during the data-retreat sessions and were utilized to plan targeted Tier 2 instruction in the classroom and to plan for pull-out Tier 3 instructional interventions.

Paraprofessionals were assigned to classrooms for one to two hours a day. In the classroom, paraprofessionals were to assist classroom teachers in providing Tier 2 small-group instruction. Paraprofessionals and the special education teacher were to provide Tier 3 pull-out instruction to small groups and individual students. An additional part-time Limited English Proficiency (LEP) paraprofessional, a preschool paraprofessional, and a special education paraprofessional also provided some RTI interventions to students. The principal worked to facilitate the continued use of school-wide benchmark and progress-monitoring assessments, to establish the use of research-based Tier 2 interventions within the classroom, and to develop and oversee collaborative problem-solving teams responsible for determining student need and planning for instructional interventions.
Findings

In order to understand the perspectives of educators regarding the school’s RTI model and implementation efforts, the researcher conducted two focus group sessions and one individual interview with thirteen study participants. The findings from those interviews, organized by the three research questions, are reported in this section.

Research question 1. What are educator understandings, perceptions of value, and efficacy beliefs related to the RTI model in general as applied within one rural Alaskan elementary school?

Responses in relationship to Research Question #1 were discussed by paraprofessional, classroom teacher, and certified support staff participants. Table 1 highlights themes found within and across focus group and individual interviews.

Table 1

Themes in relationship to the question: What are educator understandings, perceptions of value, and efficacy beliefs related to the RTI model in general as applied within one rural Alaskan elementary school?

<table>
<thead>
<tr>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTI is a general education model</td>
</tr>
<tr>
<td>RTI is beneficial for most students</td>
</tr>
<tr>
<td>Small group instruction is central to the model</td>
</tr>
<tr>
<td>The Tier 2 model has unrealized potential</td>
</tr>
<tr>
<td>Mixed beliefs of RTI as an alternative special-education identification model</td>
</tr>
<tr>
<td>Mixed feelings of role efficacy</td>
</tr>
</tbody>
</table>

RTI is a general education model. The perception of RTI as a model of early academic intervention for general education students was theme weaving across the data analyzed from all
groups. Certified support educator A, like most participants across groups, described RTI as a “support intervention program,” where students needing extra reading, math, or writing help are identified and where targeted instruction is provided to improve reading, writing, or math skills. Certified support educator B described RTI as a model for students who were not doing as well as hoped but who were not necessarily special needs students. She believed it to be a *middle ground* where students are placed in smaller groups where educators can improve learning through increased individualized instruction beginning where students need it. Most educators provided similar descriptions of the model and emphasized that the model improved their ability to support a greater number of students within the general education population. Classroom educator D, for example, described RTI as a way to *level the playing field* for some of her students by, “… giving them the extra boost they may need.” Paraprofessional educator discussions likewise demonstrated a consensus among participants that RTI offered a way to help keep general education students from *falling through the cracks.*

**RTI is beneficial for most students.** Mixed beliefs about the benefits of improved student learning as a result of general education identification and intervention processes was a theme identified from data analyzed across all groups. Many certified and classified participant discussions demonstrated that a majority of participants valued RTI as an improved way to support individual students needing basic reading, writing, or math skills. Classroom teacher A stated, “I did find that most of the kids who had interventions did improve, and they probably wouldn't have had as much improvement without that intervention.” Certified support educators A and B attributed student gains on benchmark assessments to student participation in interventions. Certified support educator A said she observed first hand that students were using problem-solving strategies taught during math interventions during their progress monitoring
assessments and that their progress monitoring scores from those administrations showed improvement. Most other participants also cited the progress of individual students as evidence that the model was working.

One paraprofessional educator, however, questioned whether student improvement was simply a result of building a closer connection between teacher and students participating in small group or one-on-one instruction, with or without use of the RTI model. Paraprofessional D stated, “I'm just curious as to whether or not it's accidental…. Independent of the assessment, decision making, instruction, whatever; when you make a connection like that, if you get one student, it's just serendipitous.

A majority of paraprofessional and certified participants perceived that RTI was not as beneficial for students whom they identified as exhibiting negative behavior, anxiety, or a lack of motivation. Paraprofessional E said that working with non-motivated students made it harder to keep them working through the interventions. As she said: “The big thing is, if they came in ready to learn, that was great. I had some great days with some of the more challenging students. But when they just didn't want to, behavior-wise or [with] attitude, that was my biggest challenge.” Classroom teacher E further stated that no matter how much effort teachers put into the RTI process, it would not benefit students who were not motivated to improve or not willing to accept the help. Certified support educator B also believed that, despite the additional services provided within the model, not all students would experience accelerated progress. Further, paraprofessionals concluded that student attendance was a factor inhibiting RTI efficacy for some students. One paraprofessional summed up the general perception shared among the group by saying, “… they backslide. You go test them one time, then you go back and test them again, it's like they never were taught anything.”
**Small group instruction is central to the model.** Providing students with targeted, small-group or individualized RTI instruction as the greatest benefit to improved learning for general education students was strongly evident within discussions across all participant groups. Support educator A described small group instruction as effective and necessary. Similarly, classroom teacher E stated that when small-group instruction was eliminated for some students, they ceased making gains. Classroom teacher D believed that one-on-one instruction benefitted students because educators could focus on strengthening some areas of a student’s multiple intelligences. Others felt it helped students gain the basic literacy and numeracy skills they needed to be successful in the classroom.

Classroom teacher B believed providing small-group instruction based on student need as the major benefit of the model. Data taken from paraprofessional discussions also showed the general belief among this group that small group and one-on-one instruction was key to the growth of struggling learners. Paraprofessionals also agreed that some of the one-on-one instruction in particular had worked to alleviate some student behavior problems which in turn, they believed, led to improved learning. These participants generally concluded that the one-on-one instruction may have worked to diminish an element of embarrassment some students may have experienced in larger group settings in which the negative behaviors had been displayed. Paraprofessional F also stated, and others generally agreed, that when students with behavior concerns received one-on-one attention, more focused instruction could be provided to students working in larger groups as well. Certified support educator D summed up the general consensus among participants about the benefits and necessity of small group and one-on-one instruction when she stated, “… they really benefited from having that small group, everyday instruction…. I watched their number go up when they had it and I watched their number drop
when they didn't.” While certified support educator D referred to small group instruction provided as a part of Tier 2 and Tier 3 interventions, most participants associated small-group or one-on-one instruction almost exclusively with Tier 3 pull-outs.

**The Tier 2 model has unrealized potential.** From analysis of data taken from across focus group and interview discussions, it was apparent that most participants believed Tier 2 instruction had the potential to benefit students. Certified support educator B described the school’s Tier 2 instructional model as an improvement over past classroom practices. She stated that past classroom pedagogies were not always so accommodating of individual student needs. Certified support educator A stated that Tier 2 instruction was an important way of helping students maintain academic gains made in Tier 3. Classroom educator D said that for some students Tier 2 instruction should prevent the need for Tier 3 pull-outs.

Despite a general belief across all groups that Tier 2 had the potential to improve student learning, discussions within all groups showed mixed perceptions about whether the potential had been realized in most instances. Discussion data from all groups also showed that confusion regarding the Tier 2 model was widespread. None of the classroom teachers directly linked any student improvement specifically to in-class small-group instruction. Instead, data showed that many classroom teachers had not yet developed a clear picture of what Tier 2 instruction should look like in the classroom or how to provide this instruction consistently. Classroom teacher E characterized the process of moving students from Tier 3 support back to Tier 2 as a somewhat haphazard process. Classroom teacher E stated:

… We can do the tier two but they're kind of thrown back in the whole classroom. We're trying to get everything going there and I think they tend to get lost if they're not... Some don't but I think a majority of them tend to get lost in the shuffle.
Classroom teacher E also believed that some of the students moved from Tier 3 to Tier 2 had ceased to make progress. Support educator A shared this concern and described seeing student scores drop as they moved from Tier 3 to Tier 2 instruction. Three other classroom teachers shared similar concerns about the inconsistent implementation of Tier 2 interventions in the classroom.

When paraprofessionals were asked whether Tier 2 instruction had benefitted students, the larger group of paraprofessionals turned to paraprofessional A for the answer. They explained that paraprofessional A had been the one person responsible for administering most of the Tier 2 progress monitoring assessments. After some consideration, paraprofessional A then recalled one student’s improved reading scores and associated those scores with the student’s in-class reading fluency intervention. Discussions within this group also demonstrated some confusion about the Tier 2 model. Discussions showed, for example, that all paraprofessional participants expressed some degree of uncertainty about when Tier 2 instruction was being provided in the classroom or whether they were involved. While some paraprofessionals explained that they did help with small groups and individual students in the classroom, it was unclear to them whether this was a part of the in-class Tier 2 model. Most paraprofessionals expressed confusion about what constituted Tier 2 instruction and most did not know whether that instruction had been associated with student improvement.

Within the certified support group, the two certified support educators more specifically linked some of the in-class Tier 2 interventions with student improvement. Certified support educator B stated that during a recent review of a benchmark-to-benchmark assessment report, she did see evidence that a number of students who had received Tier 2 interventions had made growth. Likewise, certified support educator A stated that she observed improved student
progress monitoring scores corresponding to their involvement in small-group or one-on-one Tier 2 interventions. Data from certified support educator discussions did, however, indicate that both support educators’ involvement in Tier 2 implementation had been limited. Support educator A, for example, stated that she remained uncertain about in-class applications of the Tier 2 model and had not been involved in providing implementation support in that area. Likewise, support educator B indicated she had limited her involvement during data review and planning meetings because she did not feel Tier 2 students were her priority and did not feel comfortable, “telling the classroom teachers what to do in their classrooms for the Tier 2 kids.” In addition, discussion data taken from support educator B and others across groups indicated that support educator B’s involvement with Tier 2 implementation was limited to providing classroom teachers with information about Tier 2 instructional resources when requested. Support educator B also said that while she knew how to use the intervention programs within the Tier 3 setting, she could learn more about implementing those programs within the classroom.

**Mixed beliefs of RTI as an alternative special-education identification model.** Mixed beliefs about the purpose and benefits of RTI as an alternative special education identification model was a theme identified from data analyzed across all groups. Some participants perceived RTI as an improvement over the older special education eligibility model. For example, certified support educator A believed participation in the model was a way to diminish over-identification of students for special education. Certified support educator A and paraprofessional F also believed the model provided intervention earlier than students would have received under the older discrepancy model of identification. Certified support educator B commented:
I think it has reached out to more kids; way, way, way more kids [than] if we didn't do this process…. Back in the days where the only kids that got an intervention were kids that qualified for special education, and that would probably be someone that's after third grade, you really didn't qualify for special education until almost third grade because that's when the gap showed up according to your IQ. So, yes I think this is much better. We are starting earlier with kindergarteners and we can give them interventions before they get so far behind.

Others who addressed RTI as part of the special education referral process, however, believed RTI to inhibit more timely identification. For example, classroom teacher E believed RTI had been put in place to inhibit or delay identification for students who were learning disabled and needed special education services. Classroom teacher E stated:

I think it's more of a way to not qualify people who meet specific needs or have specific needs, and instead we use a model that allows us to address needs, and we bounce people around rather than put them in programs that can help them, that are federally-funded. I think it's a way to reduce that, the funding issue.

Two paraprofessional educators also shared concerns that the RTI model delayed more appropriate types of support that special education identification would have provided.

*Mixed feelings of role efficacy.* Mixed feelings of efficacy associated with the application of instruction, assessment, and decision-making roles was a theme evident across all groups. The extent to which participants expressed confidence or insecurities associated with their roles varied between educators within and across groups. However, participants in all groups described diminished feelings of efficacy associated with at least some aspects of their assessment, instruction, and decision-making roles.
Instruction. Paraprofessionals generally expressed a sense of confidence and satisfaction associated with their Tier 3 instructional roles. All paraprofessionals shared accounts of how their instruction helped to improve students’ skills, strategies, and motivation. Paraprofessional E, for example, proudly shared that some of her students were doing well with addition and subtraction problems that had previously been a struggle. She said:

I can think about a couple of the first graders I worked with and one of the second graders, it was literally just sitting down with them and giving them a different strategy and me understanding why they are struggling…. And it was based on the tests, the assessment technique and how they were identified... And they are just like doing awesome now with the addition and subtraction questions.

Paraprofessional discussions also showed that the group commonly believed they played an effective role in supporting classroom teachers within the model. Paraprofessionals particularly believed their support made it possible for the teachers to give students more individualized attention. As paraprofessional F summed up, “[we] give them an extra pair of hands to work with a child who needs the extra support in the classroom or in a pull-out situation.”

Although paraprofessionals generally described feeling confident and successful in their RTI roles, participants did describe certain Tier 3 instructional situations where they felt less effective. For example, paraprofessional E explained feeling particularly frustrated as she faced a seeming mismatch between a student’s chosen intervention program and her observation of that student’s needs. She explained that she was not able to get answers to her concerns or questions in this situation and so was not able to adjust her instruction. Other paraprofessionals expressed similar concerns associated with some of the individual Tier 3 instruction they
Paraprofessional B expressed a great deal of initial discomfort with her Tier 3 role in general. She said it took her quite some time to figure out enough about the instructional programs and what she was supposed to be doing to feel more comfortable in this role. In addition, while most paraprofessionals stated they felt comfortable using the research-based programs provided for Tier 3 instruction by the end of the school year, they also believed the learning curve was steeper than it had needed to be. Discussion revealed a common sentiment among paraprofessional participants that additional training would have helped to alleviate some of the difficulties the group experienced.

Paraprofessional discussions also showed that most participants felt less comfortable and more uncertain about their Tier 2 roles in the classroom. For example, while paraprofessionals D and E stated that they were assigned to work daily with small groups in the classroom, paraprofessionals A, B, and F stated that they had to find their own way in providing in-class support. While paraprofessionals A and F expressed feeling more comfortable with just jumping in or asking what was needed, paraprofessional B felt a great deal of initial anxiety in not having a set classroom duty schedule.

Paraprofessional discussions indicated that all participants in this group were confused about whether the in-class support they provided was a part of the school’s Tier 2 model. For instance, although paraprofessionals D and E stated they had provided daily small-group support within the classroom during literacy time, they were uncertain whether they were working within the Tier 2 model because they were not necessarily working with struggling learners at those times. Paraprofessionals A and B questioned whether their in-class support was considered a part of the Tier 2 model because their in-class duties did not always follow a planned schedule for working with students.
Classroom teacher discussions indicated that all participants in this group recognized that they were responsible for providing Tier 2 interventions in the classroom. However, a significant theme that emerged from classroom teacher discussions was that these educators were not comfortable in their Tier 2 instructional roles, and they did not believe they were able to adequately coordinate paraprofessional support in the classroom on their own to provide Tier 2 instruction consistently. Classroom teachers also felt they did not yet have enough understanding of the research-based programs to be able to implement them effectively in the classroom. Classroom teacher A said that, while she had programs and strategies she felt were useful, she was not confident that these were the most up-to-date, scientifically-based programs that she should be using. Classroom teacher E explained with some frustration, “I think we're all still learning the programs. I mean, if it's not scientifically-based, we can't use it.” Classroom teachers further associated their discomfort with uncertainty about what steps needed to be taken after initial student intervention plans were developed within the data-retreat sessions. Certified support staff echoed this sentiment. As support educator B stated, “I would say we're still in the beginning parts of [Tier 2] and people still may be finding their way on that.” Four out of five classroom teachers also described themselves as being at the beginning stages of learning how to implement Tier 2 instruction.

The two certified supported educators who shared the role of RTI co-ordination likewise expressed concerns about their ability to provide paraprofessionals and classroom teachers with ongoing support. Support educator B, also the school’s special education teacher, said while she felt most confident in her ability to instruct students using district-approved intervention programs, there was still a lot for her to learn about how to implement these programs within the RTI model. Support educator B also found it a challenge to maintain the
paraprofessionals’ instructional schedule. She said this was particularly true when a change in a student’s instruction was required because the paraprofessionals’ schedules were already full and the pull-out intervention times were limited. Support educator B also expressed discomfort related to oversight of Tier 2 implementation. She said she felt that teachers would know how to best implement Tier 2 programs in the classroom and so did not want to tell classroom teachers what to do.

Support educator A stated that in some cases, the support she provided was limited by her own uncertainty about how the RTI co-coordination responsibilities were divided. Support educator A particularly expressed concern in not knowing classroom teachers needed more with help with Tier 2 coordination and oversight, but she said was still uncertain about who was responsible for providing this support. Support educator A said that her lack of understanding about Tier 2 programs also made her feel insecure in providing this type of support to classroom teachers.

Assessment. Mixed feelings of efficacy associated with different aspects of assessment administration, analysis, and application was a theme evident across participant groups. Most participants expressed confidence in paraprofessionals’ ability to administer benchmark and progress-monitoring assessments with fidelity. Most also associated AIMSweb growth data with improved confidence in the efficacy of RTI instruction they or others had provided. However, a majority of participants also expressed feeling less confident in their use of the data reporting system and assessment results.

Data from paraprofessional discussions showed that the group generally felt comfortable and confident administering assessments. Data from classroom and support educator participant groups also showed these groups were generally confident in paraprofessionals’ ability to
administer assessments efficiently and effectively. Support educator A did express some concern over the perceived lack of fidelity used by a small number of paraprofessionals during the administration of some of the progress monitoring measures. However, she also believed that, in most cases, paraprofessionals administered the assessments with fidelity. Likewise, certified support educators A and B expressed confidence in their understanding of the benchmark and progress monitoring assessment protocols, their ability to create progress monitoring graphs, and their ability to manage the database system. Support educator B also believed AIMSweb progress monitoring was an improvement over older classroom-based pretests and post-tests teachers previously used to determine students’ academic growth.

Data also showed that most participants expressed a diminished sense of efficacy in their use of AIMSweb data. Some efficacy concerns were related to questions about the accuracy of the assessments in identifying struggling learners and in pinpointing students’ instructional needs. Classroom teachers and certified support educators also associated low efficacy concerns with difficulties they experienced in accessing and using progress reports. Classroom teacher discussions indicated most participants in this group had not been using progress monitoring reports regularly to consider the efficacy of ongoing instruction between data retreat sessions. Most participants felt the cumbersome nature of the reporting protocols had inhibited them from using the progress reports to consistently monitor student response to instruction. Classroom teachers A and D stated they had not received any progress monitoring reports between benchmark periods. Classroom teachers C and E stated that they had received some reports but only sporadically. Classroom teachers C and E said when they did receive reports, there were many sent all at once which made the process of determining progress too confusing and time consuming.
Classroom teacher D added that information provided on the AIMSweb reports was too confusing. She said one of the reading assessments was particularly puzzling and that she was not completely sure of what was being measured. Certified support educator A agreed. She stated that the criteria used to develop progress-monitoring graphs made interpretation of progress confusing. Similarly, certified support educator A stated the AIMSweb database configuration made reports difficult for her to access and disseminate. She said, “I don’t feel it’s as user-friendly as it could be. I should be able to export all that data easily. I shouldn’t have to go through each individual…”

While paraprofessional discussions showed that most participants believed they understood the progress-monitoring reports, only three of the five paraprofessional participants said they only occasionally used AIMSweb reports to adjust their instruction for some individual students. All paraprofessionals stated they believed it was more appropriate for them to follow program protocols developed by certified educators during the data based decision-making sessions or to take concerns to the classroom teachers or the RTI coordinators.

Discussion across all groups also showed that many participants associated a diminished ability to accurately assess student needs and monitor progress with what they perceived as a contrived testing environment and narrow focus on assessment content. For example, certified support educator B believed some students did not perform well when taking timed tests. Certified support educator B said, “I think that we get some false positives…. I think [the assessments sometimes] over-qualify some kids based off of how they test.” Classroom teachers agreed and shared similar concerns. Classroom teacher B believed the writing assessments were not aligned with the school’s writing process expectations. Classroom teacher D believed some of the writing results had steered her in the wrong direction for determining what type of
instruction to target. Classroom teacher C worried that one of the math assessments put students with reading difficulties at a disadvantage. Certified support educator B said, “I think that we get some false positives…. I think [the assessments sometimes] over-qualify some kids based off of how they test.” Classroom teacher A summed up the general consensus of all groups regarding RTI assessment efficacy when she cautioned that determinations about a student’s need for interventions should include teacher observation and other classroom-based assessments, not just AIMSweb scores alone.

*Data based decision-making.* The theme of improved feelings of efficacy as a benefit of participation in the data-retreat sessions was evident across all groups. Discussion among all groups indicated that participants perceived data-retreat sessions had improved their understanding of RTI programs and processes and had improved their confidence that interventions were working. Three of the five classroom teachers and one paraprofessional who did attend as part of her student-teaching assignment described gaining a better understanding of RTI processes and programs in data retreat sessions. Two classroom teachers indicated specifically that participation gave them improved confidence that progress was being made. Classroom teacher E said, “I think that [the last session] was the first time I felt like it was moving forward and we weren’t just waiting at a standstill…."

Even though all classroom educators spoke positively about the reassurances they gained through participation in the data retreat sessions, some educators said they did not begin to feel comfortable with the data retreat process until the final sessions of the year. Classroom teachers and certified support educators associated the delay with not fully understanding the purpose and goals of the meetings, or what was expected of them during their initial sessions. Classroom teacher B stated that she also spent a lot more time in the meetings listening and gathering
information because she still didn’t know enough about the RTI intervention programs or processes to provide such input. Certified support educator A stated that not knowing more about the programs was one of her biggest insecurities and had limited the input she could provide during the meetings. Although certified support educator B stated feeling more comfortable in her understanding of the programs, she said she felt uncomfortable telling classroom teachers what to do with Tier 2 kids in their classrooms.

**Summary.** The theme of RTI as a General-Education Model shows that most participants believed the goals of RTI were to target basic academic skills in one or more areas of math, reading, and writing. RTI as being beneficial to most students was also a theme identified within discussion data. However, some educators stated the model was not as beneficial for students who exhibited behavior or attendance issues. Within all groups, participants associated student improvement most often with the small-group and one-on-one interventions provided within the Tier 3 model. Data analysis of discussions associated with Tier 2 instruction showed that most participants believed the Tier 2 model had the potential to benefit students. Only the two certified support educators and one of the paraprofessionals associated some student academic gains directly to participation in a Tier 2 intervention. No classroom teachers directly linked Tier 2 instruction to improved student progress. Likewise, discussion among classroom teachers, support educators, and paraprofessionals demonstrated that while many participants across groups spoke about the potential of the Tier 2 model, individual observations, questions, and concerns demonstrated that few had developed a clear understanding of the Tier 2 model as an in-class small-group, targeted instructional component of the larger RTI model.
The theme of Mixed Beliefs of RTI as an Alternative Special-Education Identification Model demonstrates shows that some educators perceived RTI to be an improvement over the older special education model of identification. Providing interventions earlier and for a greater number of students and reducing the need for special education services were named as two improvements. Other educators perceived RTI to unnecessarily delay more specialized education services for some students.

In addition, the theme of Mixed Feelings of Role Efficacy showed participants’ feelings of efficacy varied across RTI components, educator groups, and individuals. As a whole, paraprofessionals expressed confidence in their ability to administer assessments, provide Tier 3 instructional interventions, and to support classroom teachers in providing more individualized instruction. Some paraprofessionals did, however, express feeling less effective as RTI instructors in some situations where a they perceived mismatch between a Tier 3 instructional intervention and a particular student’s needs.

Classroom teachers and certified support educators also expressed discomfort associated with a lack of role clarity when providing Tier 2 support in the classroom. Classroom teachers further expressed concerns about their ability to implement Tier 2 programs and coordinate instruction with paraprofessionals. Certified support educators also both expressed discomfort in coordinating Tier 2 instruction. Support educator B stated she found it difficult to maintain the Tier 2 and Tier 3 instructional schedules and was not comfortable overseeing Tier 2 implementation within the classroom. Likewise, certified support educator A said felt she did not know enough about Tier 2 programs to oversee Tier 2 implementation. Both certified support educators did express greater confidence in their understanding and management of the benchmark and assessment processes and system.
Most classroom teachers, paraprofessionals, and support educators associated data retreat participation with improved confidence in the efficacy of RTI programming and improved understanding of processes. Some classroom teachers expressed improved confidence in taking a more active role within the data meetings by the end of the year. Others felt they still had to rely more on others to provide information and ideas.

A majority of participants across groups expressed a mixed sense of efficacy associated with the use of AIMSweb reports within the data based decision-making process. Analysis of discussions showed that participants used benchmark and progress reports as positive indicators of student growth. However, participants’ also associated a diminished sense of efficacy with their limited use of AIMSweb data. Participants shared efficacy concerns related to the focus of the assessments, testing protocols, and reporting difficulties.

**Research question 2.** What are educators’ perceptions of essential RTI structures as currently implemented within the school?

Responses in relationship to research question #2 were discussed by paraprofessional, classroom teacher, and certified support educator participants. Table 2 highlights themes identified within and across focus group and individual interviews.

Table 2

*Themes in relationship to the question: What are educators’ perceptions of essential RTI structures as currently implemented within the school?*
**Structural Supports:**

Instructional Resource Availability  
Small-Group Protocols  
Paraprofessional Support  
Student-Assessment Protocols  
Data Based Decision-Making Sessions

**Structural Challenges:**

Tier 3 Schedule  
Benchmark and Progress Monitoring System  
Limited Collaboration Time

**Instructional resource availability.** Instructional resource availability was a supporting theme identified from analysis of all group discussions. Paraprofessionals listed a variety of Tier 3 intervention programs and associated them with positive student growth. *Read Naturally, Read Well,* and *Rewards* were some of the specific programs named. Paraprofessionals described most of these programs as straightforward and easy to implement within small groups and one-on-one settings. Support educator B believed these programs allowed educators to provide targeted small-group and individualized interventions that were once only available to students receiving special education services. Support educator A noted that students completing assessments using strategies taught within these programs had shown good improvement. Classroom teacher discussions also indicated that the instructional programs provided them with additional options for supporting students. Classroom teacher D stated a number of tiered instructional resources were available in the school. Others
agreed. Most classroom teachers, however, also indicated their lack of understanding for these programs had inhibited more consistent Tier 2 implementation. Two classroom teachers in particular believed limiting Tier 2 interventions to the use of research-based programs had suppressed a more complete implementation of the Tier 2 model.

**Small group protocols.** The use of small group and one-on-one instructional protocols as a mechanism supporting consistent interventions was a theme evident across all groups. Most participants associated small-group and one-one-one pull-out interventions with an improved ability to address student needs effectively and individualize instruction consistently. Certified support educator B determined that the protocol made it possible to support the needs of many more students. Classroom teacher D stated that the small-group and one-on-one interventions supported a foundational school goal of strengthening different areas of a student’s intellect. Support educator A described the small-group and one-on-one instructional protocols as the baseline of the RTI model. Data taken from all discussion groups indicated a majority of participants shared similar perceptions.

**Paraprofessional support.** Paraprofessional support as a theme reinforcing consistent, systematic assessment and instruction within the RTI model was evident from data analyzed across participant groups. Paraprofessional B said that through RTI, paraprofessionals provided teachers with “an extra pair of hands to work with a child who needs the extra support in the classroom or in a pull-out situation where they can't give them that individualized attention…..” Support educator A summed up the general consensus of discussions within all groups. She said, “They do the small groups and they do the pull-out and they do the tests, and it could not work without the paraprofessionals in our school.”
Student-assessment protocols. Student assessment was found to be a theme supporting early identification and problem-solving aspects of the RTI model. Data from discussions across all groups showed that most participants relied on benchmark and progress monitoring assessments as a primary source of information in identifying instructional needs and monitoring growth. Support educator A said of benchmark testing, “I think it's essential. It has to happen. We have to benchmark. We need to have that data.” Paraprofessional F said the assessment protocols provided educators with a place to begin instruction where the student needed it, preventing them from getting lost or falling through the cracks. She observed:

It's very easy for a teacher to look over them... Overlook their needs, and not have enough time to get to them and make sure that they get what they need, in order to progress at a reasonable rate… this benchmark system and progress monitoring system… helps us and it gives us the ability to start that student where they need to be started… I've seen it effective with one particular fifth grader, bringing him as close to grade level to where he didn't need to be pulled out anymore… this program is what helped us target where he needed it.

Participants across groups provided similar observations. For example, support educator B viewed the RTI progress monitoring system was an improvement over past practices of using pretest and post-test, classroom-based or teacher-made assessments to determine student growth. She also believed the practice of monitoring Tier 3 students weekly provided valuable information about growth and felt that the same should be done for Tier 2 students.

Data based decision-making sessions. Data based decision-making sessions as a reinforcing theme was apparent within data taken from across all participant groups. All participants who attended data retreat meetings believed the sessions supported improved understanding and more knowledgeable decision-making. For instance, paraprofessional F said
the sessions had created a team of people who could problem-solved together to help students. Paraprofessional F described the benefits of inclusion in this team when she added, “Maybe just one teacher doesn't have all the answers or know exactly what to do or they’ve tried this, they’ve tried that, so there's a whole team working together to help those students.” A number of classroom teachers echoed this sentiment, describing the sessions as a way to learn more about student needs and to consider alternate ways they could address student needs. They also believed the sessions were valuable in providing needed information about student interventions outside the classroom and about whether those programs were working.

Even those who had not yet attended a meeting expected that the sessions would improve collaboration and communication. Paraprofessional E believed the data retreat sessions would help to answer her questions as to why a particular program was chosen and would help her better determine where to begin students within a particular program. Classroom teachers B and C similarly stated that the sessions could be used to clarify intervention expectations with paraprofessionals so that they would know exactly what they were supposed to be doing before interventions started, saving time and diminishing confusion. Data analyzed from the certified teacher and support educator focus group demonstrated that a majority of the participants in all groups held similar views.

**Tier 3 schedule.** Protocols requiring Tier 3 interventions outside of whole-class reading, writing, or math instruction time was found to be a theme challenging implementation. Certified support educator B believed limiting pull-outs to times other than reading, writing, or math instruction made it difficult to change a student’s instructional for those not responding to existing interventions. Classroom teacher D took issue with the idea that, “Many of our students had a full hour of intervention, so they've missed everything, as far as science and social studies
instruction went.” Most participants across all groups believed the pull-out schedule posed a major challenge the school’s other foundational curricular goals. Many expressed concern about the loss of art and science time as well as integrated thematic instruction time or time to prepare for presentations of student learning. Discussions showed that most participants believed these aspects of the curriculum to be foundational to the school’s curricular program. Classroom teacher D summed up the general consensus among most participants. She said, “I don't think [the pull-outs] enhanced the school's goals.”

A majority of educators across all groups expressed the desire to coordinate Tier 3 pull-outs during the time when the rest of the students in the classrooms were engaged in reading, writing, or math rather than other subject areas. Support educator B believed moving Tier 3 interventions into the classroom during these times would alleviate instructional conflicts and would provide classroom teachers with more opportunities to develop an understanding of RTI programs and to be more involved in intervention instruction.

**Benchmark and progress monitoring system.** Using the AIMSweb benchmark screeners and progress monitoring assessments for instructional planning was a theme challenging more effective RTI application. Participants within all groups perceived significant limitations associated with their use of the assessment system. For example, classroom teacher and paraprofessional participants generally believed that the narrow content focus of the assessments measured only a limited number of skills within a subject area. Support educator B believed the narrow scope of some assessments limited the ability to accurately monitor some students. She said, “… we need something to match the [emergent] level that they're reading.” Classroom teacher B felt the writing assessments did not accurately reflect writing performance expectations outlined in the curriculum. She explained:
They have three minutes to just like put as many words down as they can, and it just
doesn't go along with what we teach. We try and teach how to be good writers. When
writers plan, they have more than a minute to plan. They are able to go back and revise,
and re-read, and use all these strategies, and that test doesn't test any of that.

Participants in all groups made cautionary statements about the necessity of using
additional assessments and teacher observations to provide a more balanced perspective of
student strengths and needs.

Some classroom teacher participants and certified support educator A also believed the
RTI reporting system had limited more effective use of progress-monitoring data. Most
classroom teachers described the individual student progress-monitoring graphs as confusing and
the reporting process as cumbersome. Support educator A expressed her frustration in using the
AIMSweb database system when she stated, “I don't feel it's as user-friendly as it could be. I
should be able to export all that data easily. I shouldn't have to go through each individual. I
feel like the standards are confusing. I don't like the tests.” While some discussion within the
classroom teacher focus group centered on adapting the current reporting system, classroom
teacher D and certified support educator A questioned whether pursuing an entirely different
assessment system altogether would be a better solution.

Limited collaboration time. Limited time for collaboration as a challenge to more
effective application of RTI was a theme evident across groups. Data from discussion among all
groups showed that most participants strongly believed the data retreat sessions were a good use
of time. Most also believed, however, that the sessions needed to be streamlined and needed to
include paraprofessionals. Classroom teacher B explained it was important for paraprofessionals
and teachers to meet together, “so every person who is involved in this is on the same page and
knows what's going.” She and other participants across groups believed participation in the
meetings would improve communication about expectations for in-class instruction. Classroom
teacher B and Certified support educator A believed having paraprofessionals at the meeting
would alleviate some of the confusion among paraprofessionals and classroom teachers about
Tier 2 coordination. Paraprofessional D, the only paraprofessional to attend the data retreat
sessions, made similar observations. She said, “I knew what students needed targeted during
different areas. And so I was able to work with [the classroom teacher] and then he and I were
able to help implement some of the RTI in the classroom.” Most participants across all groups
suggested that paraprofessionals be included in future data retreat sessions.

Most classroom teachers and certified support educators further expressed concerns about
the length of the data retreat sessions. Support educator A described some of the earlier data
retreat sessions as long and tedious. Classroom teacher E said the protocol of going through
each identified student’s math answer sheet to pinpoint instructional areas of need consumed too
much of the meeting time. Certified support educator B stated that the amount of time she spent
in data retreat meetings took too much time away from her special education teaching duties.
Four classroom teacher participants suggested planning for one subject area at a time rather than
planning multiple subject areas for one student at a time as a way to streamline the process. The
participants also suggested finding a diagnostic math program that reported the type and
frequency of problems missed to decrease the time needed for data retreat sessions.

Four certified educators and most paraprofessional participants additionally expressed the
need for ongoing meeting time in between data retreat sessions. Some classroom teachers said
they needed this time to discuss ongoing programming, solve problems of student motivation, or
share student progress with paraprofessionals. Classroom teacher A believed ongoing
collaboration would likely improve the consistency of Tier 2 implementation in particular. Paraprofessionals expressed a similar desire to meet regularly with classroom teachers. Most cited the need for more time to talk with teachers about student progress, ask questions about a particular program, or coordinate instruction.

**Summary.** The themes of Structural Supports and Challenges showed the availability of instructional resources, small-group instructional protocols, paraprofessional support, student assessment protocols, and collaborative decision making protocols acted as reinforcing themes facilitating RTI application and ongoing implementation. Although classroom teachers and certified support educators shared concerns associated with a lack of familiarity and protocols requiring the use of research-based programs, they believed these resources were available within the school. Paraprofessionals also expressed satisfaction with the number of resources available for intervention instruction. Most also described the research-based programs as straightforward and easy to learn. Many participants across groups further associated use of these interventions with positive student growth. Some classroom teachers, however, believed protocols requiring the use of scientifically-based programs within the Tier 2 model in particular had inhibited more consistent implementation.

Small-group and one-on-one instructional intervention protocols were perceived across groups to be essential to effective RTI application within the school. Discussion data across groups indicated that many participants believed providing more individualized instruction made it possible to improve learning for many more students. Utilizing paraprofessional staff to administer assessments and instruct students in small groups was also seen as essential to sustaining effective application. Data also showed that the use of student assessment worked to reinforce the early identification, prevention, and ongoing problem solving aspects of the model.
while data based decision-making sessions improved understanding for RTI programs and processes and reinforced collaborative decision making practices.

The theme of Structural Supports and Challenges also showed that the Tier 3 instructional schedule, the benchmark and progress monitoring system, and limited collaboration time were themes presenting significant challenges to participants across groups. A majority of participants expressed concern that protocols for providing Tier 3 instruction outside of core reading, writing, or math blocks isolated struggling students from the classroom and caused them to lose valuable instruction time in other important curricular areas. Participants across all groups also perceived the use of the AIMSweb system as a challenge to accurate identification of student needs and a barrier to more efficient planning and progress monitoring. While some educators determined that additional assessments and teacher observations should be used to offset the AIMSweb data, others suggested that an entirely new assessment system might prove more useful. Limited collaboration time was a concern shared by a majority of participants across all groups. Most participants believed meetings would be improved by streamlining the sessions and including paraprofessionals. Most participants also believed classroom teachers and paraprofessionals needed time to meet between data retreat sessions to improve ongoing instructional efficacy.

**Research question 3.** How do current cultural conditions, as indicated by educator perceptions, support or inhibit effective application of RTI within the context of the school?

Responses in relationship to Research Question #3 were discussed by paraprofessional, classroom teacher, and certified instructional support educator participants. Table 3 highlights themes identified within and across the focus group and individual interviews.
Table 3
Themes in relationship to the question: How do current cultural conditions, as indicated by educator perceptions, support or inhibit effective application of RTI within the context of the school?

<table>
<thead>
<tr>
<th>Cultural Challenges:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity</td>
</tr>
<tr>
<td>Leadership Support</td>
</tr>
<tr>
<td>Role Conflict</td>
</tr>
<tr>
<td>Philosophical Differences</td>
</tr>
<tr>
<td>Implementation Control</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cultural Supports:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared value for problem-solving and early intervention</td>
</tr>
<tr>
<td>Shared belief in the necessity and benefits of collaboration</td>
</tr>
<tr>
<td>Collective interest in continuous improvement</td>
</tr>
</tbody>
</table>

**Clarity.** Lack of clarity for some aspects of assessment and instruction components was found to be a theme challenging implementation among all groups. Limited knowledge of assessment results and limited understanding of research-based programs and strategies were common areas of confusion identified by classroom teacher participants. Assessment and intervention alignment were areas of confusion expressed by participants within classroom teacher and paraprofessional discussions in particular. Confusion about roles and responsibilities within the Tier 2 model were shared by participants across the certified classroom teacher and support educator groups as well. Data from discussions shows that, for many participants, the confusion had left them supportive but hesitant. Comments made by certified classroom teacher B help explain this association. She said:
… sometimes I think it's hard to be on board when you don't really understand it or you're not really sure what's going on, and so I think that's where that confusion comes in. But I think most people agree that it's something that could really be beneficial and so we want it to work and we want to be on board with it, but we're still kind of figuring it out.

Most classroom teachers agreed that Tier 2 implementation could be beneficial, wanted it to work, and wanted to be on board. However, most also stated they needed further knowledge of programs or further understanding of tier two role expectations to improve coordination and consistency. Classroom teacher D described being frustrated with her attempt to implement Tier 2 instruction following the data retreat sessions. As she explained in a somewhat exasperated tone, “I definitely feel like I'm in the learning stage as far as Tier 2 interventions especially. I'm not really sure what exactly is the next strategic, scientific research phase steps.” Similarly, classroom teacher B said of her participation in the data retreat sessions, “I feel like I have to rely on others to get ideas a lot more than coming up with them.”

Support educator B determined that some of the discomfort classroom teachers felt regarding research-based interventions may be associated with the belief that paraprofessionals were more familiar with the research-based programs than were the classroom teachers. Support educator B said the thought that paraprofessionals were more familiar with the programs had left some classroom teachers feeling as if they weren’t on top of it. A similar observation was made by classroom teacher E. He said:

A para might come to me and say, “We're working on this program.” Okay, and I don't know what that individual program is. I don't know what it's addressing. So, if we had a better understanding of the programs and what they were targeting, then we could sit there and say, “Okay this is what I need to really be looking for in growth as well.”
Support educator B noted that following some of data retreat meetings, classroom teachers approached her to learn more about the research-based programs. She said, “I have had requests now from more teachers to help them understand the Tier 2 and Tier 3 interventions, so that they can apply more things into their classroom.” Support educator A also noted that teachers had shared concerns about not understanding how the programs aligned to particular needs being identified. She said she believed information developed to clarify the strategies and the skills the programs targeted would alleviate some of that confusion.

Discussions among all participant groups demonstrated a general consensus that paraprofessional educators had developed a good understanding of the research-based interventions used within the model. Paraprofessional discussions and discussions among classroom teachers and one the certified support educators indicated role confusion associated with the coordination of Tier 2 instruction was a more common challenge among this group. For example, most paraprofessionals expressed uncertainty about whether they were involved in the Tier 2 model. Paraprofessional B observed, “I am still not totally clear about Tier 1 and Tier 2…. ” Similarly, paraprofessional A stated that Tier 2 was not applicable to her, and paraprofessional D said her role was to provide Tier 3 instruction. At the same time, classroom teacher D believed paraprofessional confusion about their Tier 2 role had contributed to inconsistent Tier 2 implementation. She and other classroom teachers believed that including paraprofessionals in Tier 2 planning sessions would help alleviate some of the confusion about Tier 2 roles and coordination. Classroom teacher D said:

Maybe we can talk about the assessment tool or whatever it is, right then and there… It's happening as we're coming up with the ideas, instead of saying, "Okay, here's a stack of kids and go make it happen." And then I have to catch my paras in the 30 seconds I have,
before I stick them on kids and explain a four-week long intervention, and make a plan with them, and then get the paras to buy-in on what they're doing.

In addition, while most paraprofessionals expressed confidence in their ability to administer benchmark and progress monitoring probes, support educator A believed that there was lingering confusion among some paraprofessionals regarding the purpose and goals of the RTI assessments. She also associated this confusion with a concern about some incidents of assessment fidelity. Support educator A believed paraprofessional participation would improve buy-in and fidelity of assessment administration and the consistency of instructional programming as well. She stated:

I've had paras come to me and say, "I want to do this program," and it's like, that's a great program, but we talked in the data retreat, and we're doing this program for this reason because we looked at these problems, and this is what [students are] missing…. Trying to resolve this issue is a lot more difficult when we're not together. So, I think [having paraprofessionals at the data retreat sessions] will help a lot.

Paraprofessional D associated at least some of the coherence challenges she believed the group faced with the turnover and expansion of certified and paraprofessional staff. She stated that only one classroom teacher had more than three years of tenure in the school. She also said of the paraprofessional staff that only she and the part time LEP paraprofessional had worked in the building for more than three years. However, paraprofessional discussions demonstrated that the group as a whole believed they learned enough about RTI assessments and instructional interventions to support students and teachers as the year progressed. In situations where they still had questions, paraprofessional participants expressed the hope that working more closely
with classroom teachers and RTI coordinators would provide further clarity to improve implementation.

Role confusion among certified support educators was another theme found to challenge implementation consistency and limit buy-in. Certified support educator A stated with some surprise that she was not aware that classroom teachers were struggling with Tier 2 implementation but that she herself was still confused about who was responsible for providing different aspects of this support. Certified support educator A explained:

- My understanding was classroom teachers are responsible for the actual implementation. They are the ones working with the students, they are making sure it's happening…. But I think that there is a lot to be said about the consistency of it being done in the classroom, and that probably does come back to the coordinator and the understanding of the programs, what you're doing, and what needs to be done.

Certified support educator A believed a lack of clarity about who was responsible for ensuring Tier 2 consistency was one of the reasons support may have been limited. She said this stemmed in part from the fact that she shared the RTI coordinator role with support educator B, and she was still unclear about how some of their responsibilities were divided.

**Leadership support.** Leadership support was identified as a theme challenging implementation. A majority of classroom teacher participants believed that Tier 2 implementation in particular had been stymied by limited leadership coordination and oversight. All teachers strongly expressed the need for additional support in the form of oversight and coordination of the school’s tier-two model in order to improve consistency of tier-two implementation. Classroom teacher D highlighted this point when she said:
… the targeted in-class tier-two instruction, all of that was put on my shoulders, and then I just got so wrapped up in other things…. So, I feel like there was no follow-up on my part, in regards to making sure that I was delegating that to [the paraprofessionals] effectively or taking care of it myself, and so those interventions that we came up with weren't really very meaningful…. I feel like, as a teacher, I was not very consistent in making sure that tier two interventions happened, and I think a big part of it is just feeling overwhelmed and not having the time, and I guess, in some ways, the support or motivation to communicate exactly what needed to happen.

Classroom teacher E said, “I think you can sit there and start something, but it gets very hard after a while when you're going across so much. I think you have to have someone who is sitting over there asking: How are you doing?” Other participants in the classroom teacher focus group also recalled a variety of circumstances where they believed additional RTI leadership support would have fostered more effective Tier 2 implementation. Classroom teacher A stated that in some cases, a lack of follow-up support meant that some of her children did not have all of their intervention needs met. Classroom teacher E stated, “I think there has to be someone who's coordinating this whole thing, who is there to oversee and to make sure that the implementation is happening.”

Paraprofessionals expressed a need for increased support in their efforts to implement Tier 3 interventions as well. Some paraprofessionals stated that they wanted more time to meet with the RTI coordinators to work on scheduling. Others wanted more support in initiating or adjusting interventions from either the RTI coordinator or a classroom teacher.

**Role conflict.** Role conflict as a challenge to more effective RTI application and implementation was a theme evident from analysis of data taken from paraprofessional
discussions and responses provided by support educator B. Some paraprofessionals stated that coordination meetings they held with support educator B had decreased noticeably during 2012-2013 school year. Paraprofessionals associated this change with a corresponding increase in the special education teacher’s instructional caseload. Paraprofessional D stated, “… the effect on us as a team was marked.” Support educator B also stated concern that the time needed to participate in data retreat meetings was having a negative impact on her teaching duties. Support educator B said, “It's hard to take that many days out of my schedule for my other students because that other part of me has to go on…” In addition, support educator B expressed discomfort with her role of advising classroom teachers about Tier 2 instruction. She stated, “I feel uncomfortable telling the classroom teachers what to do in their classrooms for their Tier 2 kids. I feel that that's their deal, and they know best of how they can work that out for those guys.”

*Philosophical differences.* Conflicting beliefs and goals was identified within data taken from all participant groups as a theme challenging more effective RTI application. In particular, any participants across groups believed that the RTI pull-out protocols conflicted with the school’s foundational goals of providing an enriched and integrated curriculum within a cooperative-learning environment. According to participants, students receiving Tier 3 interventions could not be pulled from core reading, writing, and math instructional blocks. As a result, they were pulled instead from integrated-learning instruction where students applied reading, writing, and math knowledge to conduct explorations of science and social studies topics. Most participants described this collaborative instructional time as a foundational aspect of the school’s charter and expressed great concern for students missing out on that instruction.
Support educator B said it really bothered her when students were pulled from art or science because those were some academic areas struggling students enjoyed most. She said, “That might be their only time to shine… and that's their RTI time.” Classroom teacher D similarly stated that the Tier 3 pull-out protocol had “derailed the school and our class's goal because… many of our students had a full hour of intervention, so they've missed everything, as far as science and social studies instruction went.” Similarly, classroom teacher C felt pulling struggling students out when the rest of the class worked on integrated themes left those students isolated from community-building activities for large portions of the day. She felt this never allowed them an opportunity to integrate into the classroom’s cooperative-learning culture. Most paraprofessionals made similar observations. For example, paraprofessional E stated that she felt it was crucial for students to be a part of the integrated learning times, and she said she too felt bad having to pull them from that time.

Perceived conflicts between RTI goals and the individual goals of some participants were also evident from interview data. Certified support educator B, for example, shared differences between some of her goals for special education students and the goals established within the RTI model. One difference support educator B noted was her disagreement with some of the progress goals established through RTI’s goal-setting protocols. Support educator B also believed that some of her students would not make progress at a pace that had been established by some of the initial RTI goal-setting protocols. She also said that some of her classroom-based instructional goals differed from those developed through the RTI process for her special education students. Individual belief differences were also noted within discussions of the certified classroom teacher and paraprofessional participants. Most notably, one of the
classroom teachers and a paraprofessional expressed frustration with the use of RTI as part of the special education eligibility process.

**Implementation control.** Implementation control was a theme challenging more effective RTI application and buy-in. Some participants within the classroom teacher and certified support educator groups described the implementation culture as *top down*. Support educator B interpreted this term to mean that some educators in the school may perceive some RTI components as "… just something we have to do." Likewise, a few participants described some of the RTI protocols put in place by district leadership during initial implementation as mandates. Support educator B further stated that other educators in the school might not see the value in some aspects of the model as implemented. Tier 3 pull-out protocols, the research-based intervention criteria, and the AIMSweb reporting system were most often described in this manner.

Most classroom educators associated concerns about research-based program selection with a lack of information explaining what made these particular program research-based. Many also wondered whether other programs they were more familiar with would be meet this criteria. Two classroom teacher participants more directly shared concerns about the current intervention programs put in place as a result of the selection process. For example, classroom teacher E said:

… programs that have worked over time that haven't been researched are not scientifically-based and it's just because no one's actually written the papers up on them… no one spent the money. Yet, brand new programs are scientifically-based because the companies are pushing the programs, and so then you're stuck with a
program that you don’t have a background with and doesn’t have any track record. I think that's part of the problem with RTI.

Participants across groups wanted to change the Tier 3 pull-out protocol. Paraprofessional F asked, “Does that really benefit [students] to miss out on [core instruction] when they're sitting in a math lesson that they don't know or understand…? Are our hands really that tied that we can't pull during [math, reading, or writing instruction]?” Paraprofessional D added that this protocol was a particular frustration felt across the school. She said:

… each of the four years that I’ve been here, that has been a major point of discussion. And especially in the first year that I was here… teachers were particularly well-spoken about this frustration of taking the kids out of art, music, and the supplemental activities to science… and the frustration of having those kids in the classroom in the more academic segments of literacy and math… it came down to not a decision that could be made within the school. I believe it was a district-wide decision, if not a state-wide decision, that said what the restrictions were… how the kids had to be in the classroom even when it was obvious that they were not getting anything out of it.

Support educator D, who shared similar frustrations, said that she would like to integrate Tier 3 instruction into the core instructional blocks and provide most of these services in the classroom rather than as pull-outs from other subject-area instruction. She believed the change would support improved implementation by providing students with accommodations that would meet both RTI requirements and the school’s philosophical beliefs about other curricular areas of need.
Educators across all participant groups also expressed frustration with selection of the AIMSweb assessment system. Some classroom teachers said they wanted progress reports that were easier to access and easier to use. Others said they wanted assessments that provided information more closely aligned with student learning expectations in different subject areas. Classroom teacher E and support educator A wanted to find an alternate assessment system that they believed would provide more detailed information about student needs and make the instructional planning process easier. At the same time, discussions showed that many participants felt uncertain about whether making such changes was possible. Support educator B, for example, said of her desire to hold off on early literacy testing, “I wish we could maybe wait for the winter benchmark before we got those guys but that's probably not a decision I can make. If I could change that, I would”

**Shared value for problem-solving and early intervention.** Shared values for problem solving and early intervention within the RTI model was found to be a theme supporting continued educator investment in implementation. Identifying student needs early and providing more individualized instruction to accelerate learning were regularly described by participants as valued aspects of the model. Paraprofessional B said of providing RTI interventions, “I see that as a great benefit for kids that early on you figure that out and it doesn't remain something that is basically wrong … until they get that fixed.” Support educator B also explained:

… [Tier 2 instruction based on assessment] forces the classroom teacher or a paraprofessional in that classroom to spend extra time with a student… I think anytime you can do that with your individual students or a small group or a pair of kids that are working on the same thing, it makes it more personal and I think kids do better… I do think they're getting more practice, they're getting more repetition of something whether
it's math or reading. I think anytime you can do that, I think you're going to see the kids benefit.

Data showed that most participants felt similarly enthusiastic about the problem-solving aspect of the model. Paraprofessional F said, “I also think RTI is another way for teachers to not just identify who the students are that need remediation, but it is also a way that they can help students in areas that they need to target….“ Classroom teacher D characterized the problem-solving aspect of the model as “different way of trying to look at, and learn about, and attack different issues,” and said, “I think for skill-based instruction, a lot of that stuff is incredibly beneficial for my students.” Discussions across all groups showed that participants were particularly motivated by the prospect of increased collaboration and improved student learning to address implementation challenges.

It is also noted that while discussion data demonstrated participants were motivated by beliefs that effective application of the early-intervention model could improve student learning, not all participants believed it was universally beneficial to all students. Data taken from discussions involving RTI as a part of the special education determination process, for example, demonstrated some participants were suspicious and even resistant to the idea of general educators providing intervention services within the general education setting. Likewise, there were a few participants who viewed the protocols requiring student participation in an ongoing assessment-intervention cycle as an unnecessary delay in determining special education eligibility. These participants desired a more immediate identification. They believed that an earlier special-education designation would initiate more appropriate services provided by the special education teacher or more appropriate programs provided through the special education department.
**Shared belief in the necessity and benefits of collaboration.** A shared belief in the necessity and benefits of collaboration is a theme supporting effective application and continued participant investment in ongoing RTI implementation. Data indicates participants across all groups collectively believed collaboration improved intervention selection, coordination, and efficacy within the general education setting. Classroom teacher D said of the data retreat sessions, “I really think that pooling that wealth of knowledge is extremely beneficial.” Certified support educator A stated that the collaborative sessions were necessary and allowed her “to talk with the classroom teachers about what's going on in the classroom and what needs to happen for Tier 2. I think it's really important for teachers to see the numbers and to communicate with [the] coordinators.” Classroom teacher A said of discussions held in between data retreat sessions, “I actually got more out of talking with the paraprofessional… in the weeks to follow. I think there needs to be more follow-up opportunities for the classroom teacher to talk with the paraprofessional… as the intervention keeps going.” Support educator B, the special education teacher, said collaborative sessions had provided time for regular education teachers to find out more about what the students with special needs were doing in the special education classroom. She also said collaborative sessions provided an opportunity for regular education teachers to learn what they needed to be doing in the regular-education teachers’ classrooms.

Data showed paraprofessional participants also believed collaboration within their group had been particularly beneficial. Participants described helping each other to learn new programs and to answer assessment or instruction questions throughout the year. Some participants commonly referred to the members of this group as a team during discussions. Paraprofessionals also collectively expressed a strong desire to become part of a larger RTI team made up of classroom teachers, certified support educators, and the principal. Data taken from
all groups indicated that most participants wanted to make increased collaboration the next step of implementation improvement. A majority of participants in all groups said that more successful application of the model would be accomplished if teachers, support educators, and paraprofessionals could work more closely together.

*Collective interest in continuous improvement.* A collective interest in addressing perceived implementation roadblocks was determined to be a reinforcing theme supporting ongoing implementation efforts across groups. A majority of classroom teachers stated that they wanted to improve understanding of Tier 2 programs and coordination of Tier 2 programming. They also wanted to improve the way students were assessed and the way assessment was reported and reviewed. Data indicated that participants across certified support and paraprofessional groups also wanted to be a part of ongoing improvements. Support educator A said she wanted to improve her own understanding of scientifically-based programs to be better able to help classroom teachers with instructional planning during data retreat sessions. Classroom teacher E and support educator A discussed wanting to find a way to better support students exited from Tier 3 pull out services. In all cases, participant discussions indicated that participants perceived implementation as an ongoing process of learning and improvement. Discussions also indicated that most educators wanted to play an active role in shaping how RTI was applied in the school in order to improve implementation. They wanted it to work.

*Summary.* Some cultural themes challenged effective application and continuing implementation while others were found to facilitate the reform effort. Limited knowledge of assessment results, limited understanding of research-based programs and strategies, limited leadership support, role conflicts, and concerns about implementation control were found to be themes challenging implementation efforts. Shared beliefs about early intervention benefits, the
benefits of problem-solving and collaboration, as well as a desire to improve implementation
were found to be themes reinforcing continued participation in ongoing implementation efforts.

**Summary of Research Results**

The study findings in this chapter were based on analysis of interview transcripts and
relevant school documents. The research results were organized following the study’s three
primary questions. The first subsection contained findings related to the research question:
*What are educators’ understandings, perceptions of value, and efficacy beliefs related to the RTI
model and its essential components as applied within one rural Alaskan elementary school?*

Although the interviews revealed individual participants held a variety of understandings,
perceptions, and beliefs related to the RTI model, six major themes emerged from the findings
which were organized under the following headings: RTI is a General Education Model, RTI as
Beneficial for Most Students, Small Group Instruction at the Model’s Center, Tier 2 Model has
Unrealized Potential, Mixed Beliefs of RTI as an Alternative Special Education Model, and
Mixed Feelings of Role Efficacy.

The second subsection contained findings related to the second research question: *What
are educators’ perceptions of essential RTI structures as currently implemented within the
school?* Although the findings revealed that a variety of factors supported or challenged
individual efforts, several major themes emerged. Findings supporting application and
implementation efforts were organized under the following subheadings: Instructional Resource
Availability, Small Group Protocols, Paraprofessional Support, Student Assessment Protocols,
and Data Based Decision-Making Sessions. Those challenging RTI application and ongoing
implementation were identified as follows: Tier 3 Schedule, Benchmark and Progress
The third subsection contained findings related to the final research question: *How do current cultural conditions, as indicated by educator perceptions, support or inhibit effective application of RTI within the context of the school?*

Findings revealed a mixed implementation culture. Some conditions were perceived to support systematic application and implementation improvement. Others were found to challenge implementation. Themes identified as challenges were categorized under the following headings: Clarity, Leadership Support, Role Conflict, Philosophical Differences, and Implementation Control. Themes identified as supporting effective RTI application were categorized as: Shared Value for Problem-Solving and Early Intervention, Shared Belief in the Necessity and Benefits of Collaboration, and Collective Interest in Continuous Improvement. In chapter four, the research findings were presented. The chapter was divided into two sections. The first section contained an introduction to the purpose and goals of the case study and an overview of the study site. The second section discussed the research findings. In chapter five, the research findings and study limitations are discussed. The paper concludes with the references and appendices.

**Chapter V: Summary of Findings and Recommendations**

**Revisiting the Problem of Practice**

Response to Intervention (RTI) was initiated as part of a federal IDEA reauthorization in 2004. Research has established that providing students with early academic intervention for the prevention of later, more severe deficits is one of the goals and potential benefits of the model (Hughes & Dexter, n.d.; Coleman et al., 2006; Kovaleski & Glew, 2006; Fixsen et al., 2009; Brown-Chidsey & Steege, 2010). Providing an alternative path in the identification and support
of learning disabled students is another (Fuchs & Fuchs, 2007; Bradley et al., 2007; Collier, 2012).

In order to realize the potential of the RTI model, effective school-level application is essential (Kovaleski & Glew, 2006; Fuchs & Deshler, 2007; National Center for Learning Disabilities, 2012) and reliant on school-level educators’ who have developed an individual and collective capacity to effectively apply the model’s essential components (Leithwood et al., 1994; Kovaleski, Gickling, Morrow, & Swank, 1999; Slonski-Fowler & Truscott, 2004; Fullan, 2007; Kozleski & Huber, 2010; Johnson et al., 2011; National Center for Learning Disabilities, 2012).

A lack of building-level educator coherence about the purpose, goals, procedures, and processes of the model can challenge implementation efficacy and consistency. At the same time, a number of factors associated with the RTI initiative have the potential to diminish coherence and challenge effective application. These include: numerous variations of the model (Fuchs & Fuchs, 2006; Fuchs & Fuchs, 2007; Fuchs & Deschler, 2007; Stoehr et al., 2011; Bender & Shores, 2012; Collier, 2012), relatively loose federal and state implementation guidelines (Bradley et al., 2007; Greenfield et al., 2010; Zirkel & Thomas, 2010; Rinaldi et al., 2011), the special-education originations of the model, use of the model as an alternative path to learning disability identification (Bender & Shores, 2012), and a the necessary shift in mindset and roles of special and general educators (Bradley et al., 2007; Fuchs & Fuchs, 2007; Zirkel & Thomas, 2010; Bender & Shores, 2012; Collier, 2012; Swanson et al., 2012). Structural and Cultural factors can create an implementation context that either supports or challenges educators. Failure to understand the challenges and strengthen supports can diminish the sense of efficacy, buy-in, and ongoing commitment needed among educators upon whom the model’s
success mainly depends (Leithwood et al., 1994; Slonski-Fowler & Truscott, 2004; Sergiovanni, 2005; Fullan, 2007; Johnson et al., 2011).

**Research Questions**

According to the National Center on Response to Intervention (NCRTI) website, thirty-two states provide local education agencies with RTI guidance. Forty-eight states are listed on the site as allowing identification of specific learning disabilities using an RTI framework. This research aims to contribute to the existing research on RTI implementation by drawing on educator perceptions of RTI application and implementation. The researcher conducted a qualitative case study to answer the following research questions: (1) What are educators’ understandings, perceptions of value, and efficacy beliefs related to the RTI model and its essential components as applied within one rural Alaskan elementary school?, (2) What are educators’ perceptions of essential RTI structures as currently implemented within the school?, and (3) How do current cultural conditions, as indicated by educator perceptions, support or inhibit effective application of RTI within the context of the school? Interview and focus group transcripts served as the main source of data for this study. The data was coded and analyzed to identify significant themes within and across participant groups.

**Summary of the Findings**

Study findings come from focus group and individual interviews conducted with a certified faculty and classified staff working to implement RTI at the study site during the 2012-2013 school year. The analysis of findings was supported by a review school documents relevant to the school’s application and implementation of the RTI model. Documents included in-service agendas, minutes, and training materials; staff meeting agendas, minutes, and informational materials; the RTI section of the school’s teacher handbook; written intervention
plans, and the district’s written RTI protocols and guidelines.

In summary, most participants understood and valued RTI as a general education model of early intervention and improvement. Participants believed the model increased the school’s capacity to improve learning for more students. Most participants viewed paraprofessional support, small group instruction, and the use of data as necessary and beneficial aspects of the model. Participants also particularly valued the collaborative and shared decision-making aspects of the model and associated these components with improved understanding for RTI and with improved feelings of self or collective efficacy. Relative to the process of special education eligibility, some participants viewed RTI as a way to diminish the need for special education services while others viewed it as an unnecessary delay of special education referral and specialized services.

Participants experienced mixed feelings of efficacy related to their RTI roles. Paraprofessionals generally expressed confidence in their ability to assess and instruct students and support teachers within the model. Classroom teachers more often expressed efficacy concerns related to their assessment and instructional roles. Support educators were confident in their ability to coordinate assessments and manage assessment data. However, all groups described at least some diminished feelings of efficacy associated with at least some aspects of these three essential RTI components.

In addition, findings indicate that some existing contextual structures supported RTI application and implementation efforts while others presented as challenges. The availability of instructional resources, the use of academic data to identify struggling learners and target specific learning needs, the application of small group intervention instruction, paraprofessional support, and collaborative decision-making practices were found to facilitate application of
essential aspects of the model. Those structures challenging RTI application and implementation efforts were found to be the Tier 3 pull-out protocols, the current benchmark and progress monitoring system, and limited time for collaboration.

Findings further indicate the presence of a mixed implementation culture. A limited knowledge of assessment results, research-based programs, and assessment and instructional alignment as well as role confusion presented as cultural challenges. In addition, philosophical differences associated with assessment content, philosophical conflicts associated with protocols requiring that pull-out interventions take place during other subject-area instruction, limited leadership support, and a perceived lack of control for the selection of some assessment and intervention programs were found to be additional cultural challenges to more effective implementation or application of the model. Participant’s shared beliefs in the necessity and benefits of problem-solving and problem prevention, collaboration, and continuous improvement indicated cultural conditions facilitating implementation efforts and motivating ongoing participation in improvement efforts.

In chapter four, the research findings were presented. The chapter was divided into two sections. The first section contained an overview of the study site. The second section discussed the research findings. Chapter five is broken down into the following sections: discussion of major findings, discussion of findings in relation to the theoretical framework, discussion of findings in relation to the literature review, the study limitations, and conclusion. The paper concludes with the references and appendices.

**Discussion of Major Findings**

Through focus group and individual interviews supported by a review of relevant school documents, various themes emerged. However, five major themes were identified from data
analyzed across paraprofessional, classroom teacher, and certified support educator discussions.

Table 4 presents each of these themes:

Table 4
Major themes identified by paraprofessionals, classroom teachers, and certified support educators:

<table>
<thead>
<tr>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>A successful general education model</td>
</tr>
<tr>
<td>Mixed understanding and efficacy beliefs associated with special education</td>
</tr>
<tr>
<td>Mixed efficacy associated with assessment, instruction and decision-making</td>
</tr>
<tr>
<td>Mixed structural implementation and application context</td>
</tr>
<tr>
<td>Mixed cultural context surrounds ongoing implementation and application</td>
</tr>
</tbody>
</table>

**A successful general education model.** Participants across all groups viewed RTI as a general education model of early intervention and prevention or remediation. According to participants, the goals of the model were to improve the basic academic skills of students. Participants reported application of the model made it possible to provide interventions for more students who needed them. Participants also believed the model had benefited most students who participated. A number of participants, however, also believed the model was not as successful for students with behavior issues.

**Mixed understanding and efficacy beliefs associated with special education.** Participants across all three groups addressed the use of RTI as part of a new process of special education eligibility. Some believed the model diminished the need for special education, supported students with disabilities earlier, and believed the RTI-supported eligibility process to be an improvement over the previously used discrepancy model. Others, however, believed the model unnecessarily delayed identification and specialized services.
Mixed efficacy associated with assessment, instruction, and decision-making.

Participants reported mixed feelings of efficacy associated with the essential components of RTI assessment, instruction, and decision making. Participants across all groups believed student data improved their ability to identify areas where students were struggling and to support students’ individual needs. Most participants referred to improved benchmark results as an indicator that the model was working for many students. At the same time, a majority of participants believed that the focus of assessment content and artificial testing environment diminished the accuracy of some results. Many participants also reported guarded feelings about the use of the assessments for identifying areas of difficulty or planning for instruction based on the narrow focus of skills targeted by some of the individual assessments.

In addition, most discussions demonstrated participants felt confident in the paraprofessionals’ ability to assess students using the AIMSweb benchmark and progress monitoring assessments. Most discussions also demonstrated positive participant feelings about the paraprofessionals’ ability to instruct students within the Tier 3 model. Diminished efficacy beliefs were indicated by most participant discussions regarding Tier 2 instruction. Positive feelings of efficacy were associated by participants across all groups in association with participation in the data retreat sessions. Many participants reported gaining a better understanding of RTI programs and processes as a result of participation in data retreat sessions. Some also reported that their participation had led to improved feelings of confidence that the model was working.

Mixed structural implementation and application context. Participant discussions across groups indicated that the availability of instructional resources, small-group instructional protocols, paraprofessional support, student assessment protocols, and collaborative decision
making protocols facilitated RTI application and ongoing implementation. Participants across groups associated use of these interventions with positive student growth. Discussions showed that many participants believed their ability to target student needs and improve learning was improved through the use of small-group and individualized interventions. Likewise, discussions indicted that using paraprofessionals to support assessment and small-group instruction made consistent and continuous application of the model feasible. Utilizing paraprofessional staff to administer assessments and to instruct students in small groups was also viewed as essential to sustaining these essential components. Data also showed that student assessment data helped to reinforce the model’s desired aspects of early identification, prevention, and ongoing problem solving while data based decision-making sessions improved understanding for RTI programs and processes and reinforced collaborative decision making practices.

In addition, the Tier 3 instructional schedule, benchmark and progress monitoring system, and limited collaboration time were indicated by discussion data to be significant application challenges or barriers to ongoing implementation efforts. Participants expressed widespread concern and some resistance to taking students from science, social studies, and cooperative learning activities to provide Tier 3 interventions. Participants were also hesitant to consider some RTI assessments as accurate measures of student needs. Limited collaboration time was also found to be a challenge. Discussions showed that most participants believed intervention coordination had been limited by paraprofessionals’ absence from data retreat sessions and by a lack of time between sessions to discuss and coordinate ongoing interventions.

**Mixed cultural context surrounds ongoing implementation and application.** Data taken from discussions within and across groups demonstrated that the themes of clarity, role
conflict, leadership support, philosophical differences, and implementation control presented as cultural implementation and application challenges. Data taken from across groups also showed that a shared value for early intervention and problem-solving, a shared belief in the necessity of ongoing instructional collaboration, and a collective interest in addressing and overcoming perceived roadblocks were themes facilitating ongoing application and implementation processes. While teachers, paraprofessionals, and support educators did not feel completely on board with some aspects of the model and did not feel completely confident in their RTI roles, they saw value in it, were motivated to learn more, and wanted it to work.

Findings in Relation to the Theoretical Framework

Research into understanding, exploring, and describing the supports and challenges of RTI implementation and application at the school level is guided by the lens of educational change theory. Leithwood et al. (1994) and others (Hargreaves, 2009; Darling-Hammond, 2005; Sergiovanni, 2005; Fullan, 2007) contend that the success or failure of educational reforms depend on both educators’ ability and commitment to implement and sustain them. Educational theorists further argue contextual factors can positively or negatively affect educator capacity and commitment.

Leithwood et al. (1994) and others (Evans, 1996; Piderit, 2000; Allen & Glickman, 2005; Darling-Hammond, 2005; Sergiovanni, 2005; Fullan, 2007, 2009) argue that effective implementation efforts utilize cultural and structural strategies to build educator capacity and improve the possibility, desirability, and credibility of a particular reform. The findings of this study support these contentions. For example, participants across all groups associated certain aspects of the RTI model with an increased capacity to improve student learning. Paraprofessional support, small group instruction, and the ability to identify student needs were
commonly cited by participants as ways that RTI had improved the school’s ability to support struggling learners school-wide. Many classroom teachers also believed their participant in the data-retreat sessions increased their understanding of student needs and provided needed insight into alternate ways to address those needs. Further, participants in all groups indicated that the problem-solving aspect of the data-retreat sessions were a valuable aspect of RTI. Most believed collaborative efforts within the sessions had improved understanding of RTI. Some classroom teacher participated also stated that the sessions helped them understand the interventions were working. Participants across all groups believed improved collaboration would further their ability to meet the needs of a greater number of students.

Fullan (2007) and Sergiovanni (2005) believe that significant reforms require educators to develop a collective mindset, shifting the way they think and act professionally about teaching and learning. Similarly, Fullan (1992; 2007) and Sergiovanni (2005) believe certain implementation strategies generate professional accountability norms that improve student learning. In addition, Leithwood et al. (1994) and others (Hargreaves, 2004; Darling-Hammond, 2005; Sergiovanni, 2005; Fullan, 2007) add that educators’ understandings, beliefs, and perceptions generate the needed commitment to enact desired reforms. Study finding provide some evidence to support these claims. For example, participants’ shared a value for the early intervention and improvement aspect of the model. They also commonly believed in the benefits of participation in the collaborative problem-solving aspect of instructional planning within the model. They viewed the data retreat component as a structure supporting their collective ability to identify, monitor, and provide interventions for students. They also strongly associated the improvement of individual and collective understanding and efficacy with this aspect of the model. The value educators placed on the targeted intervention, small group, and collaborative
aspects of the model were also associated with the desire to improve Tier 2 and Tier 3 interventions. In fact, most participants described increased collaboration as the primary means by which they wanted to improve individual and program efficacy.

Sergiovanni (2005) and Fullan (2007) further argue that one of the reasons significant reforms can be difficult to achieve is that they require educators to develop new skills and teaching approaches. This idea is supported by findings from the current study. While participants across all groups believed it was important to align interventions with student needs, many also believed they needed further training and support to improve their understanding of these interventions. Classroom teachers and certified support educators in particular expressed the need to develop a better understanding of intervention programs and practices. Classroom teachers believed an improved knowledge would help them establish more consistent Tier 2 support and would improve their ability to collaborate and coordinate with paraprofessionals who provided Tier 3 interventions. While paraprofessionals believed they had developed a working knowledge of many of the intervention programs, most also wanted more training so that they could better understand why particular intervention programs were chosen for some students.

Sergiovanni (2005), Fullan (2007) and others (Hargreaves, 2004; Darling-Hammond, 2009) also contend that educator buy-in and support for a particular reform may be restrained by perceptions that develop within the context of implementation. Reforms that are viewed as externally-driven, poorly aligned with school norms, or incompatible with educators’ own ideas about teaching and learning may dampen enthusiasm or eliminate support altogether. Support for this argument is found in some of the data findings. For example, implementation of some essential components of the model was considered to have been a top-down endeavor by some
participants. At the same time, discussions revealed that participants also considered these components as primary structural and cultural challenges to effective implementation. For example, the district’s chosen assessment system and the school’s Tier 3 pull-out protocols were structural components most often associated with participant concerns and feelings of confusion. Some participants also believed that developing an improved assessment system, alternate Tier 3 schedule, and increased collaboration would alleviate concerns improve buy-in. Participants across all groups commonly expressed frustration with the lack of control they felt they had in using the AIMSweb assessment system despite educator concerns.

Similarly, Leithwood et al. (1994) argue that negative beliefs or perceptions about contextual conditions can manifest into negative perceptions of a reform initiative. Findings from this study support this theoretical construct. For example, while study participants believed the more intensive instruction provided within the Tier 3 interventions provided students with needed skills, they also believed the model, as implemented, was incompatible with the school’s overall philosophy and principles of instruction. The main problem was that students pulled out of the classroom for Tier 3 instruction missed out on integrated science, social studies, cooperative learning instruction. These components, meanwhile, were described by individuals across all groups as fundamental to the school’s philosophy and mission.

Findings in Relation to the Literature Review

Desired implementation outcomes. Hoover and Love (2011) and others (East, 2006; Stuart & Rinaldi, 2009; White et al., 2012; Burton and Kappenber, 2012) assert that the value of RTI rests in its potential to provide early intervention and prevention services for struggling learners within the general education setting. According to Hall (2008), RTI also has value in its potential to improve the model of intervention service delivery and special education
identification. Harlacher and Siler (2011) believe that successful implementation of RTI will depend on whether educators understand and value the model’s early identification and intervention principles. Kozleski and Huber (2010) argue that educator perceptions of RTI as a within-classroom support system of early intervention and prevention creates facilitative conditions for implementation. Similarly, Hall contends that realizing the model’s potential to improve the process of special education identification will depend on general educators’ support for and involvement in that process.

A review of prior research reveals mixed results related to educator understandings, values, and efficacy beliefs associated with RTI as both a general education model and as part of the special education referral process. Some research findings show educator buy-in for RTI is associated with beliefs that implementation of the model improved learning for a greater number of students within the general education setting. Others demonstrate educator buy-in is associated with reports of an improved ability to assess, plan, or instruct struggling students following implementation. Educators in some prior studies have also been reported to favor the model over prior special education models. In others, educator confusion and efficacy concerns have been reported to challenge more successful implementation of RTI as a general education model and as an alternative path to special education eligibility determination. Findings from the current study demonstrate mixed results in regard to participant understandings, perceptions of value, and efficacy perceptions related to implementation of RTI as a general education model and as part of the special education referral process.

**RTI as a general education model.** One of the foundational principles of RTI is the assumption that with appropriate instruction, learning for most or all students will improve (Kozleski & Huber, 2010; Harlacher & Siler, 2011). Understanding and embracing RTI as a
general education model, according to Harlacher and Siler (2011), requires some educators to shift their thinking about the goals of identifying student learning problems. The reason for this, RTI theorists and researchers contend, is that in previous intervention models; consistently described in the literature as “wait to fail” approaches (Bradley et al., 2007; Fuchs & Fuchs, 2007; Collier, 2012); assessment goals focused primarily on confirming or denying within-child learning deficits (Kozleski & Huber, 2010) to make determinations for placement in special education. Harlacher and Siler contend that RTI requires a shift in thinking about problem identification from one focused on confirming or denying a within-child deficit to one that is focused on viewing problem identification as an initial step in an ongoing problem-solving process for instructional improvement.

Prior implementation research findings reported by Greenfield et al. (2010), Rinaldi et al. (2011), and Swanson et al. (2012) show that general and special educators held positive views of RTI as a regular-education problem-solving model. In each study, teachers believed RTI provided more students with early-intervention access, provided greater opportunities to align instruction to individual student needs, and increased their ability to meet the needs of more students within the general education setting. Some results from the present study corroborate these earlier research findings, others do not.

For example, participants across certified and classified educator groups described early identification and support for struggling learners, an improved ability to target instruction to student needs, and the ability to serve more students within the general education setting as valued benefits of RTI. One of the classroom teachers, for example, described, RTI was a way to level the playing field for some struggling students. Discussion within each group also demonstrated that participants believed the goal of the model was to support students within the
general education setting. As the special education teacher explained, “The main goal is to get interventions to kids that need them,” (Support Educator B Interview, p. 10).

However, other findings indicate that the transformation from deficit to problem-solving is not complete. Rather, data shows that in some instances perceptions remain that certain identified student problems indicate within-child deficits that make expectations of academic proficiency achievement unrealistic. Classroom teacher E, for example, stated that RTI would only work for students who really want to get better. In addition, support educator B stated that in some cases teachers must resign themselves to the fact that, despite the additional intervention support, not all students would make significant gains. To some extent, discussions among paraprofessionals and other certified participants also indicated a general belief that RTI was less likely to benefit students with behavior issues.

Based on prior research findings and findings from the current study, developing additional, structured opportunities to address educator beliefs about students’ capacity for learning, the goals of identifying student learning difficulties, and the focus of problem-solving within a general-education RTI model is indicated. Consultation, discussions, and ongoing coaching may also be needed to help educators address and overcome specific behavioral or learning challenges encountered within a problem-solving model. Future research examining general-education interventions that support accelerated learning for students exhibiting challenging behavior or motivational characteristics may also be indicated.

**RTI and special education eligibility.** According to Harlacher and Siler (2011), RTI requires that educators take a general-education problem-solving approach to the identification of student difficulties or disabilities. Harlacher and Siler (2011) argue that this approach is an improvement over the discrepancy model of special education eligibility because through RTI
planning and monitoring processes, educators seek to provide more targeted support for all students, including those with potential disabilities, prior to special education referral. Harlacher and Siler further argue that educators who understand this principle are more likely to buy-in to the idea that the model is an improvement over the older discrepancy model where the goal of assessment is to identify within-child deficits rather than to align contextual conditions for improved learning.

In the literature reviewed, Rinaldi et al. (2011) conclude that general and special education teachers believed the special education referral process and programming had improved with RTI implementation. In particular, Rinaldi et al. report that special education teachers believed RTI improved identification of needs and learning for many struggling students, including those eventually determined to need special education services. They further believed the processes of aligning instruction and monitoring progress diminished the need for special education referral and improved their ability to address learning problems within both general and special education settings. Data from some participant discussions within the current study corroborate the positive results obtained by Rinaldi et al. For example, certified support educator B felt the model was an improvement over the discrepancy model. She stated that RTI made it possible to meet the needs of many more struggling students across the school because so many students who had qualified for help through RTI would not have qualified through the old special education model. She also pointed out that general education students were now receiving some of the same high-quality research-based programs and strategies were only available for use with special education students prior to referral. Paraprofessional B stated that RTI she believed the intervention instruction provided likely diminished the need for special
education referral. Other participants more generally stated that RTI made it possible to address the needs of more students earlier than had been possible prior to implementation.

Findings from the current study also indicate that, while many participants valued the early intervening approach, not all fully understood or embraced one of its fundamental principles, which is “… to correct the identified problem, not place the child in special education,” (Harlacher & Siler, p. 21). For example, data taken from some discussions shows one classroom teacher and one paraprofessional viewed the ongoing RTI intervention-assessment cycle as unnecessary, harmful, and even as a way to delay needed eligibility determination and services. Classroom teacher E, for instance, described the process as one in which certain students were being bounced around rather than placed in federally-funded special education programs that could help them.

Similarly, a second paraprofessional shared concerns that RTI’s instructional services were not of the same quality as those services provided within the special education program. Paraprofessional C explained, “… to say RTI replaces in any form, the need to identify a child as [special education] is wrong,” (Paraprofessional Interview, p. 12). Paraprofessional C went on to say that she believed paraprofessionals providing research-based interventions within the model would not be able to achieve the same quality of service as that achieved by a qualified special education teacher.

Barnes and Harlacher (2008) argue that, in order to help schools make a transition from “traditional models of service delivery to the use of RTI,” (p. 418), implementers must go beyond simply developing educator understanding of what RTI looks like. Instead, implementers must help practitioners understand why RTI is needed and how it might be implemented within different school settings to best address the needs of all students. This
includes better addressing the needs of students with learning difficulties and disabilities. Similarly, Hoover and Love (2011) conclude that implementation leaders who encounter concerns associated with RTI as part of the special education process should help educators understand that one of the main goals of RTI is to identify and address issues of instructional quality in all circumstances. Pyle (2011) argues that providing a concrete definition of non-response to intervention, accompanied by procedural directions for providing interventions for non-responding students, would improve understanding and acceptance of RTI as part of a special education referral process.

Based on the findings of this study and conclusions drawn by prior theorists and researchers, providing structured discussions or professional development opportunities that develop a shared understanding of RTI’s fundamental principle of problem-solving through instructional alignment is indicated. Developing educator understanding of the process of ruling out instruction as a cause for student difficulty as part of the special education eligibility process is also indicated. Providing clear protocols for making non-response determinations as part of the special education referral process may also improve educator buy-in for the model. Further research on the benefits, challenges, and effective use of the RTI assessment-instruction cycle as part of a well-defined special education identification process is also warranted.

**RTI and educator efficacy beliefs.** Within the RTI literature, Nunn and Jantz (2009) define educator efficacy beliefs as perceptions of their ability to effectively apply RTI’s “knowledge, skills, procedures, methods, and strategies” (p. 605) to improve student learning and motivation. Other researchers reviewed in the literature offer similar descriptions (Rinaldi et al., 2011; Swanson et al., 2012). Findings from the current study indicate that participants held
mixed feelings of efficacy associated with their ability to use these essential assessment, planning, or instructional components.

**Assessment efficacy beliefs.** In prior research, Pyle (2011) and White et al. (2012) argue that buy-in for RTI is directly associated with educator beliefs about the effective use of RTI assessment data in identifying and improving relevant skills and strategies necessary for improvement. A review of the research demonstrates that some teachers in prior studies held positive efficacy beliefs associated with RTI assessments (Greenfield et al., 2010; Rinaldi et al. 2011). In others, teacher concerns indicated feelings of low-efficacy (White et al., 2012). In studies where positive efficacy was reported, educators felt they were able to use the assessment data effectively to plan instruction and report progress (Greenfield et al., 2010; Stuart et al., 2011). In the RTI literature where educator efficacy concerns were discussed, some theorists and researchers concluded that teachers either did not understand the research base behind the use of the assessments, did not understand what counted as evidence of student response, were not provided the opportunity to use the data to determine whether student learning had improved, or did not have enough time to learn the assessment database system (Kozleski & Huber, 2010; Pyle, 2011; White et al., 2012).

Data from this study demonstrate that educators held mixed efficacy beliefs associated with their use of RTI assessments. For example, paraprofessionals, classroom teachers, and certified support educators generally expressed confidence in their ability to administer and use benchmark assessment data to determine which students needed more support. Participants also commonly referred to the assessment data as proof that many Tier 3 interventions were working. However, when it came to using the assessments for planning and progress monitoring within the Tier 2 model, participants either reported they had not attempted to use the progress-monitoring
assessments or had experienced difficulty and frustration in their attempts to do so.

Paraprofessionals, for example, reported they had not used the data to make determinations about whether Tier 2 interventions were working. Rather, they passed this data on to classroom teachers. At the same time, all classroom teacher participants reported frustration in trying to access and use the progress monitoring data to determine student progress associated with either Tier 2 or Tier 3 instruction. Some classroom teachers stated that by the time they received the reports, the information was not useful. Other stated that the sheer number of individual reports sent made the process of analysis too time consuming. One teacher stated she had not received any progress reports at all and believed she had drifted away from providing consistent Tier 2 in-class instruction as a result. Most classroom teachers reported similar inconsistencies. In addition, data taken from discussions among classroom teachers and paraprofessionals indicates that the assessments did not always align with their beliefs about student strengths and weaknesses nor did the assessments provide enough relevant information to support intervention planning within the school’s curricular framework.

These findings support arguments made by O’Connor and Freeman (2012) who conclude that the lack of a “clearly articulated assessment framework,” (p. 303) is one reason educators have difficulty making sense of assessment data or using it for instructional decision making. For example, although teachers in the current study reported using AIMSweb results to inform instructional planning, these assessments were developed primarily as screening and progress monitoring tools. In addition, it is noted throughout the RTI literature that diagnostic assessments should accompany the use of benchmark and progress monitoring data to support more specific determinations regarding student strengths and needs (Howard, 2009; Bender & Shores, 2012; Burton & Kappenberg, 2012). Yet, while some diagnostic assessments had been
conducted within classrooms to support instructional planning, only one classroom teacher mentioned using one of these assessments as a part of the RTI identification or intervention planning process. Teachers also expressed the desire to find alternate assessments that provided more specific information aligned with the school’s curricular goals.

According to O’Connor and Freeman (2012), successful districts implementing RTI, “… recognize the need for the coordination of assessment procedures, data management, and staff development in basic measurement concepts, interpretation of data, and data-based decision making (Togneri & Anderson, 2003),” (p. 303). O’Connor and Freeman contend that without such efforts, “… even the best assessment data will not be useful to those trying to make educational decisions,” (p. 202). The researchers conclude that coordination and coaching efforts may help to ensure integration of assessment routines across grade levels and buildings according to these researchers. Similarly, Harlacher and Siler (2011) argue that, in order to improve efficacy, educators should receive “… ongoing coaching and ample opportunities to practice new skills,” (p. 21).

Based on the findings of this study and prior research, professional development that supports an understanding of purpose and function of various screening, diagnostic, and progress monitoring assessments used within an RTI model is indicated. Expert coaching focused on improving educators’ ability to use progress monitoring data to inform intervention planning and monitor progress through the intervention cycle is also indicated. Further research into effective uses of traditional classroom-based assessments or alternative benchmark, diagnostic, and progress monitoring assessments may also prove beneficial to practitioners facing implementation challenges associated with assessment incoherence.
**Instructional efficacy beliefs.** In order for teachers to successfully alter their practices, Pyle, Wade-Wooley, and Hutchinson (2011) argue teachers must, “… not only see potential in the new initiative, but must also have confidence in their ability to integrate the essential elements into their classrooms,” (p. 259). In the literature reviewed, Rinaldi et al. (2011) reported positive efficacy beliefs among teachers associated with perceptions of an improved ability to provide more targeted instruction for struggling learners using RTI intervention protocols. However, White et al. (2012) reported efficacy challenges associated with teacher perceptions that the interventions were complex and with reports that educators considered their understanding of the interventions as incomplete.

Data from the current study indicates mixed efficacy beliefs associated the model’s intervention protocols. Most participants held positive efficacy beliefs about paraprofessionals’ ability to implement Tier 3 instructional protocols. But classroom teachers and certified support educators held lower efficacy beliefs associated with what some described as their limited knowledge of the instructional interventions associated with Tier 2 interventions. For example, most classroom teachers stated they did not know enough about the already-approved interventions to feel confident that they could implement them. Classroom teachers and certified support educator A also stated that they did not know enough about the interventions to feel confident in making recommendations about which ones might address the needs of a particular student. Rather, most classroom teachers reported they had to rely on other members of the RTI team to make determinations about which programs best aligned to student needs. Even support educator B, the special education teacher, who saw her knowledge of the research-based instructional programs as one of her strengths, said she could still learn a lot more about how to implement some of them.
Hoover and Love (2011) reported similar issues of efficacy and understanding associated with the involvement of general educators in providing tiered instruction. To address these issues, the researchers initiated a Tier 2 push-in model that included collaborative planning and follow-up discussions among RTI school teams on how to resolve RTI needs. Hoover and Love reported that these strategies empowered teachers and reduced the need for outside expertise as implementation efforts continued. According to Stewart and Rinaldi (2009), “It is essential to provide educators with professional development opportunities (such as small group coaching, teacher leadership teams) so that they can develop instructional supports for RTI models,” (p. 56). Harlacher and Siler (2011) recommend that professional development should include “include knowledge of high-quality instruction,” (p. 2). Similarly, Nunn and Jantz (2009) argue that positive teacher efficacy was found to be significantly associated with teacher reports of involvement in ongoing RTI training.

Based on the findings of prior research and the current study, additional training in RTI instructional processes, practices, and programs within the classroom is indicated to empower educators in making instructional decisions and to provide interventions for struggling learners within the Tier 2 model. Further research aimed at exploring the relationship between teacher efficacy, professional development, and ongoing coaching support as a part of RTI implementation is also indicated.

**Collaborative decision-making efficacy beliefs.** Another paradigm shift required for successful implementation of RTI is collaborative planning for instruction (Harlacher & Siler, 2011). Throughout the RTI literature reviewed, researchers and theorists argue that effective school-level application of the model depends on collaboration among special education teachers, general education teachers and instructional support staff (Howard, 2009; Mellard &
Johnson, 2012; Fuchs & Bergeron 2013). According to Ehren, Laster, and Watts-Taffe (n.d.), “RTI calls for deliberate, intentional, ongoing collaboration…[the] joining of forces, pooling of resources, and sharing of expertise order to meet shared goals for instruction and assessment,” (Collaboration and RTI section, para. 4). Prior research into efficacy beliefs associated with RTI planning for instruction shows that some educators experienced improved efficacy beliefs associated with collaborative aspects of the model while others described collaboration efforts as challenging.

Johnson et al. (2011) report that concerns over responsibility for student performance in part limited teachers’ willingness to share instructional responsibilities with other educators providing supplement tiered instruction outside of the classroom. Teachers in this study expressed concern that students would miss valuable instruction while receiving intervention services outside the classroom. The concern was characterized by the researchers as, “limiting the school’s ability to develop and follow data-driven instructional and curricular decision rules,” (p. 141). Swanson et al. (2012), on the other hand, reported that participants believed they experienced increased opportunities for collaboration and felt the model facilitated a sense of shared responsibility for students among general and special educators. Similarly, Stewart and Rinaldi (2009) found that educators believed the RTI framework was effective in part because it allowed them to work with peers to problem solve intervention implementation issues and develop more meaningful individualized instruction.

Rinaldi et al. (2011) concluded from their study that, “… collaborative, data-informed practice is critical to the successful and sustainable enactment of an RTI model and can yield both a shift in school culture and in teachers’ feelings of efficacy,” (p. 51). Likewise, Pyle et al. (2011) concluded that, “An increase in teachers’ knowledge is one of the conditions that
facilitates empowerment (Maeroff, 1988) by instilling in teachers the confidence to make instructional decisions that will benefit their students,” (p. 267).

Although participants in the current study shared concerns about missed classroom instruction similar to those cited in Johnson et al. (2011), much of the data from the current study corroborates the positive efficacy findings associated with collaboration and the subsequent efficacy arguments made by Pyle et al (2011) and Rinaldi et al (2011). Many participants in the current study believed the data-retreat meetings and other collaborative sessions had improved their understanding of the process and their roles in it, improved their confidence that the interventions were working, or improved their understanding of alternate strategies and resources they could use to teach students differently. Classroom teacher D summarized it best as she explained her growing confidence in working as part of a team to solve problems of instruction and learning. She said:

By the last meeting we had…, it was like “Here's my piece of evidence. Let's identify a big thing that's missing and then let’s work together to come up with a plan.” It's like having everybody's brain compiled on each student really gave me a lot of ideas of ways I could work with my kids. (Classroom Teacher Interview, p. 5)

Similarly, classroom teacher E believed that data retreat sessions improved his understanding of RTI processes and practices and improved his confidence that RTI interventions were working. Although most paraprofessionals did not participate in data retreat sessions, most stated they wanted to participate and believed it would improve their ability to coordinate instruction and problem instructional issues that arose once interventions were underway. In addition, paraprofessional F, the only paraprofessional to attend the data retreat meetings, said she felt the sessions gave her a place to provide input and “to be a part of the
conversation,” (Paraprofessional Interview, p. 3). She explained that she felt privileged being a part of the sessions because they made her feel that she was part of a team considering the needs of students in the classroom. Paraprofessional E further believed she was able to use the information gained in the sessions to support the classroom teacher in implementing some of the Tier 2 instruction in the classroom.

Based on the findings from prior research and this study, including all implementation stakeholders as part of an ongoing RTI instructional planning team is indicated. In this case, that includes paraprofessionals as well as the building principal, classroom teachers, and RTI building coordinators. Providing additional time for classroom teachers and paraprofessionals to collaborate as part of a classroom-based team is also indicated. Future research examining the use of classroom-based intervention teams as well as school-level intervention teams that support improved collaborative problem-solving and the ongoing coordination of services within the classroom and across the school may also be indicated.

**Structural supports and challenges.** Within the literature reviewed, some essential RTI structures were identified as supporting effective application of the model while others were determined to present challenges (Kozleski & Huber, 2010; Rinaldi et al, 2012). Data from the current study corroborates the mixed perceptions associated with RTI components as either structural barriers or supports to effective implementation noted in these earlier studies.

For example, time was found to be a factor supporting or limiting perceptions of implementation effectiveness across studies. Rinaldi et al. (2012), for example found that providing time for collaborative problem solving attributed to perceptions of efficacy. White et al. (2012) reported the rapid pace of implementation and limited professional development time posed instructional and assessment challenges. Pyle (2011) argued that the *incremental*
Implementation of the essential assessment and instructional elements posed a challenge to effective implementation. Kozleski and Huber (2010) likewise report that facilitative structural conditions include providing adequate time for collaboration, professional learning, assessment data, and instructional resources. In the current study, limited amounts of time provided for collaboration, training, and ongoing support were perceived as significant challenges to more effective implementation by participants across groups.

In addition, Rinaldi et al. (2011) report that teachers in that study believed the assessment protocols supported effective identification of struggling learners and provided information needed to plan more appropriate instruction. In the current study, the use of benchmark assessment data was perceived by most participants to facilitate identification of struggling learners needing further support. However, classroom teacher and certified support participants also believed the limited data provided by benchmark assessment results and cumbersome nature of obtaining using progress monitoring data challenged more effective implementation.

Within the literature reviewed (Harlacher & Siler, 2011; Hughes & Dexter, 2011; Rinaldi et al, 2011), collaborative structures were believed to facilitate effective implementation of essential assessment and instructional components within the model. These findings are corroborated by data taken from discussions within the current study. Participants who were part of the data-based decision team believed their participation facilitated understanding of the assessment-intervention process, provided new insight into instructional options, and improved confidence that RTI interventions were working. At the same time, exclusion of paraprofessional educators from the data retreat sessions was believed by most participants to inhibit collaboration and coordination of services.
Within the current study, the use of paraprofessionals was believed by a majority of participants to facilitate more effective implementation. This protocol, participants explained, made it possible to provide small-group instruction, targeted instruction for many more students. Small-group instruction was presented by a majority of participants as an essential feature of the model. Study participants described paraprofessional support as both a benefit and necessity in applying the model within the school. This may be significant in that prior research conducted by Rinaldi et al. (2011) and Swanson et al. (2012) shows that finding additional staff to provide interventions could present as a challenge to maintaining differentiated instruction within the model. Likewise, Pyle (2011) found that classroom teachers felt overwhelmed by the number of assessments they had to administer and enter into the database system.

Another implementation challenge reported by Rinaldi et al. (2011) was staff turnover. Participants in Rinaldi et al. described staff turnover as a threat to fidelity of implementation in all tiers. Data from the current study supports this conclusion. Some participants indicated staff turnover made implementation start up and consistency from year to year more difficult. Training new teachers and paraprofessionals to use assessment and instruction protocols were discussed as challenges specific to staff turnover.

In addition to some of the findings already reported elsewhere in this paper, Ahram et al. (n.d.) identified persistently low student achievement, poorly functioning business operations, and low expectations of students as structural impediments to successful RTI development in urban schools. Although participants in the current study did not report persistently low student achievement or low expectations for some students to be a challenge, data taken from some of some discussions did indicate that low expectations for some students may present as a challenge
to more effective implementation in some instances. Perceptions of poorly functioning business operations were not indicated, however.

Swanson et al. (2012) reported frequent removal of students from the classroom by different interventionists to be a structural challenge. Data from the current study corroborates this finding. Participants across group shared concerns that students were missing out on valuable instruction and collaborative opportunities when pulled out for daily Tier 3 interventions. As in the Swanson et al. study, participants in this study concluded that this was particularly a problem for students receiving multiple interventions.

Prewett et al. (2012) identified school-wide professional development and systemic leadership as two structures supporting effective implementation. Prewett et al. reported that participants believed close involvement of leadership and adequate training in the components of the model supported effective application. In the current study, educator discussions indicated that many participants perceived these structures to be limited, challenging more effective implementation. For example, classroom teacher participants reported that increased leadership support and professional development for Tier 2 implementation in particular was needed to improve the consistency of Tier 2 interventions. Paraprofessional discussions also indicated that these participants wanted additional support and guidance from both classroom teachers and RTI coordinators to improve the coordination and efficacy of Tier 3 interventions. Thus, findings from the current study corroborate the findings of prior research indicating that educators believe close and involved leadership and adequate and ongoing professional development are structures that facilitate more effective implementation.

Considering prior research and findings from the current study, providing paraprofessional educator assessment and instructional support, developing strong building-level leadership
structures, and developing an ongoing system of professional development support systems are indicated. A closer examination of how to best utilize paraprofessional support as well as leadership and professional development structures would also be warranted as a future area for implementation research.

**Cultural supports and challenges.** According to O’Connor and Freeman (2012), “Without attention to the fundamental culture and beliefs that exist among district and building staff, along with the actions to address mismatches between RTI principles and prevailing beliefs, RTI efforts will falter,” (p. 306). In the present study and the literature reviewed (Pyle, 2011; Hoover & Love, 2012; Prewett et al., 2012; White et al., 2012), perceptions of coherence, implementation control, and implementation support were found to be cultural factors associated with educator perceptions of efficacy and buy-in for the model. The conclusions drawn from this study and the literature reviewed indicate that a number of cultural factors may facilitate or challenge effective RTI implementation and application.

**General education coherence.** Pyle (2011) defines coherence as how well a recent initiative enmeshes with, “… existing practices and facilitate the accomplishment of a common goal (Madda, Halverson, & Gomez, 2007),” (p. 69). In the literature reviewed, Pyle (2011) and White et al. (2012) identified that educator perceptions of incoherence of this type became a barrier to more effective implementation. Pyle (2011) determined that one of the central challenges encountered during her study of RTI implementation was the perception by teachers of a lack of coherence between applied elements of an RTI model and educators’ existing assessment and instructional practices. The root of the coherence problem, Pyle determined, was that teachers believed RTI fluency measures did not provide needed information about student comprehension.
In the current study, many participants across educator groups perceived a lack of coherence between the skills and concepts they believed should be targeted by RTI assessments and those included within the RTI assessment system. Participants also commonly perceived the RTI assessment probes as too narrowly focused on fluency while not providing enough information into comprehension development. Some participants also believed the writing assessments discounted the writing process even though writing process skills were a valued aspect of the school curriculum and emphasized throughout students’ writing instruction. Participants within the certified educator and paraprofessional groups also indicated the timed-testing protocols required by the RTI assessments resulted in an incomplete and sometimes inaccurate picture of student’s strength and needs, particularly in light of the fact that state assessments were not timed.

Pyle (2011) associated teachers’ perceptions of assessment incoherence on their lack of exposure to the research-based behind some of the assessments and lack of opportunity to use the assessments as intended. According to Pyle, teachers in that study were not familiar with the research base showing the relationship between reading fluency and comprehension on which one of the RTI reading assessments was founded. In addition, according to Pyle, teachers had not yet implemented the instructional component of the model, and therefore had not yet observed the entire assessment-instruction cycle. This, according to Pyle, resulted in educators garnering an incomplete picture of the formative nature of these assessments during implementation.

Data from the current study supports Pyle’s arguments that educators’ perceptions of incoherence may be associated with a lack of understanding of the purpose and goals of the assessment and a lack of opportunity to use the assessments formatively, as intended. In the
current study a number of classroom teacher participants in particular were not able to observe the complete assessment-instruction cycle for students participating in Tier 2 instruction. For example, classroom teachers repeatedly shared concerns about the problems they had in regularly accessing student progress monitoring reports. They commonly reported issues of access and understanding interfered with their ability to determine whether or how ongoing tiered instruction was working. Some classroom teachers also stated they were confused about how to interpret the progress-monitoring graphs when they were able to obtain them. One classroom teacher in particular stated the lack of access to students’ progress monitoring data was one of the primary reasons she had drifted away from providing Tier 2 interventions despite being initially motivated by her involvement in an analysis of benchmark data and in planning for targeted instruction during an initial data-retreat session.

Additional data from the current study further leaves the impression that not all participants understood the AIMSweb assessment system was developed as a screening and progress monitoring tool and was not designed to be a diagnostic assessment tool even though some results were being used to examine specific skill deficits. For example, data shows that participants were frustrated by the limited focus of the fluency and comprehension assessments and limited information provided about student strengths and needs. Participants who had used the math assessments also expressed frustration regarding the cumbersome nature of having to look through individual answer sheets to find missed problems that might indicate a particular area of need.

Pyle concluded that professional development would help to address some of the incoherence issues associated with RTI assessments. Pyle suggested developing teacher understanding of the research base supporting the intent of RTI screening assessments would be
helpful. Based on prior research findings and findings from the current study, further training on the purpose and use of current screening assessment protocols are indicated. In addition, involving school-based educators in the review and selection of additional diagnostic assessments aligned to curriculum and intervention needs may be beneficial to improving assessment coherence. A closer examination of how to best utilize screening, progress monitoring, and diagnostic assessments within different schools would also be warranted as a future area for implementation research.

According to White et al. (2012), teachers perceived instructional coherence issues as an implementation challenge in their study. White et al. reported that teachers were concerned with the rapid pace of implementation and wished that they had had training on some research-based programs important to the model before beginning implementation. Similarly, the findings from this study revealed that participants faced coherence and efficacy challenges associated with the implementation of research-based interventions. Most significantly, classroom teachers and certified support educators believed they lacked the working knowledge to apply many of the instructional programs and strategies within the Tier 2 setting.

White et al. (2012) concluded that teachers should be provided time to learn instructional programs before starting implementation. However, White et al. also determined that “… team leadership and problem-solving are key ingredients to making an RTI model work,” (p. 88). Similarly, Pyle et al. (2011) contend that implementation leaders need to provide “… considerable and sustained professional development (PD) programs to facilitate the introduction of the range of new skills that teachers must acquire (Fuchs & Deshler, 2007),” (p. 258). Many participants in the current study expressed the need for additional professional development to improve their understanding or application of research-based programs, especially within the
Tier 2 model. These findings suggest that additional, sustained professional development and follow-up support, perhaps in the form of coaching and close implementation oversight, would help to address the expressed instructional incoherence challenges. Further research into the specific challenges associated with the use of research-based intervention programs and strategies as part of an in-class Tier 2 RTI model would also be useful.

In addition, despite widespread support for Tier 3 interventions across all groups in the current study, participant perceptions of incoherence were significant in association with the Tier 3 pull-out schedule. Participants believed pulling Tier 3 students from other subject areas to provide RTI interventions was a major challenge. This belief was rooted in participants’ shared believe in the importance the school placed on science, integrated learning, and cooperative learning curriculum and instruction. This finding does share some consistencies with the argument made by O’Connor and Freeman (2012) that, “This reallocation of schedule time and staff time can be difficult for some staff and some stakeholders,” (p. 308). It is also consistent some of the findings in the study by Swanson et al. (2012) where educators expressed concern that students were frequently being pulled from in-class instruction by numerous interventionists, each providing instruction in a different subject-area.

Building-level RTI leaders and educators may benefit from a discussion of different options available for instructional delivery of Tier 2 and Tier 3 interventions. This may include consideration of the frequency with which to provide interventions within Tiers 2 and 3 and whether a Tier 3 push-in model is feasible.

Within the current study, perceptions of instructional incoherence associated with the Tier 3 pull-out schedule are also associated with conflicting beliefs about the necessity of providing core subject-area instruction to students who also receive Tier 3 interventions. The
combination of core instruction and intervention instruction is a fundamental principle commonly espoused throughout RTI implementation literature. However, most study participants believed that a number of students receiving Tier 3 interventions were not benefitting from Tier 1 instruction. Participants believed the concepts and work to be too challenging for students who qualified for Tier 3 interventions. To address these issues, professional development opportunities that clarify the rationale for providing students with core instruction may be indicated. Additional professional development opportunities may also allow for an investigation of different modalities of learning that provide all students, including Tier 3 learners, with improved access to Tier 1 content. RTI leaders and teachers may also benefit from a discussion about specific cases in which it is believed that replacing core instruction with Tier 3 interventions might benefit some students. Undertaking further research to determine whether students who qualified for Tier 3 would benefit from receiving those services as a replacement to core instruction would prove more beneficial. An argument put forth by O’Connor and Freeman indicating the importance of continuous RTI improvement of implementation through policy, procedure, and practice reviews “… that improve outcomes for all students…” (p. 309) provides the rationale for suggesting these implications.

White et al. (2012) concluded that that despite coherence challenges associated with the RTI assessment component, sufficient successes maintained staff enthusiasm and buy-in. White et al. defined these implementation successes as teachers’ eventual ability to use the RTI data successfully and their corresponding belief that the intervention plans were working. Current study findings demonstrate that participants’ across all groups perceived some successes associated with the implementation of RTI assessment, decision-making, and instructional components. Participants who participated in the data retreat sessions believed their
participation had improved their understanding of the assessment-instructional cycle. Participants across all groups believed the small-group intervention protocols and paraprofessional support provided made it possible to address the specific needs of many more students. Despite the challenges expressed by participants, paraprofessional educators commonly referred to AIMSweb data to support their beliefs that Tier 3 interventions had a positive effect on student growth. Some of the certified participants who pointed to student growth as an indicator of the benefits of small-group interventions also referred to AIMSweb data to support this conclusion.

In addition to the shared perception of RTI as a general-education model, participants also collectively perceived that RTI intervention services were reliant on communication and collaboration among classroom teachers and paraprofessional educators. This belief was strongly associated with participants’ desire to improve communication and collaboration efforts. Classroom teachers and paraprofessionals repeatedly expressed the desire for additional time to meet on a regular basis to plan for ongoing Tier 2 and Tier 3 program development, instruction, and progress monitoring. Providing additional resources, primarily in the form of time to collaboratively analyze student data, share ideas, or solve problems related to ongoing interventions may be considered. In addition, future research related to identifying and addressing collaboration or coordination issues among general education, special education, and paraprofessional support staff could prove beneficial.

*Special education coherence.* Hoover and Love (2011) identified confusion among educators regarding use of the RTI process in helping to determine special education eligibility as an implementation challenge. Results from the current study affirm this earlier research finding. While some participants in the current study believed RTI to be an improvement over
the earlier academic-IQ discrepancy model, other participants believed that the model inhibited needed special education identification and support. Hoover and Love (2011) determined that the coherence issues related to special education eligibility determination in their study should be addressed by helping educators distinguish between learning differences (particularly within English Language Learner populations) and learning disabilities. Hoover and Love suggest that taking educators through the process of determining special education eligibility within a school’s RTI model provides clarification of the process. This study did not investigate participant perceptions of how the RTI process was utilized within the process of special education identification, nor were participants asked to define the process of eligibility determination using the RTI model. Thus, the roots of educator perceptions of special education incoherence, other than perceived delays in eligibility determination, remain unclear.

White et al. concluded that in cases of incoherence, especially for those who are transitioning from a different model of special education referral, it is necessary to communicate fully the rationale for RTI and to develop “… a clear understanding of the framework…” (p. 47). Data from the current study indicates that implementers should provide greater clarity for the rationale and use of the model in the case of special education referral. Further clarification could involve providing opportunities for educators to participate in several case-study approaches that require them to utilize RTI guidelines as part of the eligibility determination process. Future research may investigate how RTI processes are being used to help determine special education eligibility within different schools and districts.

**Role conflict and confusion.** In the literature reviewed, Prewett et al. (2012) determined that staff acceptance of changing roles and responsibilities to be an important factor supporting effective RTI implementation. White et al. (2012) identified role conflict as a barrier to
implementation. In her study Pyle (2011) determined that conflict was the belief by general and special education teachers that the special educators did not have the time or authority to provide needed Tier 3 services for students not already receiving special education services. Data from certified support educator and paraprofessional participants indicated that similar role conflicts were perceived to challenge to some aspects of RTI implementation in the current study. Certified support educator B expressed concern that the amount of time it took to participate in RTI team meetings interfered with her primary duties as a special education teacher. Some of the paraprofessional participants also noted that due to the increased special education caseload, RTI coordinator B had not been available to meet with them as regularly as she had the prior year. According to the paraprofessionals, this greatly impacted their ability to coordinate or problem-solve ongoing Tier 3 interventions.

In addition, although one of RTI coordinator A and B’s responsibilities as part of the school RTI team was to support classroom teachers in selecting appropriate Tier 2 and Tier 3 interventions, both support educators expressed feeling uncomfortable making such suggestions to classroom teachers. Support educator A stated she didn’t feel she knew enough about the interventions herself to feel confident in making intervention suggestions to classroom teachers. Support educator B stated that while she was comfortable using the interventions herself, she did not feel comfortable telling classroom teachers to use them.

In light of these findings, facilitation of feedback and discussions between classroom teachers, paraprofessionals, and support staff could prove helpful in clarifying support needs, support staff roles, and responsibilities. Providing professional development in the content and uses of RTI programs, and clarifying the roles of RTI coordinators on the RTI data-based decision making team, might also alleviate some of the conflict perceptions noted. Providing
professional development on the changing role of special education teachers and other support staff within an RTI model and providing resources, such as time, for RTI coordinators to provide support may also address some of these perceived conflict issues.

Confusion among general educators’ and special educators regarding their collaborative roles can also challenge implementation (Hoover and Love, 2012). In this study, all classroom teachers and RTI coordinator A expressed confusion about who was responsible for coordination and oversight of Tier 2 implementation. Paraprofessionals were more generally confused about what part they played in this aspect of the intervention plan. Hoover and Love applied collaborative planning, a push-in model of Tier 2 classroom instruction, and follow-up discussions among the school teams as strategies used to address identified role confusion issues. Similar implications can be drawn from current research data. Further research into the ways general and special educators’ roles change as a result of RTI implementation may also prove useful in identifying or alleviating other issues of role conflict or confusion.

**Leadership.** White et al. (2012) believe that principal and RTI team leadership are paramount to the model’s successful implementation. It was evident from the findings of the current study that participants considered RTI leadership to be a key factor in successful implementation. Classroom teacher participants felt that additional leadership supported was needed in the form of oversight and support for the consistent implementation of Tier 2 interventions. Most paraprofessional participants believed they needed additional support to problem-solve issues or answer questions they had about ongoing implementation of Tier 3 instruction.

To improve leadership support, White et al. (2012) recommended establishing two separate RTI teams. An *RTI Leadership Team* that would be responsible for planning and
resolving faculty concerns and other issues of implementation. An additional RTI team would be responsible for handling individual student case plans. Within the current study, study findings make it apparent that classroom teachers and paraprofessional educators would benefit from additional support from a school-RTI leadership team responsible for ongoing coordination of Tier 3 intervention services and increased support and oversight of the Tier 2 implementation process. The inclusion of paraprofessionals on the team responsible for creating student intervention plans would also improve coordination and collaboration efforts.

**Implementation control.** White et al. (2012) believe that educator engagement in the implementation process is one of the key factors contributing to the model’s success. Prewett et al. (2011), assert that teachers’ desire to improve their practice and to improve student learning only initially motivate teachers to buy-in to the potential of the RTI model. Prewett et al. contend that RTI implementation leaders must provide a context in which educators feel actively involved, empowered, and valued, in order to sustain motivation. Such an environment exists, according to Pyle et al. when teachers feel their input is integral to the implementation process. Creating this environment involves providing opportunities for teachers to share information and increase knowledge, welcoming active participation, and acknowledging teachers’ professional abilities and ideas according. Rinaldi et al. (2011) share similar observations when comparing the implementation culture in the first and third years of their study. Rinaldi et al. found that while teachers viewed implementation as more of a directive in the first implementation year of implementation, after the third year implementation efforts were associated with a culture in which teachers’ held improved perceptions of collaboration and a positive view of being collectively responsible for student learning.
Data from the current study shows that participants across all groups perceived some aspects of RTI implementation as top-down mandates that were not in their power to change. These included: the requirement that students with significant learning difficulties still participate in the Tier 1 core curriculum, the requirement that only approved research-based programs and strategies could be used for interventions, and the requirement to use the AIMSweb reporting system. These requirements were reported by many participants as something they *had to do* despite the concerns they had about them.

Prewett et al. (2012) determined it is important for leadership to address the school culture, “… to help establish a climate that facilitates a change in staff’s perceptions of roles and responsibilities,” (p. 146). For Prewett et al., techniques applied to address the current school culture and accomplish such change could include, “school-wide professional development on RTI; establishing a common language and understanding; school-wide participation on the data-based decision making process; and systemic leadership in the implementation process,” (p. 146). Based on the findings of the current study, providing further professional development on different types and uses of assessments within the RTI model, involving faculty and staff in problem-solving access to data, providing professional development in the selection and use of research-based programs, providing additional time for collaboration and additional leadership support should be considered.

Some of the findings from the current study also support facilitative culture conditions noted by Prewett et al. (2011). For example, most participants across all groups in this study viewed the RTI small-group intervention process as necessary and beneficial to many students. They also viewed collaboration between classroom teachers and paraprofessionals to be an important aspect of providing effective interventions. Participants also commonly expressed the
desire to improve their understanding of research-based intervention programs. This included improving knowledge of how to select and use research-based programs within the Tier 2 model. Participants further expressed a desire to explore alternate assessments that they believed would provide additional insight into student needs and would align more completely with their beliefs about curriculum and instruction. They also wanted to improve collaboration among all groups responsible for coordinating assessment and instructional practices. Finally, participants expressed a continuing hope that their participation in these efforts would strengthen the model and lead to more desirable RTI implementation outcomes.

Because the current investigation focuses on implementation over the course of one school year, it is not possible to determine how educator perceptions of Tier 2 and Tier 3 challenges may change after concerns are addressed. Therefore, additional research within a multi-year investigation of ongoing RTI implementation is recommended to support a more complete understanding of how educator concerns, motivation, or buy-in might change over time as cultural challenges are addressed and supports strengthened.

**Limitations**

A number of potential limitations are associated with this qualitative case study. The ability to generalize the findings is difficult due to the unique contextual factors found at the study site and the small panel size. The study was limited to one school and included only thirteen participants. The results thus describe only the understandings, beliefs, and perceptions of a small group of school-level educators. Limiting the study to one school makes it difficult to generalize the findings to larger urban or rural schools and potentially limits the generalizability of the findings. Despite these limits, the results of the study support theoretical generalization
based on a comparison of findings documented in educational change theory and RTI implementation research literature.

The researcher’s background and association with the school being examined also limits the study. The researcher is employed as the building principal, overseeing the work of the thirteen participants. The researcher had to consider the potential for bias due to her vested interest in the success of the implementation. In order to address this issue, the researcher continually reflected on the importance of understanding educator perspectives of implementation challenges. The researcher also communicated to participants the importance of understanding implementation challenges as one of the major goals of the study.

Because the researcher was also the school administrator, participant responses may have been more guarded. Therefore researcher limitations may exist due to the position of authority the researcher held within the school. In order to address this issue, the researcher outlined the purpose and goals of the study and informed participants of their right to withdraw participation from any part or all of the study at any time. Again, the researcher also clarified the research goal of understanding the challenges as well as the benefits of applying and sustaining the RTI model within the school.

**Conclusion**

RTI implementation leaders are responsible for supporting successful implementation of RTI within schools. In order to address problems of practice associated with RTI implementation, leaders must be able to sort through implementation complexities to develop a clearer picture of the factors contributing to or challenging desired implementation outcomes. Determining what educators understand or value about RTI’s essential components within the context of the school is one way leaders can develop this understanding. Developing a clearer
picture of those contextual factors educators perceive to support or challenge desired implementation outcomes is another. This study offers at least some insight helpful to educational leaders tasked with successful implementation within the unique contexts of a school. The study also provided implications for further research for those interested in examining school-level contextual factors that may support or inhibit effective application of the model in other settings. The findings of this study helped clarify local-level educators’ understanding and perceptions of RTI as applied within one rural Alaskan elementary school. The study explored and described educators’ understandings, perceptions of value, and efficacy beliefs related to the RTI model and its essential components as applied within this school. The study also uncovered cultural and structural aspects of the implementation context perceived by educators to facilitate or inhibit more effective implementation and application of the model. The study, however, did not consider implementation outcomes based on actual student improvement as evidence of RTI’s success within the school. Future research focusing on comparisons of student outcomes to the implementation of particular components of the model would therefore be beneficial.

Because this study examined the experiences of school-level educators at a Kindergarten through sixth-grade elementary school in rural Alaska, further research in other rural or urban schools or with educators serving older student populations would be beneficial to understanding RTI implementation within different educational environments. Other populations might include settings within Alaska or in other locations across the country. This study was conducted and data analyzed using qualitative methods. Therefore, future studies would benefit from an examination of RTI using quantitative or mixed-methods approaches. This study helped reveal contextual implementation and application challenges and supports. Future research would
benefit from improved understanding of whether strengthening identified supports corresponds with improved effectiveness. It would also benefit from understanding whether addressing identified challenges correspond with improved effectiveness of the model.
References


psychologist, administrator, and teacher from a large midwest urban school district.

*Psychology in Schools, 43*(1), 117-127.


http://www.doe.virginia.gov/index.shtml


Appendix A: Professional Development: 2012-2013

August:

School-level in-service attended by certified faculty
- RTI model purpose, strategies, and outcome goals
- Review of math analysis protocols: essential math skills and concepts needed, using SBA and AIMSweb data to determine need, available intervention resources to meet needs, differentiate for all students at least one day a week (Differentiated Fridays)
- introduction to data retreat days
  - goals: coordinate Tier 2 and Tier 3 intervention services
  - meeting protocols
    - determining student areas of need in reading, writing, and math
    - review of research-based targeted instruction programs and strategies
  - create data-retreat schedule
District-level in-service attended by the special education teacher
- two-day workshop introduction to Language!, a Tier 2 and Tier 3 district approved Language Arts program
District-level in-service attended by certified classroom teachers
- two-day workshop introduction to Write Tools, a district-approved writing program used with students in all tiers

September

District-level in-service attended by certified classroom teachers
- one-day training continuation in the use of Write Tools
  - District-level in-service attended by one of the instructional paraprofessionals
- three day training review of Read Naturally, Headsprout/Mimio, Earobics
  - Paraprofessional Meeting- attended by instructional paraprofessionals
- review of the benchmark, diagnostic, and progress monitoring assessment protocols

November

School-level in-service attended by certified faculty and paraprofessional staff
- using progress-monitoring data to determine student progress
- data-retreat plans and report of support needed to carry out plans
- student expectations for proficiency demonstration
- multimodal intervention strategies to support student proficiency
  - Multimodal “I Can” statements
  - Paraprofessional Meeting- attended by instructional paraprofessionals
- Review of instruction in some Tier 3 reading, math, and writing programs

January

Statewide RTI conference attended by the half-time RTI coordinator and one full-time classroom teacher
- behavior intervention support
- RTI overview of academic procedures and protocols
- peer walkthroughs
  - Staff meeting- attended by all certified faculty
- writing rubrics- classroom teachers share developed writing rubrics with other teachers for feedback
  - School-level in-service attended by certified classroom teachers
- one-day training continuation in the use of Write Tools

**February**

- Half-day in-service- attended by certified faculty and paraprofessional staff
- using AIMSweb assessment data to create learning targets that can be shared with students in the form of “I Can” statements
- guided reading and literacy center routines for differentiated classroom-based instruction-
  - paraprofessionals and classroom teachers
- Write Tools lesson sequence introduced to paraprofessional staff

**April**

Paraprofessional meeting
- calibrating AIMSweb assessment protocols
- scheduling
- communication between classroom teachers and paras
Appendix B: Focus Group and Individual Interview Guiding Questions

**Certified and Classified Staff Focus Group Probes**
1. Please describe what RTI "looks like" at the school.
2. Who are the important stakeholders?
3. What do you believe is the intent or main goal of implementing an RTI model?
4. Was the implementation of a benchmark and progress-monitoring assessment system within the school necessary?
5. How do these goals enhance or challenge the school’s overall program or goals?
6. Does RTI benefit students? Why or why not?
7. Does RTI enhance or challenge the school’s program or goals?
8. Are the data-based decision making sessions necessary?
9. Are Tier 2 instructional programs in the classroom necessary?
10. Are Tier 3 pull-out interventions necessary?
11. How confident are you in using the RTI benchmark or progress monitoring assessments to identify the needs of struggling learners?
12. How confident are you in contributing to the decisions made by the data-based planning team?
13. How confident are you in utilizing benchmark or progress monitoring assessment data to determine the instructional needs of struggling learners?
14. How confident are you in using Tier 2 or Tier 3 programs or strategies to meet the needs of different learners?
15. What are the benefits of the current assessment, decision making, and instructional components of RTI applied within the school?
16. What are the challenges in using the current assessment, decision making, and instructional components of RTI applied within the school?
17. If you could change any part of the way RTI being implemented, what would you change?
18. Anything else I can add or that you'd like to say?

**Certified and Classified Educator Individual Interview Probes**
1. Do the assessment, decision-making, or instructional components of the RTI model most align with your teaching program or goals? Are there any that do not align?
2. Describe your role within the model.
3. Can you describe the culture of the school during this implementation?
4. Do you think school certified faculty is "on board" with the implementation of RTI? Why or why not?
5. Do you believe paraprofessional staff is “on board” with the implementation of RTI? Why or why not?
6. Can you talk about the impact of school’s current benchmark and progress monitoring process on your work with struggling learners? Do you think this process is working? Why or why not?
7. Can you talk about the impact of the school’s current data-based decision making process on your work with struggling learners? Do you think the process is working? Why or why not?
8. Can you talk about the impact of the classroom-based Tier 2 instructional processes on your work with struggling learners? Do you think the process is working? Why or why not?

9. Concerning the use of RTI benchmark and progress monitoring assessments, data-based decision making practices, and research-based instructional programs, what do you feel are your areas of strength?

10. What components of the model do you feel least confident in implementing? What would help you feel more confident?

11. What aspects of RTI, as currently implemented, are working well in the school?

12. What changes, if any, would you make to the way the essential assessment, decision-making, or instructional components of RTI is applied within the school?

**Certified Educator Only Probes**

1. Has RTI affected the process of referring students to receive special education services? If so, can you give examples?

2. How has RTI affected the process of referring students to receive special education services at the school? If so, can you give examples? Do you think this new process is working? Why or why not?

3. Do you refer students to receive special education services more frequently, less frequently, or just as frequently as you did before the implementation of RTI? Can you explain why?

4. Anything else I can add or you'd like to say?

Appendix C: Superintendent of Schools Permission to Conduct Research

April 25, 2013

Superintendent X,

I am writing this letter as a doctoral student at Northeastern University located in Boston, Massachusetts. This letter is a request to conduct research at X school where I am the school principal. Professor Sara Ewell of Northeastern University is my research advisor and the principal investigator in this study. My proposed research is aimed at exploring and describing the current impact of Response to Intervention (RTI) implementation on elementary school educators’ understandings, perceptions, and beliefs about the purpose, goals, value, benefits, and challenges of applying the model within the school. It is expected that the findings will reveal cultural and structural conditions that support or inhibit effective implementation specific to the context of the school. It is hoped that the findings will provide insights useful to local RTI implementers working to support development and maintenance of RTI within the school. It is also hoped that the findings will add to the research aimed at improving understanding of school-level RTI implementation.

Certified teachers and classified paraprofessionals working to apply the RTI model will be invited to participate in the study. All educator participation in this research is completely voluntary. The study and use of results will be explained in detail to all potential participants. Educators will be required to sign a consent form to participate. The consent form clearly outlines participant expectations and states clearly that educators can refuse to participate in all or any part of the process without losing any rights, benefits, or services as an employee of the school or district. There will be no direct benefit to educator participants taking part in the study. However, the information learned from this study may help the school identify current strengths in using the model to identify and support struggling learners. The potential findings may also help school and district leaders identify and address challenges to effective implementation.

A copy of the written consent form that will be provided to potential participants and a copy of the application for research to be submitted to Northeastern University are attached for your review. If you have any questions about this study, please email me at gonzales.mar@husky.neu.edu. You may also email the Principal Investigator, Dr. Sara Ewell at sewell@neu.edu. This study has been approved by the Academic Policy Committee and the Northeastern University Institutional Review Board (IRB).

I am looking forward to learning from this project and hope it will contribute to the school district’s ongoing RTI implementation efforts as well as to the field of education.

Thank you for your time.

If you agree to grant permission to the researchers to conduct this research at X school, please sign the following consent agreement.
I grant permission to the researchers (Marian Gonzales and Sara Ewell) to conduct a research study on educator perceptions of the RTI model as described in this letter.

_____________________________       ____________
District Superintendent Signature       Date

Respectfully,

Marian Gonzales
Northeastern University
Doctor of Education, Graduate Student
Appendix D: APC President Permission to Conduct Research

April 25, 2013

Academic Policy Committee President

President X,

I am writing this letter as a doctoral student at Northeastern University located in Boston, Massachusetts. This letter is a request to conduct research at X school where I am the school principal. Professor Sara Ewell of Northeastern University is my research advisor and the principal investigator in this study. My proposed research is aimed at exploring and describing the current impact of Response to Intervention (RTI) implementation on elementary school educators’ understandings, perceptions, and beliefs about the purpose, goals, value, benefits, and challenges of applying the model within the school. It is expected that the findings will reveal cultural and structural conditions that support or inhibit effective implementation specific to the context of the school. It is hoped that the findings will provide insights useful to local RTI implementers working to support development and maintenance of RTI within the school. It is also hoped that the findings will add to the research aimed at improving understanding of school-level RTI implementation.

Certified teachers and classified paraprofessionals working to apply the RTI model will be invited to participate in the study. All educator participation in this research is completely voluntary. The study and use of results will be explained in detail to all potential participants. Educators will be required to sign a consent form to participate. The consent form clearly outlines participant expectations and states clearly that educators can refuse to participate in all or any part of the process without losing any rights, benefits, or services as an employee of the school or district. There will be no direct benefit to educator participants taking part in the study. However, the information learned from this study may help the school identify current strengths in using the model to identify and support struggling learners. The potential findings may also help school and district leaders identify and address challenges to effective implementation.

A copy of the written consent form that will be provided to potential participants and a copy of the application for research to be submitted to Northeastern University are attached for your review. If you have any questions about this study, please email me at gonzales.mar@husky.neu.edu. You may also email the Principal Investigator, Dr. Sara Ewell at sewell@neu.edu. This study has been approved by the Academic Policy Committee and the Northeastern University Institutional Review Board (IRB).

I am looking forward to learning from this project and hope it will contribute to the school district’s ongoing RTI implementation efforts as well as to the field of education.

Thank you for your time.

If you agree to grant permission to the researchers to conduct this research at X school, please sign the following consent agreement.
I grant permission to the researchers (Marian Gonzales and Sara Ewell) to conduct a research study on educator perceptions of the RTI model as described in this letter.

Academic Policy Committee President Signature  Date

Respectfully,

Marian Gonzales
Northeastern University
Doctor of Education, Graduate Student
Appendix E: Educator Signed Consent Form

Northeastern University, College of Professional Studies
Name of Investigator(s): Sara Ewell, PhD and Marian Gonzales, Ed.D. Student
Title of Project: Educator Perceptions: Indicators of School-Level Conditions that Support or Inhibit Effective RTI Implementation

Dear Educator,

My name is Marian Gonzales and I have been a principal at Tongass School of Arts and Sciences for two years and a teacher in the school district for sixteen years. I am also a doctoral student at Northeastern University located in Boston, Massachusetts. Doctor Sara Ewell is a member of the faculty of the College of Professional Studies and my research advisor.

Informed Consent
We are inviting you to take part in a research study. This form is called a Consent Form. It will give you information about the study so you can make an informed decision about participation in this research. This form will tell you about the study, but I will explain it to you first. You may ask me any questions that you have.

This consent form will give you the information you will need to understand why this study is being done and why you are being invited to participate. It will also describe what you will need to do to participate and any known risks, inconveniences or discomforts that you may have while participating. We encourage you to take some time to think this over and ask questions now and at any other time.

When you are ready to make a decision, you may tell me if you want to participate or not. You do not have to participate if you do not want to. If you decide to participate, we will ask you to sign this statement and will give you a copy to keep for your records. Your signature below indicates that you have read the information provided above and have decided to participate in the focus group session and individual interview. You may withdraw participation at any time.

Initial __________

Purpose of Research
The purpose of this research is to explore and describe the current impact of implementation on elementary school educators’ understandings, perceptions, and beliefs about the purpose, goals, value, benefits, and challenges in applying the model within the school. Your feedback will be help us better understand local conditions that support or inhibit successful implementation of the model’s essential components. The findings will also add to the research literature concerned with effective school-level RTI implementation and maintenance.

Initial __________

Participation
We are asking you to take part in this study because we are investigating the impact of Response to Intervention implementation at X school, and you have been involved in this
process. There are two parts to the research study. In the first part, you will be asked to
participate in one of two ninety-minute focus group discussions. One focus group will include
all certified teaching staff involved in the school’s Response to Intervention Model (RTI) who
also provide consent to participate. The second focus group will include all instructional
paraprofessionals involved in the school’s RTI model who agree to participate. Each focus
group session will be audio recorded. During the focus group session, you will be asked to share
your understanding, beliefs, perceptions, and concerns associated with implementation of the
model within the school. The focus group interview is planned for late May, 2013. The focus
group sessions and interviews will take place after school hours in the school. You will be
provided transcripts of the answers you gave during the focus group session and a draft of the
researcher’s interpretation of staff member responses to verify accuracy.

☐ I agree to allow the 90 minute focus group discussion to be audio taped. I
agree to review the transcripts of the researcher’s interpretation of my responses
from that session for accuracy.

Initial __________

In the second part of this study, you may be asked to participate in one additional sixty
minute, individual interview with one of the researchers. All individual interviews will be audio
recorded. These interviews will take place within four months of the initial focus group session.
They will be scheduled between June and September of 2013. The interviews will take place
after school hours at a location and time most convenient to you. You will be provided
transcripts of the interviews and a draft of the researcher’s interpretation of staff member
responses to verify accuracy.

☐ I agree to allow my 60 minute individual interview to be audio taped. I agree to
review the transcripts of the researcher’s interpretation of my responses from that
interview for accuracy.

Initial __________

Voluntary Participation
Your participation in this research is completely voluntary. You do not have to
participate if you do not want to and you can refuse to answer any question. Even if you begin
the study, you may quit at any time. If you do not participate or if you decide to quit, you will
not lose any rights, benefits, or services that you would otherwise have as an employee of the
school or district.

Initial __________

Potential risks
You may feel uncomfortable talking about beliefs or differences of opinion during the
focus group session. There is a risk that you may fear being evaluated through your
participation. There are no other known risks to participants taking part in this study; however, a
possible inconvenience may be the time it takes to complete the study. Due to your experiences,
it will be meaningful to gain your perspectives through this investigation. Our intention is to
make this as non-intrusive as possible for you.

Initial __________

Potential benefits
There will be no direct benefit to you for taking part in the study. However, the information learned from this study may help identify local contextual conditions that facilitate and inhibit effective application of the RTI model within the school. The findings may also help school and district leadership better identify and address the needs of the school as it continues ongoing implementation efforts.

Initial ________

Confidentiality
The following procedures will be used to protect the confidentiality of your study records. Study records will include focus group and individual interview audio files and transcripts as well as meeting minutes and agendas related to the implementation of Response to Intervention implementation activities within the school. The researchers will maintain confidentiality by using a coding system to collect data obtained from individuals. Only the researchers on this study will have access to this coding system. All electronic files containing identifiable information will be password protected. Any computer hosting such files will also have password protection to prevent access by unauthorized users. Only the study researchers will have access to the passwords. The researchers will keep all electronic study records, including any codes to your data, on a secure server. The researchers will keep all hard-copy records, including any codes to your data in a locked filing cabinet. A master key that links names and codes will be maintained in a separate locked filing cabinet. The master key and audiotapes will be destroyed three years after the close of the study. At the conclusion of this study, the researchers will publish the findings. Information will be presented in summary format and you will not be personally identified in any publications or presentations.

Please be advised that although the researchers will take every precaution to maintain confidentiality of the data, the nature of focus groups prevents the researchers from guaranteeing confidentiality. The researchers would like to remind participants to respect the privacy of your fellow participants and not repeat what is said in the focus group to others.

☐ I agree to maintain the confidentiality of the information discussed by all participants and researchers during the focus group session.
If you cannot agree to the above stipulation please see the researcher(s) as you may be ineligible to participate in this study.

Initial ________

If you later decide that you wish to withdraw your participation in the interview, you may do so at any time. If you feel uncomfortable with any of the questions, you may choose not to answer. Your decision to participate or not will not affect your relationship with the school or other school personnel, the X School District, or Northeastern University. If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 960 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: n.regina@neu.edu. You may call anonymously if you wish.

If you have any questions about this study, please email me at gonzales.mar@husky.neu.edu. You may also email the Principal Investigator, Dr. Sara Ewell at sewell@neu.edu. This study has been approved by the Academic Policy Committee, the school district superintendent, and the Northeastern University Institutional Review Board (IRB). To
ensure that this research continues to protect your rights and minimizes your risk, the IRB reserves the right to examine and evaluate the data and research protocols involved in this project.

Initial __________

This study has been explained to me. I have read the consent form and have been given a copy of this consent form. I agree to take part in:

This study has been explained to me. I have read the letter and have been given a copy of this letter.

<table>
<thead>
<tr>
<th>Signature of person agreeing to take part</th>
<th>Date</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Printed name of person above</th>
</tr>
</thead>
</table>
By signing below I indicate that the participant has read and, to the best of my knowledge, understands the details contained in this document and has been given a copy.

<table>
<thead>
<tr>
<th>Signature of person who explained the study to the</th>
<th>Date</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Printed name of person above</th>
</tr>
</thead>
</table>
I am looking forward to learning from this project and hope it will contribute to the field of education, particularly in reference to RTI implementation.

Thank you for your time.

Respectfully,

Marian Gonzales
Ed.D. Student
Northeastern University