

BRIDGING THE RESEARCH TO PRACTICE GAP: A DEVELOPMENTAL  
EVALUATION OF RESPONSE TO INTERVENTION

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## **Abstract**

Response to Intervention (RTI) is a research-based model of service delivery that incorporates best practices for data based decision making, intervention delivery, and progress monitoring in a multi-tier system of supports. Response to Intervention embodies proactive approaches to addressing students' needs including early intervention strategies that are known to prevent and mitigate the potential risk of academic failure. The critical link between RTI's promising outcomes and putting RTI into practice is effective implementation.

In the research literature, very little attention has been paid to how schools and practitioners adapt best practice models, like RTI, to their local contexts. Developmental evaluation is an emerging approach that engages stakeholders in reality testing about what is working and what is not working with implementation under the conditions of complexity. In this study, a developmental evaluation was paired with an action research approach to capture the stories of five first grade teachers as they implemented RTI models in their classrooms.

Interviews were conducted with three of the teachers who participated in the action research in order to gather a more detailed account of their experience with implementation. The action research and interviews answered the following questions: 1) How do first grade teachers develop classroom intervention models as part of the response to intervention implementation plan? 2) What do teachers perceive as working and not working with implementation of RTI best practices?

The teachers were provided coaching on how to implement these procedures in the professional learning community (PLC) setting. By the end of the our four-month long action research phase, the teachers in this study were able to successfully implement grouping procedures for intervention and procedures for progress monitoring. The teachers also used the progress data generated to make timely instructional decisions—a critical component of RTI that was never successfully developed during prior implementation attempts. There was a consensus among the teachers interviewed that the time provided in PLC to collaborate was a critical factor in supporting their ability to implement the RTI components successfully.

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# **Chapter 1: INTRODUCTION**

## **Getting Started**

2008 was a pivotal year for me. At the beginning of the year, I wore many professional hats. I was a special educator, a co-teacher, a department head, a mentor, a student, and a national board candidate. Little did I know that by the end of the year, a change in position in a new pilot program would offer me an opportunity to try on some new hats for size.

During the first half of the year, I was in the midst of completing my master's degree while mentoring a student teacher from the university and serving as our special education department chair. I was also assigned as the care coordinator, or special education teacher, for ten fourth graders with special needs. Most of my students were identified as having a "specific learning disability." Some students in my group were labeled as having "attention problems" and a few were considered "English language learners." As their care coordinator, I was expected to provide specialized instruction as part of their Individualized Educational Plans, oversee all of the specialized services in their plan, and challenge them on a daily basis to meet grade level standards in their general education classrooms to the fullest extent possible. Wearing these hats, I learned how to navigate the challenges associated with finding time to lead my department, finish coursework, and collaboratively plan with my co-teacher and student teacher to deliver high quality instruction in our complex and ever changing inclusive learning environments.

During the second half of the year, I transitioned into a new role at my school. I became the student services coordinator, and I no longer taught students in the classroom. I put on a hat with a larger brim, one that stretched beyond a few classrooms to the far corners of the school. At the same time, our school was asked to participate in a pilot response to intervention (RTI) program. As part of this program, I was trained in the major components of a RTI service delivery model and became part of a team made up of district resource teachers, administrators, and other resource teachers that would lead the development and implementation of the model at our school. What began here in 2008 was the origin of a journey that would lead me to try on a number of new hats in my search for new ways to solve problems of practice in my educational setting and bridge the research to practice gap through emergent, and what some call innovative, methods of practitioner research and evaluation design.

### **RTI Origins**

RTI is a research-based model of service delivery that incorporates best practices for data based decision making, intervention delivery, and progress monitoring in a multi-level system of instructional supports. The National Center on Response to Intervention (NCRTI) defines RTI as a preventative framework intended to improve outcomes for all students while providing immediate, supplemental support to students at risk for poor learning outcomes (National Center on Response to Intervention, 2010).

The basis for RTI in Federal Law began in 1975 when the concept of a “free and appropriate education” was introduced into the least restrictive environment requirements of the Individuals with Disabilities Act (IDEA). In the 1980’s, the focus of the law shifted from access to schools to access to curriculum, instruction, and to results in



student learning. In the 2000's, the language in two of our most significant educational policies of that time, No Child Left Behind (NCLB) policy and Individuals with Disabilities Education Improvement Act (IDEIA) of 2004 contain similar language about the type of instructional strategies and practices they advocate (IDEA partnership, 2007). The language in IDEIA 2004 includes three requirements that are the core components — the use of scientifically based instruction, evaluation of how a student responds to intervention, and the use of data to determine if student responded to the intervention — of RTI (Brown-Chisdey & Steege, 2005). Additionally, the language in NCLB emphasizes holding schools accountable for improving the academic achievement of all students and advocates for the use of effective, scientifically-based instructional strategies and practices (IDEA partnership, 2007).

A centerpiece of RTI is the notion of evidence-based practices or strategies. Evidence-based practices generally meet prescribed, rigorous standards for experimental or quasi-experimental research design that demonstrate that a practice had a meaningful impact on student outcomes (Cook & Odom, 2013). The origins of evidence-based practice can be traced to the medical field where clinicians used an evidence-based framework for selecting treatments of the highest likely value (Burns, Riley-Tillman, VanDerHeyden, 2012). Burns, Riley-Tillman, & VanDerHeyden (2012) argue that evidence-based practices should be the pool from which interventions are selected, but within the RTI model, the specific intervention selected should be guided by the individual learning needs of the students or group of students for which the intervention is intended to benefit.

Some point to Stanley Deno's "cascade" model of special education service delivery as the starting point for the evolution of RTI (Buffum, Mattos, Weber, 2009, Brown-Chisdey & Steege, 2005). Deno's model features an outline for the environment and group size that match to individual student's specific needs where the environment has grown more restrictive and the instructional groupings have become smaller as the student's instructional need increased. "RTI is based on a three-tiered model where increasing levels of intervention are provided to each student as he or she moves from tier one to tier two to tier three" (Riley-Tillman, Burns, Gibbons, 2013, p.1). Similar to the cascade model, the instructional group size in the RTI model becomes smaller as the instructional needs increase.

Within an RTI framework, educators examine data to identify areas of academic or behavioral concern, engage in problem analysis, implement scientifically based instructional strategies to address the concerns, and evaluate their success using data to assist the greatest number of students in the most efficient way (Burns, Riley-Tillman, & VanDerHeyden, 2012) Implementing RTI as a system has potential advantages beyond allocating resources effectively to assist students. First, struggling students are provided assistance in learning in a timely and systematic manner rather than waiting until they were officially diagnosed with a specific learning disability to receive specialized instruction. Because RTI urges schools to use evidence based practices and decision making processes in all levels of the system, it helps educators to accurately determine which students possess learning disabilities since only students who do not respond to high-quality instruction would be considered for special education (Gersten, R. Compton, D. Connor, C.M., Dimino, J., Santoro, L., Linan-Thompson, S., & Tilly, W.D., 2008).

RTI, when implemented as a system, has the potential to provide timely assistance to large numbers of struggling students and reduce inappropriate referrals to special education. At the same time, because RTI is an integrated system of processes, there are multiple opportunities for error to occur and implementation to go awry (Burns, Riley-Tillman, & VanDerHeyden, 2012). In fact, most attempts to implement innovations fail during the stage of initial implementation because the requirements for successful implementation are both poorly understood and inadequately supported (Fixsen et al., 2007). Our schools story of RTI implementation began in 2008 when we were selected as a pilot RTI school for our district and continued on through the stages of initial implementation to full implementation. This is our story.

### **The Early Pilot Years**

During our first years as a pilot RTI school, we worked diligently to establish universal screening procedures and sound assessment practices for both universal screening and progress monitoring. Universal screening and progress monitoring are cornerstones of the data-generating processes in a RTI system. Universal screening results can be used by schools to identify students who need additional instruction, or intervention, in order to experience success, while progress monitoring results provide schools with timely information about how a student is responding to instruction and interventions (National Center on Response to Intervention, 2010).

In 2009, we established school-wide universal screening procedures for reading, and we added math universal screening for our entire school in 2011. For both universal screening and progress monitoring, we used brief, nationally normed assessment instruments in reading and math that were proven to reliable, valid, and demonstrated

diagnostic accuracy (Pearson, 2012, National Center on Response to Intervention, 2010). The second grade teachers and I received explicit training on how to administer curriculum-based measurements in fluency and how to score and chart the results to determine student's rate of progress in reading fluency. This process of progress monitoring by regularly administering fluency curriculum-based measurements is a method of measuring and monitoring the effectiveness of the instructional intervention to ensure that it is helping the student to reach their reading fluency goal (Pearson, 2012).

As part of the pilot professional development plan, district resource teachers coordinated multi-sensory language intervention training for a cohort of kindergarten, first grade, and second grade teachers during our first year as a RTI pilot school. During our second and third year in the pilot, reading fluency intervention training and resources were provided to first and second grade teachers. At the time, most of the RTI research available was in the area of reading, so our school decided to build methods of foundational reading support through the development of intervention systems in the early grades. I attended the trainings with teachers to learn about the intervention strategies so I could also deliver interventions to small groups, thereby supporting implementation at the classroom level.

In 2010, the second grade teachers began developing their classroom intervention plans in reading fluency, and by 2011 they had developed a two-tier system of delivering interventions and progress monitoring. In a tiered assessment and instruction system, the universal screening results are used to place students into tiers for the purpose of organizing instruction and allocating resources, with structures of tiers varying across settings (Pearson, 2012).

In the second grade intervention model, the following descriptions applied to their tiers:

- Tier one consists of students who should continue to receive core instruction and do not demonstrate the need for additional intervention
- Tier two consists of students who need some additional help, usually in the form of supplemental small-group instruction, because their performance puts them at moderate risk of failure. (Pearson, 2012).

Cut scores indicate the break points between the tiers and can be labeled or assigned in different ways depending on a schools preference for interpreting the scores. The teachers used a universal screening report that assigned labels of intensive, strategic, and benchmark to cut scores. The students who fell within the intensive and strategic range of scores were targeted for tier two interventions.

Once students have been identified for intervention, the teachers use Reading A-Z materials and an instructional approach called the neurological impress method. The materials and training on how to use this approach was provided to the teachers by our district support teachers during the pilot phase, so it was an easy instructional decision for the grade level to make.

The intervention delivery protocol requires that the students read a leveled reading fluency probe three times over a designated period. Students are given a reading fluency probe to read for one minute and the teacher recorded the words that the students read correct each time. The first time the student read the probe, it is recorded as the "cold" read, because students are being introduced to the probe for the first time. The total number of words read correctly during the first reading is considered the students

baseline score. Then students are provided with instruction and practice opportunities with their teacher using the same probe. After they are given the opportunity to practice reading the probe, usually after one to two days, the student is asked to read the probe out loud to the teacher a second time. Then, the teacher records that score as the “warm” score. The students are provided one to two more days to practice reading the probe, and then the students do a final reading of the probe. The score from this final reading is considered a "hot" read score because students are given many opportunities to read the probe they are being assessed with. Teachers keep track of each cold, warm, and hot score as a way to monitor their students’ progress in reading fluency.

Kindergarten and first grade teachers also implemented interventions in their classrooms during the pilot. First grade and kindergarten were provided with support from our school educational assistant through a pullout tutoring support model. In kindergarten, at the end of each quarter, the teachers use the quarterly teacher-made assessments in reading to select three to four students per classroom to receive tutoring from their educational assistant in reading.

The teachers trust the educational assistant to design her interventions based on her multi-sensory language background and years of experience as a reading tutor in the early grades. The educational assistant focuses on letter identification and letter sounds during the first semester of tutoring and do reading skills towards the end of the second semester in kindergarten. Changes to the groups are made based on the quarterly teacher-made assessments.

During a professional learning community meeting in September 2011, the first grade teachers, our curriculum coach, and I discussed the status of the grade level

interventions. The teachers had selected eleven students from the grade level using accelerated reader reports, Informal Reading Inventory (IRI) results, and summative reading assessment data, forming two intervention groups targeting decoding skills and sight word fluency. The educational assistant pulled ten identified students the students out from their classes to deliver instruction in the targeted skill areas for thirty minutes, four times per week.

As the conversation went on the teachers talked specifically about the range of students they were seeing that needed interventions in their classrooms and how to provide support to more struggling readers. Serendipitously, the teachers began sharing personal stories about what books they love to teach during reading lessons. One teacher shared her passion for teaching non-fiction reading strategies and another teacher agreed that he also enjoyed teaching comprehension strategies to students who are ready for reading. They shared how they used strategies like purposeful talk and interactive reading aloud to provide students with opportunities to talk purposefully in a variety of small group and partner structures (Harvey, S. & Daniels, H., 2009), but described challenges differentiating their instruction as an intervention to specifically target the range of students in their classroom.

That sparked another teacher to share her passion for multi-sensory language instruction and how she loves teaching her struggling readers with her special education co-teacher. They described their multi-sensory approach to delivering instruction to their struggling readers that incorporates the following three learning pathways: auditory, kinesthetic, and visual. Based on the Orton-Gillingham approach to reading instruction, the theory combines multisensory techniques with the structure of the English language

including phonemes, morphemes, and letter-sounds. The co-teachers design lessons that engage their learners' pathways through the use of a variety of materials, such as letter cards, word lists, and individual whiteboards. She also agreed that it was difficult to differentiate for the range of learners in the classroom.

The last general education teacher asked the group if they thought using mobile devices to develop students oral reading fluency would be a good approach to reach more struggling readers. He then came up with the idea to use the devices to record leveled passages for students to read when practicing their fluency strategies.

As the teachers discussed their desire to expand their intervention delivery system to reach more learners and their challenges with differentiation within their homeroom setting, the teachers suddenly began selecting skills they wanted to target. Each teacher began sorting students into skill groups from their homeroom by memory. One by one, teachers volunteered to teach different skill targets to different groups of students. By the time all the students in the grade level were sorted, the teachers decided that the tier one interventions would be delivered by two general education teachers in their classrooms to groups of twenty-two students each. The tier one enrichment teacher would focus on book stories and life stories while the tier one benchmark teacher would focus on improving the students non-fiction reading skills. The third general education teacher would then be free to work with nineteen students delivering tier two sight word and fluency interventions via mobile devices. The fourth general education teacher and the special education teacher would then target phonemic awareness with ten students, delivering tier three interventions to two small groups of five students.



The collaborative power of the grade level decision-making stunned me. By the end of the meeting, they selected a common thirty-minute block to take place on Monday's, Tuesday's, and Wednesday's each week, agreeing to start the intervention on January 23, 2012. In a span of about forty minutes, the teachers created a three-tier intervention model which included tier three interventions between the other two tiers discussed previously. Tier three is a more intense level of instructional intervention that is more intense and/or more individualized because the student's performance puts them at a high risk of failure (Pearson, 2012).

As the teachers wondered aloud as to what to call this new venture, they threw out words like "walk", "read", and "learn". At first teachers thought of calling it Walk to Read, but they wanted to keep it more open ended, so they finally decided to call their new intervention model Walk to Learn. Thus, the Walk to Learn intervention model at our school was born.

Each grade level took different approaches to selecting their students for intervention and used data in different ways to inform their instruction. Although they all used some types of data to inform their selection of students for intervention, first grade teachers selected students together as a grade level while kindergarten and second grade teachers selected students individually. Kindergarten teachers did not use universal screening data to select students for intervention, while first and second grade teachers did. Second grade teacher's employed progress monitoring regularly, while kindergarten and first grade teachers did not.

Methods of selecting students for intervention and delivering interventions also differed amongst grade levels. Second grade teachers identified students with similar

reading fluency deficits and delivered standardized fluency interventions to the homeroom students in their classrooms, while kindergarten teachers relied on the educational assistant to provide tier two interventions to their students.

The first grade teachers created a three-tier intervention model that involved all the general education teachers, special education teachers, and students in the grade level. In contrast, second grade and kindergarten targeted smaller groups of students in the grade level using a two-tier approach. The first grade teachers used a criterion-referenced method to interpret their students screening results and group students into instructional tiers and delivered interventions to their students using a standard protocol approach similar to the second grade teachers, but they differentiated the standard protocols to match the intervention to the identified skill deficit within their multi-tier intervention system. The standard protocol approach matches research-based interventions in a systematic fashion to groups of students who share common behaviors or skill deficits (Hardcastle & Justice, 2006). In this approach, common skill deficits are identified among students who need additional academic support and the student is then matched with standardized interventions that are often scripted and more intensive than what a classroom teacher is expected to provide in their core instruction (Wright, 2007).

### **Pilot Implementation Steps and Missteps**

In 2011, we hired a RTI consultant for our professional development day to provide training for the teachers and hoped that they would be able to implement the changes suggested. Our school took a top-down approach to implementing RTI by disseminating best practices of RTI implementation during this “sit and get” training.

Using this approach, our administrators and teacher leaders hoped that our one-time dissemination tactics would translate to high quality practice in the classroom.

In 2013, our district resource teachers conducted a RTI self-assessment with our school to determine how we were doing overall in implementing RTI. Universal screening procedures, collaboration amongst teachers, and commitment to learning from and with colleagues were identified as strengths on our self-assessment, but our weakest area was school-wide visioning for RTI.

Teacher perceptual data revealed that teachers in grade levels who were not targeted for training and support during the RTI pilot, primarily our third through sixth grade teachers, were experiencing confusion about the defining characteristics of an intervention. These teachers also demonstrated misunderstandings about the definition of “interventions”, at times defining their interventions as accommodations, re-testing, and re-teaching. In the years prior to our participation in the RTI pilot, much of our professional development was focused on using differentiation strategies during core instruction, so it was not surprising to see teachers listing differentiation strategies as interventions.

Our self-assessment made it clear that our “train and hope” approach to implementation did not work. The outcomes of our assessment revealed concerns about how teachers were using universal screening and progress monitoring data to make instructional decisions. Most of the teachers reported using universal screening data to identify students for intervention as recommended by the RTI literature, but it was unclear how grade levels were making decisions about selecting students for intervention. Progress monitoring was not occurring in any other grade levels besides second grade.

Without progress monitoring data, teachers were not able to make timely adjustments, or data-based decisions, to their instruction as intended in a RTI system. Technically, we were not implementing a true RTI system because it was missing the essential components of progress monitoring and data-based decision-making processes.

We understood that our next phase of implementation needed to include a plan for implementation that addressed the missing components identified on our self-assessment. Fixsen et al. (2007) conducted a comprehensive review of the implementation evaluation literature and identified six functional stages of implementation: exploration, installation, initial implementation, full implementation, innovation, and sustainability. Embarking on our next phase of the journey towards full implementation of all the components of RTI, would involve execution of implementation actions from the exploration, installation, and initial implementation stages.

### **An Innovative Model**

Our principal followed up on our RTI self-assessment by conducting team meetings with various school-based stakeholders, such as our school psychologist, special education department head, and curriculum coach. The process of collecting and analyzing information from our self-assessment and forming a school-based implementation team were critical pre-requisites for planning our next phase of implementation. The self-assessment helped us to determine the problems we needed to address, allowing our RTI team to identify appropriate strategies to address the problems interfering with our progress towards full implementation.

Our team reflected on the strengths of our pilot intervention models. My principal liked how the second grade teachers regularly progress monitored their students and used

the data to inform their fluency instruction, but felt that expanding the support beyond fluency intervention was needed. She wanted to target a greater number of students who were struggling in reading in all of the early grades.

The first grade model made excellent use of existing resources and targeted all of the students in the entire grade level during a common intervention schedule. My principal liked this innovative intervention design, and began a discussion about how to adapt the model to include explicit procedures for grouping students for intervention, matching the groups to a skill area, progress monitoring, and data-based decision making. This led to the creation of school-wide guidelines for using universal screening results for grouping students, progress monitoring, and the frequency and duration of interventions within a multi-level RTI model. Her decision to adapt the first grade RTI model was grounded in her belief that all students should be included in our RTI system. She felt that the first grade model provided an inclusive structure for service delivery that would ensure all students were receiving support at their level because it would not require students who were struggling to miss instruction in order to receive intervention support. In addition, students who were not struggling would be provided with enrichment instruction that aligned to their needs.

Our principal worked with our team to develop a professional development plan that would include awareness building activities amongst the faculty (exploration stage) and the creation of a resource plan to support the school-wide implementation of common intervention block and progress monitoring schedule (installation stage) would prepare us for initial implementation of using universal screening data to group students

for intervention, deliver interventions during the common intervention block, and progress monitor students according to RTI best practices.

## Chapter 2: SCHOOL CONTEXT

### School RTI Guidelines

Our principal dedicated an entire professional development day to be held in August 2013 to establish the processes for data-based decision-making and introduce our staff to the broad conceptual and procedural components of our RTI model. An important aspect of the professional development day was the review of the decision-making guidelines set by our administrators.

As recommended by the National Center on RTI, we created the written procedures for data-based decision making as a way to increase the fidelity of the data-based decision making process. These guidelines established the explicit decision-making rules for assessing student progress and outlined the common expectations for how our school would assign students to intervention tiers, how often assessment data would be collected, and how data indicators would be used when making decisions about instruction and interventions (see figure).

Tiers		Universal Screening Criteria	Progress Monitoring Guidelines	Staffing
Tier One	a	Enrichment: 75 <sup>th</sup> Percentile and Above	Mid-session Curriculum Based Assessments	General education teachers
	b	Benchmark: 50 <sup>th</sup> – 74 <sup>th</sup> Percentile		
Tier Two	a	Sustained: 25 <sup>th</sup> – 49 <sup>th</sup> Percentile	Bi-weekly using Curriculum Based Measurements	
	b	Targeted: 11 <sup>th</sup> – 24 <sup>th</sup> Percentile		
Tier Three		Intensive: 10 <sup>th</sup> Percentile and Below	Weekly using Curriculum Based Measurements	Special Education Teacher and Educational Assistants

## Universal Screening Guidelines

Universal screening results can be interpreted using two methods – a criterion-referenced and a norm-referenced interpretation approach. A criterion-referenced interpretation involves a comparison of student scores with designated scores based on professional judgment and in a norm-referenced approach, empirical demonstration of the relationship between the screening score and a positive outcome (Pearson, 2012). Our school guidelines use a norm-referenced method of interpretation, where students are grouped according to universal screening percentiles—the percentage of students in the local or national reference group who scored below a particular score value. Using this type of scale, a student at the 50<sup>th</sup> percentile is considered average, the 90<sup>th</sup> percentile is considered very high, and the 10<sup>th</sup> percentile is considered very low (Pearson, 2012). As a result, our school is able to group students into instructional tiers that enable us to identify where to allocate additional support and where to pare back supports (Burns, Riley-Tillman & VanDerHeyden, 2012).

Based on the cut-points, our principal identified five levels of risk according to the screening cut-points. Students who were at the lowest levels of risk were assigned to the levels named enrichment (75<sup>th</sup> percentile and above) and benchmark (50<sup>th</sup> to 74<sup>th</sup> percentile). The moderate risk levels were considered sustained (25<sup>th</sup> to 49<sup>th</sup> percentile) and targeted (11<sup>th</sup> to the 24<sup>th</sup> percentile) and the highest risk level was named the intensive category (10<sup>th</sup> percentile and below). These guidelines would be used when grade levels reviewed their universal benchmark data to make decisions about how to group students into instructional tiers, a critical first step in RTI decision making.



## **Tiers**

Tier one of a RTI model is described as a primary level of prevention that focuses on all students and assumes that evidence-based instructional practice is being delivered during core instruction to meet the needs of at least 80 percent of the student population. The instruction in this tier takes place in the general education classroom and is considered the foundation of a tiered model of interventions.

On average, 20 percent of the student population requires additional support beyond tier one core instruction (Burns et al., 2005 as cited in Burns, Riley-Tillman & VanDerHeyden, 2012, p. 46). Tier two is considered the secondary level of a tiered intervention system, and focuses on students who are identified through screening as at-risk for poor learning outcomes. Typically, 15 percent of students fall into this tier and require targeted, supplemental instruction delivered in small groups (National Center on Response to Intervention, 2012). Students in tier two should be provided twenty to forty minutes of interventions three or four times per week over a nine to twelve week period and should be progress monitored minimally two times per month (Hawaii Department of Education, 2012).

Tier three is described as the tertiary or intensive level, typically 5 percent of the population, that focuses on students who have not responded to primary or secondary intervention tiers and require intensive, supplemental instruction delivered in small groups (National Center on Response to Intervention, 2012). According to the Hawaii Department of Education 2012 Comprehensive Student Support System Introductory Guide, students in this tier should be provided sixty minutes of interventions daily in a

group no larger than five students. Their progress should be monitored weekly over a nine to eighteen week period.

In order to align with the three-tier system of intervention, our principal matched the categories of risk identified by our universal screening to the three tiers described above. The enrichment and benchmark categories would be considered a tier one instructional level, sustained and targeted categories would be considered a tier two intervention level, and the intensive category would be considered a tier three intervention level.

Students grouped into these categories would be provided intervention and their progress monitored according to the research guidelines for each tier. The progress of tier three students would be monitored weekly, while the progress of tier two students would be monitored bi-weekly using curriculum-based measures (CBM). CBM is a distinctive form of curriculum-based assessment that follows highly prescriptive and standardized assessment procedures, which guarantees reliable and valid scores (Fuchs & Fuchs, 2007). It is different from other forms of curriculum-based assessment (CBA) whose assessment procedures are designed by teachers and do not offer the same reliability and validity guarantees as CBM.

For students grouped into tier one, teachers would have much more flexibility in deciding how to assess their students. This is because, in theory, students whose scores fall in the enrichment and benchmark category do not require progress monitoring as they are not at risk for academic or learning failure. Instead, these students were assessed using curriculum-based assessments created and administered by the teacher.

## **Staffing the Model**

Our principal wanted the interventions to be provided by certified and well-trained teachers and paraprofessionals during a common intervention schedule in accordance with the recommendations made in the RTI literature (Wright, 2007). The creation of a common intervention schedule was a new expectation that would be part of our RTI implementation plan. Using the guidelines provided by the Hawai'i Department of Education and research literature on RTI, our principal decided to mandate that all grade levels set a common schedule that would provide students with a minimum of thirty minutes of intervention at least three times per week. The teachers were instructed to avoid scheduling the common intervention block during the core instructional time. The teachers were also given the option of providing additional intervention support to students in Tier three or to students who demonstrated significant skill deficits. The purpose of the common intervention schedule was to provide all students with consistent intervention or enrichment support in addition to their core instruction, at a minimum of thirty minutes, three times per week.

In order to adequately staff this schedule, our principal assigned all the certified teachers and trained paraprofessionals to take on the role of interventionists during this intervention block. In grades kindergarten through second grade, four general education teachers and a special educator were assigned to each grade level. The special educator assigned to kindergarten and first grade needed to split her time between the grade levels, while the one special educator working with second grade could schedule her time solely with that grade level.

In this staffing model, each grade level was also assigned two educational assistants trained to deliver intervention under the supervision of a special education teacher. Given these human resources, each grade level was tasked with collaboratively deciding how the teachers and educational assistants would be assigned to instructional categories before the beginning of the school-wide common intervention schedule in October.

### **School Culture**

Our commitment to inclusive practices is also an integral part of our school culture. At our school, we believe that all students, including those with special needs, have the right to be a member of the general education classroom and allowed participation in all of its activities. In terms of practical application, this means that our school provides instruction to our students in the least restrictive environment possible—the general education classroom. In terms of practice, all of our special education teachers co-teach with a general educational partner to deliver special education services to our students. The physical boundaries and philosophical divisions between special education and general education have been eliminated, and as a result, a bridge of shared responsibility for student achievement has been formed between our special educator and general educator co-teaching teams.

Co-teachers are expected to assume a unified responsibility for student progress and compliance with special education law and regulations, often resulting in a cross-pollination of best practices from the realms of special education and general education. Special educators in our school are expected to be able to teach all students in the inclusion classroom and therefore, must demonstrate a command of grade level standards and assessment practices. General educators too must be able to deliver specialized

instruction to special education students and adhere to compliance procedures in the same way a special educator does. Co-teachers are provided collaboration time during the workday to meet and create shared plans of action for their students in their classrooms.

Throughout our school, teachers and administrators use the Tribes process based on the work of Jeanne Gibbs to build inclusion and a sense of community amongst students and teachers. The Tribes process is used in our school to establish a caring environment for cooperative learning and a structure for positive interaction (Gibbs, 2001). Tribes facilitators working with a group of students or teachers can select and tailor strategies, that are formats for subject content, to achieve their group learning objectives along the sequential stages of group development: inclusion, influence, and community. Reflection questions and appreciation are included as an integral part of each strategy. When teachers and facilitators use Tribes strategies with their groups, they intentionally focus on building inclusion, trust, kindness, and a sense of belonging in order to develop a sense of community among learners.

Building bridges of shared responsibility, inclusion, and trust are representative of our collaborative school culture. In our school, the existence of these factors have proven critical to the success of many of our initiatives and has been fostered through our commitment to building learning communities amongst our teachers and students.

### **PLC Framework**

Professional learning communities (PLC) have been a part of our school's culture since 2007. Our school's PLC framework is based on the work of Richard DuFour and Robert Eaker and embodies the characteristics of shared values, collective inquiry,

collaborative teams, and action orientation with a focus on continuous improvement and results (DuFour & Eaker, 1998).

All teachers at our school are provided with an average of two and a half hours during their workday to meet in PLC each week. The time is dedicated to collaborative teacher learning and continuous reflection that is focused on student achievement and successful student learning (Hord and Sommers, 2008). In PLC, teachers work in collaborative teams with their grade levels and receive coaching support from other instructional leaders.

Burns, Riley-Tillman, & VanDerHeyden (2012) believe that RTI requires an organizational structure that allows collaborative teams to review outcome data and make intervention decisions. Buffum, Mattos, and Weber (2009) assert, “the essential characteristics of a professional learning community are perfectly aligned with the fundamental elements of response to intervention” that are “built upon a proven research base of best practices and designed to produce the same outcome—high levels of student learning” (p. 49).

For our post-pilot phase of RTI implementation, we set aside time in PLC for RTI coaching to take place on a regular basis throughout the initial implementation period. In the plan, PLC would be utilized as the primary venue for actively developing the decision-making routines and implementing processes that were missing from our previous RTI model.

The intentional pairing of the RTI and PLC frameworks provided our school with the structure for the “what” and the “how” of implementation. The RTI framework provided the “what”, a set of scientifically based procedures that use data to make

decisions about instruction, movement between tiers, and disability identification (National Center on Response to Intervention, 2010). The PLC framework addressed the logistical needs such as time and collaborative space, and provided a cultural foundation of collaborative learning and action experimentation—a foundation that supports teachers in their efforts to develop “how” to implement RTI best practices in their dynamic classroom contexts.

## **Chapter 3: ACTION RESEARCH PLAN AND PROCESS**

### **Action Research Plan**

The cultural foundation of collaborative learning and action experimentation inherent in our PLC framework aligns exactly with the tenets of action research. In PLC, teachers come together to engage in a "continuous cycle of reflection, learning, and assessment of effects" (Hord & Sommers, 2009, p. 13). Action research often takes place in one's professional setting with colleagues and is described as a cyclical and recursive process, made up of iterative cycles, rounds of data gathering, action, analysis and reflection focused on improving a situation or solving a problem of practice (Herr & Anderson, 2005). Both frameworks are grounded in a research base of best practices that focus on continuous improvement and results.

I selected the PLC meetings as the setting where the action research component of my study would occur. I organized the stages of my action research in the following six steps: collaboratively defining the issue or problem to be addressed, information gathering, planning, action, reflection, and revision of the action plan (Willis, Inman, & Valenti, 2010). The decision-making processes and research activities we engaged in happened simultaneously throughout the action research process. In action research, it is implied that since the steps of the process are recursive and non-linear, many of the research activities within the action process will happen at the same time (Herr & Anderson, 2005).

The timing of our actions in our research process was guided by our RTI implementation timeline and school guidelines. During the months of September through December, I engaged in a recursive action research process with teachers in PLC. In



September, we focused primarily on gathering information to prepare us to develop plans of action for our initial implementation phase—the eight-week period from October to December where teachers would begin to provide students with interventions during the grade level common intervention block, administer progress monitoring assessments, and engage in data-based decision making.

Throughout the preparation and implementation phases, I facilitated the action research process with teachers in the PLC setting. Generally, my planning process consisted of reviewing our meeting notes from the previous meeting and reviewing my journal entries to identify any potential topics or problems that needed to be addressed at the following meeting. I then reviewed our RTI school guidelines and implementation timeline to identify areas that would be most beneficial for us to work on at that point in time. Lastly, I selected and read relevant RTI literature to prepare for discussion about problem areas or areas of implementation that needed to be discussed at the following meeting.

During the PLC, I worked with teachers to develop their intervention models. Initially, this work consisted of data-based decision-making focused on instruction. We used our school RTI guidelines and RTI literature to inform how we identified students for intervention, matched student groups to intervention strategies, developed intervention plans, delivered interventions, and administered progress monitoring assessments.

Mid-way through the implementation phase, we collected enough data to engage in the data-based decision making process focused on identifying students who were not responding to the instruction. At that point, I worked with teachers to analyze their data

and facilitate the data-based decision making process to determine student movement between instructional levels.

### **Action Research Question**

Our action research with PLC was focused on the following central question: How do first grade teachers develop classroom intervention models as part of the response to intervention implementation plan?

### **Focus of the Study**

This study focuses on kindergarten through second grade, and on academic performance in reading. I address the components of progress monitoring, universal screening, and targeted instruction in a RTI framework, not disability identification or the instruction in the core program.

### **Data Sources**

Two primary sources of data generated through the action research process were the minutes from PLC meetings and my ongoing reflections as documented in my researcher journal. The meeting minutes generated from the PLC is a large source of data for this study. The meeting notes captured details about each meeting and included teacher reflections, questions, actions, plans, and perceptions about developing classroom intervention models and our implementation plan. In addition, the meeting notes served as a record of the stages of each cyclical process of action research taking place during the PLC meetings.

As part of our school's PLC norms, we rotate the note taker role amongst the teachers in the grade level. The note taker records meeting minutes and posts them on our

electronic wiki that can be accessed by any of the teachers and administrators at our school. The notes typically include the date, the participants, topics discussed, actions, and next steps. The amount of details documented in the notes depends both on the content of the discussion and the writing style of the recorder.

Wanting to capture more details, such as teacher reflection, I created a note-taking template in the form of a simple t-chart with space for chronological details on the left side and space for reflections-in-action on the right side (see appendix). I used the notes from this template to supplement the recorder generated meeting notes and provide more details about the plans, questions, reflections, and actions that occurred in the PLC meetings.

I also maintained a research journal throughout the study. Herr & Anderson (2005) state that keeping a research journal is a vital piece of action research methodology because it chronicles one's research decisions and is documentation of the increased understanding that results from the action research process. I used my journal as a repository for my observations, questions, hunches, decisions, and plans. In my journal, I documented my reflections-on-action resulting from our actions in our PLC—collecting data.

Stevens & Cooper (2009) describe how journaling allows "writers to go back and review their thinking, acknowledge their own misconceptions, and adjust their thinking accordingly" (p. 29). My researcher journal also served as a tool for documenting my thinking, observations, and ethical decisions, providing a written record for me to use during the critical analysis phases of the research.

## **Researcher Experiences in RTI**

My desire to conduct action research focused on how teachers implement RTI originated from my experiences with the pilot implementation. While participating in the pilot, I received training and first-hand experience in using the data-based decision making process for disability identification. In a RTI system, the disability identification process typically involves team decision-making about when to refer a student for special education evaluation and consideration of how the student compared to his or her peers or if he or she received appropriate instruction in accordance with state law (NCRTI, 2010).

In 2008 when I became our school's student services coordinator, RTI was introduced as a preventative framework that could generate critical data that could be used as part of the special education eligibility process. Because most of my work as a student services coordinator revolves around the disability identification component of the data-based decision making processes, I was interested in learning how we could scale up our RTI practices and systematize RTI as a preventative framework at our school.

In my quest to learn more about scaling up our RTI implementation, I found that the research literature on RTI implementation told from the practitioners' perspective was limited. This void fueled my desire to capture the story of how teachers implemented RTI best practices and provide an authentic, honest account of what they experienced in the process. I worked with district resource teachers, administrators, and other pilot schools to learn how to integrate RTI decision-making practices into our existing pre-referral system. To gain hands on experience with the other components of RTI, I worked with teachers to identify small groups of students for intervention and delivered interventions

and administered progress monitoring assessments to those groups. I also assessed students from all grade levels during our universal screening benchmark periods.

In 2013, I was assigned to the role of accountable leader for the RTI initiative on our school academic review team. One primary function of academic review teams is to assist principals in measuring progress the school is making towards the targets and non-negotiable strategies that are included in their academic financial plan. This plan lists the activities, goals, strategies, and outcomes that are linked to school-level initiatives connected to targets and non-negotiable strategies from the Hawaii DOE State Strategic Plan.

On our academic plan for the 2013-2014 school year, we identified three teacher-focused outcomes linked to Response to Intervention, one of the six priority strategies on our Hawaii Department of Education Strategic Plan:

**1. Teacher focused outcomes:**

1a. 100 percent of the classroom and special education teachers will identify targeted students using universal screening assessments as evidenced by the improvement reports.

1b. 100 percent of the K – 2 classroom and special education teachers will provide research-based interventions to the targeted students as evidenced by the teacher’s records. (i.e., anecdotal, CR data, etc.)

1c. 100 percent of the K – 2 classroom and special education teachers will monitor the progress of students receiving intervention as evidenced by the teacher’s records. (i.e., anecdotal, CR data, etc.)

As an accountable leader, I was tasked with leading implementation activities and assisting administrators with gathering evidence on student and teacher outcome measures for RTI written into our academic plan. These tasks included assisting with

coordinating professional development, providing coaching support to teachers in PLCs, and providing progress reports to administrators and staff.

### **Researcher Perspectives on RTI**

In reflecting on the roadblocks that we had encountered in the past, I was able to focus on identifying the internal changes that needed to happen for our systemic growth. Making our system better, I believed, could only be accomplished with others—others who shared the same desire to make our intervention systems clearer and more effective for teachers, so they could positively impact the lives of our students through their support.

During our pilot phase of RTI implementation, our school focused heavily on the actions associated with the implementation stages of installation and exploration. We arranged many initial trainings for staff and enacted a “passive process of diffusion and information dissemination” which, I felt, merely increased our teachers awareness of the RTI process and it’s components. Our revised implementation plan included coaching in PLC as a way to support teachers by providing ongoing professional development and technical assistance as teachers worked to build the RTI system from the bottom up. The coaching would also support teachers as they engaged in data-based decision making processes and collaboration about student progress.

Prior to conducting this study, my experiences with the RTI decision-making process were mostly in the area of disability identification. I worked on approximately ten to twenty cases per year with teams of professionals and parents to determine when to refer a child for special education evaluation. The classroom data collected by teachers was a significant source of information that helped us understand how a student

compared to his or her peers, and it allowed us to make a determination if the student had been provided with appropriate instruction.

The progress monitoring component of a RTI creates the conditions for collecting data in a way that can assist teams who are trying to make determinations about student progress and appropriate instruction. During the pilot phase of implementation, we disseminated information about progress monitoring and provided teacher with progress monitoring tools, but the teachers did not use the tools consistently. For the majority of cases I reviewed during this time, only a few of the teachers demonstrated that they were able and willing to monitor the progress of their students as part of the RTI system and disability identification process at our school.

When framing this study, I made the assumption that the teachers would experience the most difficulty implementing the progress monitoring component of the RTI system based on my past experiences. Another major assumption I made while framing this study is that teachers would respond positively to the coaching support provided in PLC and that by the end of our first phase of fully implementing RTI, teachers would be prepared enough to write down a complete description of their intervention models, or plans, for our school documentation purposes.

### **Multiple Positions**

Adding the roles of RTI accountable leader and PLC coach to my professional responsibilities during the course of this study increased my desire to create a PLC environment that would support us to meet the outcomes in our academic plan. Our academic plan made it clear that all teachers in the grade levels I would be coaching were expected to identify students for intervention, deliver research-based interventions,

monitor the progress of students, and maintain documentation of these activities.

Fortunately, our RTI implementation plan aligned with the outcomes of our academic plan and provided us with a guiding framework to use as we began implementing new RTI practices.

In previous years, I had worked with my special education department as a PLC coach and learned the importance of developing skills such as listening, questioning, staying open, and observing. Initially, I approached my coaching role with the special education department as a presenter, and focused on talking about subject matter instead of listening and facilitating dialogue amongst the group. After reflection on my practice and review of PLC literature, I was able to revise my coaching approach to focus on creating an environment for fostering dialogue around student learning, rather than simply disseminating content information.

While conducting this study, I regarded my multiple roles as coach, RTI lead, practitioner, and action researcher as one in the same. My professional role in my school positioned me as an insider to the organization and the action research. I was a teacher and a colleague to all the research participants who volunteered for the study. My new titles, such as coach and RTI lead, did not come with additional authority. It simply created clarity around the new responsibilities I added to my daily workload. In many ways, the new titles increased my accountability for the shared goals and outcomes of our RTI initiative.

Navigating the multiple roles required me to look at the process of action research from multiple angles and multiple perspectives. In many cases, action research takes place in one's professional setting with others who are collectively responsible for



carrying out plans of action (Reason & Bradbury, 2006). The coaching role helped me to focus intentionally on utilizing conversational skills to promote dialogue and discussion that were directed to the desired outcomes. There were times during the PLC meetings that I needed to actively listen to others, suspend judgment, and resist premature closure to the conversations to encourage openness to diverse points of view. I actively worked to achieve a balance between promoting my thinking as a contribution to the group and withholding my viewpoint to maximize our learning and engagement in the action research process.

## **CHAPTER 4: PARTICIPANT RELATIONSHIPS**

### **Researcher and Participant Relationships**

I selected an action research approach for my study because it is relationship centered. I had worked with each member of the first grade team in some capacity or other during my career at the school. I got to know the first grade teachers as a grade level when I was assigned to assist them during our monthly request for assistance meetings during the 2011-2012 school year. My role in these meetings was to facilitate discussions about any issues students were having that might warrant a request for additional services or a special education evaluation.

Through interaction with the grade level, I got to know the staff as individuals and was able to observe their teamwork. The first grade teacher team is a diverse group of educators with varying educational backgrounds and years of experience. Their experience as educators ranged from five years to more than twenty years, and at the time of the study all of them had at least three years of experience working at our school.

So when it was time to select a group of teacher to study for my dissertation, I was immediately drawn to the idea of working with the first grade teachers. I explored various sampling approaches, and the closest match to my sampling approach is Maxwell's (2013) purposeful selection strategy. My work assignment created a sampling pool of teachers working with me in PLCs, and from there I deliberately selected the first grade teachers as participants who I felt could provide information that was relevant to my research question and goals.

I was particularly interested in understanding how the first grade teachers would adapt their intervention model to align with the revised RTI guidelines and additional

implementation components of progress monitoring and data-based decision-making. Their previous work implementing this model over the years made them the most experienced grade level to choose from at my school. While other grade levels delivered interventions using different approaches, the first grade teachers had already created and implemented their “Walk to Learn” structure that matched the intervention model we planned to scale up with other grade levels during implementation.

As an insider to the research study, my lens as a researcher could not be separated from my position and the roles I held at my school. Unlike other forms of research that position the researcher at a distance from their participants, my research approach required me to work as one of a collaborative group of investigators within the context of close, committed relationships (Reason & Bradbury, 2006). It was of critical importance for me, throughout the study, to build and maintain trust amongst the teachers.

### **Informed Consent**

As a researcher working with colleagues, it is my responsibility to explain the consent process, their confidentiality rights, and the purpose of my study in a way that is clear, concise, and practitioner friendly. I conducted two informational meetings about my research project with all of my research participants prior to beginning the study. At the first meeting on May 23, 2013, I provided my participants with an overview of my research study objectives, action research, and what participating in the study would entail in terms of time commitment and permissions. I held a follow-up meeting with all of the participants on November 22, 2013 to allow them to ask any follow-up questions about what each of the consent forms entailed. At that meeting, I explained in detail the

contents of the different consent forms as part of the consent process: action research consent form, interview consent form, and data release form.

Since action research unfolds in a negotiated way, I created a research consent form that included action research agreements, and a set of rules around participation in the study that honored the participants' right to negotiate what should and should not be included in the study. This process of negotiation included validation strategies such as peer debriefing with my research participants to allow them to validate the data I collected and to have control over what would be admitted as part of the research study. In this study, research participants collect data and review the data in PLCs as part of our normal educational practice. In contrast, the data I reported on as the principal investigator are about teacher practices resulting from our review and analysis in the form of meeting notes. It does not use the raw data they collect. This meant that the raw data collected by teachers were shared and stored voluntarily by the research participants. As outlined in the consent form signed by the research participants, the raw data belonged to them.

In addition, I made it clear that the action research approach that I employed differs from traditional research approaches in that it treats human participants as collaborators rather than subjects to be studied. At the core of the action approach are principles of democracy and humanity. I assured participants that in this study I would observe good ethical practice throughout the research and demonstrate respect for their welfare and their opinions. I also encouraged participants to engage with me in frank discussions about any aspects of the research as it proceeded, should the need arise.

The interview consent form included a description of the member check process I offered to participants who participated in interviews. Transcripts from interviews were provided to all interview participants for their review. During this review, participants could add or delete anything on the transcript and notes before returning it to me for inclusion in the project data. This is a voluntary process that allows the participant to control what they want to be included in the project.

The data release form that I created allowed participants to "own their story" by consenting to permit the use of their name likeness, and/or bibliographical identification for inclusion in the dissertation study. Participants in research who insist on "owning their own stories" are challenging confidentiality norms (Patton, 2002). Patton (2002) describes the emerging tension between the important ethic of protecting people's privacy and their desire to own their story. This means that informed consent does not automatically mean confidentiality.

Informed consent, for the purposes of my study, means that the research participants understand the risks and benefits of participating in the study. Additionally, participants who wish to have their real names reported in this study also understand the risks and benefits of doing so, and may indicate their consent on the data release form. I made it clear to participants that I believe there would be no direct benefits to them in participating in my research project, but the results of this study might help me and other researchers learn more about teachers' perspectives on implementing the components of RTI in their classrooms. Furthermore, I clearly stated on consent forms and in meetings with participants that I believe there would be little to no risk to them by participating in this study.

All of the first grade teachers and educational assistants working on the Response to Intervention project consented to participating in the action research portion of this study. Three teachers—Karin, Marcus, and Valerie—agreed to participate in interviews and also consented to allow use of their name and likeness in my dissertation. The two educational assistants, Kris and Judi, working on the project also consented to use of their name and likeness.

## **Chapter 5: ADOPTING DATA-DRIVEN PRACTICES**

### **Grouping Procedures**

At my first meeting with the first grade teachers in our PLC on September 5, 2013, we used our universal screening guidelines to group students for intervention. I created the agenda and prepared the learning activities for the group. For this meeting, I created a tier record sheet as an organizational tool for documenting teacher decisions when creating student tier groups, and I designed a grouping activity to use with the universal data and record sheet. We reviewed the universal screening data results together as a grade level. The universal screening was administered in August 2013 and the first-grade reading screening consisted of three assessments: 1) phoneme segmentation fluency, 2) nonsense word fluency, and 3) letter sound fluency.

I asked the teachers to record percentile scores for all three assessments next to the student name and their homeroom teachers' name on the record sheets. As teachers began plotting the scores on the record sheet, it became evident that many students exhibited a range of scores on the assessments, making it difficult to group students into tiers within the percentile score categories. Many of the students' scores represented a range of percentiles across multiple tiers instead of just one. It was rare for any child to have three scores falling within one category.

As teachers compared the assessment results to what they knew about their students, they asked questions of me and of each other about what assessment they should use to group the students into intervention groups. In turn, I described the skills targeted in each assessment and asked them which one they felt should be used with our

percentile criteria for grouping students. The first-grade universal screening consisted of three individually administered standardized measures: letter sound fluency, phoneme segmentation fluency, and nonsense word fluency. Each assessment is administered for one minute and measures the students ability to say the sounds of visually presented letters, the phonemes in orally presented words, and the sounds of visually presented non-real words (Pearson, 2012).

The teachers engaged in dialogue, consisting mainly of teacher reflection-in-action about the reading skills of students and their performance on the multiple assessments that we were reviewing. The teachers discussed students whose percentile scores were spread out across different tier categories. For example, teachers discussed the discrepancies between letter sound fluency scores that fell within the intensive range and phoneme segmentation and nonsense word fluency scores that fell within the targeted and sustained range for the same students. The teachers discussed the different scores in comparison with their observation of the student's reading performance in class in order to validate or invalidate the accuracy of the universal screening results. After teachers had an opportunity to dialogue, they decided that they should weigh the letter sound fluency assessment score more heavily than phoneme segmentation or nonsense word fluency because they felt that letter sound fluency was a more critical and universal skill that the students needed to master at that point in time.

Despite the struggles with contradictory percentile scores and no clear cut guidelines for which set of universal screening assessment results to use with the cut score guidelines, the first grade teachers were able to tentatively establish groups of students into the five categories. We collaboratively decided to review the tier groupings



again at our next meeting, incorporating other reading assessment data and teacher input to finalize the groups of students and begin discussion about teacher assignments to tier groups.

At the end of the meeting, I asked teachers to reflect aloud about what had taken place at our professional learning community that day. One teacher said he felt overwhelmed and that it was confusing at times to consider all the expectations and guidelines for different assessments at once. Another teacher said she liked the process better, because in the past she felt like she was on an island, but now she could collaborate with others when making decisions about how to group students for intervention. The teachers agreed that it was advantageous to be able to take “baby steps” in planning together because of the amount of data they needed to review and that it was helpful to engage in the process together. They also talked of how the process changed from the previous year of implementing the intervention model, connecting the changes in how we grouped students according to “stricter” guidelines to their desire to improve the effectiveness of their use of assessment data. One teacher reflected that they used to wait until the next benchmark period, which could take three to six months in between periods, in order to determine if their students made progress. The final reflective statement came from one teacher who described their grade level team as “non-judgmental” made up of “professionals with strong rapport who are receptive to each other’s feedback”.

After the meeting, I recorded my observations, thoughts, and reflections in my researcher journal. I had planned to discuss grouping and teacher assignments to groups

at this meeting, but since the questions about assessment took a lot of time to flesh out, we were not able to finish the grouping or move on to teacher assignments.

At our next meeting on September 12, 2013, we planned to finalize the assignment of students into tier groups and discuss teacher assignments. I prepared a packet of documents for the teachers that included research based articles about the role of assessment in RTI and how to use instructional hierarchies to identify effective teaching and intervention targets. Based on our discussion the previous week, I decided to present teachers with research articles about how assessment, intervention targets, and instruction were connected in a RTI system as a way to prepare us for finalizing the student grouping and beginning teacher assignments. I did this in anticipation of our need to discuss the skill targets for the groups in order to make teacher assignments to the groups after they were finalized.

The instructional hierarchy, as described by Wright (2013), is a framework that breaks the learning process into five levels: acquisition, fluency, retention, endurance, and generalization. Wright created a table with descriptions of the learning stages in the hierarchy and corresponding interventions and instructional strategies. At our meeting, we used the table to locate the stage of learning for our students and gain insight about instructional strategies and interventions that could be matched to the various skill levels.

We revisited our tier three group first. There were twelve students on the list and each teacher had at least one of their own students from their classroom in this group. The teachers referred to the instructional hierarchy and discussed the reading level of this group of students, using both the data from the universal screening and their experiences reading with them in their classrooms. The teachers agreed that the students grouped in

the intensive tier should fall within the acquisition stage of learning, where the students have just begun to acquire the target skill and the objective is for the students to learn how to complete the skill accurately and repeatedly without assistance (Wright, 2013). This led to a discussion about what skill to target for these students. Once again, teachers reviewed their students' universal screening scores and identified the lowest numbers on the letter sound fluency assessment. From there, the teachers identified four students who needed instruction in letter sound correspondence and five students who fell in the late acquisition and early fluency stage of the letter sound skill. The three remaining students were identified as students in the acquisition stage of phonics, and were grouped with the tier two targeted students who also demonstrated the same skill level and target need.

As we moved on to discuss the tier two targeted group, the teachers decided that the students in this group demonstrated adequate letter sound fluency skills, but they did not demonstrate fluency with applying the letter sounds when decoding words in text. The teachers relied more on the nonsense word fluency screening assessment results in this case when selecting students for this group. By the end of the discussion, we selected twenty students for this group, with one moving down to the intensive group and three moving up from the intensive group. The teachers identified blending and segmenting sounds in words as the primary skills to be targeted for this group.

There were twenty-eight students listed in the tier two sustained group. This high number of students sparked a discussion about the resources available for the intervention model and how to staff the groups accordingly. The teachers wanted to make sure that the number of students in each group matched the research recommendations, as groups should get increasingly smaller as you move to a higher intensity tier. Eight staff

members were identified as interventionists in our first grade model. The teachers decided that two educational assistants would provide interventions to students in tier three, and supervised by the special education teacher. The special education teacher would teach the tier two targeted students with her inclusion partner. The curriculum coordinator volunteered to take a small group from to alleviate the group size of the tier two sustained group of students and one of the grade level teachers volunteered to take the larger tier two sustained group. Then the other two teachers volunteered to teach the tier one benchmark and enrichment groups.

After the model was staffed, the teachers were able to move on to a discussion about what skills to target in the remaining groups. By the end of the meeting, the teachers decided to target reading fluency skills with the twenty-two identified benchmark students and reading comprehension skills with sixteen of the enrichment students. Teachers felt that the benchmark and enrichment students fell within the generalization stage of the instructional hierarchy where the objective is to provide instruction that supports the students to apply their reading fluency and comprehension skills in the widest possible range of situations (Wright, 2013). The teachers used the informal reading inventory (IRI) assessment results in addition to the screening results to group students into the benchmark and enrichment category. Karin noted that the “IRI data give more information than the screening results for these students” further stating that she could “tell who her readers are through the IRI” while the screening assessments seemed to be “more clear cut for the lowest performing students”.

Karin’s comment generated a discussion about using multiple assessment sources when making decisions about grouping students for intervention. One teacher voiced

confusion about using cut scores first then using the informal reading inventory to make a final decision about who belongs in what group. Karin responded by commenting that the “decision making process takes longer than just sorting by one score” and that she prefers to “review IRI data in addition to the screening for the benchmark and enrichment kids because they are the readers in the class”.

After our second PLC meeting in mid-September, I reflected on our accomplishments thus far and what we needed to achieve by the end of the month over our next two meetings. In the past, the teachers had formulated groups without reviewing assessment data. It was exciting to think that this was the first time the teachers in first grade had used assessment results in a systematic way to group students. Yet, for that same reason, I was not surprised that some teachers expressed confusion about how to use multiple sources of assessment data when making decisions. Because our next implementation steps would continue to involve assessment data for decision-making, I anticipated that the topic would need to be revisited once we began the progress monitoring component of the RTI framework.

Our work during the first two meetings—deciding groups, skill targets, and teacher assignments—set the stage for our work at subsequent meetings in September. At our third meeting in September, I wanted teachers to learn how to systematically develop progress monitoring goals for their students as a starting point for future discussion on how we would develop our progress monitoring system in first grade.

For this meeting, I consulted with our school psychologist to develop a plan to systematically set group progress monitoring goals with the teachers. McDonald (2013) describes how a school psychologist can contribute to RTI efforts in schools. She

explains that school psychologists are provided with specific training in problem identification and problem analysis, skills that can assist school-based teams in formulating a hypothesis for the cause of the problem and developing a corresponding “treatment” or intervention plan (McDonald, 2013). School psychologists have specific expertise in how to sift through preexisting data and know how to formulate appropriate goals and assist teams in selecting empirically supported interventions that have been validated for remediating the student’s specific need area.

At our professional learning community meeting, our school psychologist and I modeled how to use our school’s growth table with the universal screening scores to develop goals for our intensive group of students. The growth table plotted by grade, benchmark period, and percentile the normed scores for each RTI assessment that we used at our school. The growth table allowed us to compare the scores of our students to the national norms and percentiles according to grade and benchmark period. The benchmark periods of fall, winter, and spring matched our universal benchmark screening scheduled during the months of August, December, and May.

For our intensive group of students, we set our letter sound fluency goal at the 50<sup>th</sup> winter percentile, or thirty-one letters correctly identified in one minute. In order to determine this goal, we looked at the letter sound fluency results of the eight students identified in this group. Four students fell below the fall 10<sup>th</sup> percentile of thirteen letters correctly identified while the other four students scores fell near the fall 25<sup>th</sup> percentile of twenty-one letters correctly identified. By the end of the intervention period in December when we would be conducting universal screening assessments for winter we wanted to set a goal that was challenging yet attainable.

For the tier two targeted students, we used the results from their nonsense words screening to determine what goal to set for them. Their group goal was set for the 50<sup>th</sup> percentile winter benchmark of 54 nonsense words read correctly. For the sustained, benchmark, and enrichment groups, student goals were set using the norms for winter R-CBM, reading curriculum based measurement, because the R-CBM is not given as part of the fall universal screening for grade one. For these groups, we set their goals progressively higher according to the winter percentiles. The sustained group's goal was thirty-six words read correctly in one minute or the winter 50<sup>th</sup> percentile. The benchmark groups' goal would be the 75<sup>th</sup> percentile and the enrichment group at the 90<sup>th</sup> percentile for R-CBM, scores of 68 and 100 words read correct for each.

Due to a mandatory training, I was unable to attend our last professional learning community in our September professional learning community cycle, so teachers worked without a facilitator to draft out their intervention plans and make final adjustments to the teacher assignments, skill target, and student groups.

### **Does the Intervention Match the Skill?**

Wright (2007) suggests that interventionists "spell out" the details of tier two and tier three interventions as a "series of specific steps so that the teacher or other person(s) designated to implement it can do so correctly and efficiently" (p. 73). He suggests that the teacher developing an intervention plan consult with a response to intervention team with members who demonstrate expertise in academic and behavioral strategies that are research based to ensure that the strategies selected both match the skill to be targeted and are considered "scientifically validated intervention methods" (Wright, 2007, p. 48). He claims, that by doing this, the procedures for implementing the intervention are clear,

scripted, and grounded in scientifically validated research so that it prevents time from being wasted (Wright, 2007).

Riley-Tillman, Burns, and Gibbons (2013) describe the complexity of selecting and implementing evidence-based interventions (EBI) in a RTI model. They discuss some issues related to the assumption that the EBIs are implemented exactly as developed, without changing any of the steps of the intervention (frequency, materials, group size) that could alter or invalidate the EBI. From an implementation standpoint, teachers are expected to customize the intervention to fit the situation at hand and “EBI overviews rarely specify which steps can be altered and which are actually critical aspects of the method” (Riley-Tillman, Burns, and Gibbons, 2013, p. 3).

In preparation for our PLC meeting, I created tiered intervention plan templates, based on the work of Jim Wright (2013) that were approved for use by our administrators (see appendix). Tier two and tier three templates looked almost identical, as both required the same types of information about interventions and progress monitoring to be documented. My goal by the end of the meeting was to discuss Wright’s recommendations for scripting interventions and start the process of writing the script into our intervention plans.

Our first PLC in October also fell on the first week back from our weeklong intersession. This professional learning community meeting was a significant one for a number of reasons. Our special education teacher, Valerie, who would be overseeing implementation of the tier three intervention plan and delivering interventions to the tier two targeted group was returning to our team after being on leave for the first quarter. Their thirty minute common intervention block was scheduled to begin the following



Tuesday, and this was our first and final professional learning community meeting with Valerie before we proceeded.

To start off the meeting, I facilitated a Tribes community building activity called "something good". This activity focused on sharing positive feelings and building inclusion amongst the team. Each person shared one positive experience that they had experienced during the previous week. Many teachers described activities they did over the intersession such as spending time with their families, traveling, ocean activities, shopping, and watching movies. Through our resulting discussion, we were able to identify common interests and build rapport.

Valerie was interested in hearing from her colleagues about the students from their classes who were assigned to her group. At that point, she had only met a few of them and wanted to hear ideas about teaching strategies that would work well with her intensive level group. Fortunately, Valerie, a veteran special educator teacher, had extensive training and experience in delivering multi-sensory language interventions in reading and math so she was very comfortable planning for and overseeing the delivery of interventions. It was well known among the group that she had previously integrated her intervention knowledge and passion for mobile device technology into an innovative approach to small group instruction with her kindergarten and first grade students over the past two school years.

Valerie and the other teachers discussed their ideas for teaching strategies for the tier three and tier two targeted group. Valerie would be planning and overseeing the delivery of the tier three interventions by our educational assistants Judi and Kris while also co-planning and co-teaching with her inclusion partner for the tier two targeted

students. Looking at the makeup of her group, the teachers reiterated their desire for Valerie to develop an intervention plan that targeted letter sound knowledge for lowest scoring students in the tier three group and letter sound fluency for the other four. The teachers asked Valerie what kinds of mobile device applications she used in kindergarten. Valerie described some of the applications she used, but she suggested creating a routine of multi-sensory activities targeting letter formations and sounds, along with writing single words to reinforce the learning of the letter sounds in application rather than focusing on using mobile technology with this group of students.

At that point, Karin one of the general education teachers on the grade level suggested that the lowest group of students in tier three construct patterned books. I asked if having students construct patterned books as an intervention would match the target skill of learning letter sounds. Karin discussed how students could write simple sentences that matched pictures in the patterned books, in order to reinforce the learning of the letter sounds.

At this point, I steered our talk towards a discussion of Wright's (2007) recommendations for scripting interventions. I also tried, unsuccessfully, to recite from memory our District description of essential characteristics of an intervention because I didn't have it on hand. Then, I questioned whether the strategy Karin suggested sufficiently matched the skill target, as I was having trouble agreeing that writing sentences was the right intervention to address the letter sound knowledge weakness shared by our lowest performing students.

The conversation continued, and Valerie was able to draw on her experience delivering interventions to make a decision about what to do with the tier three students.

She decided to design a routine of multi-sensory language strategies targeting letter sounds. This would include presenting a card deck of individual letters with key word cues to allow students to practice the associating the letter sound with the letter symbol. Students would be presented the letters orally, and then they would practice writing the individual letters, then they would practice writing c-v-c (consonant-vowel-consonant) words also presented orally by the teachers. Using this approach, the students would be getting regular practice looking at, saying, hearing, and writing the letters and their associated sounds during their intervention time.

### **Head to Paper**

At the close of our October PLC meeting, all of the teachers were able to make decisions about the strategies they would be using in each of their groups, but they did not write any of them down on the templates that I provided to them. I did not meet my goal of having written intervention drafts by the end of the meeting. As I packed up my materials, Karin spoke informally to me. She shared her opinions on how their grade level operates, and described them as teachers who like to teach to the whole child and prefer innovation and thinking outside of the box rather than repetitive scripts. We talked about the components of the intervention plans and the school-level expectation that the intervention should be written down. She responded by telling me that she believes that they all at some point over the two years, had been delivering interventions and probably documented their plans for their interventions in their heads, but had not written them down on paper.

Karin's willingness to share her thoughts about the teachers in her grade level and her reaction to being asked to write down interventions made me slow down my planning

drive and steered me into reflective mode. The words "head to paper" resonated with me, and I thought about what Karin had said about the teacher's penchant for innovation and out-of-the-box thinking. I asked myself, "How would a teacher capture the art of innovation in their thinking as it is happening?" I wondered if it was even possible.

My questions and Karin's feedback created a dilemma between pursuing the idea of scripting the teachers' intervention plans or not. Our school district's definition included five characteristics of assessment, goal setting, and instruction that indicated "step-by-step directions for consistent implementation and replication by others" as one of the essential characteristics of an intervention (Central District Office, 2013).

The National Center on Response to Intervention (2010) suggests that instruction in a RTI system at the secondary level be targeted and delivered to small groups and that instruction at the tertiary level be intensive and delivered either to small groups or individually. The National Center's definition of instruction within a RTI system was concerned with the group size and instructional match to student needs over delivering the instruction in a scripted format. Buffum, Mattos, & Weber, (2009) define targeted instruction as "highly effective teaching practices that meet each child's individual learning needs" (p. 63) They emphasize that effective instruction will vary according to the varying learning needs for each student. The National Center on Response to Intervention definition for the secondary and tertiary levels of instruction matched our school districts definition for targeted and explicit instruction at the tier two and tier three level.

The conversation I had with Karin revealed a key detail that I had not been fully aware of when planning for PLC, that their grade level "preferred innovation and

thinking outside of the box to repetitive scripts" (Shim, 2013). In reviewing the variety of definitions of targeted instruction within a RTI framework from the district and national level, I concluded that delivering scripted intervention was a negotiable aspect of RTI instruction.

As a PLC coach and action researcher, it was my responsibility to listen carefully to my team members and be willing to adapt to their preferences and needs. I trusted and valued the teacher's ability to independently select research-based strategies and deliver quality instruction rather than script their interventions for the sake of replication. So, I decided to shift gears in future PLC towards focusing on supporting the teachers in selecting research-based strategies for their interventions and developing other RTI processes such as progress monitoring and data-based decision making, than focusing time and energy on scripting interventions.

### **Mid-Way Reflections**

At our November 7, 2013 PLC meeting, I had teachers share how their interventions and progress monitoring schedules had been going. The "enrichment" teacher reported that her students seemed to fit well with the skills that she targeted, and she described her students as insightful, complex problem solvers, who rarely demonstrate any behavior problems. The benchmark teacher also agreed that the students seemed to fit well in his group so he was able to proceed at a good teaching pace with the students.

The "sustained" teacher described his intervention as a "fun approach" to practicing fluency. He recorded short phrases at the students' level in audio and PowerPoint presentation format then loaded them onto student mobile devices. The students used

headphones to listen to, read, and practice reciting the phrases on their mobile devices to build their reading fluency.

The teachers who worked with the tier two targeted group described the addition of activity centers to their previous intervention plan. The co-teachers also created centers in addition to their daily multisensory routines that provided reinforcement of the targeted skills through the use of mobile device applications and hands-on manipulative activities facilitated by the teachers.

Valerie described the progress that the tier three students were making, and said that they "celebrate the small things", especially for those students who were making minimal progress. She summarized the assessment data that she had collected during the progress monitoring and each teacher compared their progress score to the initial universal benchmark score. All students showed at least a ten-point gain from the initial assessment and four out of the eight students showed a significant thirty-plus point gain in letter sound fluency as measured by the most recent progress monitoring assessment.

For our final activity, I asked teachers to reflect on the RTI processes and implementation by identifying at least one "aha moment" and one "question". Four of the teachers indicated that they felt the grouping of the students into intervention groups using the universal screening data seemed to be "on target" and "right on." One teacher commended the tier three teachers and special education teacher for the gains made by the tier three group, and another reflected that his students were "doing well" and reported that the students seem to enjoy "the enrichment, the change in environment, and learning from each other." Two teachers asked how to get administrators to identify

common intervention time as "sacred", where school-wide activities like assemblies would not be allowed to interfere with the common intervention schedule.

Before ending our November 7<sup>th</sup> meeting, I asked teachers to continue collecting their progress monitoring data and come prepared to share the data at the next PLC meeting on November 21<sup>st</sup>, 2013. I came to the November 7<sup>th</sup> meeting with the understanding that because teachers were trying to implement the progress monitoring schedule out for the first time, questions or issues with collecting progress monitoring data might be expected.

Progress monitoring is a system of scientifically-based practices of ongoing data collection that is used to assess students' performance and the effectiveness of instruction (NCRTI, 2013). The progress monitoring process involves the following key components: appropriate progress monitoring tools, preset schedule for collecting progress monitoring data, and decision rules (NCRTI, 2013). Our school uses curriculum-based measurement, a scientifically validated form of student progress monitoring that involves the use of valid and reliable assessments and incorporates standard methods for test creation, administration, and scoring (Fuchs, L.S., & Fuchs, D., 2004).

The application of the progress monitoring guidelines required each teacher to approach progress monitoring differently. The tier one teachers administered formative, teacher-made assessments to their group, while the tier two and tier three teachers administered progress monitoring probes to their students. The tier two and tier three teachers needed to adhere to a strict schedule of assessment administration, while the tier one teachers had more freedom to decide how often the students needed to be assessed. During the learning community meeting that day no major concerns about the progress

monitoring process had been shared, so I felt it was realistic for me to expect the teachers to administer at least two assessments in accordance with our progress monitoring expectations by our November 21<sup>st</sup> meeting.

I wanted to accomplish two things at the following November 21<sup>st</sup> meeting: 1) engage the teachers in reviewing data with their colleagues in an efficient and non-threatening way, and 2) generate reflective feedback about what the data was telling us. I created a simple data review activity that allowed all team members to quickly review everyone else's data and provide written feedback to each other.

For the activity, teachers gathered their progress monitoring assessment data and records into a stack and passed the stack to the teacher on their right. Next, the teachers reviewed the stack of data and wrote at least one question, comment, or reflection on their sticky note. This segment took about three minutes. Then, the teachers attached their data notes to the data stack and passed the stack to their teacher on the right side of them. This cycle was repeated until all of the teachers had an opportunity to review and comment on their colleague's data.

In order to promote the teachers' reflection, I asked teachers to quickly review the comments on their stack of data and respond to the questions or reflect on the comments one by one. Each teacher responded briefly to the questions asked about their instruction and progress monitoring results.

The enrichment teacher described how she used a variety of strategies, such as character study, visualization, compare/contrast, and opinion writing, with stories she selected for her group. She was happy to report that she noticed the students had begun to borrow the books in the series that she was using during the enrichment block and the



team agreed that it was a sign that her story selection was indeed engaging and motivating for her students.

The benchmark teacher described his approach to teaching his group by using the "wows, wonders, and questioning" strategies based on the work of Stephanie Harvey (2009). He facilitated open-ended discussions around the theme of "reading is thinking". One team member commented that his assessment showed that the students made "great personal connections."

The sustained teacher responded to some questions from the group and had some questions of his own. In describing his group, he said his students demonstrated a wide range of scores on the reading curriculum based measurement (R-CBM) progress monitoring assessment. He wondered how his group would do after the next progress monitoring assessment and if it would continue to show a wide range of scores, reminding the group that the R-CBM assessment is not administered as a benchmark assessment to all first grade students until the winter universal screening in December. His large group of twenty students represented a wide range of "beginning readers" working on building reading fluency, with many performing close to the grade level expectation for reading. Looking at the range of scores in his group, he asked what process we should follow when we have to move someone out of the group based on their progress or lack thereof?

The tier two targeted teachers also posed the same question about student movement when reviewing their progress monitoring data. Because the special education teacher, Valerie, actively uses the tier two and tier three data when planning interventions for both groups, she was able to describe how she made movement decisions within those

groups. Valerie and her educational assistant, Judi, reviewed student data in both tiers and identified the lowest performing students in each group.

One student was identified in each group as not making adequate progress towards the group goal. In tier three, all students except one made significant progress towards meeting their letter sound fluency goal. Based on this information they decided to change the instruction and progress monitoring tool to measure their application of letter sounds on the nonsense word fluency assessment. The goal for the tier three group was then adjusted to match a nonsense word fluency goal. The one student who did not meet the letter sound fluency intervention goal, would continue to receive instruction and be progress monitored in letter sound fluency. For this student, Valerie designed a series of interactive mobile device applications so that his instruction could be differentiated and managed during the common intervention time.

In the tier two targeted group, Valerie reported that the data revealed six students who needed to be monitored more closely to determine whether they would need to be moved down to the tier three group. The one student who was not making adequate progress towards the tier two targeted goal was to be moved down to the tier three group the following week. It was agreed by the team, that moving a student between tiers would require a data review and discussion between the intervention teachers who may be affected in order to make a final decision.

## **Teacher Evaluation**

Our final PLC meeting for the quarter was held on December 12, 2013. At the time of this meeting, the first grade teachers had completed seven weeks of intervention with their students and had implemented progress monitoring and data-based decision-making

procedures in accordance with our school-wide response to intervention plan. It was an opportune time to gather feedback from teachers about their perceptions about what worked and what needed improvement.

In order to efficiently maximize the time allocated to us for our PLC meeting, I created an activity that would allow us to quickly gather information from teachers about what they thought worked and what needed improvement or revision in terms of grouping (size, progress monitoring, skill target) and scheduling (time, location, days) in our RTI system. The teachers recorded their input in a t-chart labeled "what worked" and "what needs improvement or needs revision" on two separate sheets of paper. The teachers passed the papers around, discussing some of their thoughts as they wrote. Once everyone had a chance to put down their feedback, I read it out loud to the group and opened the floor for discussion.

The teachers all agreed that our grouping procedures for using universal benchmark data to match students to the correct intervention group worked well. The teachers also agreed that using the time during resource classes for progress monitoring was a good practice to continue. Keeping the progress monitoring schedule outside of the intervention and core instructional time ensured the least amount of interruption to the students' instructional schedules.

There were mixed feelings about group size. Most teachers agreed that the group size for the tier three group worked well. A few teachers felt that the tier two groups were a little too large and that even for the tier one groups, exceeding a maximum of twenty-one students may cause difficulty for the intervention teacher.

A comment about progress monitoring led to a discussion about teacher perceptions of the progress. One teacher asked for more clarification about the comment that “progress monitoring is very time consuming, labor intensive”. One of the teachers voiced their concern that progress monitoring “seemed like a lot of work”. I asked the teachers with experience progress monitoring to share their thoughts on the matter with the others.

Our guidelines for progress monitoring required teachers who worked with students in tier three groups to monitor the progress of those students weekly, while teachers who worked with the tier two targeted and tier two sustained group monitored the progress of their students bi-weekly. In response to the question about the progress monitoring workload, one teacher stated that because two resource teachers assisted him with progress monitoring the students in his group, it was not a significant increase in his workload.

Valerie, the tier three supervisory teacher and tier two targeted interventionist, echoed his sentiment and described the process of data collection and data organization she created with the help of her educational assistants. They created a weekly progress monitoring schedule that identified the students targeted, the assessment to be administered, and the assessor responsible. The educational assistants split the progress monitoring responsibilities for the tier three and tier two targeted groups and administered progress monitoring assessments during designated resource periods as not to interrupt core instruction.

One of the educational assistants, Judi, created a template for organizing and recording the progress monitoring data. On the template, the assessor could record the

number of correct items and the number of attempted items for the different progress monitoring assessments. The benchmark universal screening score and tier goal was also included on the template as a reference.

Valerie explained how she formed a PLC with her educational assistants in addition to our grade level PLC. Since October, when the progress monitoring schedule began, Valerie and her educational assistants met weekly at 2:10-2:40pm on Mondays in order to collaborate on lessons, review data, and make instructional decisions using the weekly progress monitoring data. This emergent PLC was an unexpected, but valuable venue for the tier three and tier two targeted instructional teams to meet and review their progress data in a more timely and focused manner. Valerie developed her own solution to the progress monitoring workload challenge and reported much success with their approach.

## **Chapter 6: DEVELOPMENTAL DESIGN OF STUDY**

### **Evaluation Approach**

The final PLC meeting in December 2013 marked the end phase of our action research with the PLCs. The activity conducted at the meeting generated some evaluative information from the teachers about what they considered as "working" and "not working" in terms of grouping (size, progress monitoring, skill target) and scheduling (time, location, days) in our RTI system. I purposefully timed this activity to occur at the end of the full implementation phase because the teachers needed enough time to engage in the RTI implementation process in order to evaluate it. Conducting this type of activity in the beginning or middle of the initial implementation phase would not have provided teachers with enough time or experience to evaluate our implementation process sufficiently.

Patton (2010) distinguishes between simple, complicated, and complex situations that impact evaluating programs or interventions like RTI. These distinctions are not absolute, but they do provide a heuristic to better recognize situations in order to match evaluation methods accordingly. Traditional evaluation approaches, such as formative and summative evaluation, are well suited to certain types of evaluation purposes and situations. Formative evaluation is conducted for program improvement and focuses on stabilizing and standardizing programs or innovations, while summative evaluation is conducted upon completion of a program to determine whether to continue, expand, or disseminate it (Patton, 2010).

For example, in a simple evaluation situation, what needs to be done is known. In simple situations, the context can be controlled and predicted. In this case, one might assign a summative or formative evaluation because it offers ideal conditions for top-down dissemination of best practices, such as evidence-based practice, as well as a stable context for evaluation. The dissemination of these types of practices, epitomizes a top-down approach to evaluation and change based on the “presumption that rigorous adherence to a validated model will produce the same outcomes as those attained when the model was evaluated and validated summatively” (Patton, 2011, p. 156).

Michael Quinn Patton has pioneered an emergent evaluation approach called developmental evaluation that can be matched to situations that are complex and dynamic. Developmental evaluation “has a distinct purpose and niche beyond formative and summative evaluation” (Patton, 2010, p. 4). While traditional evaluations aim to control and manage complexity of the evaluation situation, developmental evaluation is designed to “adapt to the realities of complex nonlinear dynamics rather than trying to impose order and certainty on a disorderly and uncertain world” (Patton, 2010, p. 5).

### **Developmental Evaluation Design**

Implementing our first grade RTI model involved multiple stakeholders acting in dynamic learning environments simultaneously. Our implementation context could not be controlled or predicted which created a complex evaluation situation instead of a simple one. I selected a developmental evaluation design for this study, because our complex implementation situation did not match the traditional approaches to evaluation.

Our evaluation context was informed by our RTI implementation plan that followed a chain of steps made up of both linear and non-linear processes. The large group

professional development training and universal screening represented the linear processes in the model, while the RTI coaching supported the development and implementation of non-linear processes such as delivering interventions to students and engagement in the decision making process.

In this study, the distinct purpose of conducting a developmental evaluation was to capture the interactive developments that emerged as the teachers engaged in the bottom-up change process of implementation (Patton, 2010). The evaluation seeks to answer the following evaluation question: What do teachers perceive as working and not working with implementation of RTI best practices? It has been integrated with an action research approach to capture the details about the adaptations teachers made and the teachers' perceptions about implementation as it happened in real time. The action research component of the evaluation tracked the details of the first grade teachers' engagement in the simultaneous development, adaptation, and implementation of RTI processes in their grade level. This involved the work of teachers developing processes of collecting, organizing, and interpreting data while adapting effective principles of RTI in the form of school guidelines to their local classroom contexts.

I assumed that teachers would adhere to the agreed-upon school guidelines and that by engaging in the implementation activities within the PLC coaching framework, the majority of students would show improvement in their reading performance by the end of the first phase of RTI implementation. In our RTI implementation plan, the long-term goals are reduction in students' risk of reading failure and improvement in our service delivery system.



## **Developmental Evaluation Data Sources**

Developmental evaluation is one of many approaches to evaluation that share the general purpose of improvement, but it is particularly adaptable to an action research approach to innovation and organizational learning that empowers “local groups through participation and using process of evaluation to build staff capacity for data-based decision making and continuous improvement” (Patton, 1994, p. 220). I designed an action research component of the evaluation in a way that honored our local context and captured stories about how implementation occurred from the teacher's perspective. In keeping with that spirit, my developmental evaluation captured the teacher's perspective of what worked and what didn't work as implementation progressed and honored the teachers' ownership of their actions and the results of the process.

Collecting narratives in a developmental evaluation is a way for evaluators to document the perspectives and stories of individuals participating in a program or initiative. These stories are powerful tools in evaluation because they provide evaluators with key information that helps determine if a program or initiative is or is not working. Storytelling is a useful tool in developmental evaluation because it respects storytellers' diverse ways of knowing and learning and is, at its core, empowering and participatory. “Storytelling is a powerful mode of human expression and a sophisticated form of ‘meaning making’ beginning from a singular experience from a storyteller with a unique point of view” (California Endowment, 2007). Researchers and evaluators can collect narratives told from the participants' points of view, allowing researchers to record the history of program implementation, and provide details of its progress from unique perspectives that are not often found in traditional evaluation and research methodology.

In addition to the minutes from PLC meetings and my researcher journal entries, I conducted interviews to triangulate these data sources, using a narrative structure to illustrate key themes and principles. The meeting minutes and interviews elicited details that provided source material for a narrative account of the implementation of RTI told from the perspective of the teachers participating in the study.

## **Interviews**

I conducted interviews during the months of January and February 2014 after the first phase of implementation was completed. The timing of the interviews allowed me to gather detailed information from my interviewees about what they viewed as working and not working after the first phase of implementation was complete. I scheduled a thirty-minute interview session with each interviewee. Two participants consented to allow the interview to exceed the thirty-minutes.

Each interview was conducted during a single session and was guided by the following questions:

1. Tell me about your experiences with implementation of response to intervention this year
2. Tell me about the process of developing your classroom interventions this year
3. How did the process of developing your classroom interventions involve collaboration with others?
4. Tell me about your experience implementing the classroom intervention in your classroom.

The questions were provided to interviewees prior to the interview.

In the interview encounter, the interview-respondent interaction is a complex phenomenon where both parties bring biases, predispositions, and attitudes that affect the

interaction and the data elicited (Merriam, S., 2009). Merriam (2009) suggests that the interviewer take a stance that is nonjudgmental, nonthreatening, and respectful of the respondent as a beginning point in the interview process. She also suggests that the interviewer should assume neutrality by avoiding arguing and debating with the respondent.

Using Merriam's advice as a guide, prior to each interview I thanked my interviewees for taking the time to share their experience. I reiterated the purpose of the interviews, which was to get their perspective on how they developed classroom intervention systems as part of the RTI system in our school and what they perceived as working and not working in that process. I indicated that my motives and intentions for the interview were focused solely on eliciting their perspective of the implementation process.

My personal connection with the others and prior working relationships with them allowed me to create a colleague-to-colleague interview setting that enabled me to interact with my interviewees conversationally and in an open and respectful way. The colleague-to-colleague interview structure was informal and mutually reflective at times when interview questions focused on our shared experiences of the implementation process. The teachers were comfortable asking me questions as part of their response. During the formal parts of the interview, I made it a point to ask open-ended questions and refrained from making judgments during the interview interaction.

I brought my experiences as a coach, RTI lead, and action researcher with me to the interview, as well as my prior experiences with our pilot implementation. I used these experiences to guide my questioning during the interview. I was able to successfully assume neutrality by refraining from arguing and debating with my interviewees. The

interviewees did not surface concerns about my positionality or researcher role at any time before, during, or after the interview so it may be assumed that my positionality and role in the research had little to no impact on the interviewees ability to provide candid responses to the interview questions.

### **Model Adaptation**

The first grade teachers who were interviewed began by sharing their thoughts on the differences between previous years implementing their intervention model and their recent experience with implementing new aspects of the RTI system, such as using universal screening guidelines and identifying skills for intervention groups.

At the last PLC meeting held on December 12, 2013, the teachers reported that our grouping procedures for using universal benchmark data to match students to the correct intervention group and skill target worked well. “Since last year, maybe it wasn’t as focused on what particular skill we wanted the students to work on. So that's where I see it’s different from this year where especially in the tier two and tier three groups, we’re focused on a specific skill” (Nakamura, 2014). Karin shared similar thoughts about the focus by saying, “so we tried to tweak it, every year we try to make it better and this year, it’s very different in the way it’s very focused on specific skills. We have more help, which is really nice so our intensive group has more one to one help or smaller ratio that they need to work in and that has been very useful, I think for their success. So we’re very structured this year, very organized, we’re focused and on our targeted skills” (Shim, 2014).

Although the teachers agreed that using the results helped them to hone in on skills that they wanted the students to work on, Karin mentioned her concern about how the guidelines affect the "weight" of their professional judgment, "at the same time it's hard because now our grouping is solely, kind of solely on, the scores from the [universal screening] test. So our professional judgment sometimes may not hold as much weight as it has in the past" (Shim, 2014).

### **The Power of Professional Learning Communities**

A major change to our implementation plan was the addition of dedicated time and coaching focused on RTI in PLCs. As Karin put it, the purpose of PLC is to get people together to collaborate about teaching and learning. "The more minds the better. The whole point of PLC is that we don't teach in isolation" (Shim, 2014).

All teachers interviewed referred to the collaboration that took place in PLCs. Marcus emphasized the importance of time in the process of collaboration, "The [professional learning community] gave us time to collaborate and plan and make our groups. Time is always necessary to undertake things to have a focus" (Nakamura, 2014). Karin also noted the importance of time for implementing the RTI processes, "PLC time is very important and [RTI] does take a lot of planning, and it does take a lot of collaboration in order for it to be successful. So I feel very fortunate we are given that time" (Shim, 2014).

Valerie noted the importance of trust amongst her team of collaborators. She worked closely with her educational assistants and her co-teacher outside our formal PLC meetings to develop interventions and progress monitoring systems for two of the lowest performing groups in our system. "I mean we're a team and...you just, you have to have

trust in each other and respect for each other and you have to listen to each other so, collaboration is really, really important” (Bosworth, 2014).

Hord & Sommers, (2009) identify trust amongst PLC members as one of the supportive conditions that are essential for a PLC. They posit, when teachers trust each other, they share, help each other, and create possibilities so that the organization as a whole will think more creatively and share information more readily. Trust is the foundation for the collegial learning and community building that is needed in order for PLCs to work.

Karin described at length the trust and relationships established amongst the first grade teachers in PLC, providing insight to their unique team dynamic and perspective about their "Walk to Learn" intervention model. "And I think maybe that's why our walk to learn from day one, we feel, we feel was successful because of the amount of sharing and just the way we work together. We're like a big puzzle, each one has a piece and we just fit. And we value each other's ideas and opinions. I think we all bring things to the table and that's why we find success, because we all share" (Shim, 2014).

Karin also shared her perspective about being flexible. "If you notice, we're very flexible. I mean you can change something like two minutes before and I'm going to be okay, we'll do it" (Shim, 2014). When asked about times when we disagreed about some aspects of the interventions, such as what skills to target for our lowest groups of students, she responded, "There's no hurt or ill feelings because we all know that it's for the better of the students. It's about what we need to do —that RTI was to focus on specific skills. So we move on and we try our best and we're not perfect. I mean we all

know we need to learn more, we need to grow more, we need to improve more and the only way we're going to do that is by trying and making mistakes" (Shim, 2014).

### **Data-Based Decision Making**

Karin also shared her thoughts about her grade levels approach to decision-making. "We do everything together and even when it comes to decision-making. It's always a team. It's always four of us you know. Sometimes our GLC might make an executive decision, but we trust that person that you know, that they're going to make the right decision" (Shim, 2014).

Valerie offered a different perspective on decision-making. Three of the teachers working with the highest performing groups in our model delivered interventions without assistance from other teachers or educational assistants. In contrast, Valerie was responsible for coordinating the interventions for the tier three students and delivered interventions with her co-teaching partner for the targeted tier two group. The intervention groups happened simultaneously, so Valerie had to find creative ways to collaborate with her educational assistant delivering instruction in the other group she was supervising. "Between me going this way and her going that way, we're talking because it's so important to get what happened in her group and how they were doing today and how did they do when they were with me to make decisions because we can't just wait for that. It's happening all the time" (Bosworth, 2014).

I asked Valerie to elaborate on her method of collaboration with her educational assistants and she said, "You can't really do it without collaborating on the fly because decisions have to be made. I mean, when you're developing something new, decisions have to be made that day" (Bosworth, 2014). She noted the importance of reflection in

her educational practice. “Reflection in action is what I’m doing everyday as I’m doing it. What does this kid need now and where can I get it and how can I deliver it. Reflection on action is when we sit down and collaborate with the data and try to figure out where do we go? I like that because it really works” (Bosworth, 2014).

Valerie shared her shift in perception about data in the RTI model and how that shift occurred. “So it was jumping in, it was diving in and I maybe am surprised that I love it so much. You know, because of all that data icky data stuff. Data is not my favorite thing but I am seeing how critical it is when you have targeted instruction” (Bosworth, 2014). Valerie described how she distributed the data collection responsibilities with her educational assistants Judi and Kris. “There was Judi willing to do a lot of the assessment and Kris was also willing to do it and crunch the numbers. Then we would look at the data and make some decisions, collaboratively. So I’m liking it, I think mostly because I get to do the practice part. But you know that’s the best place for me because I’m the one that is making connection between the students and the instruction. Judi and Kris aren’t. They’re taking the data on how well it’s working, but I’m the one that actually does the decision making part about the student learning” (Bosworth, 2014).

Valerie elaborated on the importance of matching the assessment to the skill being targeted, “If the assessment doesn’t match, or if the instruction doesn’t match, then we got to keep thinking and revising and figuring out what we’re going to do. You know, I think that’s different than when you’re doing a literature class or doing something else, but when you’re really targeting on something, you have to have the data and so the



assessment has to match. And I think that's one of the areas that we're trying to figure out a lot" (Bosworth, 2014).

This led Valerie to discuss some of the challenges they experienced with decision-making for students when the intervention didn't seem to be working as effectively as they hoped. "I think we're just not real clear right now on what we need to do for tier two in grade 1. We're just kind of really fishing. But that's the only way it can be done because there's nothing out there that tells us what to do so we're just using our judgment and looking at the data and stuff like that" (Bosworth, 2014).

### **Progress Monitoring**

Some teachers brought up concerns about the time commitment needed for progress monitoring at our last PLC meeting in December. In the RTI implementation plan, progress monitoring was a key area that we focused on because it did not happen consistently or at all in the past. Valerie commented on the importance of progress monitoring data to make decisions in a RTI system. "It's data driven, right and if you don't have time to look at and analyze the data then you don't have change" (Bosworth, 2014).

Karin stated, "There was a lot of focus on progress monitoring. So we really need that data to support or give evidence that what we are doing is for the best for our students and it is moving them up and helping them to achieve to be proficient" (Shim, 2014). Karin also shared her perspectives about analyzing data and how experience matters. "I think if [teachers] don't know what to do with it, the scores, then it's not going to be meaningful. I mean they could give the running record and you could get the

accuracy rate, but we have to analyze every error. Was the error because of the meaning, structure, or visual breakdowns? I have that background in Reading Recovery and in analyzing running records. That's why I see the error analysis as important where if I didn't have this background, I would be like, I don't want to do it" (Shim, 2014).

Marcus raised his personal concern about the use of the progress monitoring scores. "I guess just the concern is with the progress monitoring is how I felt a lot of pressure seeing their scores every two weeks. So, my concern is about those kinds of scores being tied into how you're evaluated. I mean I don't take it too personally. I mean it's good because you can see the progress, but sometimes it makes you nervous when you don't see as much progress as you like" (Nakamura, 2014).

## CHAPTER 7: REFLECTIVE ANALYSIS

This study, focused on the behaviors and perceptions of the first grade teachers in our RTI system to attempt to understand how they translated RTI theory to practice in order to improve learning outcomes for students. The details from the action research phase of implementation coupled with teacher interviews culminated in a detailed account of the multiple facets of RTI implementation from the teachers' perspective.

The PLC framework served as the primary mechanism for change in this study. There was a consensus among the teachers interviewed that the PLC time provided was valuable to them and that it fostered collaboration. The time provided in PLC along with the strong relational trust among the first grade team created a favorable context for collaborative decision making, where teachers engaged with each other fully in the data collection and decision making processes. All of the teachers interviewed referred to the importance of time to collaborate and make decisions.

RTI requires an organizational structure, like that of a PLC, to make it possible for collaborative teams of teachers to review outcome data and make intervention decisions (Burns, Riley-Tillman, & VanDerHeyden, 2012). The PLC provided an organizational and cultural structure for our first grade team to engage with each other in an environment characterized by peer support, trust, relational trust, and respect. Two teachers interviewed commented specifically on how they viewed the members of the PLC as equals and described how they valued the opinions and expertise of others on the grade level team. In her interview, Karin emphasized the importance of the trust that existed among the members of first grade teacher team in their ability to make collaborative, data-based decisions.

The developmental aspect of this study allowed participants to explore creative ways to solve problems that occurred during implementation. When Valerie needed more time to collaborate with her educational assistants, she led the creation of an additional PLC. She began meeting weekly with her educational assistants in PLC initially to organize the weekly progress monitoring assessments. By the end of October, Valerie began facilitating weekly data analysis and decision making for instruction. She continued these practices in her PLC throughout the study.

The qualitative nature of my research design also allowed me to change course when I mistakenly advocated in favor of a prescribed approach to documenting interventions with teachers on my team. Throughout the study, the first grade teachers were encouraged to use their professional judgment and question the research activities presented to them should the need arise. During our first PLC in October, Karin questioned my idea of having them write down their intervention plans in a scripted format. As a result of our conversation, I concluded that it was not in the best interest of the group to pursue the idea of creating scripted interventions, and instead I focused on supporting the teachers to select research-based strategies that they could use as part of their targeted instruction.

The interviews shed more light on teacher perspectives about scripted interventions. Valerie described her experience with scripted curriculum. “In my early days somebody would hand me a script—I mean really there’s been scripted curriculum out there forever. So you got your actual little book and you read it and you ask the question, but you can’t do that with RTI. It’s just—it’s not in the book. You could have a page of possibilities

but you have to interpret those possibilities in a way that translates to action” (Bosworth, 2014).

She elaborated further by describing her experiences working with her educational assistant to plan and deliver instruction for their student who was not responding to the standard-protocol group instruction. “There’s a sense where every couple of weeks I have a script for our [tier three student] so that Kris does not need to think. She just needs to know what to put on and when and what to put on when. So [Kris] has a script for an alternate curriculum which I update every couple of weeks” (Bosworth, 2014).

Valerie also offered her ideas for when to use scripted interventions. “There are some people that are going to want and need the script. But I prefer to start looking at more practitioners that can do it on the spot, be reflective practitioners. I think we need to have more of those, but you can always have the—ones that need the script you know, supporting you. Like Kris is a good example, she’s got the script” (Bosworth, 2014).

Valerie and Karin’s perspectives about interventions led me to gain a better understanding of alternative ways in which scripted interventions can be integrated into our RTI model in the future. For example, scripted interventions may be better suited for staff without a teaching degree or background, such as tutors and educational assistants, because these staff members should not be expected to make instructional decisions or adjustments. Teachers, on the other hand, may be given the option of utilizing a scripted intervention or developing an intervention plan that utilizes research-based strategies that gives them the freedom to customize it to the needs of the students in their group. Hall (2014) indicates that discouraging teachers from differentiating scripted intervention

programs is a major RTI pitfall that schools should avoid because interventions must be differentiated for individual students. Her perspective reflects a preference for individualizing research-based interventions, commonly known as a problem-solving protocol, that is customized to match the profile of a student's strengths and limitations (Wright, 2007). The message here is that providing teachers with options for delivering interventions empowers the teacher to decide whether they wanted to use prescriptive or differentiated approaches to delivering interventions and may lead to increased buy-in from teachers delivering instruction in a RTI model.

### **Building Capacity for Implementation**

Fixsen et al. (2007) drew the tentative conclusion that the “findings of educational high-quality research are not being applied in sufficient quantity to have a demonstrable impact on human services, and they have not provided the intended benefits to consumers and communities” (p. 4). In order to address this issue, administrators should consider integrating ongoing professional development and developmental evaluation approaches to find solutions to implementation problems in an adaptive and useful way. Karin describes her perspectives on what this might look like in practice. “In an ideal world, [professional development] would not be something like a new training, but continuing contact. Continuing contact is when trainers will come back periodically and take us further for the next steps. By checking on what’s been going on, [if there’s] any problems; you know what’s working, what’s not working and hey, here’s some new stuff for you to try so let’s continue on this program and let’s keep building, building, building” (Shim, 2014).

The coaching support provided to teachers can be framed in terms of a PLC framework or a developmental evaluation approach. In both frameworks, the role of a coach is to stimulate deeper thinking amongst participants. In addition, the coach should participate in making decisions with team members in a context of ongoing development. The provision of coaching over an extended period of time is one of the key features of teacher learning and professional development that we know has an impact on student achievement (Hattie, 2012). Educational leaders should consider providing coaching in a structured setting to support implementation and build capacity among teachers within the school to assume collective responsibility for improving adult and student learning (Hattie, 2012).

John Hattie, Professor and Director of the Melbourne Education Research Institute at the University of Melbourne, Australia, published his synthesized results of over 800 meta-analyses of 52,637 studies conducted over the past 15 years which represents the largest collection of evidence-based research into what works in schools to improve learning (Hattie, 2012). Hattie's (2012), conclusions are not packaged as recipe for success. He asserts that, "there is no recipe, no professional development set of worksheets, no new teacher method, and no band-aid remedy" for achieving educational excellence. Instead, he concludes that, "teachers are among the most powerful influences on learning", and he further states that, "the greatest source of variance in our systems relates to teachers" both between teachers and between student and teacher (Hattie, 2012, p. 19, p. 15). Hattie (2012) concludes that teachers' engagement in critical reflection in light of evidence about their teaching was a significant factor towards achieving excellence in education.

Reflection is a key tenet of both action research and PLCs. In the PLC setting, reflective practice is embedded in our collegial learning as we consistently pose questions focused on student learning and achievement. In the action research process, the inquiry process depends on alternating phases of action and reflection, where participants are invited to challenge their prior beliefs and reconstruct what they know leading to the generation of new interpretations and perspectives (Reason & Bradbury, 2006).

It is critical that educators view themselves as professional practitioners who are active consumers of knowledge. The preferred epistemology of practice is one in which technical problem solving is placed within the broader context of reflective inquiry (Schon, 1983). This is in contrast to the traditional epistemological views of a teacher as an executive technician, one who receives knowledge and is expected to apply it without necessarily understanding or engaging with the knowledge (Furlong, 2014). Educational leaders, too, must take this perspective of practice into consideration if they want to create systems that are focused on continuous improvement and results. Karin asserted, “There is always room for improvement. That’s the reflection right? The reflection will help us strengthen [RTI], making it better” (Shim, 2014).

My action research approach was qualitative in nature so it did not involve testing of hypotheses and research questions based on theory. In action research, notions of researcher objectivity and distance are rejected (Reason & Bradbury, 2006). This aligns with the epistemological assumption that when conducting a qualitative study, researchers “try to get as close as possible to the participants being studied” so that “subjective evidence is assembled based on individual views” (Creswell, 2013).



As an action research study situated in one elementary school in Hawai'i, the research may not be generalizable to other schools; however, the study findings will contribute to the growing understanding about how teachers implement interventions within a RTI framework and can inform other schools attempting to implement this framework at their school.

The number of teachers who participated may also have influenced the findings. Three out of five teachers on the grade level participated in the interviews. Perspectives presented from the interviews are from the majority of the grade level, but do not reflect the perspectives of all the teachers who participated in the study.

### **Recommendations for Future Studies**

By the end of the first phase of implementation, Valerie was able to create data collection and review routines, but she reported that she still needed to work on how to intensify instruction for students who are not responding to the intervention. Our grade level team might consider extending our action research into the following academic year, with a more specific focus on improving our intervention and instructional strategies for our lowest performing students.

Valerie also reported difficulty in finding the best progress monitoring assessment to match the intervention skill that the group was targeting. Karin discussed ways to analyze the errors students made on assessments in order to better pinpoint the students weak areas in reading. This suggests that future action research could focus on exploring a broader range of assessments and error analysis practices to further develop the assessment system within our current RTI model.

As part of the action research on assessment, our school could also add a second stage to our universal screening process. Findings from research about the capacity of one-stage screening measures', like our universal screening assessments, show unacceptable rates of false positives in the early grades (Fuchs, Fuchs, & Compton, 2012). Schools can mitigate the potential negative effects of false positives (or students who appear at risk but are not) in a RTI system by implanting a two-stage screening process for our younger students. Fuchs, Fuchs, & Compton (2012) recommend that the first stage of the screening process exclude children clearly not at risk by setting a cut point that is sufficiently high enough to miss only a small number of at risk students. During the second stage of screening, students who failed the first-stage screen should be provided with an additional assessment that is more thorough.

Smith, Schmidt, Edelen-Smith, & Cook (2013) discuss the need for research on identifying specific approaches for researchers and practitioners to work together to carry out collaborative research as a way to link research and practice. They explore ways to bridge the complementary notions of rigor and relevance in research. I agree that researchers and practitioners should continue to explore ways to collaborate in order to purposefully link research and practice. Researchers and practitioners need to "step outside the box" together when considering how to approach research in a way that focuses on the implementation of practices validated by rigorous research conducted in nuanced, real-world contexts.

## **Conclusion**

The teachers' commitment made all the difference to developing the processes needed to fulfill our implementation plan. Their positive perception of RTI fueled our

collective action as implementation progressed. This is summed up in the statement of two participants. “I really see the value of RTI, I mean that kind of model especially with the primary grades focusing on reading” (Nakamura, 2014). “There will always be a place for RTI, to target students’ needs at their level” (Shim, 2014).

This study was focused on the teachers in our RTI system because they are the people in our schools who are faced with solving the dilemmas of student learning on a daily basis. The teachers are the ones who are tasked with the ongoing decision-making that must be made before, during, and after instruction in order to ensure high quality student learning takes place. The teachers are the ones who wear the hats of evaluator, leader, colleague, curriculum designer, director, and advocate for student learning. Teachers are the ones who make the day-to-day instructional decisions for our students in their real world context.

It is important to remember that in order for best practices to reach our students, we must focus on supporting and empowering the teachers to utilize them in their classroom. It is my hope, that as we continue to build bridges between research and practice we will ensure that our teachers will be able to make better decisions and will be better equipped to solve the dilemmas of student learning as it happens in their real world context.

## References

- Buffum, A., Mattos, M., & Weber, C. (2009). *Pyramid response to intervention RTI, professional learning communities, and how to respond when kids don't learn*. Bloomington, IN: Solution Tree Press.
- Brown-Chisdey, R., Steege, M. (2005). *Response to intervention principles and strategies for effective practice*. New York, NY: The Guilford Press.
- Burns, M., Riley-Tillman, T., & VanDerHeyden, A. (2012). *RTI applications volume 1 academic and behavioral interventions*. New York, NY: The Guilford Press.
- Cook, B.G., & Odom, S. L. (2013). Evidence based practices and implementation science in special education. *Exceptional Children*, 79 (2), 135-144.
- Creswell, J. (2011). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage Publications, Inc.
- DuFour, R., & Eaker, R. (1998). *Professional learning communities at work best practices for enhancing student achievement*. Bloomington, IN: National Educational Service.
- Fixen, D., Naoom, S., Blase, K., & Wallace, F. (2007). Implementation: The missing link between research and ractice. *APSAC Advisor*, 19 (1&2), 4-11.
- Fuchs, L.S., & Fuchs, D. (2004). *What is scientifically based research on progress monitoring?* Washington, DC: National Center on Progress Monitoring, American Institute for Research, Office of Special Education Programs.
- Fuchs, L.S., & Fuchs, D. (2007). *Using CBM for progress monitoring in written expression and spelling*. Washington, DC: National Center on Progress Monitoring, American Institute for Research, Office of Special Education Programs.

- Fuchs, D., Fuchs, L.S., & Compton, D. (2012). Smart RTI: A next generation approach to multilevel prevention. *Exceptional Children*, 78 (3), 263-279.
- Furlong, J. (2014). Why research matters: Lessons from the BERA-RSA inquiry. *The Research Journey: Triumphs and Tribulations on the Road to Research*. Lecture conducted from Oxford Brookes University, Oxford, UK.
- Gersten, R. Compton, D. Connor, C.M., Dimino, J., Santoro, L., Linan-Thompson, S., & Tilly, W.D. (2008). *Assisting students struggling with reading: Reading to Intervention and multi-tier intervention for reading in the primary grades. A practice guide*. Washington, DC: National Center for Educational Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc/publications/practiceguides/>.
- Gibbs, J. (2001). *Tribes TLC a new way of learning and being together*. Windsor, CA: CenterSource Systems, LLC.
- Hall, S. (n.d.) Create your implementation blueprint: avoiding implementation pitfalls. *Rtinetwork.org*. Retrieved from
- Hardcastle, B. & Justice, K. (2006). *RTI and the classroom teacher a guide for fostering teacher buy-in and supporting the intervention process*. Horsham, PA: LRP Publications.
- Harvey, S. & Daniels, H. (2009). *Comprehension and collaboration: Inquiry circles in action*. Portsmouth, NH: Heineman.
- Harn, B., Parisi, D., Stoolmiller, M. (2013). Balancing fidelity with flexibility and fit: What do we really know about fidelity of implementation in schools? *Exceptional Children*, 79 (2), 181-193.

- Herr, K. & Anderson, G. (2005). *The action research dissertation a guide for students and faculty*. Thousand Oaks, CA: Sage Publications.
- Hord, S. & Sommers, W. (2008). *Leading professional learning communities voices from research and practice*. Thousand Oaks, CA: Corwin Press.
- Maxwell, J. (2013). *Qualitative research design an interactive approach*. Thousand Oaks, CA: Sage Publications, Inc.
- McDonald, M. (2013). The role of the school psychologist in RTI: Linking assessment to intervention. *NASP Communique*, 42 (2), 8-9.
- McNiff, J. & Whitehead, J. (2010). *You and your action research project 3<sup>rd</sup> Edition*. New York, NY: Routledge.
- Merriam, S. (2009). *Qualitative research a guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- National Center on Response to Intervention. (2010). *Essential components of RTI – A closer look at response to intervention*. Washington, DC: U.S. Department of Education, Office of Special Education Programs, National Center on Response to Intervention.
- National Center on Response to Intervention. (2013). *Progress monitoring brief #1: Common progress monitoring graph omissions: planning and practice*. Washington, DC: U.S. Department of Education, Office of Special Education Programs, National Center on Response to Intervention.
- National Center on Response to Intervention. (2012). *RTI implementer series: Module 3: multi-level prevention system – Training manual*. Washington, DC: U.S. Department of Education, Office of Special Education Programs, National Center on Response to Intervention.

- Patton, M. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage Publications, Inc.
- Patton, M. (2011). *Developmental evaluation applying complexity concepts to enhance innovation and use*. New York, NY: The Guilford Press.
- Pearson (2012). *Aimsweb introductory guide*. Bloomington, MN: NCS Pearson Inc.
- Hawaii Department of Education. (2012). *2012 Comprehensive student support system introductory guide*. Honolulu, HI: Department of Education.
- Herr, K., & Anderson, G. (2005). *The action research dissertation*. Thousand Oaks, CA: Sage Publications, Inc.
- Reason, P. & Bradbury, H. (2006). *Handbook of action research*. Thousand Oaks, CA: Sage Publications, Inc.
- Schon, D. (1983). *The reflective practitioner: How professionals think in action*. USA: Basic Books Inc.
- Smith, G.J., Schmidt M.M., Edelen-Smith P.J., & Cook, B.G. (2013). Pasteur's quadrant as the bridge linking rigor with relevance. *Exceptional Children: 79*(2), 147-161.
- Stevens, D & Cooper, J. (2009). *Journal keeping how to use reflective writing for learning, teaching, professional insight, and positive change*. Sterling, VA: Stylus Publishing.
- Willis, J., Inman, D., & Valenti, R. (2010). *Completing a professional practice dissertation*. Charlotte, NC: Information Age Publishing.
- Wright, J. (2007). *RTI toolkit a practical guide for schools*. Port Chester, NY: Dude Publishing.
- Wright, J. (2013). *RTI toolkit a practical guide for schools implementing response to intervention: An introduction for CAST center consultants*. [http://www.interventioncentral.org/hi\\_doe](http://www.interventioncentral.org/hi_doe)

## APPENDIX A: INTERVENTION PLAN

Case Information		
<b>What to Write:</b> Record the important case information, including student, person delivering the intervention, date of plan, start and end dates for the intervention plan, and the total number of instructional weeks that the intervention will run.		
Interventionist(s):	Grade Level:	Date Intervention Plan Was Written:
Date Intervention is to Start:	Date Intervention is to End:	Total Number of Intervention Weeks:
Duration of Intervention:	Frequency of Intervention (per week)	Group size:
Skill(s) targeted:		
Student(s)/Teacher(s):		

Intervention
<b>What to Write:</b> Write a brief description of the intervention(s) to be used with this student. TIP: If you have a script for this intervention, you can just write its name here and attach the script to this sheet.

Materials
<b>What to Write:</b> Jot down materials (e.g., flashcards) or resources (e.g., Internet-connected computer) needed to carry out this intervention.

Progress-Monitoring Plan	
<b>What to Write:</b> Select a method to monitor student progress on this intervention. For the method selected, record what type of data is to be used, enter student baseline (starting-point) information, calculate an intervention outcome goal, and note how frequently you plan to monitor the intervention. Tip: Several ideas for classroom data collection appear on the right side of this table.	
Type of Data Used to Monitor:	<div style="border: 1px solid black; padding: 5px;"> <b>Ideas for Intervention Progress-Monitoring</b>             Curriculum-based measurement            Behavior report card            Behavior checklist         </div>
Baseline:	
Outcome Goal:	
How often will data be collected? (e.g., daily, every other day, weekly):	

(Adapted with permission from Jim Wright)