A middle school's response to intervention: SuccessMaker for math remediation

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A MIDDLE SCHOOL’S RESPONSE TO INTERVENTION: SUCCESSMAKER FOR MATH REMEDIATION

A Thesis

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Masters of Natural Science in The Interdepartmental Program in Natural Sciences

by
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Abstract

This thesis discusses the results obtained upon the implementation of an online math remediation program, SuccessMaker, as a component of Response to Intervention (RTI). The objective was to increase the content knowledge of students struggling in math. Woodlawn Middle chose a targeted group of students considered “at risk” in hopes of preparing them for the Louisiana Educational Assessment Program (LEAP).

Yearly gains in SuccessMaker were compared to achievement levels on the math section of the LEAP test. Results showed that the more time spent on SuccessMaker resulted in higher gains in grade level. The gains in SuccessMaker did not necessarily translate to increasing the passing rate on the math component of the LEAP test.

In terms of an RTI component, SuccessMaker worked well as a remediation tool because teachers were able to meet the needs of multiple students at a time. The intervention raised the math skills and consequently, the grade levels of many students. Hence, suggestions to optimize the implementation of SuccessMaker are given in detail to Pearson, school administrators and teachers.
Chapter 1: Introduction

Figure 1: "Math...Cool Kids" T-Shirt (Café Press, 2013)

It would be nice if all students followed the mantra of this t-shirt. In order to be considered “cool”, all students would have to do is math. However, doing math is easier said than done for some students. Math is “highly proceduralized and continually builds on previous knowledge; therefore, early deficits have enduring and devastating effects on later learning” (U.S. Department of Health and Human Services, 2001). This situation occurs often in secondary mathematics classes. Teachers have a certain number of students each year that have “fallen through the cracks” and are enrolled in their courses unprepared for the grade level. The student is not equipped for the present grade level of mathematics and is on track to fail the current year’s standardized test. A student in this situation typically lacks the self-motivation to catch up to their current grade level and is in a classroom room where very little learning is taking place. The school year for that student will essentially be wasted if someone or something is not there to help them.

Helping a student who is multiple years behind in curriculum is a daunting task for teachers. Finding time to work with students one-on-one or in a small group can be difficult with a classroom full of students. The solution, for many years, has been differentiated instruction.
Differentiated instruction is defined as the process of designing lesson plans that meet the needs of the entire range of learners in the classroom (Buffum, Mattos, Weber, 206). Examples of differentiated instruction can include, but are not limited to, “grouping practices, teaching methods, varied assignments and varied materials chosen based on student skill levels, interest levels and learning preferences” (Buffum, Mattos, Weber, 206). If a teacher has a student who is multiple years behind in a certain course they can “customize” coursework in order to meet the student at their current level and bring them up to speed. The “one size fits all” model of teaching is no longer in use and the student is now the focus of the lesson that is being taught. Teachers must now find the perfect way to teach every concept to every student regardless of their current content level.

Differentiated instruction is a wonderful concept in theory. However, making sure that every student learns to his or her maximum capacity can be overwhelming for a teacher. Consider this, every two years the United States releases The Nation’s Report Card through the National Center for Education Statistics. In 2011, a sample of 175,200 8th graders participated in the study. The results showed that 73% of 8th graders were performing at or above a Basic level. If 73% of students are at Basic or above, the remaining 27% of students fall into the category of Approaching Basic or Unsatisfactory. *This thesis will focus on the attempts that one middle school made at improving the overall achievement scores of students who fall into the bottom 27%.*

Many times, these students are overlooked in the classroom because they are quiet and fly below the radar. They don’t speak much in the classroom or answer questions because often times they don’t have the answer and are afraid of being criticized by peers for incorrect
answers. Year after year of missing viable instruction leads to lack of content knowledge and a feeling of hopelessness when it comes to being able to succeed in the classroom. On the other hand, many students in the bottom 27% tend to act out behaviorally in the classroom in order to gain attention. They often make silly remarks about others or the lesson in order to detract from the fact that they know very little about what is being taught. The result of poor behavior choices is that the student is often removed from the learning environment and, ultimately, falls further behind.

As a result of falling multiple years behind, students can be socially promoted to the appropriate grade level based on their age or even be referred for special education testing to identify potential learning disabilities. While it is important for students to be in their correct grade level, social promotion neglects the fact that students are missing content in multiple subjects and will be placed in a classroom where they are expected to be on track. If a student is found to have a specific learning disability, they are usually given accommodations in the classroom, such as extended time for assignments, modified assignments, or test read aloud, in an effort to help them succeed. However, neither of these “remedies” addresses the fact that students in the bottom 27% need the skills that are missing in order to be successful. Worst of all, students who fall multiple years behind are at risk for dropping out of school.

Educators need a way to help students fill in their gaps in knowledge without detracting from the core content that is being taught. Often times, differentiated instruction is used to make a new curriculum or course for a student rather than supplement their core content with remediation. That is where following a Response to Intervention (RTI) plan comes into play. Response to Intervention is the practice of 1) providing high-quality instruction and interventions
that match students’ needs and 2) using students’ learning rate over time and level of performance to make important education decisions (Buffum, Mattos, Webber, 14). RTI was designed as a preventative framework using student data from screening measures to identify students’ at-risk status for learning and behavioral difficulties and provide immediate instructional supports (National Center on Response to Intervention, 2013).

This thesis follows a specific group of 8th grade students who scored Unsatisfactory or Approaching Basic on the 2012 iLEAP test. These students received their core curriculum for mathematics in traditional math classes, but were also given math remediation on an online program called SuccessMaker. The students worked in either the homeroom or pull-out group to complete thirty minutes of math intervention. The first few sessions of SuccessMaker are known as the initial placement period. The placement is based on the grade-level with which the student is most knowledgeable. Most students in this targeted group tested approximately 3-4 grade levels below the age-appropriate grade level. 20 out of 35 students tested at a grade level of 5.29 (5th grade, 2nd month, 27th day of school), which is the lowest grade level that an 8th grader is assigned to by the program. SuccessMaker is “powerful technology that pinpoints the specific areas where a student struggles and focuses on addressing areas of difficulty while advancing students through areas where they show content mastery” (Pearson). This program is designed to be a multi-year remediation program. Therefore, students in 6th and 7th grade also participated in the program with similar guidelines. These two groups of students will continue to use SuccessMaker in the subsequent school years.

The students started on SuccessMaker in late September, 2012 and continued to work on the program throughout the school year. SuccessMaker tracked the progress of students and
gave reliable feedback to teachers, the school, and district. Teachers used this data to determine whether or not a student needed to continue in SuccessMaker or move out of the program due to significant gains. One students’ lack of progress led to a School Building Level Committee (SBLC) meeting where the student was determined eligible for special education testing due to a lack of “gain” in the program.

Progress monitoring continued throughout the school year in an effort to move students to an achievement level of Basic or above on the LEAP test, Louisiana’s state standardized test for 4th and 8th graders. Though SuccessMaker is a multi-year remediation program for K-8 students, this school felt that it was necessary to give students from all three grade levels the opportunity to improve their content knowledge. As of May 21, 2013, the original 8th grade homeroom group had an average gain of 1.79 school years and the highest achieving student had a gain of 2.62 school years. The students, on an average, spent 52 hours and 56 minutes working on the program and achieved an average grade level of 7.31. Although only 6 out of the original 31 students passed the LEAP test with an acceptable achievement level, many of them made significant gains in their content knowledge according to SuccessMaker. However, it is worthwhile to keep in mind that this group of students were considered “at risk” in mathematics. Hence, one should not take a dim view of the 19 percent success rate, for this group, on the LEAP test.

This thesis will describe the importance of establishing a fruitful Response to Intervention program in middle schools and will discuss the triumphs and challenges that can take place. The components of a successful RTI program will be discussed with given examples. An important component of RTI is choosing research-based interventions. Buffum describes
research-based interventions as “curriculum and educational interventions that have been scientifically proven to be effective for most students. Thus, this thesis will focus on the use of SuccessMaker for mathematics remediation. Data results from SuccessMaker will be given and compared with results from both the 2013 LEAP and the 2012 iLEAP. Suggestions will be made for improving the current RTI program at the middle school level as well as suggestions for Pearson, the provider of SuccessMaker.

One objective of this thesis is to shed light on various aspects of Response to Intervention programs at the middle school level. Another objective is to bring hope to secondary schools that even the lowest achieving students can be successful with the right tools. By establishing a culture of support and implementing the RTI plan with fidelity, there will be positive results for students. Teachers must keep in mind that passing the test is not of the utmost importance in our education system. Students must be encouraged and rewarded to try their best every day to reach their own maximum potential.
Chapter 2: Background Information

“The Individuals with Disabilities Education Act (IDEA) is the primary federal program that authorizes state and local aid for special education and related services for children with disabilities” (State of New Jersey Department of Education). IDEA 2004 was signed into law in December, 2004 in an effort to update and regulate the current laws relating to special education. One key area of focus was in revising regulation related to students qualifying for special education evaluations. Prior to IDEA 2004, “educators mistakenly placed too many students in special education” (Buffum, Mattos, Weber, 20). In addition, educators took a reactive approach to identification due to the use of the discrepancy model. The discrepancy model essentially required that students fail multiple times before qualifying for a special education referral.

With the revised regulations, “When determining whether a child has a specific learning disability, a school district is not required to take into consideration whether a child has a severe discrepancy between achievement and intellectual ability in oral expression, basic reading skill, reading comprehension, mathematical expression, or basic mathematical reasoning. A school district may use a process that determines if the child responds to scientific, research-based intervention as a part of the evaluation procedures”(IDEA 2004). “The ultimate decision to qualify a child for special education should be made by a team of stakeholders only after high-quality interventions have been attempted and frequently monitored” (Buffum, Mattos, Weber, 19).

In an effort to reduce the number of students labeled as special education, a framework was put into place using some components that have been around for decades. Although this thesis does not necessarily focus on Response to Intervention within Special Education, the roots of RTI are deeply laced within Special Education laws and regulations. Many of the components
of a well-planned RTI framework, such as early detection, data-based decision making and progress monitoring, came from IDEA 2004. These best practices are useful for providing a high quality education to all students, regardless of any label that they may have.

Pieces of the now commonly recognized components were developed as far back as 1970 with Dr. Stanley Deno’s cascade model (Buffum, Mattos, Weber, 16). According to the RTI Action Network, Dr. Deno is well-known for his work focusing on the failure of students to develop basic skills in reading, writing, and arithmetic. His cascade model has been used to describe the types of environments appropriate for students that qualify for Special Education services. “Deno’s cascade model outlines five progressively less restrictive environments in which to educate students with disabilities: home, special schools, self-contained classrooms, general education classrooms with pull-out support, and general education classrooms with full inclusion” (Buffum, Mattos, Weber, 16). Pull-out support and inclusion models are used frequently in schools today in order to meet Federal regulations for Special Education and are being used to serve the general populations of students as well. Deno’s environments can be seen in traditional RTI frameworks when describing the environment those interventions should take place.

Along with the least restrictive environments, Deno is credited with developing curriculum-based measures (CBMs). “Curriculum-Based Measurement (CBM) is a method teachers use to find out how students are progressing in basic academic areas such as math, reading, writing, and spelling” (National Center on Student Progress Monitoring). Many teachers now refer to CBMs as “formative assessments” and use them periodically to measure student’s comprehension of a specific skill. A common nickname for a formative assessment is a “ticket-out-the-door”
(TOTD). A common best practice for general education teachers is use TOTD’s while teaching new material in order to gauge comprehension. The data produced by TOTD’s will guide the instruction in the classroom by allowing teachers know who understands and who does not. From there, a teacher can move at a faster pace, slower pace or remediate with a select group of students. The development of CBM’s by Dr. Deno paved the way for progress monitoring within an RTI framework. The use of CBM’s allows teachers to take a proactive approach to student learning rather than a reactive approach. This basic building block is a key to the success or failure of an RTI program. RTI can mean the difference between student success through a systematic framework or repeated failure due to reactiveness.
Chapter 3: Response to Intervention

3.1 Introduction

Before the beginning of each school year teachers have a critical job to employ which is planning. Using the guidance of a curriculum, teachers plan out their calendars by the day, week, month and semester to ensure that each critical piece of information will be covered. With 45 states adopting the Common Core State Standards (CCSS), teachers will be making adjustments to the material that they traditionally teach. Many standards in the mathematics curriculum has been shifted down into lower grades, meaning students will be responsible for comprehending more difficult material at a younger age. The CCSS will, however, narrow the scope of information that is to be taught. According to Achievethecore.org, rather than racing to cover topics in today’s mile-wide, inch-deep curriculum, teachers use the power of the eraser and significantly narrow and deepen the way time and energy is spent in the math classroom. “The standards stress not only procedural skill but also conceptual understanding, to make sure students are learning and absorbing the critical information they need to succeed at higher levels, rather than the current practices by which many students learn enough to get by on the next test, but forget it shortly thereafter, only to review again the following year” (Common Core State Standards Initiative).

According to the Common Core State Standards Initiative, “the standards are designed to ensure that students graduating from high school are prepared to enter credit bearing entry courses in two or four year college programs or enter the workforce. The standards are evidence-based, aligned with college and work expectations, include rigorous content and skills, and are informed by other top performing countries.” The Common Core sets high standards for all students but realizes that some students will require different supports in order to meet these
standards (Council of Chief State School Officers, 2013). Teachers will be responsible for providing the “different supports” that students will need to stay on track with the CCSS. As with previous curriculums, teachers will be faced with the challenge of making sure all students have the opportunity to become successful. Research has shown that people learn at different rates and in different modalities, therefore teachers will need to be creative, now more than ever, in order to accommodate for the new curriculum standards.

3.2 Response to Intervention Defined

“RTI is a multi-level prevention system designed to allow school staff to instruct all students in accordance with their level of educational need. Response to intervention integrates assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavior problems. With RTI, schools identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student’s responsiveness, and identify students with learning disabilities.” (National Center on Response to Intervention, 2010, p.2). Most traditional classroom teachers participate in some form of RTI even if they are not aware of it. Working with a student one-on-one or in a small group, giving extended time on tests, allowing a student to complete an alternative assignment and differentiating instruction are all examples of techniques that teachers use to insure success for their students. All of these examples can be integrated into an RTI program. Response to Intervention is not intended to place more work on classroom teachers but instead is a framework in which teachers can monitor the progress that students are making and use that data to make informed decisions about future
instruction. RTI gives teachers an official process for documenting the hard work and effort that they put forth each school year.

Extensive research has been conducted on Response to Intervention with schools throughout the United States and the world. Most researchers will state that no two RTI programs are exactly the same. Most RTI manuals leave room for interpretation and creativity. The organization and implementation of an RTI program depends greatly on the resources that schools have at their disposal and the ways in which they choose to use them. A program in one school will not necessarily work for another for a number of reasons. That being stated, the development and implementation of an RTI program should be fluid and ever evolving to meet the needs of the participants.

3.3 Creating a Culture of Learning

Creating a positing learning environment and collective buy-in from the faculty is important in insuring a successful Response to Intervention plan. It is critical that all faculty members be well informed of the structure of the plan and understand all aspects in order to implement it. Teachers and administrators should meet in professional learning communities (PLC’s) frequently to discuss implementation, review data, make informed decisions and allow for changes. “When schools operate as professional learning communities, create a pyramid of interventions, and implement response to intervention, they create the opportunity for powerful change (Buffum, Mattos, Weber, 5).

Part of creating a culture of learning is ensuring that faculty members are trained and well versed in the framework of an RTI program. Professional developments should be used to
establish goals, discuss implementation, educate teachers on methods used and specific
intervention tools, as well as review data and make informed decisions. Professional
developments are also a great time to share in successes and make adjustments to the program
where necessary.

3.4 Need for Response to Intervention

In preparation for the CCSS, teachers should expect that a percentage of their students
will struggle with the rigorous format of the curriculum and the learning gaps that will be caused
due to the transition. In order to fill-in those learning gaps teachers will need a plan that can
accommodate remediation as well as maintain the current pace of the CCSS. A framework will
be needed for monitoring student progress and making data-based decisions. The key in making
sure each student reaches his or her own maximum potential lies in a well-developed and well-
implemented Response to Intervention (RTI) plan.

Because Mathematics is procedural based and builds upon prior learning, it is important
to intervene with at-risk students as early as possible. Research has shown that RTI programs
are more effective in elementary schools as opposed to secondary due to the fact that knowledge
gaps tend to be smaller in younger children. The sooner teachers can intervene and close those
knowledge gaps; the greater the chance students will have at being successful in the remainder of
their education. Common sense tells us that a student who is half a year behind in school will
have a much easier time catching up than one who is multiple years behind. That being said, as
teachers we never want to give up on our students. Even though the odds may be stacked against
the student, it is important to give children the opportunity to succeed. In Secondary schools,
measuring outcomes of an RTI plan can be difficult and disappointing if not viewed in the
correct light. Teachers must keep in mind that any growth shown by their students is an accomplishment.

The need for a Response to Intervention plan stems from special education regulations; however, RTI is intended for use by both traditional and special education teachers. Instead of using the discrepancy model for determining a student’s eligibility for special education (the discrepancy model requires that students fail multiple times before being referred for special education evaluations), an RTI process will provide reliable data that can be used. “Response to Intervention has become a vehicle for system reform because it provides a framework in which data can be relied on as the basis for making relative judgments (e.g., determining who needs help the most and how much they need) and for distributing instructional resources to promote the greatest good for the greatest number of students” (VanDerHeyden). “Again, RTI is not meant to supplement special education; rather, it tries to make the system of helping all students achieve more effective by intervening early and by diagnosing their specific needs more accurately” (Buffum, Mattos, Weber, 30). A Response to Intervention process will take students through levels, tiers and interventions, as needed, in order to ensure that each student reaches his or her own maximum potential.

3.5 Response to Intervention Tiers

Similar to positive behavior intervention and support (PBIS), RTI utilizes the tiered model of intervention to direct students through the necessary levels of the process. The levels are commonly referred to as Tier 1, Tier 2 and Tier 3. Figure 2 shows a model and explanation of each tier and its responsibilities. Tier 1, also known as a Level 1 Response, represents a well-established, core curriculum. All students, 100 percent, receive Tier 1 interventions through
traditional classroom instruction. The traditional instruction includes gifted and accelerated
coursed as well as special education courses for students that qualify. The National Center on
Response to Intervention defines primary prevention (Tier 1) as “high quality core instruction
that meets the needs of most students” and “it will be sufficient for at least 80 percent of
students.” “At Tier 1, considered the key component of tiered instruction, all students receive
instruction within an evidence-based, scientifically researched core program. Usually, the Tier 1
instructional program is synonymous with the core reading or math curriculum that is typically
aligned with state standards” (Shapiro). Teachers should frequently monitor student progress
through formative assessments to evaluate their instructional practices and adjust as needed. It is
important for teachers to meet within Professional Learning Communities to discuss teaching
strategies and share common formative assessments. Differentiated instruction is encouraged to
assist teachers in reaching students with various learning modalities.

![Diagram](image)

**Figure 2:** A comparison of the pyramid of interventions and response to intervention
models (Buffum, Mattos, Weber, 6)
As part of Tier 1, teachers will use universal screening tools to measure whether or not students are meeting the benchmarks set forth by the district or state. The tools used for screening can vary but are typically in the form of state-wide or district level assessments. In Louisiana Elementary and Middle Schools, students take the iLEAP or LEAP test as a benchmark assessment. Furthermore, the East Baton Rouge Parish School System has adopted an assessment tool called Edusoft that is given by English, math, science, and social studies teachers at the end of each curriculum unit. Within PLC’s, teachers must establish a minimum score in which students are to be considered “on track”. Students who fall below that score may be in need of a more intensive intervention. When students fall below a pre-established cut point on the screening tool, more in-depth testing or short-term progress monitoring may be conducted to more accurately predict which students are truly at risk for poor learning outcomes (National Center on Response to Intervention, 2010, p.5).

“While the foundation of a Pyramid Response to Intervention is a highly effective Tier 1 core program, it is virtually impossible for differentiated core instruction alone to meet the needs of every child. Therefore, a learning-centered school will systematically identify students in need of additional time and support and provide targeted interventions”(Buffum, Mattos, Weber, 88). Tier 2 Interventions, also known as a Level 2 Response, includes supplementary interventions put in place as a result of universal screening. Students who fall below the cut point on the screening tool will most likely move to a Tier 2 intervention.

According to Buffum, Mattos and Weber, students are placed in a Tier 2 intervention for one of two reasons: the student failed to learn (called a “failed learner”) or because the student failed to try (called an “intentional nonlearner”). In the case of the student who is a “failed
learner”, further screening should take place to determine specific skills that need targeting. Professional Learning Communities should convene to organize a plan for students in this category. “Failed Learner” can benefit from mandatory tutorials in which students receive a repeat of the daily lesson and/or mandatory homework help given during lunchtime or afterschool (Buffum, Mattos and Weber, 97). The “intentional nonlearner”, on the other hand, has chosen to opt out of learning. In this case potential interventions for these students include:

1. Mandatory study hall
2. Mandatory homework help
3. Frequent progress reports
4. Study-skills classes
5. Goal-setting and career planning support

Tier 2 Interventions plans should include a more intensive intervention in a small group setting. The National Center on Response to Intervention suggests that the intervention takes place for 10 to 15 weeks with sessions lasting 20-40 minutes. According to Fuchs, mathematics interventions at the Tier 2 (secondary prevention) level of a multi-tier prevention system must incorporate six instructional principles:

1. Instructional explicitness
2. Instructional design that eases the learning challenge
3. A strong conceptual basis for procedures that are taught
4. An emphasis on drill and practice
5. Cumulative review as part of drill and practice

6. Motivators to help students regulate their attention and behavior and to work hard.

Fuchs recommends going back to the basics and incorporating drill and practice into intervention sessions. The material being covered needs to be challenging yet attainable for students to comprehend. Teachers should spiral material and review on a continual basis to ensure that key concepts are being retained. Fuchs also recommends using effective tools to motivate students who typically avoid learning due to fear of failure. “Secondary intervention must incorporate systematic self-regulation and motivators, and for many students, tangible reinforcers are required” (Fuchs).

Because Tier 2 Interventions must take place in addition to traditional instruction, schools must be creative in finding time for planned interventions. Interventions can take place during lunch, recess, homeroom, physical education, elective class, and/or after school. Some schools may use intervention specialist hired for the specific purpose of implementing an RTI program. Schools without intervention specialist must become creative with scheduling and the use of faculty and staff. In many cases, inclusion teachers and paraprofessionals are in charge of maintaining interventions while other schools choose to have whole faculty participation. Teachers may also use portions of their planning periods for intervention.

“The goal of Tier 2 is to remediate academic skill deficits with the idea that in doing so, students will be successful in the Tier 1 program without support” (Johnson). According to Buffum, Mattos and Weber, “as student progress is monitored to determine the effectiveness of the interventions, some students will need a greater intensity of support to achieve. This
increased intensity could include more frequent application of the Tier 2 interventions. When a child does not respond at all to the Tier 2 interventions, however, he or she may need the interventions provided at Tier 3, including, in some cases, an entirely new core program” (Buffum, Mattos, and Weber, 98).

Tier 3 interventions take place after a student has spent sufficient time in Tier 2 without displaying adequate growth. “At Tier 3 (tertiary prevention), an additional layer of intensive supports is available to address the needs of a smaller percentage of students (e.g., 2%–7%) who are experiencing problems and are at risk of developing more severe problems. At Tier 3, the goal is remediation of existing problems and prevention of more severe problems or the development of secondary concerns as a result of persistent problems” (Ervin).

After using progress monitoring data to determine that a student should move to Tier 3, the student’s intervention plan should be adjusted for additional supports. The first approach to adjustment is typically to increase the regularity and length of the interventions. Research suggests requiring daily interventions that last an hour or more with a student-teacher ratio of three to one or less. Instruction given should be specific to each student based on their skill level.

Tier 3 interventions can be more difficult to implement than Tier 2 due to a lack of resources (e.g. teachers, facilities, technology, time, etc.). For secondary schools, the National Center on Response to Intervention suggests using all of the students’ elective time for intervention. They also reported that some schools removed students from science or social studies; however, this was only done when “the students received no benefit from remaining in a
primary level class”. “The goal for all schools [is] to move students back into the primary level class as soon as possible” (The National Center on Response to Intervention, 16).

Occasionally, students in Tier 3 fail to respond to the intensive intervention, which is usually the case for “failed learners”. At this point in the RTI process, schools should have adequate data showing that a student has been given interventions in Tier 2 and 3 and has failed to make sufficient progress. When this occurs, a Student Study Team (including classroom teachers, administrators, guidance counselors, intervention teachers, special education teachers, etc.) should convene to discuss whether or not the student qualifies for a special education referral. “Since students at Tier 3 have not responded sufficiently to previous supplemental interventions, frequent progress monitoring is especially important to establish that a student’s lack of success was not caused by a lack of either effective instruction or systematic and intensive interventions, which would indicate the possible existence of a specific learning disability”(Mattos, Buffum, and Weber, 102). Regardless of whether or not the student qualifies for a specific learning disability, the student’s core instruction may need to be replaced with a specialized curriculum specifically for that student. In such case, the student would continue to receive instruction at a Tier 3 level with the modified curriculum. Progress monitoring would continue with the goal of moving the student down to a lower level. Keep in mind, the goal of RTI is to reduce the number of Special Education referrals, therefore, a referral should come as a last resort to a Tier 3 intervention.

3.6 Parental Involvement

Because RTI programs can vary in structure from school to school, it is important to inform parents and guardians of the process that is taking place and how their child may be
involved. This information can be given at open house or delivered in an email or newsletter. Parents of students, who are in a Tier 2 or 3 intervention, should be contacted and informed of the process that is taking place and updated on a regular basis. RTI programs, whether brand new or well established, should always include parental involvement in the decision making process. Key personnel to the interventions should keep parents informed and invite them to progress monitoring meetings.

It is important for parents to understand that RTI is not synonymous with special education. An RTI program will, however, speed up the process of a special education referral if one is necessary. Schools no longer have to wait for students to fail multiple times in order to collect the necessary data for a special education referral. Data collected throughout the RTI process will be sufficient if a referral is necessary. In accordance with IDEA 2004, parents can request a special education referral at any time. “The RTI process gets help to struggling learners faster, making interventions more successful and keeping students from becoming frustrated. The information collected along the way- such as progress monitoring data- becomes an important part of determining if a student needs to be formally evaluated for special education” (Cortiella, 13).

Parental involvement can also help to encourage a student who is in a Tier 2 or 3 intervention. Regular progress reports to parents will inform them of their child’s progress thus allowing them to celebrate successes and encourage them in the future.
3.7 Starting off Small

Building an RTI program for the first time can be both intimidating and overwhelming. The universal screening process may reveal a large number of students in need of a Tier 2 intervention. If that occurs, teachers should first examine their core curriculum and look for adjustments that can be made in order to reach more students. This is a great topic of discussion for Professional Learning Communities. Teachers should share teaching methods and work to perfect their lessons. Certain skills may need to be redelivered to an entire class in order to remediate with a large number of students.

After adjustments are made to the core curriculum, it is time to start planning for Tier 2 interventions. “When some schools implemented RTI, they opted to ‘start small’ by focusing on a full-model pilot with a small group of students, thus creating a model for later school-wide implementation. For instance, schools started by implementing all essential components (screening, data-based decision making, multilevel instruction, and progress monitoring) with one small class of students” (National Center on Response to Intervention, RTI Implementation, pg 13). Starting small allows schools to test out their RTI plans, make adjustments to the plan, and focus on creating the best core curriculum for Tier 1 instruction. Focusing on a small targeted group of students allows teachers to test out their universal screening tools and practice with progress monitoring before fully implementing RTI school-wide. Starting small helps schools and teachers build confidence in their RTI program without getting overwhelmed or burnt out.
3.8 Challenges to RTI

In order to build an effective Response to Intervention program schools must invest time, energy and resources into making it successful. Even then, schools must be flexible and able to bend when changes need to occur in order for the program to improve. According to the School Improvement Network, “common RTI implementation challenges of setting up and running an RTI program include:

- Scheduling
- Personnel
- Resource issues
- Introducing change
- Establishing new protocols
- Building consensus”

Finding time to conduct interventions can be difficult especially in the middle school setting due to scheduling. It is important to build a culture of success within the faculty and staff and maintain the course of the RTI program throughout the year. It is much easier for a teacher to give up planning period time if they see other teachers giving up their time as well. Time for interventions can be found during lunch, homeroom, before or after school or during physical education or elective classes.

Challenges in finding qualified personnel can be difficult to remedy due to pressures from the district and state level. Principals may not have the proper funds available to bring in additional qualified assistance and therefore must examine the current personnel to find
resources. A scheduling shuffle may need to take place to free up certain teachers at specific
times to assist or run interventions. It is also recommended that principals reach out to the
community for help in finding qualified volunteers to work with students in intervention. Many
volunteer organizations are already in place and are looking for opportunities to serve.
University students, especially those seeking a degree in education, are often willing to assist in
intervention in order to gain experience with students.

Issues with finding resources such as technology and funding can be as tricky as finding
qualified personnel. Schools must first examine the current resources at their school and
evaluate whether or not the resources are being used to their maximum potential. Gaining access
to computers may be as simple as establishing a computer lab schedule or splitting time with
another teacher with the use of a mobile lab. Title 1 funding is typically used for programs such
as RTI; therefore an examination of how the funding is currently being used may need to occur.
Again, asking for donations from universities or business in the community for technology can
result in additional resources.

Similar to finding time for interventions, instituting changes to the current curriculum and
practices throughout the school can be challenging, especially to faculty members with many
years of experience. This is where creating a culture of learning throughout the school will come
in handy. It is imperative for all faculty members to know and understand the goals of the RTI
program and realize that sacrifices must be made for the betterment of the school and its
students. Establishing new protocol and building consensus will be accomplished when faculty
members take ownership in the RTI program. They must see all students as “their students”, not
just the students on their roster. By investing time in the RTI process, they will be helping students reach their goals.

3.9 Behavioral RTI

Response to Intervention is a program for both academic and behavioral interventions. While academic interventions typically take a front seat to behavior, most classroom teachers will admit that without good classroom management academics can fall by the wayside. Behavioral RTI can be used in a similar manner to academic RTI in that a tiered intervention system is put in place to track behavior and intervene when necessary. Behavioral RTI is being used in an effort to reduce out-of-school suspensions, prevent expulsions and to keep students in the learning environment.

Behavioral RTI works in conjunction with PBIS, Positive Behavioral Interventions and Supports. Students are taught appropriate behaviors and procedures by classroom teachers and are expected to comply. “Behaviors are frequently assessed, and students are consistently recognized and rewarded when they display those behaviors. When they don’t, they are provided with scientifically validated interventions and increasing time and support until they achieve success” (Buffum, Mattos, and Weber, 111).

As with academic interventions, the framework for behavior RTI can look different from school to school depending on resources. However, the tiers of intervention are presented in the same way with all students falling into Tier 1, about 20 percent in Tier 2 and less than 7 percent in Tier 3.
3.10 Woodlawn Middle School's Behavior RTI

In the 2011-2012 school year, the 8th grade team at Woodlawn Middle School developed a behavior intervention plan in an effort to reduce the occurrence of behavior issues in the classrooms and hallways. Planning began at the end of the previous school year and all teachers were on board for implementation. PBIS was followed for minor infractions that occurred. Infractions were documented on the school’s official tracking form and upon a 6th infraction the student was written up on an office referral. The main goal for the 8th grade team was to reduce the number of office referrals which lead to a reduced number of suspensions and expulsions. The idea was to handle as many behavior issues within the 8th grade team without referring students to the office.

At the beginning of the school year, the 8th grade teachers developed a duty schedule for the interventions. The interventions took place during 5th block (the 8th grade team’s planning period) in an empty classroom on the 8th grade hall. An RTI referral form was developed by an 8th grade teacher and used as a notice to the student when they were assigned to intervention. The forms were also used for data tracking and were kept in student folders in a filing cabinet. This documentation was used to keep track of the number of times a student was referred to and participated in behavior intervention. It was common for the disciplinarians at Woodlawn Middle to request the folder on a particular student if they were being recommended for expulsion. Behavior progress monitoring was used in several expulsion hearings to prove that every effort was made on the faculty’s behalf to assist the student and to help them improve their behavior.
When a student received their 3rd minor infraction, they were referred to “5th block intervention”, a Tier 2 Intervention. During this intervention, students worked on a reflection sheet that asked questions such as “What did I do to end up in 5th block intervention?”, “What could I have done differently?” and “Who can I ask for help with this issue?”. The 8th grade teachers monitored the students during intervention and counseled with them upon the completion of the reflection sheet. Students were encouraged to take the intervention seriously with the consequence being an office referral. Intervention was described to the students as being their opportunity to get back on track with proper behavior. The past behaviors would be forgiven. As long as the student was able to behave properly in the future, they would stay out of trouble. If the student decided not to take the intervention seriously and continued on a path of poor choices, then they would forgo the opportunity to participate in behavior intervention and would go through the traditional route of discipline. The goal was always to reduce the number of students who needed an intervention and to improve the behavior of the students in the classroom and hallways.

During the 2011-2012 school year, 8th grade teachers would agree that a vast improvement in behavior was made from the previous school year. Referrals, suspensions and expulsions decreased drastically from the year before. The interventions, although time consuming and tedious, provided students and teachers the opportunity to get to know and understand one another. The paperwork and headache caused by organizing the interventions was worth it in the end and proved so by the increased test scores that followed.

In the following school year, 2012-2013, the 8th grade team continued the behavior interventions using the model developed in the previous year. Some adjustments were made to
the forms used for interventions and the data tracking methods. In addition to keeping records in a filing cabinet, an Excel file was created to track interventions. The 8th grade team decided that students would forgo the right to a behavior intervention after a certain number of interventions took place. The conclusion was that the student was not responding to the intervention and therefore needed a different intervention in order to correct the behavior. The new intervention was called “Check-in, Check-out” and was implemented with the assistance of the school’s disciplinarians. A student on “Check-in, Check-out” was given a tracking form that was used to track specific behaviors that were to be avoided by the student. The student, teachers and disciplinarians agreed to the behaviors and teachers gave ratings to the student on a daily basis. At the end of each week the tracking form would be reviewed with the student, adjustments would be made if necessary and a new form would start. These interventions took place for a period of six weeks. “Check-in, Check-out” is an example of a Tier 3 intervention that was used when progress monitoring showed that the Tier 2 intervention was not working.

At the end of the 2012-2013 school year, the results of the behavior interventions were just as impressive as the previous year. Going into the 2013-2014 school year, the 8th grade team will use behavior tracking data from the 7th grade team to assist in behavior interventions. Adjustments will continue to be made to the program to allow for improvements.

With the success found in the behavior interventions, Woodlawn Middle School had confidence that academic interventions would succeed due to the dedication of the faculty to their students. Therefore, in the 2012-2013 school year, Woodlawn started small with academic RTI in mathematics and focused on a targeted group of students to work in a program called SuccessMaker.
Chapter 4: SuccessMaker as a tool for Response to Intervention

4.1 Woodlawn Middle School Demographics

Woodlawn Middle School is one of thirteen middle schools located in East Baton Rouge Parish, Louisiana. According to Louisiana Believes, Woodlawn outperformed the District’s School Performance score of 86.2 by scoring a 91.5 for the 2012-2013 school year. School Performance Scores are based on a 200 point scale as seen in Table 1. Woodlawn Middle School’s score of 91.5 places them at a letter grade of “C” compared to the districts’ letter grade of “D” (Louisiana Believes, 2013).

Table 1: BESE School Performance Scores

<table>
<thead>
<tr>
<th>BESE School Performance Score (SPS)</th>
<th>Letter-Grade Scale 2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>120-200</td>
</tr>
<tr>
<td>B</td>
<td>105-119.9</td>
</tr>
<tr>
<td>C</td>
<td>90-104.9</td>
</tr>
<tr>
<td>D</td>
<td>75-89.9</td>
</tr>
<tr>
<td>F</td>
<td>0-74.9</td>
</tr>
</tbody>
</table>

In the 2012-2013 school year, Woodlawn’s student body comprised of 1033 students, 45% were female and 55% were male. Approximately 364 students were 6th graders, 357 were 7th graders and 312 were 8th graders. 650 students at the school were African-Americans, 250 were White and the remaining 137 students were from other minority groups. 79% of the student population qualified for free or reduced lunch (Louisiana Believes, 2013). Woodlawn
Middle offers several educational programs including Gifted, Great Scholars, Traditional, Inclusion, Self-Contained and Community Based.

On the 2012 iLEAP test, 61% of 7th graders scored an achievement level of Basic or above in mathematics. In 2013, that same group of students, the current year’s 8th graders, scored 67% Basic or above in mathematics on the LEAP test (Louisiana Believes, 2013).

4.2 Current Response to Intervention plan

Response to Intervention is a new concept to Woodlawn Middle School. The implementation of academic RTI began in the 2011-2012 school year. A large focus of team meetings and monthly faculty meeting was on training teachers on implementing and following the steps of an RTI plan. Most of the information was delivered through a professional development program called PD360 that was adopted by the East Baton Rouge Parish School System. As a faculty we watched videos and discussed varying topics relative to RTI. Our principal asked teachers to identify students in each of the three tiers and plan our interventions accordingly. Most interventions for math consisted of small group or one-on-one pull outs during the students’ physical education class.

As a school we decided to change the focus of our homeroom curriculum from Fine Arts to math interventions. Every teacher, regardless of the content that they teach, was required to model, teach and assist students in math remediation during homeroom. Math teachers in each grade level collaborated to design a remediation curriculum that was easy to use and easily accessible to all teachers. The lesson plans were placed on the teacher shared drive for easy access. Lessons included PowerPoint slides of specific topics such as operations with fractions,
rounding, estimation, etc. Teachers were to review the lessons and have students work on practice worksheets to reinforce concepts.

To collect data for our interventions, teachers gave pre and posttest for each topic to measure growth. Teachers kept files on their homeroom students with pre and posttests as well as practice worksheets. These files were to act as evidence of interventions and were used in meetings with parents and school officials to showing that children were given remediation.

Many teachers commented that they were overwhelmed with paperwork and progress monitoring. Our teachers wanted to find a more efficient way to meet the needs of our struggling math students. Relief came in the form of a representative from Pearson. Our school was introduced to SuccessMaker during a team meeting at the end of the 2011-2012 school year. Upon approval from Pearson, three of my 8th graders piloted the program for our school. After working on the program for approximately 3-6 sessions (30 minutes each), our Pearson representative reviewed the student data with us. We were impressed with the power of the program and eager to start remediation with a select group of students during the following school year.

4.3 SuccessMaker Description

Pearson has been working in the educational technology industry for over 40 years and is focused on improving student achievement in all content areas. SuccessMaker is educational software, designed by Pearson, which differentiates and personalizes K-8 reading and math instruction (Pearson, 2013). According to Pearsonschools.org, every aspect of SuccessMaker is singularly focused on the individual needs and desires of real students and educators allowing you to effectively address individual learning needs while supporting the instructional goals of
your school or district. Figure 3 shows the SuccessMaker logo that is seen upon logging into the program.

![SuccessMaker Logo](image)

Figure 3: SuccessMaker Logo (Bing, 2013)

Our school district was attracted to SuccessMaker because it is aligned to the Common Core State Standards (CCSS). SuccessMaker creates a personalized path through the Common Core for each student by first accessing their current knowledge level. This process of assessment is known as Initial Placement and is used to tailor the remaining pathways for the students. This powerful technology pinpoints the specific areas where a student struggles and focuses on addressing areas of difficulty while advancing students through areas where they show content mastery (Pearson, 2013). SuccessMaker can be customized for advanced learners, learners that are on level, learners that are one year behind and learners that are multiple years behind. This program is intended to be a multi-year remediation tool for students who are more than one year behind grade level.

In addition to the Common Core aligned, custom-tailored curriculum, SuccessMaker gives teachers a “Resources” tab on the teacher desktop that is linked to a library full of
remediation tools. In that library, teachers can sort the tools by selecting the appropriate grade level, standard and skill. Once sorted, teachers can choose from interactive lessons, videos, and practice problems to reinforce a particular skill with one student or an entire classroom. The resource library spans from 3rd grade through high school.

A representative from Pearson, Princess Newbold, was assigned to our district to handle professional development regarding implementation plans, system updates, technical questions, transfers of student data, questions from teachers and data interpretation. Herman Brister, Associate Superintendent for Student Support Services at the East Baton Rouge Parish School System, stated the reason our district chose SuccessMaker over other online math remediation programs is because they “offered artificial intelligence with excellent professional development. In addition they provided an educational consultant to the district” (Brister, 2013). Teachers at Woodlawn Middle were given professional development on SuccessMaker at the beginning of the school year. A portion of a faculty meeting was led by Princess Newbold with the goal of instructing teachers on how to create groups, run reports and access resources within SuccessMaker for small group remediation. Most of our questions and issues were handled through our district representative however; Pearson does offer professional development and assistance through their website, MyTrainingConnection.com. The company also has a technical support staff that can assist teachers via phone, email or online chat.

Pearson has three implementation models that school districts can choose from to best suit their needs. The East Baton Rouge Parish School District chose Option 2: Pearson-Hosted Web Deployment (with Perpetual Licenses). Option 2 “allows SuccessMaker content and student data to be hosted by Pearson and delivered online via the web to school sites across the district” (Pearson, 2013). Our district purchased site licenses through Pearson for individual
schools. Woodlawn Middle School was given 50 licenses to use throughout the school year. SuccessMaker licenses are attached to schools and allow a certain number of students to work on the program at a time. Even though SuccessMaker is an online remediation tool and can be accessed anywhere through an internet connection, Pearson advises that students only use the program at school to ensure the accuracy of the data.

Finding funding in public schools to implement a program such as SuccessMaker can be a challenge therefore; schools must be creative with the money they have to spend. Pearson accepts Title 1 funds, Federal money given to schools with large numbers of students living in poverty. According to pearsonschool.com, Title 1 funds are intended to help students meet state academic standards in reading and mathematics. Title 1 money can also be used to implement remediation programs such as SuccessMaker. According to Brister, the East Baton Rouge Parish School District was forced to “cut 82 million dollars out of our budget over the last three years”. Hiring one math intervention specialist would cost the district approximately $70,000 per school year. That specialist would be limited in the number of students that he/she would be able to work with due to scheduling and time constraints. The East Baton Rouge Parish School District needed another, more cost effective, model for remediation. According to Newbold one concurrent license in SuccessMaker costs $325.23. Woodlawn Middle School was given 50 licenses for the school year totaling $16,261.50 (Newbold, 2013). Therefore, in deciding how to spend Title 1 money, East Baton Rouge Parish acquired the greatest benefit for their dollar by investing in SuccessMaker for math remediation.

SuccessMaker generates reports that allow educators to view class and individual learner-level progress from the data dashboard, track progress toward a specific target and assign lessons by standard for additional coverage of skills (Pearson, 2013). The program allows teachers to
easily run reports such as “Cumulative Performance” to gauge a student’s total progress in the program. Reports such as “Last Session” allow teachers to examine the number of problems a student answered correctly out the total number of problems that were assigned. The “Last Session” report also provides the total amount of time spent on a particular session and states whether or not a student used resources such as a glossary or calculator. As students complete sessions a daily progress report is given that states the number of problems answered correctly out of the total questions and the percentage correct.

![Daily Progress Report](image)

**Figure 4: Student’s Daily Progress Report, 2013**

Pearson states that motivation is the key for students to commit to a program such as SuccessMaker, therefore the company rewards students in an age appropriate setting. For grades K-5, intangible rewards may be choosing furniture for their avatar or posters to go in their avatar’s bedroom. In grades 6-12 “students are rewarded with additional backgrounds for the
student interface” (Pearson, 2013). Upon logging into the program students choose a theme that continues throughout their session.

![Figure 5: Theme Choice, 2013](image)

In addition to choosing themes, Pearson recommends implementing a motivational reward program in each school. Woodlawn Middle rewarded students daily, monthly and on a semester basis. At Woodlawn Middle, students recorded their daily sessions on a calendar and were given a reward (such as a sticker or gold star) if they scored a 70% or higher. Refer to Appendix B for an example of a student’s calendar. After receiving five stickers, the student’s name goes on a recognition bulletin board. Woodlawn Middle chose the theme “Fishing to Proficiency;” therefore, students were given a die-cut of a fish to write their name on for the recognition board. Our school also held two SuccessMaker Reward Parties for students who scored exceptionally well in the program. Teachers set qualifications for the party such as attaining a certain level of “Gain” or attaining a skills percent mastery of 90% or higher. During
the party students celebrated their success with pizza, soft drinks and certificates for those who double qualified for the party. Pearson also recommends giving verbal praise to students as they accomplish a goal or struggle through a difficult problem. SuccessMaker gives periodic encouragement through short animations with sayings such as “Good Job” or “Outstanding” (SuccessMaker, 2013).

Students encounter a variety of question styles while working on a 30-minute session. It is common for a student to answer basic multiplication facts. These questions may be followed by problems on estimating volume or even finding the circumference of a circle. Questions range in difficulty from recalling basic math facts, interpolation of a graph or applying a formula on a geometry skill. SuccessMaker may ask a student to analyze a set of numbers and sort them into groups of primes and composites or even draw a line of symmetry using the mouse. The
level of difficulty of the questions is shuffled throughout each session. Pearson purposely
arranges question styles in ways that keep students engaged in the program without getting bored
on one particular skill.

SuccessMaker is an interactive program. Indeed, students can input their answers and get
step-by-step instructions if a question is answered incorrectly. Not only does the interactive
feature keep the students engaged, it also prepares them for the format of the upcoming PARCC
assessments. PARCC assessments will be computer based; therefore, SuccessMaker is giving
students experience working on computer based assessments. SuccessMaker reads questions
aloud while students follow along with onscreen questions and instructions. Having a
remediation program that reads questions to students is beneficial for students with 504
accommodations, special education students, English Language learners and struggling
traditional students.

If a student answers a question incorrectly, SuccessMaker will aid a student in the correct
procedure to follow in order to solve the problem correctly. For example, if a student misses a
question about adding fractions with unlike denominators, SuccessMaker will explain how to
find the common denominator and rename the fractions. These instructions are displayed on the
screen as well as delivered verbally. The student can read along with the verbal instructions,
correct their mistake and move on to the next problem. The subsequent problem will most likely
be the same skill however; if a student continues to answer incorrectly on the same skill it is
noted in the teacher dashboard. Teachers can run a report on frequently missed skills and use
these topics in small group remediation. Below is an example of a question on finding the
circumference of a circle. When the incorrect answer was selected, SuccessMaker gave
assistance at the bottom of the screen by reminding the student of the circumference formula and the approximation to use for pi.

Figure 7: Step-by-step Instructions, 2013

4.4 SuccessMaker Integrated into Response to Intervention

At the end of the 2011-2012 school year, teachers and administrators at Woodlawn Middle School began to evaluate their current Response to Intervention plan and made adjustments for the next school year. We wanted to continue our small group remediation that was taking place during physical education and elective periods however; we needed to find a more efficient way of addressing the needs of more students. Small group remediation was successful in groups of three to six students however, we found through common formative assessments that numerous students needed extra help on basic skills. Before getting SuccessMaker it was common to have remediation groups of 15 or more students. Our Response to Intervention efforts needed to be more meaningful and effective to the students while reducing the burden and workload on the teachers.

After the introduction and trial run, Woodlawn Middle chose to use SuccessMaker for Tier 2 interventions in math. According to Buffum, Mattos and Weber, potential interventions
for a Tier 2 student can include, but are not limited to, mandatory study hall, mandatory homework help, frequent progress reports, study-skills classes, goal-setting and career planning support and targeted rewards. SuccessMaker was the “mandatory study hall” that our students desperately needed. A new homeroom course called “Math Intervention” was created by our Assistant Principal and targeted students were added upon teacher recommendations. The creation of the course was intentional. By creating a course students would have to work hard to earn letter grades, similar to other subjects.

SuccessMaker qualifies as a Tier 2 intervention because it tracks a student’s progress and creates custom lessons focusing on skills to meet specific performance goals (Pearson, 2013). According to the National Center on Response to Intervention, secondary levels of instruction should include homogeneous classes of students with similar instructional needs. Students should also receive greater frequency and duration of instruction. For that reason, students worked on SuccessMaker for 120-150 minutes each week.

Woodlawn Middle started off small with RTI unintentionally due limited funds and access to the program. This method of starting off small proved beneficial because it allowed a small group of teachers and students to work together to see if our RTI plan would be effective. By keeping the targeted group small, the level of stress on teachers was reduced, and the amount of paperwork was manageable.

4.5 Targeted Students for Response to Intervention

Schools should use a universal screening assessment that provides initial information on which students need additional, specialized support to maximize their learning (Buffum, Mattos, Weber, 85). Woodlawn Middle School chose to use iLEAP scores from the previous school year as the universal screening assessment. Teachers focused particularly on the “Number and
Number Relations” results from iLEAP to determine qualifying students. Students scoring in the Approaching Basic category were chosen first with two to three students coming from the Unsatisfactory category. Due to the limited number of licenses, teachers considered the motivation level of the students as well when selecting participants. These students were viewed as “at risk” students who needed an academic intervention in addition to Tier 1, core curriculum.

The process of choosing students for our Tier 2 intervention was overwhelming at first. The East Baton Rouge Parish School System followed an implementation guide handed down by Pearson. Pearson’s suggested choosing students who performed two to four grade levels behind their peers. Our job, as teachers, was to choose a target group of 30 students per grade level to participate in the program. Due to a limited number of site licenses, teachers and administrators were forced to get creative with scheduling. Woodlawn was given 50 licenses from the district; meaning only 50 students could work on the program at a time. Therefore, Woodlawn created two groups of intervention students per grade level, a homeroom group and a pull-out group. Each grade level was limited in the number of students in the “Math Intervention” homeroom. 8th grade teachers choose 20 students while 6th and 7th grade teachers were able to choose 15 students each. As the school year progressed, 5 of my original homeroom students left the course for various reasons. Some students proved to excel in the program due to their high initial placement relative to other students. These students were placed back in their original homeroom and their spot was filled with another student from our targeted group. Other students left Woodlawn Middle and transferred to another school.

The additional 10-15 students needed for the targeted group would be placed in the pull-out group. The pull-out group was excused from Physical Education and/or their elective for 30
minutes daily to work on SuccessMaker. Students worked four days per week, Monday-Thursday. Teachers attended team meetings on Fridays and therefore were unable to house and monitor the students using the program.

When implementing a Response to Intervention plan it is important to keep parents informed and a part of the decisions that are being made. According to Buffum, Mattos and Weber, “documenting student progress and communicating with all stakeholders, particularly parents, are crucial (30). In an effort to inform parents about our intervention plan, the principal at Woodlawn Middle wrote a letter that was distributed to students who were participating in SuccessMaker. See Appendix B for a sample of the SuccessMaker parent letter. The letter stated that their child would have an opportunity to “increase their math understanding” in order for them “to score Basic or above on the iLEAP or LEAP test (Colvin, 2012).

**4.6 Daily use of SuccessMaker**

Woodlawn Middle began using SuccessMaker in late September, 2012. The teachers in charge of the SuccessMaker homerooms were given an implementation guide from Pearson and the East Baton Rouge Parish School District. As a part of the RTI process, teachers shared the goals of the district with their students. The goal was for 90% of the target group to complete a minimum of 30 working hours per semester, maintain “Acceptable Performance” and reach at least 2 years of “gain” by May, 2013. “Acceptable Performance” is attained when a student achieves 90% or higher of skill mastery, therefore, skill mastery is a representation of a students’ accuracy in their answers. Pearson represents a “gain” as an increase in grade level based on skills mastered. Gains are broken down by grade level, month and day. As students master grade specific skills, Pearson incorporates this into an overall grade level increase.
Students were assigned to work on SuccessMaker for 30 minute sessions, 4 days per week. While students were working on the program a teacher was present to monitor the students, give guidance, resolve computer issues and review progress reports with the students. One day per week students worked in a small group with an instructor on “Areas of Difficulty” remediation. Topics for the small group remediation came from the teacher desktop in SuccessMaker under the “Mastery” tab. If, for example, the skill mastery report is showing that a student has not mastered the skill “extend an arithmetic sequence for three more terms” an interactive lesson can be used to target that skill in a small group. The student would then work on one skill that day rather than their regular 30 minute session. The teacher would make a note of the small group remediation on the student’s calendar. See Appendix B, January 15, for an example.

Throughout the school year Woodlawn Middle experienced a few technology issues associated with SuccessMaker. According to Newbold, East Baton Rouge Parish’s Pearson Consultant, SuccessMaker was updated approximately 6 times throughout the school year. The reasons for the updates were usually small and came as a result of continuous customer feedback. Some of the reasons were as follows: adding correct answers for problems that did not show a correct answer, remaining compatible with Java and Internet Explorer and adding the student skills report. As a result of one update from Pearson, Woodlawn Middle’s computers needed a Java update in order for SuccessMaker to run correctly. The updates were completed manually by the SuccessMaker homeroom teachers, librarians and pull-out group teachers. On occasion, students informed me when problems were not working correctly in the program. The majority of the time the issue was resolved by simply showing students how to properly input an answer. A great example of students misunderstanding how to use the program is on the skill “Complete
a symmetrical drawing”. SuccessMaker has this skill listed at grade level 5.8. As seen in Figure 8, students must complete the symmetrical figure by drawing in lines to essentially create a reflection. Students were tempted to “click and drag” to create the lines of symmetry however, SuccessMaker was designed for students to “click and click”. One must click on a dot to start the line segment then click on a second dot to complete the line segment. Once I figured out how to work this problem, I showed my students and resolved the issue. Pearson, however, is working to change this problem to the more common “click and drag” procedure.

Figure 8: Complete a Symmetrical Drawing, 2013

The students in the homeroom group received a grade for working on SuccessMaker. A weekly participation grade of 25 points (5 points per day) was earned by simply attending class
and working efficiently in the program. Teachers can monitor a student’s accuracy by reviewing
the student’s cumulative performance. According to Pearson, if the “skills percent mastery” is at
90% or higher, the student is putting forth effort in the program as opposed to clicking through
problems without trying to answer correctly. Students also earned an “Average Daily Grade”
worth 10 points. Teacher’s totaled each student’s daily percentages and divided by the number
of days the student worked on the program that week.

As a motivational incentive, students in the homeroom group were encouraged to attend
the daily pull-out session in order to earn bonus points for their homeroom grade and traditional
math class. Students earned 5 bonus points for homeroom and their math class by attending a
pull-out session. This incentive was not only meant to be a motivational factor but a way to have
students log more time in SuccessMaker. Pearson’s slogan “Time = Growth” was taken to heart
by our faculty. We had to keep in mind that one of our goals was for each student to attain 60
hours in the program for the school year.

With the exception of a few technology issues, the homeroom model for SuccessMaker
ran smoothly throughout the year. There were very few behavior issues in the homeroom which
can be contributed to student engagement in the program. Our students logged an average of 52
hours and 56 minutes and achieved an average growth rate of 1.79 school years.

In addition to the homeroom group, a pull-out group was established in order to meet the
requirement of 30 targeted students using the program. Students worked using a mobile lab that
contained 15 laptops. In addition to the mobile lab the remediation classroom had four desktop
computers for students to use. Because there were twenty 8th graders using the program during
homeroom, we chose an additional twenty students for the pull-out group. We surpassed the
requirement for the target group of 30 students by adding an additional 10 students to the pull-
out group. The idea was to have as many students as possible working on SuccessMaker. We also recognized that on most days we would have less than 100% attendance for the pull-out group therefore we were able to over schedule the use of computers with relatively few issues.

For 8th grade students, the pull-out session took place during 5th block (the last block of the day) which happens to be the planning period for 8th grade teachers. The 8th grade math teachers created a duty schedule where one day per week they would monitor the students in the pull-out group. Their task was to retrieve the laptop cart from the library, bring the cart to the intervention room, set up the laptops, monitor and help the students using the program and return the laptops back to the library. For the first few sessions, the SuccessMaker duty teacher gathered the students from their various classes and brought them to the intervention room. Our goal was to become accustomed to using SuccessMaker during 5th block. We gathered the students for the first few weeks of the program then slowly allowed them to come to the intervention room on their own. Throughout the school year, teachers found that more students attended the pull-out group if the duty teacher gathered the students and brought them to the room. A few students took advantage of their independence and excuse from class by wandering around the school. When caught, the students were reprimanded and reminded of the opportunity they had to pull up their grade and prepare for the upcoming LEAP test.

Students spent the first 30 minutes of 5th block in their physical education or elective class, followed by 30 minutes of SuccessMaker and the final 30 minutes back in their original class. The students worked on Dell mini-laptops that were housed in a transportable laptop cart. The laptops were set up on student desks and were connected to the internet wirelessly. Students had the opportunity to use headphones while working in the afternoon group. Compared to the physical set up for the homeroom group, the pull-out group occasionally experienced issues with
low laptop batteries and wireless disconnection. These issues usually caused SuccessMaker to freeze which resulted in lost scores for the session.

For various reasons, the results from the pull-out group were not as impressive as the homeroom group. The pull-out group logged an average of 18 hours and 33 minutes, approximately 34 hours less than the homeroom group. They also had an average gain of .64 school years, which was 1.15 school years less than the homeroom group. The discrepancy in the results among the two groups could be related to a number of reasons. In my opinion, the students’ eagerness to put forth effort was impacted because the pull-out group was not an actual class where they received a grade. Therefore, the program was not taken seriously by the majority of students which is proven in data. Many students in the pull-out group were disgruntled because they were missing the experiences in their physical education and elective classes. Several students expressed that their grades were suffering in their elective courses because of their absences due to SuccessMaker. Students also commented that they were tired at the end of the school day and found it difficult to focus on the program. Finally, a few students viewed SuccessMaker as a punishment rather than an opportunity to succeed and therefore struggled to get on board with the program.

4.7 Analysis of Data

An essential component of the RTI process is progress monitoring. According to the National Center on Response to Intervention, progress monitoring is the regular and repeated assessment of students’ academic performance to inform instruction. It is conducted at least monthly to: (1) assess students’ performance over time, (2) quantify student rates of improvement or responsiveness to instruction, (3) evaluate instructional effectiveness, and (4) formulate effective individualized programs for students who do not respond to instruction.
Although the NCRTI suggest that progress monitoring be done on a monthly basis, SuccessMaker allows schools to progress monitor students daily. Teachers are able to see student achievement immediately after they finish a session. SuccessMaker makes progress monitoring simple by allowing teachers to run reports such as “Last Session” and “Cumulative Performance”. These two reports allow teachers to see where a student began the RTI process and how well they are progressing. The reports will also indicate a lack of success at which time teachers can further investigate why a student is not progressing.

In addition to the daily progress reports that student receive at the end of each session, teachers can run a “Last Session Report” which gives a summation of the most current session completed by each student in a group. The “Last Session Report” was printed out daily and kept in a SuccessMaker data binder along with other reports. Occasionally, students were unable to complete a full 30 minute session and had to log off before their daily progress report appeared. In this situation, the teacher is able to use the last session report to fill in the student’s calendar with their daily progress. The “Last Session Report” states the students’ current course level, the number of exercises (problems) correct, the number of exercises attempted, help used (ie. calculator or glossary) time spend on each session, total number of sessions completed and the date of the most current session. The following two tables are examples of “Last Session Reports” for both my homeroom and pull-out groups. The district required that intervention teachers separate the homeroom and pull-out groups into separate groups within SuccessMaker.
### Table 2: Last Session Report for the Original Homeroom Group

#### Last Session for Original Homeroom

<table>
<thead>
<tr>
<th>Math</th>
<th>School: Woodlawn MS</th>
<th>Teacher: Lauren Hutchinson</th>
<th>Grade: 8th Grade</th>
<th>Group: Original Homeroom 8th Grade</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Student</th>
<th>Level</th>
<th>Raw Performance</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current Course Level</td>
<td>Exercises Correct</td>
<td>Exercises Attempted</td>
</tr>
<tr>
<td>Student #1</td>
<td>8.05</td>
<td>26</td>
<td>40</td>
</tr>
<tr>
<td>Student #2</td>
<td>8.03</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Student #3</td>
<td>7.29</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Student #4</td>
<td>7.36</td>
<td>12</td>
<td>42</td>
</tr>
<tr>
<td>Student #5</td>
<td>7.42</td>
<td>15</td>
<td>34</td>
</tr>
<tr>
<td>Student #6</td>
<td>6.11</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Student #7</td>
<td>7.47</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>Student #8</td>
<td>7.33</td>
<td>26</td>
<td>39</td>
</tr>
<tr>
<td>Student #9</td>
<td>7.19</td>
<td>21</td>
<td>35</td>
</tr>
<tr>
<td>Student #10</td>
<td>6.62</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Student #11</td>
<td>7.94</td>
<td>35</td>
<td>40</td>
</tr>
<tr>
<td>Student #12</td>
<td>7.20</td>
<td>23</td>
<td>45</td>
</tr>
<tr>
<td>Student #13</td>
<td>7.34</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Student #14</td>
<td>7.28</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>Student #15</td>
<td>7.21</td>
<td>13</td>
<td>16</td>
</tr>
</tbody>
</table>

| Mean - 15 Students | 7.32 | 14.00 | 25.73 | 51.2% | 2.4 | 0:19 | 124.47 |
| Standard Deviation | 0.50 | 10.04 | 13.93 | 17.91% | 3.7 | 0:07 | 21.77 |
## Table 3: Last Session Report for the Original Homeroom Group

### Last Session for Pull-Out Group

<table>
<thead>
<tr>
<th>Student</th>
<th>Level</th>
<th>Raw Performance</th>
<th>Usage</th>
<th>School: Woodlawn MS</th>
<th>Teacher: Lauren Hutchinson</th>
<th>Grade: 8th Grade</th>
<th>Group: H-08-RTI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current Course Level</td>
<td>Exercises Correct</td>
<td>Exercises Attempted</td>
<td>Exercises Percent Correct</td>
<td>Help Used</td>
<td>Time Spent</td>
<td>Total Sessions</td>
</tr>
<tr>
<td>Student #16</td>
<td>6.09</td>
<td>1</td>
<td>3</td>
<td>33%</td>
<td>0</td>
<td>0:04*</td>
<td>56</td>
</tr>
<tr>
<td>Student #17</td>
<td>6.27</td>
<td>13</td>
<td>31</td>
<td>42%</td>
<td>0</td>
<td>0:30</td>
<td>17</td>
</tr>
<tr>
<td>Student #18</td>
<td>6.37</td>
<td>14</td>
<td>34</td>
<td>41%</td>
<td>0</td>
<td>0:24*</td>
<td>82</td>
</tr>
<tr>
<td>Student #19</td>
<td>6.13</td>
<td>26</td>
<td>36</td>
<td>72%</td>
<td>0</td>
<td>0:17*</td>
<td>47</td>
</tr>
<tr>
<td>Student #20</td>
<td>6.64</td>
<td>11</td>
<td>22</td>
<td>50%</td>
<td>0</td>
<td>0:30</td>
<td>31</td>
</tr>
<tr>
<td>Student #21</td>
<td>6.06</td>
<td>17</td>
<td>31</td>
<td>55%</td>
<td>0</td>
<td>0:30</td>
<td>47</td>
</tr>
<tr>
<td>Student #22</td>
<td>6.34</td>
<td>30</td>
<td>41</td>
<td>73%</td>
<td>0</td>
<td>0:23*</td>
<td>41</td>
</tr>
<tr>
<td>Student #23</td>
<td>5.94</td>
<td>18</td>
<td>33</td>
<td>55%</td>
<td>0</td>
<td>0:30</td>
<td>81</td>
</tr>
<tr>
<td>Student #24</td>
<td>6.56</td>
<td>17</td>
<td>33</td>
<td>52%</td>
<td>0</td>
<td>0:28*</td>
<td>50</td>
</tr>
<tr>
<td>Student #25</td>
<td>5.62</td>
<td>1</td>
<td>7</td>
<td>14%</td>
<td>0</td>
<td>0:16*</td>
<td>13</td>
</tr>
<tr>
<td>Student #26</td>
<td>6.36</td>
<td>0</td>
<td>1</td>
<td>0%</td>
<td>0</td>
<td>0:01*</td>
<td>65</td>
</tr>
<tr>
<td>Student #27</td>
<td>5.74</td>
<td>17</td>
<td>30</td>
<td>57%</td>
<td>0</td>
<td>0:30</td>
<td>11</td>
</tr>
<tr>
<td>Student #28</td>
<td>6.28</td>
<td>36</td>
<td>67</td>
<td>54%</td>
<td>0</td>
<td>0:30</td>
<td>60</td>
</tr>
<tr>
<td>Student #29</td>
<td>6.05</td>
<td>3</td>
<td>20</td>
<td>15%</td>
<td>1</td>
<td>0:20*</td>
<td>50</td>
</tr>
<tr>
<td>Student #30</td>
<td>6.80</td>
<td>8</td>
<td>13</td>
<td>62%</td>
<td>0</td>
<td>0:12*</td>
<td>70</td>
</tr>
<tr>
<td>Student #31</td>
<td>6.12</td>
<td>50</td>
<td>78</td>
<td>64%</td>
<td>6</td>
<td>0:30</td>
<td>51</td>
</tr>
<tr>
<td>Student #32</td>
<td>6.91</td>
<td>15</td>
<td>18</td>
<td>83%</td>
<td>0</td>
<td>0:30</td>
<td>29</td>
</tr>
<tr>
<td>Student #33</td>
<td>6.15</td>
<td>19</td>
<td>25</td>
<td>76%</td>
<td>0</td>
<td>0:30</td>
<td>48</td>
</tr>
<tr>
<td>Student #34</td>
<td>5.56</td>
<td>0</td>
<td>6</td>
<td>0%</td>
<td>3</td>
<td>0:07*</td>
<td>27</td>
</tr>
<tr>
<td>Student #35</td>
<td>6.04</td>
<td>25</td>
<td>34</td>
<td>74%</td>
<td>0</td>
<td>0:30</td>
<td>16</td>
</tr>
</tbody>
</table>

**Mean - 20 Students**

<table>
<thead>
<tr>
<th>Level</th>
<th>Raw Performance</th>
<th>Usage</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.20</td>
<td>16.05</td>
<td>28.15</td>
<td>48.6%</td>
</tr>
<tr>
<td>0.35</td>
<td>12.94</td>
<td>19.35</td>
<td>24.85%</td>
</tr>
</tbody>
</table>
In addition to daily “Last Session Reports”, SuccessMaker generates a “Progress Monitoring Graph” on each student. Figure 9 is displayed in the teacher’s dashboard and shows a student’s progress relative to the primary target. My 8th graders, for example, had a primary target (the yellow line) of attaining a 9th grade level by May, 2013. The blue dots represent the individual sessions that students complete and the light blue line shows the students current grade level. While in the teacher dashboard, placing your cursor on a blue dot will show the teacher the student’s score for that session. According to Student #1’s progress monitoring graph, this student did not attain the primary target however the student can easily see that the growth that he/she is attaining. For example, Student #1’s initial placement was nearly 5th grade, 4th month of school. As of June, 3, 2013, Student #1 gained 2 years and 6 months putting this student at an 8th grade level. Although this student did not attain the overall goal, this student made incredible progress toward the goal in only 8 months of working on SuccessMaker.
The “Progress Monitoring Graph” is a powerful tool for teachers to use. Within seconds teachers can visually see the progress, or lack of progress, that their students are making. In comparison to Student #1, below is the “Progress Monitoring Graph” for Student #6. Notice that both students have the same Primary Target because they are 8th graders; however, Student #6’s current level is far below that of Student #1 and the rest of the students in the homeroom group. Student #6’s lack of progress became a concern late in the fall of 2012. Through the “Progress Monitoring Graph” and other reports from SuccessMaker, it was clear that this student was struggling in the program. This student’s lack of progress lead to an investigation as to the cause of the struggle. Further information on Student #6 will be given in section 4.8, Special Education Referral.

Figure 10: Progress Monitoring Graph for Student #6
In addition to the individual progress monitoring of the former reports, SuccessMaker allows teachers to run “Cumulative Performance” reports on groups of students. The “Cumulative Performance” report shows a quick overview on a student’s progress year-to-date. This report includes level data, usage, instructional performance and mastery. Teachers will see a student’s growth in the program, total time and number of sessions completed, their percentage of exercises answered correctly and their skill percent mastery. “Cumulative Performance” can be used when checking to see which students qualify for rewards based on attaining certain goals. This report also shows students their progress relative to other students in the program which can be used as a motivational factor.

Tables 4 and 5 are “Cumulative Performance” reports for both my homeroom and pull-out group. Group averages are given at the bottom of each report which is helpful in comparing one group’s progress to another. When updating my principal on my students’ progress, I often used these reports to show the discrepancy in performance between the homeroom and pull-out group. Our ability to progress monitor multiple groups using the SuccessMaker reports allowed our school to evaluate our Response to Intervention plan and guide our future implementation of the program toward the homeroom model.

Using the “Cumulative Performance” report allows teachers to quickly see if any students are falling behind in the program. In Table 4 it is easy to see that Student #6 has a current course level that is significantly lower than their peers. The student’s skills percent mastery was at 66% indicating that the student was not putting forth the appropriate effort. In other words, the student was clicking through the program without trying to answer correctly. This report indicates issues of underperformance with ease and can be used in PLC’s to report on progress.
Table 4: Cumulative Performance Report for the Original Homeroom Group

### Cumulative Performance - Original Homeroom

<table>
<thead>
<tr>
<th>Student</th>
<th>Assigned Course Level</th>
<th>Current Course Level</th>
<th>Time Spent</th>
<th>Total Sessions</th>
<th>Time Spent</th>
<th>Total Sessions</th>
<th>Exercises Correct</th>
<th>Exercises Attempted</th>
<th>Exercises Percent Correct</th>
<th>Skills Assessed</th>
<th>Skills Mastered</th>
<th>Skills Percent Mastered</th>
<th>AP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student #1</td>
<td>8.00</td>
<td>8.02</td>
<td>5.38</td>
<td>2.64</td>
<td>61:53</td>
<td>148</td>
<td>4177</td>
<td>6584</td>
<td>63%</td>
<td>423</td>
<td>392</td>
<td>93%</td>
<td></td>
</tr>
<tr>
<td>Student #2</td>
<td>8.00</td>
<td>8.03</td>
<td>6.30</td>
<td>1.73</td>
<td>47:34</td>
<td>129</td>
<td>2777</td>
<td>4588</td>
<td>61%</td>
<td>263</td>
<td>238</td>
<td>90%</td>
<td></td>
</tr>
<tr>
<td>Student #3</td>
<td>8.00</td>
<td>7.29</td>
<td>5.29</td>
<td>2.00</td>
<td>47:35</td>
<td>122</td>
<td>3149</td>
<td>5184</td>
<td>61%</td>
<td>326</td>
<td>303</td>
<td>93%</td>
<td></td>
</tr>
<tr>
<td>Student #4</td>
<td>8.00</td>
<td>7.36</td>
<td>5.29</td>
<td>2.07</td>
<td>56:55</td>
<td>130</td>
<td>3619</td>
<td>7385</td>
<td>49%</td>
<td>335</td>
<td>272</td>
<td>81%</td>
<td></td>
</tr>
<tr>
<td>Student #5</td>
<td>8.00</td>
<td>7.43</td>
<td>5.29</td>
<td>2.14</td>
<td>67:35</td>
<td>151</td>
<td>3398</td>
<td>5628</td>
<td>60%</td>
<td>354</td>
<td>323</td>
<td>91%</td>
<td></td>
</tr>
<tr>
<td>Student #6</td>
<td>8.00</td>
<td>6.11</td>
<td>5.29</td>
<td>0.82</td>
<td>33:32</td>
<td>72</td>
<td>925</td>
<td>2473</td>
<td>37%</td>
<td>87</td>
<td>57</td>
<td>66%</td>
<td></td>
</tr>
<tr>
<td>Student #7</td>
<td>8.00</td>
<td>7.47</td>
<td>5.89</td>
<td>1.58</td>
<td>59:47</td>
<td>134</td>
<td>2423</td>
<td>3841</td>
<td>63%</td>
<td>263</td>
<td>246</td>
<td>94%</td>
<td></td>
</tr>
<tr>
<td>Student #8</td>
<td>8.00</td>
<td>7.33</td>
<td>5.29</td>
<td>2.04</td>
<td>57:08</td>
<td>134</td>
<td>3435</td>
<td>5901</td>
<td>58%</td>
<td>337</td>
<td>298</td>
<td>88%</td>
<td></td>
</tr>
<tr>
<td>Student #9</td>
<td>8.00</td>
<td>7.19</td>
<td>5.29</td>
<td>1.90</td>
<td>42:09</td>
<td>95</td>
<td>2801</td>
<td>4402</td>
<td>64%</td>
<td>309</td>
<td>291</td>
<td>94%</td>
<td></td>
</tr>
<tr>
<td>Student #10</td>
<td>8.00</td>
<td>6.62</td>
<td>5.29</td>
<td>1.33</td>
<td>48:27</td>
<td>114</td>
<td>2151</td>
<td>3742</td>
<td>57%</td>
<td>201</td>
<td>174</td>
<td>87%</td>
<td></td>
</tr>
<tr>
<td>Student #11</td>
<td>8.00</td>
<td>7.94</td>
<td>5.80</td>
<td>2.14</td>
<td>57:55</td>
<td>134</td>
<td>3299</td>
<td>5155</td>
<td>64%</td>
<td>349</td>
<td>329</td>
<td>94%</td>
<td></td>
</tr>
<tr>
<td>Student #12</td>
<td>8.00</td>
<td>7.20</td>
<td>5.29</td>
<td>1.91</td>
<td>55:25</td>
<td>127</td>
<td>3142</td>
<td>5848</td>
<td>54%</td>
<td>304</td>
<td>258</td>
<td>83%</td>
<td></td>
</tr>
<tr>
<td>Student #13</td>
<td>8.00</td>
<td>7.34</td>
<td>5.88</td>
<td>1.46</td>
<td>60:36</td>
<td>131</td>
<td>2480</td>
<td>4383</td>
<td>57%</td>
<td>240</td>
<td>205</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>Student #14</td>
<td>8.00</td>
<td>7.28</td>
<td>5.88</td>
<td>1.40</td>
<td>44:37</td>
<td>98</td>
<td>2661</td>
<td>4935</td>
<td>54%</td>
<td>227</td>
<td>188</td>
<td>83%</td>
<td></td>
</tr>
<tr>
<td>Student #15</td>
<td>8.00</td>
<td>7.21</td>
<td>5.29</td>
<td>1.92</td>
<td>62:34</td>
<td>146</td>
<td>3171</td>
<td>5309</td>
<td>60%</td>
<td>309</td>
<td>284</td>
<td>92%</td>
<td></td>
</tr>
<tr>
<td><strong>Mean - 15 Students</strong></td>
<td>8.00</td>
<td>7.32</td>
<td>5.52</td>
<td>1.81</td>
<td>53:35</td>
<td>124.33</td>
<td>2907.20</td>
<td>5023.87</td>
<td>57.47%</td>
<td>258.47</td>
<td>257.20</td>
<td>87.73%</td>
<td></td>
</tr>
<tr>
<td><strong>Standard Deviation</strong></td>
<td>0.00</td>
<td>0.49</td>
<td>0.34</td>
<td>0.44</td>
<td>9.13</td>
<td>21.60</td>
<td>755.08</td>
<td>1209.82</td>
<td>7.07%</td>
<td>79.61</td>
<td>79.51</td>
<td>7.38%</td>
<td></td>
</tr>
</tbody>
</table>

% of Students with AP: 53.33%
Table 5: Cumulative Performance Report for the Pull-Out Group

### Cumulative Performance - Pull-Out

**Math**

<table>
<thead>
<tr>
<th>Student</th>
<th>Level Data</th>
<th>Usage</th>
<th>Instructional Performance</th>
<th>Mastery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Assigned Course Level</td>
<td>Current Course Level</td>
<td>IP Level</td>
<td>Gain</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>---------------------</td>
<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>Student #16</td>
<td>8.00</td>
<td>6.09</td>
<td>5.29</td>
<td>0.80</td>
</tr>
<tr>
<td>Student #17</td>
<td>8.00</td>
<td>6.27</td>
<td>6.00</td>
<td>0.27</td>
</tr>
<tr>
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<td>8.00</td>
<td>6.37</td>
<td>5.29</td>
<td>1.08</td>
</tr>
<tr>
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<td>8.00</td>
<td>6.13</td>
<td>5.29</td>
<td>0.84</td>
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<tr>
<td>Student #20</td>
<td>8.00</td>
<td>6.64</td>
<td>6.37</td>
<td>0.27</td>
</tr>
<tr>
<td>Student #21</td>
<td>8.00</td>
<td>6.06</td>
<td>5.38</td>
<td>0.68</td>
</tr>
<tr>
<td>Student #22</td>
<td>8.00</td>
<td>6.34</td>
<td>5.90</td>
<td>0.44</td>
</tr>
<tr>
<td>Student #23</td>
<td>8.00</td>
<td>5.94</td>
<td>5.29</td>
<td>0.65</td>
</tr>
<tr>
<td>Student #24</td>
<td>8.00</td>
<td>6.56</td>
<td>5.80</td>
<td>0.76</td>
</tr>
<tr>
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<td>5.74</td>
<td>5.38</td>
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<td>0.99</td>
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<td>Student #29</td>
<td>8.00</td>
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<td>5.29</td>
<td>0.76</td>
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<tr>
<td>Student #30</td>
<td>8.00</td>
<td>6.80</td>
<td>5.81</td>
<td>0.99</td>
</tr>
<tr>
<td>Student #31</td>
<td>8.00</td>
<td>6.12</td>
<td>5.29</td>
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</tr>
<tr>
<td>Student #32</td>
<td>8.00</td>
<td>6.91</td>
<td>6.68</td>
<td>0.23</td>
</tr>
<tr>
<td>Student #33</td>
<td>8.00</td>
<td>6.15</td>
<td>5.29</td>
<td>0.86</td>
</tr>
<tr>
<td>Student #34</td>
<td>8.00</td>
<td>5.56</td>
<td>5.23</td>
<td>0.33</td>
</tr>
<tr>
<td>Student #35</td>
<td>8.00</td>
<td>6.04</td>
<td>5.80</td>
<td>0.24</td>
</tr>
</tbody>
</table>

**Mean - 20 Students**

<table>
<thead>
<tr>
<th></th>
<th>Assigned Course Level</th>
<th>Current Course Level</th>
<th>IP Level</th>
<th>Gain</th>
<th>Time Spent</th>
<th>Total Sessions</th>
<th>Exercises Correct</th>
<th>Exercises Attempted</th>
<th>Exercises Percent Correct</th>
<th>Skills Assessed</th>
<th>Skills Mastered</th>
<th>Skills Percent Mastered</th>
<th>AP</th>
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<td></td>
<td>8.00</td>
<td>6.20</td>
<td>5.56</td>
<td>0.64</td>
<td>18:39</td>
<td>44:60</td>
<td>716:40</td>
<td>1328:30</td>
<td>53.35%</td>
<td>72.25</td>
<td>63.30</td>
<td>88.00%</td>
<td>•</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.35</td>
<td>0.42</td>
<td>0.30</td>
<td>9:24</td>
<td>21.44</td>
<td>532.80</td>
<td>982.65</td>
<td>12.33%</td>
<td>51.43</td>
<td>45.92</td>
<td>11.79%</td>
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</tbody>
</table>

% of Students with AP: 60%
To measure the effectiveness of SuccessMaker, I examined the math scores on the LEAP test of the targeted students. Of the 31 students, in both the homeroom and pull-out groups, 6 (19%) passed the math section with a Basic. Three students from the homeroom group and three students from the pull-out group were among the 6 students who passed the test.

Because our homeroom group logged a significant amount of time in the program (approximately 52 hours), I compared the LEAP data of this group with students who fell under the cut-point but were not chosen for SuccessMaker. For a basis of comparison I looked at 15 students scoring Approaching Basic or Unsatisfactory on the 2012 iLEAP. I compared their passing rate on the math section of LEAP to the students in the homeroom group. Of the 15 students not chosen for intervention, 5 (33%) passed the math section of the LEAP test. In the homeroom group, 3 out of 15 (20%) students passed the math section.

Initially, I was disappointed with the number of targeted students that passed. I assumed that based on the growth rates shown on the “Cumulative Performance Report” in SuccessMaker, more students would have passed the LEAP. What I failed to consider was that the targeted 8th graders were performing two to four years below grade level upon beginning the program. Their average grade level at “Initial Placement” was in the 5th grade range. Although some of them achieved almost two grade levels of growth, there was not a sufficient amount of time for them to catch up to grade level in one school year.

We considered the differences between LEAP and iLEAP scores separately for the homeroom and pull-out groups. The average of the differences was computed. Naively, one would conclude that there is a difference between these groups based on these group averages. However, the t-test for equality of sample means does not reveal a significant difference between the averages. Though the homeroom group’s passing rate for LEAP was lower than that of the
pull-out group, the differences between the LEAP and iLEAP scores did not show a disparity between the two groups.

For the 6 targeted students who did pass the 8th grade LEAP test, they achieved a great accomplishment. See Appendix C for a comparison of the target group’s scaled scores for both the 2012 iLEAP and 2013 LEAP test. 27 out of 31 (87%) students improved their scaled score for math from iLEAP to LEAP. Although only 19% of the students passed, a majority of them showed growth based on the scaled scores.

Although the effectiveness of SuccessMaker is somewhat questionable when focusing on one school year, East Baton Rouge Parish (EBR) has been using the program for three years and has noticed benefits. For example, over the past three years EBR has observed an upward trend in the number of targeted students who passed the LEAP test. Table 6 shows the percentage of students in 4th and 8th grade that passed the LEAP test in the past three years. The students included in the table are in the target groups established at the beginning of each school year. The 4th grade group consisted of approximately 830 students and the 8th grade group consisted of approximately 200 students.

Table 6: Percentage of Students in Target Groups Who Passed the LEAP Test

<table>
<thead>
<tr>
<th>Percentage of Students in Target Groups who passed the LEAP Test</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th Grade</td>
<td>56</td>
<td>63</td>
<td>66</td>
</tr>
<tr>
<td>8th Grade</td>
<td>40</td>
<td>43</td>
<td>49</td>
</tr>
</tbody>
</table>

In addition to seeing an upward trend of passing LEAP scores, Table 7 shows the progress that the district made in SuccessMaker throughout the 2012-2013 school year. The
table is broken down by grade level, number of students, average placement levels during August 2012 and April 2013, average instructional days behind during August 2012 and April 2013, and the average instructional days recovered. The August 2012 Mean Placement Level shows the average initial placement level from each grade. Compared to the Mean Current Level in April 2013, all grade levels gained at least seven months’ worth of knowledge with the greatest gains being the 3rd graders. Grades 3-5 recovered all instructional days. This means the 3rd-5th graders should now be on the appropriate grade level. Grades 6-8 all showed improvement in grade level. However, due to the fact that their mean placement level was considerably low to begin with they were unable to catch up to current grade level. The 6th-8th graders did however recover an average of 139 instructional days which is the same average number of days recovered by the 3rd-4th graders. This table shows that SuccessMaker is working to close gaps in mathematical knowledge at all grade levels. It also points out the power of using the program for multiple years with the same students.

Table 7: 2012-2013 SuccessMaker 5- Chronological Progress

<table>
<thead>
<tr>
<th>Grade</th>
<th># of Students Included</th>
<th>Aug 2012 Mean Placement Level</th>
<th>Aug 2012 Mean Instructional Days Behind</th>
<th>April 2013 Mean Current Level</th>
<th>April 2013 Mean Instructional Days Behind</th>
<th>Mean Instructional Days Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd</td>
<td>840</td>
<td>2.34</td>
<td>118</td>
<td>3.42</td>
<td>0</td>
<td>118</td>
</tr>
<tr>
<td>4th</td>
<td>833</td>
<td>3.24</td>
<td>136</td>
<td>4.23</td>
<td>0</td>
<td>136</td>
</tr>
<tr>
<td>5th</td>
<td>760</td>
<td>4.10</td>
<td>162</td>
<td>5.09</td>
<td>0</td>
<td>162</td>
</tr>
<tr>
<td>6th</td>
<td>311</td>
<td>4.37</td>
<td>293</td>
<td>5.11</td>
<td>160</td>
<td>133</td>
</tr>
<tr>
<td>7th</td>
<td>324</td>
<td>5.15</td>
<td>333</td>
<td>5.86</td>
<td>205</td>
<td>128</td>
</tr>
<tr>
<td>8th</td>
<td>209</td>
<td>5.59</td>
<td>434</td>
<td>6.45</td>
<td>279</td>
<td>155</td>
</tr>
<tr>
<td>Totals</td>
<td>3277</td>
<td>4.13</td>
<td>1476</td>
<td>5.02</td>
<td>644</td>
<td>832</td>
</tr>
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</table>
4.8 Special Education Referral

An integral part of a Response to Intervention program is progress monitoring of students while on their course of remediation. Some RTI plans include short-term remediation for students who might be missing a singular skill in a content area. For instance, if a student is struggling to understand the life cycle of a caterpillar, a science teacher can quiz the student, identify the area of weakness, reteach the skill in a small group, progress monitor, retest the student and assess their progress. For most students this form of short-term remediation is the key to staying on grade level. However, most schools have a subpopulation of students who are multiple grade levels behind, sometimes in multiple subject areas. In this situation, teachers should use the data collected from their RTI plan to gauge whether or not a student is responding to the intervention. “If students have not responded to the interventions prescribed by a well-designed and well-implemented PRTI system, then the team must explain other options, including referring them to a higher tier or to special education assessment” (Buffum, Mattos, Weber, 133). In the case of Student #6 from my homeroom group, the RTI plan did exactly what it was supposed to.

After going through the initial placement phase, Student #6 was placed at a grade level of 5.29. Because 9 out of the original 15 homeroom students were placed at 5.29 during initial placement, I was not immediately concerned about Student #6. As the school year progressed, I became concerned when viewing the “Cumulative Performance” reports and seeing the student’s lack of progress relative to the other students. This cause of concern led to a casual discussion among the student’s content teachers. Each teacher stated that they were also concerned about the student’s progress in their classes. Student #6 was behind on many assignments in all classes. Teachers commented that if an assignment was submitted for a grade Student #6
typically answered all questions incorrectly therefore earning no credit. This student was quiet in the classroom and usually caused no behavior problems, consequently they went unnoticed.

On December 14, 2012, I emailed our school guidance counselor with our concerns. I stated that according to Student #6’s cumulative records the student was retained in the 4th grade after failing the LEAP test twice. The student repeated the 4th grade and retook the LEAP twice, failing both again. Student #6 was then promoted to 6th grade without attending 5th grade. The student was promoted once again from 6th grade to 8th grade where they failed the LEAP test twice in the 2011-2012 school year. During the 2012-2013 school year, Student #6 was enrolled in a remediation program called Language! for English/Language Arts and had begun working in SuccessMaker since the end of September 2012. At the time of the email Student #6 was at half a year of growth in the program when most other students were around one year of growth. I also stated that the student’s mother was contacted and she was aware of the deficiencies. I asked the mother if the student was ever tested for Special Education to which she answered “no”.

With the progress monitoring documentation from SuccessMaker, verbal statements, grade reports from teachers and cumulative records our guidance counselor was given enough proof to make a data-based decision. Special Education testing was the appropriate next step in the RTI process. After relaying the data, the school district’s special education coordinator conducted a few tests with Student #6. The testing period took approximately 2 months to complete. After the required paperwork and testing took place the coordinator concluded that Student #6 did qualify for accommodations. Student #6 was given accommodations such as “tests read aloud”, “small group testing”, “extended time”, “modified assignments” and “preferential seating”.
Diagnosing a student with a learning disability typically occurs in Elementary aged children. It was surprising to see a student, with such deficits, in 8th grade that was never evaluated. Thanks to SuccessMaker’s progress monitoring reports sufficient data was provided to allow Student #6 to receive the services they deserved. Student #6 will continue to have progress monitoring meetings with special education coordinators, teachers and parents. This student will be allowed accommodations on standardized testing and classroom assignments throughout the course of their schooling.

4.9 Suggestions to Pearson

Pearson is adamant about keeping students motivated while using SuccessMaker. District consultants share motivational documents such as progress monitoring calendars and growth charts that are to be used on a daily and weekly basis. The students record their daily progress on their calendars however; I feel that the students are missing out on the wonderful data that teachers are privy to. The “Progress Monitoring Graph” that teachers can view on each student would be a wonderful tool to add to the student’s desktop upon logging in. This graph clearly shows the target goal for the student to attain and shows the student’s current grade level. I think students would be excited to see their growth each time they log in. This would also make it easier for teachers to review results with the students on a periodic basis.

During the past school year, our district experienced about six updates from Pearson in an effort to fix minor issues. The updates generally caused side effects such as inability for students to log in, program freezes and the need for Java updates. A recommendation from Herman Brister, Associate Superintendent for Student Support Services in the East Baton Rouge Parish School District, is for the district to “conduct the system updates only once a year as opposed to
three or four times a year”. Perhaps Pearson can update their systems while students are on breaks from school such as Thanksgiving, Christmas and Easter.

4.10 SuccessMaker Elective

In order to make our RTI process more effective with the use of SuccessMaker, Woodlawn Middle decided to make the program into an elective course. The idea for the elective course came from the success of our homeroom students relative to the pull-out group. We knew that having SuccessMaker as a graded course influences a student’s performance in the program. This was evident in the amount of growth and time spent in the program by the homeroom students compared to the pull-out group.

The elective course will be taught by a former 7th grade math teacher and will take place in a computer lab. Three sections of the course will be available during the 2013-2014 school year, one per grade level. Each section of the course will allow 30 students to participate. Students will be assigned to the elective course based on iLEAP scores and previous participation in the program. The goal is to target students scoring Approaching Basic’s on the previous year’s standardized test in order for them to score a Basic or above on the LEAP test.

Each elective class will be 90 minutes long and will include at least two, thirty minute sessions of SuccessMaker. The remaining time in class is to be spent working in small groups with the instructor on areas of difficulty as prescribed by SuccessMaker. The same procedures will be followed for documenting daily use. Students will be responsible for keeping a calendar with their daily scores as well as updating their growth chart for each .10 year in growth.

The implementation of the elective course and the continuation of the homeroom group will allow at least 50 targeted students per grade level to work on SuccessMaker. Teachers will still be able to use the program for differentiation within their classroom as well as for early
finishers. By eliminating the pull-out group, teachers will be able to work more freely with students in Tier 1 and allow those who are multiple years behind to work on SuccessMaker. Implementation of the elective course will give SuccessMaker access to a greater number of students and allow our school to use its resources more wisely.

4.11 Areas for Improvement

At the end of each school year it is essential to evaluate your school’s Response to Intervention plan and make adjustments where needed. Throughout the school year, I became aware of some downfalls to SuccessMaker and areas that we, as a faculty, can improve to make our implementation superior. Just as documenting a student’s accomplishments in RTI is essential, so is communicating with parents or guardians on the student’s progress. At the start of our RTI process with SuccessMaker we sent a letter home to parents with a description of the homeroom or pull-out group that their child would be participating in. However, over the course of the school year, I missed many opportunities to send home additional letters of praise or make phone calls informing parents of their child’s accomplishments. These missed opportunities could have been motivating to my students. In the future, I would like to set a goal of calling parents once a month to inform them of their child’s progress.

Another area of weakness that can be strengthened is the use of the “Areas of Difficulty” report. As a homeroom teacher I can implement a schedule that would allow me to work with a few students each morning on specific skills. With 20 students in the class, working 5 days per week, I will work with 4 students each morning and document the remediation in their progress monitoring calendars.

Pearson has multiple suggestions for motivating students. Some suggestions include stickers for students who score 70% or higher on their daily progress report, weekly rewards for
students earning five or more stickers, monthly recognition for students who make at least one month of “gain”, semester rewards for students who achieve one school year of growth in a semester and an end of the year reward party for schools with the most gain and best implementation. One area that our school can improve on is the weekly rewards for students earning five or more stickers. Our students enjoyed putting their name on our SuccessMaker recognition board. However, many times I felt bogged down with more pressing matters and forgot about their rewards. Teachers can designate one day per week where they review the students’ calendars and assess which students have earned their rewards for the week. SuccessMaker implementation teachers can hold each other accountable for updating the board on a weekly basis.

Another area for improvement is the advertising of our semester reward parties. Woodlawn hosted two reward parties, one in January for the 1st semester and one in May for the 2nd semester. At the parties, students enjoyed pizza, soft drinks and special awards. For both parties, I found myself trying to squeeze in time to reward the students for their achievements. Students need to be informed of the parties and the qualifications early in the semester and frequently reminded in order for it to be an incentive. The reminder should be a visual in the classroom that students can see daily and use to update their progress toward the reward. Teachers can do this in the form of a bulletin board with a progress monitoring chart for each student.

Throughout the school year I found myself wondering what kind of progress the other grade levels were making. Because teacher planning periods correlate with one another in the same grade level, we typically did not have time to meet with each other to discuss SuccessMaker. A critical part of a Response to Intervention plan is discussing the data that is
being collected and making informed decisions based on the data. If our teachers would have met last year for periodic data updates we would have noticed that the 8th grade homeroom group greatly surpassed the 6th and 7th grade groups in the amount of time spent in the program. Teachers could have discussed the reasons why this was occurring and given advice for improvement.

4.12 Conclusions and Recommendations for Future Implementation

Throughout the 2012-2013 school year, Woodlawn Middle faced various challenges and successes with RTI. With success and failure comes the opportunity to improve upon a plan that can help “at risk” students. Through the use of SuccessMaker as a research-based intervention come the following conclusions and recommendations for future implementation:

- Full-model implementation with a small target group
- Continue with homeroom model and create elective course
- Review progress reports with students on a regular basis
- SuccessMaker provided sufficient data for a special education referral
- Data results from a single year are inconclusive for LEAP success
- SuccessMaker closed gaps but there is still room for improvement

Starting off small with our RTI plan was an efficient way to implement SuccessMaker during the 2012-2013 school year. Approximately 90 students (6th-8th grade) were involved in SuccessMaker through our pilot program. Woodlawn Middle School should receive more licenses for SuccessMaker during the 2013-2014 school year allowing us to add more students to the program. Additional licenses come as a recommendation from the district to expand our use of the program.
Throughout our implementation, we noticed areas in our plan that were working well and those that needed improvement. One area of success was the structure of our homeroom model. Establishing SuccessMaker as a graded course caused the students to take the intervention more seriously. This was evident in the cumulative performance reports of both the homeroom and pull-out groups. Therefore, we will be using the homeroom model with the future implementation of SuccessMaker in our elective course.

The frequent progress monitoring that SuccessMaker generates was valuable to our program. The reports given by the program were easy to use and allowed teachers to review data with each other and with their students. In addition to being helpful for daily use, SuccessMaker reports provided sufficient data for a special education referral. Teachers may want to review data and goals with their students on a weekly basis in an effort to hold students more accountable for their progress.

Pearson promotes SuccessMaker as a multi-year remediation tool; therefore students in the target group from 6th and 7th grade will be using the program again the following school year. It will be exciting to see the continued growth of these students as they close the gaps in their mathematical content knowledge. We will continue to monitor student progress and compare their growth in SuccessMaker to the achievement levels attained on iLEAP and LEAP.

Although passing rates on the math section of the LEAP test were lower than expected, there is evidence of content knowledge growth. Passing rates may have been lower due to poor implementation of small group remediation on the teacher’s part. As with any new program, trial and error will show where improvements can be made. We now know the importance of remediating based on the “Areas of Difficulty” report and will therefore conduct small groups on a regular basis.
In conclusion, SuccessMaker proved to be a useful tool for math remediation due to its ease of use, reliability of reports and ability to remediate with multiple students at a time. Adjustments will be made to the RTI program at Woodlawn Middle in order to implement the program on a larger scale. SuccessMaker will be used in both homeroom and elective courses in order to assist more students in Tier 2 interventions. Although SuccessMaker did not provide the expected results in terms of students passing the LEAP test, we will continue its use with new and former SuccessMaker students to continue collecting data and evaluate the program’s effectiveness as a remediation tool.
References


Brister, Herman. Email Interview. 22 May, 2013.


Newbold, Princess. Interview. 5 June, 2013.


September 21, 2012

Dear Woodlawn Middle School Parents,

We have a wonderful new math program this school year called Success Maker. This computer based program will test our students and determine their weaknesses in math. An individualized program will be developed for them to increase their math understanding.

Your child has been assigned to a math home room this school year which allow them to access the Success Maker program on line on a daily basis. Each student’s goal is to reach a 2 year gain in their math scores by May of 2013. The success of this program lies in the daily work the students do on the on-line program, therefore, it is extremely important that your child is on time each day and at school each day as home room is the first block of the day.

It is our hopes that this extra help will allow your child to score basic or above on the iLEAP or LEAP test. If you have any questions or concerns, please do not hesitate to contact us.

Sincerely,

Shelly Colvin
Principal
Appendix B: SuccessMaker Progress Monitoring Calendar

Month: January

I signed up for SUCCESS

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<td>1-7-13</td>
<td>1-8-13</td>
<td>1-9-13</td>
<td>1-16-13</td>
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<tr>
<td>14-18</td>
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<td></td>
<td></td>
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<tr>
<td>16/30</td>
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<td>53%</td>
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<tr>
<th></th>
<th>1-28</th>
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<th>1-31</th>
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<td></td>
<td>7/21</td>
<td>23%</td>
<td>22/32</td>
<td>28/45</td>
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<td></td>
<td>69%</td>
<td></td>
<td>80%</td>
<td>72%</td>
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<table>
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<th>1-31</th>
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<tr>
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<td>37/18</td>
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<td>44/59</td>
<td>43/60</td>
</tr>
<tr>
<td></td>
<td>77%</td>
<td></td>
<td>75%</td>
<td>80%</td>
</tr>
<tr>
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</table>

**Codes**

- **£50**: Initial showing progress report on screen at the end of a session

- **A**: Absent

- **Star**: Star for progress reports that are 70% or higher

- **★★★★★**: Each time a student earns 5 stickers, he/she will get to sign the board
### Appendix C: 8th Grade Targeted Group’s iLEAP and LEAP Scaled Scores

<table>
<thead>
<tr>
<th>Student #</th>
<th>Group</th>
<th>iLEAP 2012 Scaled Score</th>
<th>LEAP 2013 Scaled Score</th>
<th>Scaled Score Gain or Loss</th>
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<tr>
<td>1</td>
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<td>268</td>
<td>309</td>
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<tr>
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<td>285</td>
<td>348</td>
<td>63</td>
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<td>3</td>
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<td>290</td>
<td>295</td>
<td>5</td>
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<tr>
<td>4</td>
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<td>248</td>
<td>303</td>
<td>55</td>
</tr>
<tr>
<td>5</td>
<td>Homeroom</td>
<td>127</td>
<td>305</td>
<td>178</td>
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<tr>
<td>6</td>
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<td>-145</td>
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<td>0</td>
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<td>300</td>
<td>32</td>
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<tr>
<td>9</td>
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<td>285</td>
<td>319</td>
<td>34</td>
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<td>10</td>
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<td>274</td>
<td>329</td>
<td>55</td>
</tr>
<tr>
<td>11</td>
<td>Homeroom</td>
<td>256</td>
<td>321</td>
<td>65</td>
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<tr>
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<td>Homeroom</td>
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<td>310</td>
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<td>268</td>
<td>305</td>
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<tr>
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<td>Homeroom</td>
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<td>290</td>
<td>58</td>
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<td>19</td>
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<td>32</td>
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<td>241</td>
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<td>303</td>
<td>13</td>
</tr>
<tr>
<td>34</td>
<td>Pull-out</td>
<td>160</td>
<td>236</td>
<td>76</td>
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<tr>
<td>35</td>
<td>Pull-out</td>
<td>222</td>
<td>303</td>
<td>81</td>
</tr>
</tbody>
</table>
Appendix D: IRB Approval

Application for Exemption from Institutional Oversight

Unless qualified as meeting the specific criteria for exemption from Institutional Review Board (IRB) oversight, ALL LSU research/projects using living humans as subjects, or samples, or data obtained from humans, directly or indirectly, with or without their consent, must be approved or exempted in advance by the LSU IRB. This form helps the PI determine if a project may be exempted, and is used to request an exemption.

Applicant: Please fill out the application in its entirety and include the completed application as well as parts A-F, listed below, when submitting to the IRB. Once the application is completed, please the completed application to the IRB Office or to a member of the Human Subjects Screening Committee. Members of this committee can be found at http://research.lsu.edu/Compliance/Polices/Procedures/InstitutionalReviewBoard%28IRB%29/item24737.html

A Complete Application includes All of the Following:

(A) A copy of this completed form and a copy of parts B thru F.
(B) A brief project description (adequate to evaluate risks to subjects and to explain your responses to Parts 1-3).
(C) Copies of all instruments to be used.
(D) The consent form that you will use in the study (see part 3 for more information.)
(E) Certificate of Completion of Human Subjects Protection Training for all personnel involved in the project, including students who are involved with testing or handling data, unless already on file with the IRB Training link: (http://phrp.nihtaining.com/users/login.php)
(F) IRB Security of Data Agreement. (http://research.lsu.edu/files/26774.pdf)

1) Principal Investigator: Lauren Hutchinson
   Dept: Natural Sciences
   Ph: 2259754506
   E-mail: hutchinson1@ebschools.org

2) Co-Investigator(s): Please include department, rank, phone, and e-mail for each.
   If student, please identify and name supervising professor in this space.
   None

3) Project Title: A Middle School's Response to Intervention: Success Maker for Math Remediation

4) Proposal? (yes or no) No
   If Yes, LSU Proposal Number
   Also, if YES, either
   □ This application completely matches the scope of work in the grant
   □ More IRB Applications will be filed later

5) Subject Pool (e.g. Psychology students) Children <18
   *Circle any "vulnerable populations" to be used: (children <18; the mentally impaired; pregnant women; the ages, other). Projects with incarcerated persons cannot be exempted.

6) PI Signature
   [Signature]
   Date [MM/DD/YY] (no per signatures)

** I certify my responses are accurate and complete. If the project scope or design is later changed, I will resubmit for review. I will obtain written approval from the Authorized Representative of all non-LSU institutions in which the study is conducted. I also understand that it is my responsibility to maintain copies of all consent forms at LSU for three years after completion of the study. If I leave LSU before that time the consent forms should be preserved in the Departmental Office.

Screening Committee Action: Exempted
Signed Consent Waived: Yes
Reviewer: Mathews
Date of Review: 7/1/13

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Parental Permission Form for Success Maker

Project Title: A Middle School's Response to Intervention: Success Maker for Math Remediation

Performance Site: Woodlawn Middle School

Investigators: The following Investigator is available for questions,

M-F, 1:00 p.m.-5:00 p.m.

Lauren Hutchinson

8th grade Math teacher at Woodlawn Middle School
Graduate Student in LSU's LaMSTI Program

(225) 751-0436

Purpose of the Study: The purpose of this research project is to investigate the effectiveness of an online math remediation program on student standardized test scores.

Inclusion Criteria: Children 12-15 years of age whose ILEAP scores where an Approaching Basic or Unsatisfactory during the previous school year.

Exclusion Criteria: Children who score Basic or above on the previous years standardized test.

Description of the Study: Over a period of one school year, 4-5 days per week, the investigator, will observe subjects' working online using Success Maker, maintain records of students performance, share performance reports with individual students and administrators and monitor cumulative performance records for all of the students.

Students will work individually on Success Maker for 30 minutes a day during homeroom and/or their elective period. Success Maker will use the first few sessions of the program to determine the students appropriate grade level based on the number of problems that the student answers correctly or incorrectly. From there, students will be working on a variety of math problems that are tailored to their equivalent grade level. The goal is for 8th graders to reach the grade level of 8.9 by the time the LEAP test will be given.

Benefits: Students will have the opportunity to increase their content knowledge in math in addition to their traditional math class. The goal is for the students to gain 1.5 months of knowledge each month that they are working on the program. In one school year a student should be able to gain 1.35 years of growth.

Risks: There are no known risks.

Right to Refuse: Participation is voluntary, and a child will become part of the study only if both child and parent agree to the child's participation. At any time, either the subject may withdraw from the study or the subject's parent may withdraw the subject from the study without penalty or loss of any benefit to which they might otherwise be entitled.

Privacy: The school records of participants in this study may be reviewed by investigators. Results of the study may be published, but no names or identifying information will be included for publication. Subject identity will remain confidential unless disclosure is required by law.
Financial Information: There is no cost for participation in the study, nor is there any compensation to the subjects for participation.

Signatures:

The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigator. If I have questions about subjects' rights or other concerns, I can contact Robert C. Mathews, Chairman, Institutional Review Board, (225) 578-8692, irb@lsu.edu, www.lsu.edu/irb. I will allow my child to participate in the study described above and acknowledge the investigator's obligation to provide me with a signed copy of this consent form.

Parent's Signature: ___________________________ Date: ______________________

The parent/guardian has indicated to me that he/she is unable to read. I certify that I have read this consent form to the parent/guardian and explained that by completing the signature line above he/she has given permission for the child to participate in the study.

Signature of Reader: ___________________________ Date: ______________________

Study Exempted By:
Dr. Robert C. Mathews, Chairman
Institutional Review Board
Louisiana State University
203 B-1 David Boyd Hall
225-578-8692 | www.lsu.edu/irb
Exemption Expires: 5/18/2016

*This study was exempted by the IRB.*

Institutional Review Board
Dr. Robert Mathews, Chair
203 B-1 David Boyd Hall
Baton Rouge, LA 70803
P: 225.578.8692
F: 225.578.6792
irb@lsu.edu | lsu.edu/irb
Child Assent Form for Success Maker Study

I, ____________________________, agree to be in a study that investigates the effectiveness of an online math remediation program (Success Maker) on student standardized test scores. I will have to work on Success Maker for 30 minute sessions, 4-5 days a week. I will have to track my progress daily on a calendar that will be kept in my Success Maker folder. I will receive a weekly average grade for Success Maker based on my daily percentage scores. I can earn bonus points in my traditional math class by completing extra sessions in Success Maker and putting forth extra effort.

Child’s Signature: ____________________________ Age: _____ Date: ____________

Witness*: ____________________________ Date: ____________

* (N.B. Witness must be present for the assent process, not just the signature by the minor.)

*This study was exempted by the IRB.*

Institutional Review Board

Dr. Robert Mathews, Chair

203 B-1 David Boyd Hall

Baton Rouge, LA 70803

P: 225.578.8692

F: 225.578.6792

irb@lsu.edu | lsu.edu/irb

Study Exempted By:
Dr. Robert C. Mathews, Chairman
Institutional Review Board
Louisiana State University
203 B-1 David Boyd Hall
225-578-8992 | www.lsu.edu/irb
Exemption Expires: 5/19/2016
Vita

Lauren Jane Hutchinson is a native of Baton Rouge, Louisiana. She attended Louisiana State University and received a Bachelor of Science in Marketing in 2007. Lauren worked as a recruiter for a financial services company for two years when she felt the need to change careers. She was accepted into the Louisiana Resource Center for Educators’ Certification Solutions program and became a certified secondary mathematics teacher in December, 2009. Lauren has been teaching at Woodlawn Middle School in Baton Rouge, Louisiana since January, 2010. Coincidentally, Woodlawn Middle School is located on the same property that Lauren went to high school, the old Woodlawn High School.