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Balanced Reading Basals and the Impact on Third-Grade Reading Achievement

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INTRODUCTION

One of the most fundamental building blocks to success is learning to read by the end of third grade. There is clear evidence of the impact of reading on students’ continued academic success. A longitudinal study of third-grade students in Chicago in 1996-1997 showed a correlation between third- and eighth-grade reading scores (Lesnick, Goerge, Smithgall, & Gwynne, 2010). Based on the findings, student third-grade reading achievement scores were found to be strong indicators of student grade point averages and potential course failures in ninth grade. When grouping the students by their third-grade level in eighth and ninth grade, it also helped explain the difference in graduation rates. Students who struggled with reading in third grade were less likely to graduate. Therefore, schools have a short window of opportunity to ensure that the students they serve reach their potential to become productive lifelong learners and citizens.

Early reading instruction also plays a vital role in assuring that students build the self-esteem necessary to believe they can become successful readers. Instead of allowing students to feel helpless, there is a need to provide students with tools that will enable them to overcome the reading difficulties themselves. According to Torgeson (2002), two components are necessary for reading comprehension: language comprehension skills and the ability to read words in print fluently and accurately.

In order for students to be able to read fluently, they must have a strong grasp of phonological awareness and be able to apply the alphabetical principal. Phonemic awareness has been found to be a strong predictor of reading success (International Reading Association, 1998). When students develop these prerequisite skills, reading unknown words becomes effortless (Torgeson, 2002). Consequently, students can then spend their efforts on comprehending the text. Early readers are much more likely to
become lifelong learners who are willing to tackle a variety of texts.

In February 2009, President Obama signed the American Recovery and Reinvestment Act (ARRA) into law. One component of the law focused on making changes to education that would help schools build their capacity to improve student outcomes. The Race to the Top program, supported through ARRA, was a competitive grant to help states that were showing success in raising student achievement and to assist with developing competitive 21st century learners. North Carolina was one of 11 states that received the grant along with the District of Columbia. These states were charged with becoming models for other states on how to use these reforms to have a positive impact on student outcomes. In order for students to meet these higher standards and prepare them for the 21st century, schools must be ready to meet the learners’ individual needs and differences to support their success in today’s society.

**Policy and Practice Supports AARA**

In 2012, the North Carolina legislature passed the Read to Achieve law (House Bill 950/S.L. 2012-142 Section 7A) to assist with this mission. The law was enacted to ensure that all students read at or above grade level by the end of third grade and includes the prevention of early reading difficulties through responsive instructional support. Needs for this support are identified through a statewide system of diagnostic, formative, and screening assessments to fill those instructional gaps as well as the use of other forms of assessment data to inform and guide instruction.

Teachers are responsible for providing reading instruction to meet the needs of students through the use of research-based instructional strategies. Through the use of research-based reading instruction, student instructional differences are met. The National Reading Panel (National Institute of Child Health and Human Development [NICHHD], 2000) found that five components were essential to reading instruction: phonemic awareness, phonics, vocabulary, fluency, and comprehension.
Put Reading First (Armbruster, Lehr, & Osborn, 2003), a booklet about evidence-based reading research based on the National Reading Panel findings, specified that effective instruction has a specific set of characteristics. Instruction should be explicit, systematic, and scaffolded until the students have built automaticity in these five components of reading. Explicit direct instruction provides students with the opportunity to receive modeling, scaffolding, and corrective feedback from the teacher. Students showed improved reading achievement when systematic instruction was utilized (Shanahan, 2005).

In 2009, a paradigm shift in the standards for reading occurred through the efforts of the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO). The group acknowledged that students need to be college- and career-ready, regardless of where they live. Therefore, the group worked together to develop a set of college and career standards as well as K-12 English Language Arts standards. States adopted the standards on a volunteer basis; and North Carolina was one of 43 states including the District of Columbia, four territories, and the Department of Defense Education Activity (DoDEA) that adopted and implemented the Common Core State Standards (NGA Center, CCSSO, 2010).

McGraw-Hill Reading Wonders™, K-6, is a comprehensive reading program that addresses the five components of reading found to be part of an effective reading program by the National Reading Panel (NICHHD, 2000). The reading program is the first reading basal written since the implementation of the Common Core.

**Setting**

The study site is a small rural school district in south central North Carolina. The school district consists of six Title I elementary schools, one middle school, and four high schools consisting of approximately 3,500 students. For the purpose of the study, the population of importance in this study included 2014-2015 third-graders and teachers
who have implemented Reading Wonders™. Students included in this study were only included students who have remained constant from beginning of year to end of year during the Reading 3D testing window. At this study site, participants included 12 third-grade classes with 239 students.

**Problem Statement**

The problem is that students are not demonstrating proficiency on the state reading end-of-grade assessment (EOG), and the Reading 3D assessment (statewide diagnostic and screener), which consists of the Text Reading Comprehension (TRC) and the Dynamic Indicators of Basic Early Literacy Skills (DIBELS). EOG scores from 2013-2014 showed that only 40.2% of students were found to be proficient compared to 47.7% across the state of North Carolina. On the 2013-2014 Reading 3D assessment, the end-of-year (EOY) assessment indicated that 33% of the students, overall, were not proficient. A further breakdown of the Reading 3D data indicated that 48% of students were not proficient on the TRC; 46% were not proficient on DIBELS oral reading fluency (DORF); and 54% were not proficient on DIBELS Daze, a cloze measure which assesses the ability to construct meaning from text. According to the University of Oregon Center on Teaching and Learning (2014), students should be reading 110 words or more by the end of third grade to be considered at or above grade level and need little support. Additionally, students should be reading at a level P on the TRC, which is equivalent to approximately a 601-650 Lexile range. Once the district adopted a new reading program, McGraw-Hill Reading Wonders™, aligned to the Common Core, the focus was on the degree of impact the program was having on third-grade student reading achievement.

The study was needed to determine the impact of the McGraw-Hill Reading Wonders™ program on reading achievement. This was the first time in 15 years the district had implemented a district-wide reading program. The data collected through the
state assessment instruments, the survey, and interviews were used to ensure that students were receiving quality reading instruction district-wide.

1. To what extent has Reading Wonders™ made an impact on student reading achievement?

2. To what extent are teacher perceptions of Reading Wonders™ associated with student reading achievement?

**Theoretical base**

Research studies have a theoretical framework that must be testable and well supported. It provides the foundation for the study. Three reading theories are the basis for how reading is acquired. The three theories that are discussed are bottom-up theory, top-down theory, and interactive theory. These theories lead teachers to instructional choices about how to teach students to obtain the skills necessary to read.

The bottom-up theory developed by Gough (1972) and LaBerge and Samuels (1974) is behaviorist driven. The theory is sometimes called the phonics approach. The focus of the instruction is on decoding and practicing skills in isolation. The top-down theory developed by Goodman (1967) is cognitive based. The theory focuses on what the student brings to the process. The knowledge is constructed through meaning. It is sometimes referred to as the whole language approach. The interactive theory, also named the balanced approach, was developed by Rhumelhart (1977) and is constructivist based. This theory is a blend between the bottom-up and top-down theory. Students develop the skills and strategies necessary in meaningful contexts and use word identification to help build understanding.

For the purpose of this study, the researcher focused on the use of the interactive theory. The McGraw-Hill Reading Wonders™ program utilizes the interactive theory for teaching reading based on a review of the program research. The program allows students the opportunity to participate in a balance of phonics and whole
language instructional activities. It blends teacher- and student-centered activities. Students participate in a variety of phonics-based activities integrated with the language arts components—listening and speaking, word recognition, spelling, writing, vocabulary, comprehension, and fluency. This improves student reading experiences and brings cohesiveness to the components of reading for the student and teacher. According to Donoghue (2009), research by Fitzgerald and Weaver found that an interactive approach develops lifelong readers and writers.

**Instruments**

Reading 3D is a software platform that combines DIBELS and TRC to assist with getting a deeper understanding of a student’s ability to read and comprehend text. DIBELS consists of fluency measures that assess early literacy skills. TRC is a digital running record to determine a student’s ability to gain meaning from text. According to University of Oregon Center on Teaching Learning (2014), “benchmark testing is the systematic process of screening all students on essential skills predictive of later reading performance” (Benchmark Screening section, para. 1). The Reading 3D assessment results are collected and analyzed through the web-based software application. This assessment tool has been used in kindergarten through third grade since 2010. The benchmark assessment is administered three times a year.

The third-grade Reading 3D assessment measures the following early literacy skills: DORF, Daze (DIBELS Maze Comprehension Task), and TRC. The DORF subtest measures a student’s ability to read fluently and accurately. To provide additional insight into a student’s comprehension of the DORF passage, students are asked to retell significant events and details from what they have read (University of Oregon Center on Teaching and Learning, 2014). The Daze subtest measures a student’s reading fluency and comprehension (University of Oregon Center on Teaching and Learning, 2014). The TRC measures a student’s ability to read and comprehend authentic text.
The North Carolina reading EOG was also used to measure student performance on the goals, objectives, and grade-level competencies specified in the North Carolina Standard Course of Study (North Carolina Department of Public Instruction, 2014b). This study used the data collected from the North Carolina EOG to assist with determining the effectiveness of Reading Wonders™ on student achievement. The assessment is a North Carolina state-developed test that is administered within the last 3 weeks of the school year. The assessment is used for the school and district accountability, the Ready Accountability model, and for federal reporting purposes (North Carolina Department of Public Instruction, 2014). The assessment weight distribution for third grade is reading for literature (32-37%), reading for information (41-45%), and language (20-24%) (North Carolina Department of Public Instruction, 2014). The goal of the assessment is to not only measure a student’s ability to apply concepts and skills but also to explain and justify their answer. The EOG consists of 52 questions, and students have up to 240 minutes to complete the assessment (North Carolina Department of Public Instruction, 2014). Students following a 504 plan or IEP receive accommodations as specified in the plan.

The survey that was utilized during the study was adapted from a study conducted by Clark (2012). The original survey was developed using the model presented by Fink (2006). The survey defined the purpose of the survey, directions for how the survey should be completed and returned, a working definition of Reading Wonders™, and the benefits and purposes of using the program. The survey also provided a working definition of the five components of reading as defined by the National Reading Panel. The survey sought to identify teacher perceptions of the impact of Reading Wonders™ on the effectiveness of the program and the components of the program on student reading achievement. The survey contained both quantitative and qualitative questions. It consisted of 11 quantitative questions that were turned into
numerical scores. Open-ended questions were utilized for the qualitative portion of the survey to help identify teacher opinions about the Reading Wonders™ program and how it could be improved. Face-to-face interviews were also conducted to delve deeper into the responses received from the survey. The interviews provided insight into teacher perspectives of the impact of Reading Wonders™ on student achievement. As noted by Fitzpatrick and Sanders (2011), interviews are valuable for eliciting experiences and more detailed responses.

METHODS

The Reading 3D, BOG, and EOG scores were examined and interpreted by comparing the results of the 12 third-grade classes. “Assessment information will provide the evidence not only that students are learning, but also that teachers are teaching skillfully” (Diamond, 2006, p. 1). All third-grade teachers were asked to participate in the survey since they were implementing the Reading Wonders™ program in the classroom and therefore have insight into the effectiveness of the program on student achievement. Teachers had insight into everyday life in the setting being studied (Hatch, 2002). A sample was not selected for inclusion in the study due to the entire third-grade population being included in the study (Creswell, 2014).

A convergent method was used in this study to evaluate the effectiveness of the Reading Wonders™ literacy program. The data collection occurred throughout the study. To determine the impact of Reading Wonders™ on student reading achievement, Reading 3D data were collected at the BOY and EOY from the 2014-2015 school year, the first full year of implementation of Reading Wonders™. In addition, the third-grade BOG and EOG assessment results from the 2014-2015 school year were collected. A teacher survey and interviews were administered to determine teacher perspectives of the program design and impact on student reading achievement. An opportunity for teachers to share their perspectives about the impact of the components of the reading
program on increasing student reading achievement was also included through not only the survey but also through interviews with the third-grade teachers.

**RESULTS**

**Research Question 1**

Third-grade students were assessed on DIBELS of the 2014-2015 school year, comparing BOY to EOY results. The composite score from the assessment was utilized since it “is a combination of multiple DIBELS scores and provides the best overall estimate of the student’s early literacy skills and/or reading proficiency” (University of Oregon Center on Teaching and Learning, 2010, p. 2). The DIBELS composite consists of the DORF Words Correct, Retell Score, DAZE Adjusted Score, and DORF Accuracy (University of Oregon Center on Teaching and Learning, 2010). Specific cut scores have been established for DIBELS composite for each time period to help determine student needs for support.

A paired t test was conducted to compare the mean scores from BOY to EOY to determine whether Reading Wonders™ was having an impact on student reading achievement. The scores in Table 1 reflect the results from the BOY and EOY assessment.

**Table 1**

*BOY and EOY DIBELS Composite Results (2014-2015)*

<table>
<thead>
<tr>
<th>Score Level</th>
<th>BOY % Proficient</th>
<th>EOY % Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Below Benchmark</td>
<td>27%</td>
<td>19%</td>
</tr>
<tr>
<td>Below Benchmark</td>
<td>11%</td>
<td>17%</td>
</tr>
<tr>
<td>At or Above Benchmark</td>
<td>62%</td>
<td>64%</td>
</tr>
</tbody>
</table>
Based on the results, the number of students well below benchmark decreased by 8% from BOY to EOY. An increase in the number of students below benchmark was seen from 11% to 17% as a result of moving from well below to below benchmark on the DIBELS composite. In addition, a substantial number of students remained at or above benchmark throughout the year.

A paired $t$ test was run on a sample of 239 third graders' DIBELS composite mean scores to determine if there was a significant mean difference between the BOY and EOY mean scores when Reading Wonders™ was utilized for instruction. The results showed that third-grade students who participated in Reading Wonders™ instruction increased from BOY ($M=236.61\pm100.89$) to EOY ($M=364.97\pm121.32$) on the DIBELS composite; a statically significant increase of 128.36 95% CI [-137.02, -119.70], $t(238)= -29.21, p\leq .000$.

The Reading 3D TRC was administered to determine the impact of Reading Wonders™ on third-grade student reading achievement. The TRC results are reported as alphabetic levels. In order to conduct the analysis using the paired $t$ test, the TRC alphabetic levels were treated as numeric levels.

Based on the results of the TRC in Table 2, the number of students far below proficient decreased by 19% from BOY to EOY. A slight increase in the number of students below proficient was seen from 17% to 18% as a result of moving from far below to below proficient on the TRC. In addition, there was an increase in the number of students proficient from 28% to 33% and above proficient from 13% to 26% by EOY.
Table 2

**BOY and EOY TRC Results (2014-2015)**

<table>
<thead>
<tr>
<th>Score Level</th>
<th>BOY % Proficient</th>
<th>EOY % Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Far Below Proficient</td>
<td>42%</td>
<td>23%</td>
</tr>
<tr>
<td>Below Proficient</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>Proficient</td>
<td>28%</td>
<td>33%</td>
</tr>
<tr>
<td>Above Proficient</td>
<td>13%</td>
<td>26%</td>
</tr>
</tbody>
</table>

The results of the paired *t* test showed that third-grade students who participated in Reading Wonders™ instruction increased from BOY (M=14.26±3.62) to EOY (M=18.13±4.02) on the TRC; a statically significant increase of -3.86 95% CI [-4.24, -3.48], *t*(238)= -19.89, *p*≤.000.

BOG and EOG results were collected and analyzed to determine the impact of Reading Wonders™ on reading achievement. The scores showed a decrease in Level 1s from 53% to 28% and Level 2s from 27% to 24%; and an increase in Level 3s from 9% to 12%, Level 4s from 10% to 31%, and Level 5s from 1% to 5%. This shift showed that the number of students proficient on the assessment increased from BOY to EOY.

Table 3 displays the results of the assessment.

Table 3

**BOG and EOG Results (2014-2015)**

<table>
<thead>
<tr>
<th>Score Level</th>
<th>BOY % Proficient</th>
<th>EOY % Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>53%</td>
<td>28%</td>
</tr>
<tr>
<td>Level 2</td>
<td>27%</td>
<td>24%</td>
</tr>
<tr>
<td>Level 3</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>Level 4</td>
<td>10%</td>
<td>31%</td>
</tr>
<tr>
<td>Level 5</td>
<td>1%</td>
<td>5%</td>
</tr>
</tbody>
</table>

The outcomes of the paired *t* test showed that third-grade students who participated in Reading Wonders™ instruction increased from BOY (M=431.10±8.70) to EOY (M=437.13±9.70) on the BOG/EOG; a statically significant increase of -6.03 95%
CI [-6.88, -5.18], $t(238) = -13.91$, $p \leq .000$.

The null hypothesis was that there would be no achievement differences between the means of each group (BOY to EOY) as a result of Reading Wonders™: BOY DIBELS Composite vs. EOY DIBELS Composite, BOY TRC vs. EOY TRC, and BOG Scale Score vs. EOG Scale Score. The results of the paired $t$ tests indicated that there were significant differences in student achievement scores between BOY DIBELS Composite vs. EOY DIBELS Composite, BOY TRC vs. EOY TRC, and BOG Scale Score vs. EOG Scale Score to the .000 level. Consequently, the null hypothesis was rejected for all instances.

**Research Question 2**

**Quantitative analysis of survey results.** A survey was sent to 12 third-grade teachers to determine the teachers’ perceived impact of Reading Wonders™ on reading achievement. Eight of 12 teachers responded to the survey. A Cronbach alpha was conducted on the data to establish reliability and internal consistency. The scale had a high level of internal consistency as determined by Cronbach’s alpha ($\alpha = .945$). The responses to the survey can be found in Table 4.
### Teacher Survey Results Responses

<table>
<thead>
<tr>
<th>Questions</th>
<th>Teachers Responses (n=8)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>1. Reading Wonders™ has made a positive impact on students' reading achievement?</td>
<td>0</td>
</tr>
<tr>
<td>2. Readers Wonders™ addresses the learning needs of my students.</td>
<td>0</td>
</tr>
<tr>
<td>3. Reading Wonders™ components are valuable to increase students' reading achievement.</td>
<td>0</td>
</tr>
<tr>
<td>4. The teachers at this school are supportive of Reading Wonders™ reading and language arts program.</td>
<td>0</td>
</tr>
<tr>
<td>5. The administrators of this school are supportive of Reading Wonders™ as it relates to the students' reading achievement.</td>
<td>0</td>
</tr>
<tr>
<td>6. The administrators of this school are supportive of Readers Wonders™' design and the components embedded to enhance reading acquisition.</td>
<td>0</td>
</tr>
<tr>
<td>7. I am adequately trained to teach reading through Reading Wonders™.</td>
<td>0</td>
</tr>
<tr>
<td>8. I have the resources necessary to effectively teach reading through Reading Wonders™.</td>
<td>0</td>
</tr>
<tr>
<td>9. Reading Wonders™ has the necessary components to enhance reading achievement, and therefore increase Reading 3D and BOG/EOG scores based on ethnicity.</td>
<td>0</td>
</tr>
<tr>
<td>10. Reading Wonders™ has the necessary components to enhance reading achievement and therefore, increase the initial, middle, and ending Reading 3D and BOG/EOG scores.</td>
<td>0</td>
</tr>
<tr>
<td>11. I implement the McGraw-Hill Reading Wonders™ with fidelity.</td>
<td>0</td>
</tr>
</tbody>
</table>

The null hypothesis was that teacher perceptions of Reading Wonders™ would not have an impact on third-grade student reading achievement. Table 5 shows the "rejection of the null hypothesis" for survey items 2-11 and "retaining of the null hypothesis" for survey item 1. The use of the Chi-square statistic indicates that the researcher assumes no more than nominal level data in survey responses. The sample
n is too small to use any approach other than a nonparametric one because the underlying mathematical assumptions could not be met using any other technique.

Table 5

<table>
<thead>
<tr>
<th>Item</th>
<th>Significance</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1</td>
<td>.072</td>
<td>Retain Null Hypothesis</td>
</tr>
<tr>
<td>Question 2</td>
<td>.007</td>
<td>Reject Null Hypothesis</td>
</tr>
<tr>
<td>Question 3</td>
<td>.029</td>
<td>Reject Null Hypothesis</td>
</tr>
<tr>
<td>Question 4</td>
<td>.046</td>
<td>Reject Null Hypothesis</td>
</tr>
<tr>
<td>Question 5</td>
<td>.029</td>
<td>Reject Null Hypothesis</td>
</tr>
<tr>
<td>Question 6</td>
<td>.029</td>
<td>Reject Null Hypothesis</td>
</tr>
<tr>
<td>Question 7</td>
<td>.029</td>
<td>Reject Null Hypothesis</td>
</tr>
<tr>
<td>Question 8</td>
<td>.007</td>
<td>Reject Null Hypothesis</td>
</tr>
<tr>
<td>Question 9</td>
<td>.007</td>
<td>Reject Null Hypothesis</td>
</tr>
<tr>
<td>Question 10</td>
<td>.007</td>
<td>Reject Null Hypothesis</td>
</tr>
<tr>
<td>Question 11</td>
<td>.029</td>
<td>Reject Null Hypothesis</td>
</tr>
</tbody>
</table>

**Qualitative analysis of survey results.** Additional data were collected from the teacher survey via open-ended questions 12-16. These questions allowed teachers to further express their beliefs about how Reading Wonders™ was impacting third-grade reading achievement. Once the responses were collected and transcribed, the responses were coded for themes for ease of analysis. However, most responses collected by the teachers were yes/no and did not explain their responses.

Question 12 asked teachers to identify the strengths of Reading Wonders™ for teaching third-grade students. The overarching themes that emerged included rigor and the inclusion of SBRR components. Teacher comments regarding the rigor included “higher thinking skills” and “Students are exposed to a variety of complex text.” When followed the program helps students to read, analyze, and respond to text.” The theme of the inclusion of SBRR components was also woven throughout their responses. The
participating teachers shared that “The comprehension is very well put together,” “Phonics is great for recalling certain things that may have been missed in earlier grades,” and “Students are taught to delve into text to extract key detail and meaning.” These responses align clearly with teacher responses on Question 14 regarding if Reading Wonders™ is designed to increase student achievement on SBRR. All participating teachers agreed that the program met that need by their “Yes” response.

Question 13 asked teachers to identify the areas where Reading Wonders™ could be improved. After review of the responses, the overall theme that emerged was differentiating to meet all students. Comments included

- “Tests are very hard. Most students failed weekly and unit test consistently throughout the year.”
- “More EC support for students with exceptionalities.”
- “Leveled readers are not on the students’ levels. The approaching levels are still too difficult for the lower students.”

Three teachers did not feel any changes were needed to the program.

All respondents felt that Reading Wonders™ increased student reading achievement on Reading 3D and BOG/EOG. However, one respondent felt that it has not had a major impact on Reading 3D. “I have seen an increase in EOG scores. Reading 3D has not improved greatly. Hopefully, as our students practice written comprehension questions with progress monitoring we will begin seeing an improvement.”

The majority of the teachers (6 of 8) who participated in the survey felt that the program targets the needs of all students in the classroom. “I feel that RW does a good job providing rigorous materials. A variety of differentiated materials (Leveled Readers, Leveled Workstations, Tier II books) are available to meet the needs of all my students.” On the other hand, two teachers felt that it did not meet the needs of all students. “Not if
they are two grade levels below already.”

All teachers agreed that they did not add material to the program, delete program components, or change program content as shown by the results of question 16. “We have used the program with fidelity” and “I use the material that is provided.” This speaks to the program being used with fidelity and aligns with the responses they shared on question 11 of the survey related to fidelity.

**Qualitative analysis of interviews.** Interview questions were created based on the results of the survey. The results from survey questions 1-11 showed that something other than random variation was at play, thus supporting why interviews were needed to explore why participants responded as they did. In addition, the responses from teachers on the open-ended questions did not provide a clear or any explanation for their responses. Once the questions were developed and reviewed by the curriculum administrator and district literacy coordinator, the researcher piloted the questions with two fourth-grade teachers for clarity and validity. Minor revisions were made to the questions based on the feedback provided.

Three teachers volunteered to participate in the interviews based on their responses to the survey. Each teacher was contacted to set up a time to meet and conduct the interviews. Prior to each interview, the teacher was asked to review and sign the consent form. The interviews were recorded and transcribed for ease of analysis. Once the interviews were transcribed, the interviews were coded and reviewed for patterns and trends. Three major themes arose from the interviews conducted: implementation and fidelity, SBRR, and perception of reading program.

**Implementation and fidelity.** Teachers shared that they spent between 90 and 120 minutes providing core reading instruction. Core reading instruction included 90 minutes of Reading Wonders™ and 30 minutes of RTI (Response to Intervention) time and/or Read to Achieve time to provide targeted instruction based on student needs. All
agreed that the instructional sequence “is pretty much the same every day.” “The only thing that differed was our concept of what was required by Reading Wonders™. The procedures were basically the same, the same concept. Not the same concept but basically the same routines.” Teachers shared that the 90-minute block is a combination of whole- and small-group instruction. “I spend 40 minutes in small group. And I spend 20 or 30 minutes with writing. So, I have small group and whole group.”

Fidelity to the Reading Wonders™ program is essential for the reading program to have an impact on student achievement. Based on the responses shared by the teachers, the district mandates that the program is implemented with fidelity. One teacher shared that

The teacher should work the program with fidelity. . . . We need to work it in a manner which it is designed. The district does push it and they provide a lot of training to help us become better teachers and use the program.

Another teacher indicated that

They wanted it used daily, they wanted it to be used based on what I understood as a program in itself. They really did not suggest that we go outside the program and bring in other resources. . . . They wanted it done a certain time every day and they wanted it fidelity, fidelity, fidelity. . . . Mainly they just wanted us to stay with it consistently. Everybody has to do it so you have to see some growth here.

Teachers shared that they implemented the program as prescribed for whole group. However, they do bring in resources to help support student needs in small groups based on the data. “I tried to stick to Reading Wonders as they wanted us to stick to Reading Wonders as much as possible, I did go into Florida Reading Center often include some of those centers into the classwork to help with skills that needed to be practiced.” All three agreed that the main component they make sure is utilized on a
regular basis is the “teaching of the skills and strategies” provided in Reading Wonders™. The most beneficial aspect of implementing the program included “informational and expository text,” “questioning and the guided practice,” and “skills practice sheet.”

Responses indicated that teachers decide on the strategies and activities they implement each day based on the data and student needs identified during class. A teacher shared,

We have leveled readers of course. Based on their scores at the beginning when we did Reading 3D. I tried to use that to guide me as far as grouping the students. Then what I would do is, as we were doing Reading Wonders, when you would look at your skills and strategies for that week. We would want to incorporate any centers to help supplement what they had not mastered based on the data. Well it's basically . . . based on their need.

**SBRR components.** All three teachers agreed that the research-based components of reading were an essential component of the reading program. Comprehension, vocabulary, phonics, and fluency were incorporated in instruction throughout the 5-day cycle of the Reading Wonders™ program. Teachers indicated that they spent the majority of their time on comprehension. “It is addressed daily. The skill you taught is assessed on the fifth day. So you do comprehension for four days and you assess it on the fifth. Essentially you are doing it daily.” “I think I spend honestly about 50% of my time teaching comprehension.”

Vocabulary instruction was incorporated through whole group instruction and small group instruction. Two teachers indicated it was 20% of their weekly instruction, whereas the third teacher indicated it was only 5% of his/her instruction. Responses shared indicated how they address vocabulary in their daily reading instruction. “Vocabulary you are doing it daily as well. You also extending vocabulary beyond what
you doing with the text with morphology.” “They (students) use it in context and I think that’s the easiest thing to model for students. I think Reading Wonders™ has really set up teaching context clues and the vocabulary strategies in the new program.” “It was brought in through reading repetitively.”

Teachers shared that phonics instruction was part of the daily instruction and 5-10% of their weekly instruction. Phonics instruction was incorporated through the spelling component according to the responses. “Phonics daily is incorporated through our spelling. We talked about our phonics. We talked about how we sound out the words. We talk about different syllable types.” “Phonics came in on day 1. Day 1 it is strong. Beyond that, we used it with spelling and brought it in during small groups.”

For the most part, fluency instruction was incorporated with small groups or modeled in their daily readings based on the responses shared. They spent 15% to 25% of their weekly instruction incorporating instruction in a variety of ways. “They read and timed themselves one time a week . . . and during read-alouds we would address fluency and how we read.” It was also incorporated “in a workstation,” and “rereading during a close reading.”

Perceptions of the program. Survey results from the open-ended questions indicated that some teachers felt the reading program was too difficult but did not provide an explanation for their response. As a result, the question was posed to the three teachers who were interviewed. Two teachers indicated that in their opinion, it was because some teachers were not implementing the program with fidelity. One of the teachers shared,

I really feel like some teachers say the reading program is too difficult for some students because they have not fully implemented in the classroom. If it is not implemented in the classroom and there is no consistency with teaching it, it will definitely cause students to be weaker. . . . If you introduce part of it and then
you leave and you are not working it with fidelity. It builds upon itself and spirals. And overall it helps the students build up. I have noticed it in my students in the classroom.

However one teacher disagreed. The teacher felt that it is not developmentally aligned with some of the children’s abilities. I think they are taking it too high. I don’t know if some of the children can reach the levels that they are asking them to reach. It is just outside of their development levels.

Teachers had mixed feelings about if the program was assisting them increase reading achievement on the EOG/Reading 3D. Two indicated that “I do believe that it is assisting me helping students achieve on the EOG and Reading 3D . . . I see more growth now that I am able to work it more with fidelity.” The other teacher stated that

The writing piece helps the students on Reading 3D . . . . I’m still confused if it really does help the EOG. I don’t think the types of questions are the same. I think it’s helping the skills . . . I don’t think they help with EOG.

The teachers provided a variety of strengths about Reading Wonders. “The comprehension skills and the close reading because it is also covered in our small group and the assessment assesses the same skills in small group and same comprehension skills.” “The strength of Reading Wonders™ is that it builds build rigor within the classroom and builds definitely stamina.” Responses also indicated that the resources were a strength. “The strength was that the resources were there. You pretty much have your resources laid out for you in a sequence.”

The deficits or weaknesses identified by the teachers once again revolved around the theme of differentiation. The responses included

- It is very fast paced for those who are beginning to use and are trying to pack it all in. They haven’t been able to master it.
- I think the weakness is the lack of resources for teachers that has a group of
students who are so low. And I have to model this is how we do this and this is how we do that. So, I think when they designed it they had one group of students in mind.

- The children were repeatedly unable to achieve passing scores on the test and the fact that it moved at such a quick pace that often I felt like I was scrambling to get what I could in and not to the point that the children could grasp what they needed for that lesson.

These weaknesses helped capture how the teachers believed the program could be improved to better meet the needs of the students and increase the impact on reading achievement.

**DISCUSSION**

Pressley noted that “effective literacy instruction requires a combination of skills-based and whole language teaching in a motivating and supportive environment” (as cited in National Educational Psychological Service, 2015, p. 7). Since student needs vary, it is imperative that the program address all aspects of reading instruction. According to Donat (2006), the National Reading Council advised that a variety of components are necessary for a successful reading program including reading for meaning using high-quality text, systematic and explicit phonics instruction, and opportunities to apply the skills through reading and writing. Through the use of the interactive approach, students are provided the opportunity to develop as lifelong learners. This research supports the use of a balanced research-based basal reading program in the development of the critical skills necessary to have an impact on student achievement.

Based on the increase of the number of students proficient from BOY to EOY, it can be presumed that Reading Wonders™ is an effective balanced reading basal. These practices are embedded in the program to aid teachers with ease of
implementation. According to the responses from the survey and teacher interviews, teachers indicated that the program was having a positive impact on student achievement with seven of eight teachers agreeing or strongly agreeing with the statement on question 1 (Reading Wonders™ has made a positive impact on students’ reading achievement?) from the survey.

Fidelity to the program also needs to be considered when looking at the impact of Reading Wonders™ on student achievement. According to Diamond (CORE, Inc., 2004), fidelity means that teachers are using the program as designed by utilizing the resources appropriately and ensuring the amount of time designated for the program is provided. Protheroe (2008) cited that “Researchers Wallace, Blase, Fixsen, and Naom (2008) connect implementation to student learning because ‘improved outcomes in education are the product of effective innovations and effective implementation efforts’” (p. 38). Based on analysis of the survey and interviews, all eight teachers agreed or strongly agreed that they use the program with fidelity. Teachers did share during the interviews that the district expects teachers to use the program with fidelity and have a designated 90-minute reading block. All teachers shared during the interviews that they had at least a 90-minute designated reading block. Additional information shared during interviews indicated some teachers are bringing additional resources to meet student needs based on the data from Reading 3D and classroom assessment. Based on the guidelines provided by the district, this is acceptable.

A Chi-square test was conducted on the Likert-like survey questions. The results of the test indicated that questions 2-11 had a significant impact. Additional data were collected from the open-ended survey questions and interviews to help provide insight into teacher perceptions of Reading Wonders™ on student achievement. All teachers shared the opinion that the program included the necessary SBRRR components to increase student achievement. According to the National Reading Panel (NICHHD,
(2000), the essential components of SBRR include phonemic awareness, phonics, vocabulary, fluency, and comprehension. Throughout the interviews, teachers mentioned that comprehension was one of the strengths of the program. In addition, teachers shared that the program was appropriately designed to increase reading achievement based on Reading 3D and BOG/EOG. As evidenced by results on the TRC and BOG/EOG, which both assess comprehension, students showed a significant amount of growth from BOY to EOY.

Throughout the interviews and open-ended survey responses, one area of improvement repeatedly appeared as a critical need. Teachers shared that they desired additional resources for differentiating instruction to support struggling students. This was also evident when teachers shared during interviews that they sought outside resources for small group instruction from the Florida Center for Reading Research. One teacher shared the frustration that students were “not passing the weekly test.” With only a short window of opportunity to ensure students have the skills necessary to be successful readers, targeted differentiated support is essential for all students in the classroom. Teachers indicated based on questions 7 and 8 that they had appropriate training and resources to implement the program. Therefore, the question arises as to whether they have an understanding of how to use the resources provided by the program and/or do teachers need to be given some flexibility to bring in additional resources. Data were not collected by subgroup; and, as a result, these questions are beyond the confines and purpose of this research.

**Limitations**

Even though the results indicated a balanced reading basal had a positive impact on the third grade student achievement. The study’s finding have limitations that should be acknowledged. The study was limited to the students in the district due to the convenience of being in the district the researcher supports as an instructional coach. In
addition the study was limited to all third graders in the district and did not include a control group to compare the true impact of the independent variable since the entire district utilized McGraw-Hill Reading Wonders™. Due to the size of the district utilized the study was limited to a small number of teachers. If the study was replicated with a larger sample size, it could provide more generalizability of the results.

**Implications for Social Change**

The study involved looking at how the interactive approach to reading impacted student achievement in a small rural south central North Carolina Title I school district. The findings from the study can be used to assist with identifying which instructional practices adopted in the district are effective in improving student academic success. Additional insights gained from the assessment data, survey, and interviews can help teachers identify how to improve literacy instruction in their classrooms and the importance of implementing the program with fidelity. The study also supports the school and district in making data-driven decisions regarding the utilization of balanced reading basals in the classroom.

The teacher makes the difference. Barber and Mourshed (2007) conducted a study looking at PISA’s (Programme for International Student Assessment) top 10 performing schools to find out what made these schools so successful. The report found that the answer was high-quality teachers. According to the Center for Public Education (2005), “The effect of teaching on student learning is greater than student ethnicity or family income, school attended by student, or class size” (Insights from Tennessee and Texas section, para. 1). Learning to read has a never-ending impact on a student’s quality of life. Consequently, the importance of a quality teacher cannot be negated. As stated by Fredrick Douglas, “Once you learn to read you will be forever free” (Frederick Douglas Organization, 2015, para 1).

**Conclusion**
With the ever-increasing pressure for schools and students to be successful on high-stakes tests, it is imperative that schools know if the practices they are employing in the classroom are effective in meeting the needs of the students they serve. This study reviewed the impact of Reading Wonders™ on third-grade student reading achievement in a small south central North Carolina school district. Based on the disaggregation of the DIBELS Composite, TRC, and BOG/EOG, the program was found to have an effective impact on reading achievement. Continued use of the data to inform instructional decisions in the district will ensure that students will be equipped to be lifelong learners and continue to have a positive impact on the community. As Dr. Seuss (1978) said, “The more that you read, the more things you will know. The more that you learn, the more places you’ll go” (p. 27).
REFERENCES


University of Oregon Center on Teaching and Learning. (2014). *UO DIBELS data system*. Retrieved from https://dibels.uoregon.edu/