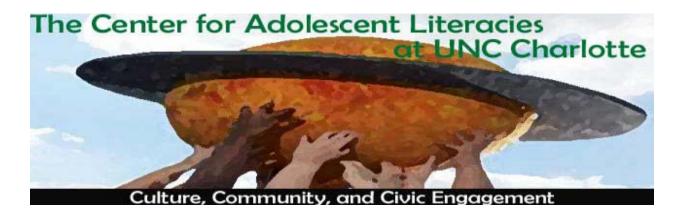
# Freedom School Partners Children's Defense Fund Freedom Schools® Program Evaluation Report

Submitted by



Written by

D. Bruce Taylor, Ph.D.

Sandraluz Lara-Cinisomo, Ph.D.

October, 2016

# **Table of Contents**

	Page
Overview	
History	
Related Research	
Objectives and Research Questions	8
Rationale for this Study	
Study Design and Measures	
Recruitment Procedures	13
Instruments	
Data Collection Procedures	
Sample	
Analysis Plan	
Results	
Independent Reading Performance Measure for the BRI and ESRI	
Frustration Reading Performance Measure for the BRI and ESRI	
Discussion and Conclusions	
The Center for Adolescent Literacies	
Evaluation Leadership Team	
References	33
Tables	
Table 1. Snapshot of Prior Year Evaluation Results	2
Table 2. Criteria for Stratification	13
Table 3. Levels of Reading Assessed with the Basic Reading Inventory	15
Table 4. Levels of Reading Assessed with the Ekwall/Shanker Reading Inventory	16
Table 5. Scholar Demographic Characteristics by Assessment	19
Table 6. Mean Scores for the BRI Independent Reading Measure by Level	20
Table 7. Mean Scores for the ESRI Independent Reading Measure by Level	20
Table 8. ESRI Scores at Four BRI Sites	21
Table 9. Mean Scores for the BRI Frustration Reading Measure by Scholar Level	24
Table 10. Mean Scores for the ESRI Frustration Reading Measure by Scholar Level	24
Table 11. Mean Scores for the ESRI Frustration Reading Measure at BRI Sites Only	25
Figures	
Figure 1. Distribution of Scholar Independent Reading Performance Over Time on the BRI	21
Figure 2. Distribution of Scholar Independent Reading Performance Over Time on the ESRI	22
Figure 3. Distribution of Scholar Independent Reading Performance on the ESRI at BRI Sites Only	23
Figure 4. Distribution of Scholar Frustration Reading Performance Over Time on the BRI	26
Figure 5. Distribution of Scholar Frustration Reading Performance Over Time on the ESRI	27
Figure 6. Distribution of Scholar Frustration Reading Performance on the ESRI at BRI Sites	28

# Freedom School Partners Children's Defense Fund Freedom Schools® Program Summer 2016 Evaluation Report

#### Overview

Since 2009, the Center for Adolescent Literacies at UNC Charlotte has conducted seven evaluation studies of Freedom School Partners' Children's Defense Fund Freedom Schools programs in Charlotte, N.C. This work has grown from a two-site pilot study in 2009 followed by multi-site studies in 2010, 2011, 2012, 2013 and 2015. Over this period of time, a similar research design was used that included pre- and post-testing of children participating in the program (known as Scholars) using the *Basic Reading Inventory* (BRI), 10<sup>th</sup> Ed. (Johns, 2010) Forms A and B. Results from these evaluations varied but followed a pattern with approximately 60% to 65% of Scholars showing gains in reading, 25% to 35% maintaining in their ability to read, and 5% to 10% declining in their ability to read as measured by the BRI at the Frustration level (a ceiling level in a child's ability to read). Table 1 provides an overview of those results.

**Table 1.** Snapshot of Prior Year Evaluation Results

Year	Number of	Performance on the BRI Frustration Reading Measure				
	Scholars Pre/Post	over time (perce	ent of participating	Scholars for the		
			year shown).			
		Declined Maintained Improved				
2010	132	9.8%	25.0%	65.2%		
2011	182	5.4%	33.9%	60.6%		
2012	196	4.6%	35.7%	59.7%		
2013	167	9.6%	28.7%	61.7%		
2015	225	9.8%	28.9%	61.3%		

This year's evaluation continues with a pre/post format at 14 Freedom School sites in Charlotte using the BRI to understand the effects on reading performance of students served by Freedom School Partners during the summer of 2016. An additional reading measure, the *Ekwall/Shanker Reading Inventory* or ESRI (Shanker & Cockrum, 2013), was added at four of these program sites. Our goal for using both the BRI and ESRI was twofold: 1) to provide an additional reading assessment to compare results to the BRI, and 2) to determine which of these measures could be utilized by Freedom School staff to evaluate all or most Scholars at all program sites in future years. This second goal includes issues related to quality (are the results of the reading inventory meaningful and reliable) and efficiency (the amount of time needed to

evaluate each Scholar in the program using a given reading inventory). This report seeks to address each of these issues.

#### Freedom School Partners' CDF Freedom Schools Program and Evaluation History

The Children's Defense Fund (CDF) is a private, nonprofit child advocacy organization that was founded in 1973 to champion the rights of all children, especially those living in poverty. Based in Washington, DC, CDF grew out of the Civil Rights Movement under the leadership of Marian Wright Edelman, who is president of CDF. The Children's Defense Fund Leave No Child Behind® mission states that it seeks "to ensure every child a Healthy Start, a Head Start, a Fair Start, a Safe Start and a Moral Start in life and successful passage to adulthood with the help of caring families and communities." CDF describes Freedom Schools as a program that "seeks to build strong, literate, and empowered children prepared to make a difference in themselves, their families, communities, nation and world today." In short, Freedom School is a summer program with a mission of empowerment that includes a significant focus on literacy.

Created by the Children's Defense Fund, the *Freedom Schools* program engages children in grades K-12<sup>2</sup> in a six week summer program designed to prevent the "learning loss" that students (known as Scholars in the program) typically experience over the months when school is not in session. *Freedom Schools* program also aim to have a positive impact on children's character development, leadership, and community involvement. The *CDF Freedom Schools* program provides enrichment with the stated goals of "helping children fall in love with reading, increase[ing] their self-esteem, and generate[ing] more positive attitudes toward learning." CDF reports that more than 137,000 children have participated in Freedom School programs since its inception in 1995. In the summer, 2016, there were 11,280 Scholars in Freedom School programs in 95 cities and 29 states including Washington D.C. and the U.S. Virgin Islands. The Scholars are grouped by grade levels with Level I Scholars having just completed Kindergarten, first or second grade. Level II Scholars come from grades three through five and Level III Scholars from grades six through eight. There is a Level IV high school program but that group was not included in this study.

The *Freedom Schools* programs provide a literature based reading program, the Integrated Reading Curriculum or IRC. About 80 books are on the IRC's booklist and these books feature the work of many well-known authors. CDF has developed six weeks of lesson plans for approximately half of the books to help staff and Scholars reflect on the themes *I Can Make a* 

<sup>&</sup>lt;sup>1</sup> Information about the Children's Defense Fund and its programs is available at the CDF website: <a href="http://www.childrensdefense.org/">http://www.childrensdefense.org/</a>.

<sup>&</sup>lt;sup>2</sup> Grade and age ranges vary by Freedom School site. Some programs serve children across the K-12 span while others focus on K-5 or K-8.

Difference in: My Self, My Family, My Community, My Country, and My World with Hope, Education and Action. The remaining titles are used to create on-site libraries of books for use during silent sustained reading and read-alouds as well as for research on history and community service projects. Servant Leader Interns are recruited and provided with training that includes how to implement the Integrated Reading Curriculum. The majority of Interns are college-age students.

In Charlotte, *CDF Freedom Schools* are hosted by Freedom School Partners, a 501(c)(3) organization founded in 1999 that is dedicated to serving children and families living in poverty. FSP's mission is to "engage, educate and empower children to succeed in school and in life through quality educational enrichment programs." Freedom School Partners began hosting Freedom Schools programs in 2004 at one location serving 100 scholars. In 2016, Freedom Schools served 16 sites and more than 1,100 Scholars. FSP partners with community groups, faith-based organizations, colleges and universities, and corporations, which provide volunteer and financial support.

Freedom School sites in Charlotte range in size from 50 to 100 scholars and operate five days a week, from 8:00 to 3:00 p.m. Transportation is provided. Scholars are served breakfast, lunch and a healthy snack. Freedom School programs are offered at no charge to participating families beyond a \$35 per family activity fee, and parents are asked to attend parent meetings and volunteer in the program. Locally, the average Freedom School site costs \$75,000 for a sixweek, 50-scholar site (or about \$250 per child per week). Program costs are shared by the program partners, which typically provide \$60,000 for a 50-Scholar site, with FSP raising the remaining \$15,000.

A typical day at a Freedom School follows a pattern. After breakfast, the Scholars and site staff, including the Interns, come together for Harambee, a Kiswahili word for "let's pull together." Harambee is a time of celebration and affirmation akin to a daily pep-rally, that includes songs, chants and read aloud of a short book by a community member. Integrated Reading Curriculum, or IRC, follows Harambee. During IRC students go to their classrooms with their Intern for a 2-1/2 hour period of literacy activities built around the reading of culturally-relevant books. Scholars and Interns read, discuss and engage in activities drawn from the books. Following IRC, Scholars eat lunch and then engage in afternoon enrichment activities. The enrichment activities vary by site but include a mix of traditional summer activities like swimming and sports but also yoga, field trips to museums and other local sites, cooking and hands-on co-curricular activities that include an academic focus that connect to science, engineering, art and technology.

As has already been noted, this research builds on a pilot evaluation study conducted at two Freedom School sites during the summer 2009. The evaluation was extended to additional sites

in the Summer 2010, 2011, 2012, 2013 and 2015. Findings across all evaluation years have remained substantially consistent. Although there has been some variation across these years, nearly 90% of Freedom School Scholars grew or maintained in their ability to read as measured by the BRI. Furthermore, important data were gathered in 2010 regarding students' attitudes towards the reading component of Freedom School with the overwhelming majority demonstrating positive attitudes towards the program (as determined in an analysis of the Scholar interviews). The Scholars comments pointed to the engaging nature of the books and activities that are part of the IRC and the role of the college-age interns as positive aspects of the program.

#### **Related Research**

Note: This review of related research is updated with each evaluation cycle. We review the research literature and add to this section but retain much of what has been reported in earlier reports.

Freedom Schools programs are six-week, literacy-based summer learning programs designed for impoverished children at risk of school failure. The risk factors that children in poverty face include lower academic achievement as measured by grades and on standardized tests, lower graduation rates, and difficulties with reading and literacy. Research on the CDF Freedom Schools programs has focused on the historical context of the program (Watson, 2014), leadership aspects of the Freedom School program, the impact on college-age Servant Leader Interns (Jackson, 2009a) and implications for teacher education (Coffey, 2009; Jackson, 2009b).

Since the release of the 2012 evaluation, a few new articles have been published about Freedom School including an overview of the program that was published by Teaching Tolerance (Williamson, 2013). Bethea (2012) published results of a study that indicate that involvement in the Freedom School program in Oakland, California had a positive influence on Scholars' racial identity and views toward African/African American culture. Pre- and post-test results also showed an increase on social skills strategies and a future commitment to social action; however, the study showed no statistically significant increase in attitudes toward reading. Howard (2015) examines Freedom Schools as a model for reimagining education for Black children that re-centers learning, literacy and culture in an atmosphere that is free from police presence in schools.

# Summer Learning Loss

The 9-month school schedule currently in widespread use has its roots in 19<sup>th</sup> and 20<sup>th</sup> Century society in which 85% of Americans were involved in agriculture. It made sense at the time to standardize school schedules and to have children at home during the summer months to help

with farming. Today fewer than 3% of Americans are involved in agriculture and research shows that students' learning is impacted negatively by this block of time away from school.

A review of research (meta-analysis) by Kim and Quinn (2013) on summer reading interventions conducted in the United States and Canada from 1998 to 2011 showed that summer reading interventions that employed teacher-directed literacy lessons had a positive effect on K-8 participants' reading comprehension. The effect of these summer interviews was stronger for children from low-income backgrounds than from a mix of income backgrounds. A metaanalysis conducted by Cooper et al. (1996) integrating 13 studies examining the effects of summer vacation on standardized achievement test scores showed that summer learning loss equaled at least one month of instruction as measured by grade level equivalents on standardized test scores, on average. An analysis of the research of Hayes and Grether (1983) with high- and low-poverty students in 600 New York City schools showed that rich and poor students had seven-month difference in scores at the beginning of second grade but this widened to a difference of two years and seven months by the end of grade six. What made this particularly striking was the research showing little or no difference in these students' achievement when school was in session: They learned at the same pace. As Hayes and Grether noted: "The differential progress made during the four summers between 2nd and 6th grade accounts for upwards of 80 percent of the achievement difference between economically advantaged ... and ... ghetto schools."

Research from the past decade shows that the impact of summer learning loss may be greater than found in earlier studies (Allington & McGill-Franzen, 2003). This deficit is so pronounced that Allington and McGill-Franzen dub summer reading loss as the "smoking gun." Their research has reported that the cumulative effects of summer reading loss can mean that struggling readers entering middle school may lag two years behind peers in their ability to read. Additional research (Alexander, Entwisle, & Olson, 2007) traces the achievement gap between high-socioeconomic and low-socioeconomic 9<sup>th</sup> grade students to the loss in reading proficiency that occurs over the summer months throughout the elementary grades. Summer learning loss across the elementary school years accounted for more than half the difference in the achievement gap between students from high-socioeconomic and low-socioeconomic families. A study by Kim (2004) published by The Center for Evaluation of the American Academy of Arts and Sciences highlights that low-income and minority students experience greater summer reading loss but suggest that summer reading mitigates this negative impact. A 2014 study by Menard and Wilson suggests that the effect on students with reading disabilities (RD) is greater than on non-RD students while another study (Sandburg Patton & Reschly, 2013) suggests greater impact on younger students.

The issue of summer learning loss is not only debated in scholarly journals. In 2010, *Time Magazine* published a cover story entitled "The Case against Summer" (Von Drehle, 2010) in which it reported:

The problem of summer vacation, first documented in 1906, compounds year after year. What starts as a hiccup in a 6-year-old's education can be a crisis by the time that child reaches high school. After collecting a century's worth of academic studies, summer-learning expert Harris Cooper, ... concluded that, on average, all students lose about a month of progress in math skills each summer, while low-income students slip as many as three months in reading comprehension, compared with middle-income students.

Calls to reorganize school calendars and extend the school year have been suggested as a way to deal with the issue of summer learning loss (Aronson, Zimmerman & Carols, 1998; Dechenes & Malone, 2011; Dessoff, 2011; Jimerson, Woehr, Kaufman & Anderson, 2003; Silva, 2007; WestEd, 2001; Woelfel, 2005). Additional research focuses on policy and funding towards mitigating summer learning loss as a way to address gaps in academic achievement (Leefatt, 2015) while other research suggests parent tutoring during the summer as a means for helping many struggling readers (Mitchell & Begeny, 2014). More recent research indicates that summer programs with a math and literacy component can help students realize gains in their math and reading abilities during the summer months (Graham, McNamara, & Van Lankveld, 2011; Smith, 2011-2012). Recent scholarship has included more on the role of summer programs to mitigate summer learning loss (McCombs, et al., 2012) and even "do-at-home" activities (Nikirk, 2012). Research on summer learning loss has recently extended to the post-secondary level with research on summer and between-semester knowledge decay (Dills, Hernandez-Julian, & Rotthoff, 2016).

#### **Urban Youth**

Youth from low-income households tend to have lower reading achievement scores than children from middle- and high-income households. Each school year, the reading achievement gap grows and much of the distance accrues during the summer when children are not as inclined to read. A recent study by Hughes-Hassell & Rodge (2007) examined the leisure reading habits of 584 urban adolescents (grades 5 – 8). One of their findings indicated that summer reading was not a "popular" activity for either male or female urban youth. However, it is known that for at-risk children, summer reading is essential to bridge the reading achievement gap (Allington & McGill-Frazen, 2003; Kim, 2004). Schacter (2003) studied the summer reading achievement of 61 first graders in Los Angeles. His study found that an 8-week summer reading "camp" experience had bearing on vocabulary, comprehension, phonics, and

oral reading. Thus, for at-risk urban children, a summer program that focuses on reading has the potential to positively influence reading achievement.

#### Reading and Literacy Rates

Literacy is a key aspect of school completion. Results from the 2013 National Assessment of Educational Progress (NAEP) indicate that 31% of fourth-grade and 24% of eighth-grade public school students in North Carolina scored below the Basic level in reading. Only 35% of fourth-grade and 33% of eighth-grade students scored at or above the Proficient level. While these scores are up slightly from 2011, they still raise concerns about the reading ability of school-age children in North Carolina. The situation for students in transitional communities (urban and rural) is dire. Data from the U.S. Department of Education and the National Center for Education Statistics shows that nearly 70% of low-income fourth-graders cannot read at a basic level. This research found that the percentage of struggling readers in a classroom negatively influenced every student's reading performance, undermining the benefits of comprehensive literacy instruction. This disparity can, in part, be attributed to unequal access to summer learning opportunities during the elementary school years (Children's Defense Fund, 2008).

# **Objectives and Research Questions**

# History

Given the challenges of summer learning loss and literacy attainment and their potential impact on such issues as graduation rates, there is a need for more research on summer programs and their potential to address these issues. A 2005 evaluation of the Kansas City Freedom School Initiative demonstrated a significant improvement in reading abilities for Freedom School Scholars. The pilot evaluation conducted in 2009 by UNC Charlotte was the first effort to evaluate outcomes for participating Scholars in Charlotte. In early 2009, Freedom School Partners approached the University of North Carolina at Charlotte's Institute for Social Capital, Inc. (ISC) to develop an outcomes evaluation for the program. A pilot program evaluation was conducted at two Freedom School sites for summer 2009. Results from the pilot evaluation were promising. This pilot study showed that of the 51 participants in grades two through five, 57% showed an increase in their reading levels as assessed in the *Basic Reading Inventory*, 9<sup>th</sup> Ed (Johns, 2005). Twenty-nine percent maintained their reading performance and just under 14% showed some decline. A recommendation that stemmed from the pilot evaluation was the continuation of programmatic evaluation.

In 2010, Freedom School Partners contracted with the Center for Adolescent Literacies at UNC Charlotte to implement an outcome evaluation project to examine the effect of Freedom Schools on children participating at all ten FSP Freedom School sites. The program evaluation

sought to assess the extent to which the *CDF Freedom Schools* program met the following objectives for the K-8 students (Scholars) enrolled:

- To increase children's reading performances
- To maintain or to increase children's reading levels from the end of the school year until the beginning of the proceeding school year
- To increase children's "love" of reading

# Present Study - Summer 2016

Following the 2015 evaluation, our team modified the research design for the current year's study. It was decided in collaboration with FSP to conduct a pilot study of a second assessment that would be more time efficient yet reliable. As a result, we added the Ekwall/Shanker Reading Inventory, 6<sup>th</sup> Ed. (ESRI; Shanker & Cockrum, 2013) to determine if this measure would allow us to assess reading performance over time and compare results to the BRI. In addition, we compared test time to determine if there was a benefit of one test over the other. The research questions that guided the evaluation were adjusted accordingly. This evaluation was guided by the following questions:

- What is the effect on the reading performance of students participating in a Freedom Schools program as determined by the Basic Reading Inventory?
  - Specifically, what proportion of Freedom School Scholars maintained or improved reading performance over time?
  - Was there a significant difference in number of Freedom School Scholars who maintained or improved compared to those whose reading performance declined over time?
- Did Freedom School Scholars show any change in their Independent and Frustration reading levels as measured by the Ekwall/Shanker Inventory (ESRI)?
  - Specifically, what proportion of Freedom School Scholars maintained or improved reading performance over time?
  - Was there a significant difference in number of Freedom School Scholars who maintained or improved compared to those whose reading performance declined over time?
- Were there differences in Scholar Independent and Frustration reading levels by assessment?
- Was there a difference in testing time between the Basic Reading Inventory (BRI) and Ekwall/Shanker Inventory (ESRI)?

#### **Rationale for this Study**

To answer these questions, we sought a measure that is suited both to the goals of the Freedom School reading program but also to the contexts of that program. The IRC component

of Freedom Schools, described earlier, engages students in the reading of culturally diverse books. Scholars and Interns read, discuss and engage in activities related to the books. The focus of this culturally diverse literature-based experience is on comprehension rather than a subskills approach to reading. We provide here a rationale and some research for the use of informal reading inventories as an assessment measure suitable for this evaluation.

We used the following criteria in determining assessment instruments for this research:

- 1. Provide a measure of reading comprehension given the focus on meaning making.
- 2. The assessment must have compatible forms for pre- and post-test administration to measure change over the relatively short duration of the program.
- 3. Span at least the K-8 grade levels, the grade and age range of Scholars in the Level I, II and III classrooms.
- 4. Have a solid research base.
- 5. Be practical in terms of cost, time and resources to administer. The Freedom School program takes place over six weeks, so it was important the assessment not take too much time from the program nor add significantly to costs. Ideally, we wanted an assessment that took less than 30 minutes per Scholar to administer during each administration. Resources at Freedom School sites vary with some sites having limited or no access to computers. This made paper/pencil administration necessary.
- 6. Allow for fidelity in administration so that multiple evaluators could be trained to assess Scholars using common guidelines for administration and scoring.

Reading assessments have their roots in the early 20<sup>th</sup> Century but came of age in the 1940s with the study of skills that comprise comprehension (Davis, 1944; Davis, 1968). Today, reading comprehension assessments are the most common type of published reading test that is available, and the most common reading comprehension assessments involve reading of passages followed by questions about the passage (usually literal recall) and then repeat this process with additional "disconnected" passages (p. 6, ETS, 2012). These traditional approaches to measuring comprehension focus on creating items that consist of lists of content and skills rather than an approach that focuses on what students know and should be able to do (ETS, 2012). Variations on this include asking inferential questions in addition to recall questions. Most reading assessments include what is thought of as the basic skill components of comprehension which include word identification, inferences, strategies, vocabulary and lexical knowledge (Sabatini, O'Reilly & Albro, 2012a and 2012b).

Reading assessments fall into two broad categories: formal and informal. Formal assessments are commonly known as standardized tests or measures and have data which often support conclusions about how a student's reading can be compared to other students his or her age.

Formal measures are used to assess overall achievement and to compare a student to others at their age or grade. Scores are often given in percentiles or stanines and many are helpful as diagnostic tools or for measuring change over longer periods of time (year to year in schools, for example). Informal reading measures are content and performance driven and are often used to inform instructional practices or progress monitoring over short intervals for individual students. Leslie and Caldwell (2009) define informal measures as assessments that "do not interpret scores using comparative or normative data or employ standardized procedures for administration and scoring" (p. 410). Informal measures are often used by classroom teachers and others to gain insight into student performance and to inform instruction. Examples of informal assessments with a focus on comprehension include: questions, retellings, informal reading inventories (i.e., the BRI), think-alouds, and most assessments that fall under the heading of performance or authentic assessments.

Formal and informal assessments measure comprehension but informal measures of reading are better suited for this research because they measure change over a short duration and typically require less time and fewer resources. Formal assessments are usually more expensive to purchase and may require computer administration and/or scoring. There are numerous reading assessments but many of these focus on a narrow range of grades and ages. For example, there are several early literacy assessments such as the Developmental Reading Assessment (DRA) and the Dynamic Indicators of Basis Early Literacy Skills (DIBELS) that span grades K-2 or 3. Informal Reading Inventories (IRI), however, span a larger range of grades from Kindergarten or first grade through grades eight or nine. Costs for IRIs are relatively low and most come in paper/pencil formats although they do require adult one-on-one administration.

The IRI has a long history as a tool for measuring comprehension and reading ability. Most IRIs include measures of word recognition using leveled lists of words and leveled passages read aloud or silently. Nilsson (2008) states in his review of eight IRIs that these assessments provide information about students' strengths and needs as well as charting reading progress over time. Leslie and Caldwell (2009), authors of the *Qualitative Reading Inventory*, raise the following issues about IRIs: 1) readability formulas used to determine passage levels may not accurately measure difference in difficulty of one passage from another, 2) passage equivalency across forms may vary, and 3) questions used to measure comprehension may work differently with different text types and topics. Research conducted by Applegate, Quinn and Applegate (2002) further suggest that IRIs focus more on text-based recall rather than inferential questions. These issues are not unique to IRIs but also reflect concerns with other forms of reading assessments including standardized assessments. Research by Spector (2005) suggests that IRIs are best suited for low-stakes decisions such as assessing reading levels (which aids in book selection and evaluation) but should not be used for diagnosing reading difficulties. Also, IRIs

typically do not offer a fine-grained analysis of growth but, rather, measure reading difference in grade-level increments.

Both formal and informal reading assessments are used for program assessment. However, IRIs were used more frequently for short-term pre/post-test administration while standardized measures were more likely to be administered when repeated measures were not used for purposes of evaluation. The STAR Reading by Renaissance Learning is another test used by some programs for evaluation purposes, but was found unsuitable by our team for several reasons. According to the publisher STAR Reading is "designed for students who can read independently" (Renaissance Learning, Inc., 2010), and some Freedom School Scholars are emergent readers, not yet reading at an independent level. Moreover, STAR is a timed test providing each student a fixed amount of time for reading a passage and then between 45 and 60 seconds to answer questions after which moves to the next question. We felt this also would present problems for emergent and struggling readers. Finally, STAR is a computer-based test, and some Freedom School sites lack access to computers or sufficient numbers of computers to properly administer this type of assessment.

Our analysis of reading assessments, outlined above, led us to the conclusion that IRIs were best suited to the Freedom School evaluation project, and in 2008 we determined that the BRI would be our IRI of choice. We reexamined the literature on reading inventories prior to the 2016 evaluation and identified three high-quality reading inventories for consideration: the BRI, the *Ekwall/Shanker Reading Inventory* and the *Qualitative Reading Inventory* (Leslie & Caldwell, 2016). These three offered a solid research base and evidence of reliability (Spector, 2005) but also addressed other concerns such as having multiple forms for pre and post testing and a scoring system that lends itself to fidelity across administrations. One challenge we noted for the QRI is that it allows assessors to choose from among a greater number of passages types and genres rather than have pre-selected forms for pre- and post-assessment. We opted for the BRI and ESRI because we believe that by having one set of passages for pre (Form A for the BRI and ESRI) and another set of passages for post-assessment (Form B for the BRI and Form C for the ESRI) lends to greater fidelity—especially if used over a period of years as has been the case with the BRI in this evaluation.

Consequently, for 2016, we decided to use the BRI with Scholars at all 14 sites included in this study (of the 16 total Freedom School sites in Charlotte) and selected four of these 14 sites where the ESRI was also administered for comparison and to allow us to answer our research questions.

#### **METHODS**

# **Study Design and Measures**

At the beginning of the summer 2016, there were 1167 Scholars enrolled in the 16 program sites, with 1051 at the 14 sites were data collection was conducted. For summer 2016, there were 430 Scholars in the 14 sites included in this evaluation who participated in the preassessment phase of the project. Additionally, we wanted to pilot the ESRI at four of the BRI sites with at least 80 Scholars across the target sites. The sample was stratified by level, gender, and ethnicity (see Table 2). The evaluation included a pretest-posttest design using only an intervention group (i.e., children who were exposed to the Freedom School Program). This design allows investigators to measure change in reading performance from the start of the program to the end. A power analysis was conducted to determine the number of participants needed to detect statistically significant change over time in group (i.e., Scholar level) means. Based on these estimates, it was determined that 300 Scholars would be sufficient to detect change over time while still allowing for some loss in participants (due to absences and withdrawal from the program, for example). The results presented in this report are based on children for whom we obtained complete pre- and posttest data.

Table 2. Criteria for Stratification

Criteria			
Level	I (K-2)	II (3-5)	III (6-8)
Gender	Male	Male	Male
	Female	Female	Female
Ethnicity	African-American	African-American	African-American
	Hispanic	Hispanic	Hispanic
	Other	Other	Other

# **Recruitment Procedures**

Participants were recruited for the study through the enrollment process for the Freedom School Program. Parents were informed about the research project and were invited to participate. Consent forms were provided to all parents and collected by Freedom School staff. Each Scholar was randomly selected for the study based on the stratification criteria described above and was administered a child assent/permission prior to assessing his/her reading performance. The study was approved by the University of North Carolina Charlotte Internal Review Board.

#### Instruments

#### Basic Reading Inventory

The Basic Reading Inventory (Johns, 2010) is an individually administered reading inventory with multiple measures used to assess facets of reading. For this evaluation, the research team used Form A (pretest) and Form B (posttest). Forms A and B are equivalent measures used to assess students' oral reading across three subtests: the Graded Word List (GWL), Graded Reading Passages, and Oral Reading Comprehension questions that accompany each passage. The BRI is an appropriate assessment that provides flexibility in diverse educational settings that emphasize literacy (Nilsson, 2008).

The BRI Forms A and B begin with a Graded Word List (GWL) section in which students read lists of 20 words. These lists begin at the Pre-primer (PP) level, which are described in the BRI as beginning reading levels, and progress to the 12<sup>th</sup> grade level. The BRI instructs assessors to begin the GWLs two grade levels below a student's current grade. This convention was followed in this assessment program. The student (or Scholar in this case) reads the sets of word lists until an Independent, Instructional and Frustration level are determined.

The Graded Reading Passages section consists of short, grade appropriate passages of text that are read aloud by the scholar while the assessor documents reading accuracy. For Oral Reading Accuracy, students are asked to read passages aloud; the assessing adult records the different types of errors or "miscues" the student/scholar makes. The assessor counts miscues including words skipped, words inserted, and word said incorrectly. Scores are reported at the Independent, Instructional, and Frustration levels based on scales provided for each passage.

For Oral Reading Comprehension, passages are a mix of expository and narrative form. Explicit comprehension questions about details from the text are provided after each passage is read aloud. The questions are scored and based on the number answered correctly; a determination is made regarding the comprehension level for that passage. Scores are reported at the Independent, Instructional, and Frustration levels (Johns, 2010). These levels—Independent, Instructional, and Frustration—describe a reader's ability to read a text with a certain degree of accuracy and to understand or comprehend its meaning. A reader at the Independent level will read a text with few errors or miscues and have a solid understanding of what he or she read. At the Instructional level, a reader makes a few mistakes or miscues and less understanding of the text. A Frustration level text is difficult to read and to understand for a reader. Table 2, below, quantifies these three levels.

The BRI yields information regarding reading proficiency and estimates an individual's Instructional, Independent, and Frustration reading level for different passages. We report on the results based on the Total BRI score—a composite of the GWL, passages and comprehension questions that gives greatest weight to comprehension because it yields the most accurate assessment of a child's performance (Johns, 2010). For the purpose of this report, we report on two outcomes based on performance on the GWL, passages and comprehension: Independent and Frustration Reading, which allows us to capture the range of their reading performance.

**Table 3.** Levels of Reading Assessed with the *Basic Reading Inventory* 

Level	Characteristics
	Comprehension (90%+)
Independent (easy)	Word Recognition (99%+)
	Few or no repetitions
	Very fluent
	Comprehension (50%+)
Frustration (too hard)	Word Recognition (90%+)
	Word by word reading; Rate is slow
	Many repetitions; Lack of expression

Table 3 above provides characteristics of the BRI Independent and Frustration Reading performance.

### Ekwall/Shanker Reading Inventory

The Ekwall/Shanker Reading Inventory (ESRI; Shanker & Cockrum, 2013) is similar to the BRI in most respects in that it includes a Graded Word List (GWL), Graded Reading Passages, and Oral Reading Comprehension Questions that accompany each passage. For this evaluation, the research team used Form A (pretest) and Form C (posttest), which are equivalent forms.

The ESRI differs from the BRI in that it has a single GWL, the San Diego Quick Assessment (SDQA), that has lists of 10 words each. The single set of ESRI word lists are used for the pre and post administration. The ESRI instructs assessors to start all students on the pre-primer (PP) lists of words and to have the student continue reading until he or she makes three or more errors on any one list. Once a student makes three errors the GWL administration is stopped. The lowest list with three or more errors (where the administration was stopped) is the Frustration level. The Instructional level is the list with two errors, and the high level (list) with one error or less is scored Independent.

The Graded Reading Passages on the ESRI are similar to those of the BRI consisting of short, leveled passages of text that are read aloud by the scholar while the assessor documents reading accuracy by noting miscues. The passages on the ERSI go through the 9<sup>th</sup> grade level, one grade level beyond the BRI. Miscues include words skipped, words inserted, and word said incorrectly. Unlike the BRI, the ESRI has assessors say any unknown words that a student cannot read after a five second pause. Scores are reported at the Independent, Instructional, and Frustration levels based on scales provided for each passage. Passages are a mix of expository and narrative form with accompanying comprehension questions about details from the text. Scores for the ESRI for each passage are computed using a matrix that includes a dimension for the number of comprehension questions missed and number of word recognition errors. More weight is given to comprehension than word errors. Scores are reported at the Independent, Instructional, and Frustration levels (Shanker & Cockrum, 2013). The ESRI computes the Independent and Frustration levels using the same percentages as the BRI (Table 4).

Table 4. Levels of Reading Assessed with the Ekwall/Shanker Reading Inventory

Level	Characteristics
Independent (easy)	Comprehension (90%+) Word Recognition (99%+)
Frustration (too hard)	Comprehension (50%+) Word Recognition (90%+)

Scores on the BRI and ESRI are computed for each outcome range from pre-primer to eighth grade. For analysis purposes, Scholars who perform at pre-primer or primer are assigned a score of zero. Scholars who reach a ceiling score of eighth grade at the Independent, Instructional or Frustration level at pre- and posttest are assigned a score of 10 to capture their upper limit. While those Scholars may be able to read beyond 10<sup>th</sup> grade level, assigning a 10 allows us to capture the Scholar's minimum upper limit.

# **Data Collection Procedures**

The study was approved by the University of North Carolina at Charlotte (UNC Charlotte) Internal Review Board (IRB). Prior to enrollment, parent consent along with demographic information about the child (e.g., date of birth, age, grade, race or ethnicity, and prior Freedom School Program participation) was collected by Freedom School Partners which shared the data with the research team for the purpose of this study. Each year of this evaluation, the assessment team selects a purposeful sample of Scholars from among those for whom consent

has been obtained. The sample reflects the demographics of the Freedom School program in Charlotte (race, gender, age, grade level). Our goal was to identify approximately 300 Scholars for the pre-test across the 14 sites to create the sample using the BRI and approximately 80 Scholars at four sites using the ESRI. We obtained 295 complete BRI assessments and 91 ESRI assessments which provide a high rate of confidence for our findings.

As in previous years, Scholars were selected to participate in the BRI or ESRI pretest during the first two weeks of the program (June 17-27, 2016) and Scholars who participated in the pretest and who were present at the time of the assessment participated in the posttest during the last week of the program. The UNC Charlotte-trained assessor obtained child assent prior to administering the pretest. Participants were assigned an identification number for data tracking purposes, to de-identify them to protect their identity, and for data analysis purposes. As described above, *The Basic Reading Inventory* (Johns, 2010) was used to determine a pre- and posttest Independent (floor) and a Frustration (ceiling) reading score equivalent to a grade level based on the exam's scoring procedures. Similarly, the ESRI was administered at four of the Freedom School sites where the BRI was also administered but to different groups of children. Assent was obtained for each child participating prior to the pretest administration and as with the BRI, a pre- and posttest Independent (floor) and a Frustration (ceiling) reading score equivalent to a grade level were determined.

#### Sample

In 2016, Freedom School Programs had 1051 Scholars eligible to participate in the study at the 14 sites included in this study. Of those, 295 (28%) completed the pre- and post BRI test and 91 (9%) completed the pre- and post ESRI test. Demographic characteristics of the recruited sample are provided in the results section of this report.

#### **Analysis Plan**

Prior to conducting data analysis, the data were entered and cleaned. For example, to capture the range in reading abilities, pre-primer scores were converted into zeros to capture pre-emergent readers who have not yet reached independence at the first grade level. This is often the case for younger Scholars, such as those in Kindergarten. In addition, Scholars who were assessed, but were not able to reach the pre-premier level were assigned a score of -1. This allowed us to capture any change among those who moved from not being able to reach the lowest level of independence to, say, pre-primer (the lowest scored level). On the other end of the spectrum were Scholars who exceeded the eighth grade score limits of the test. Those Scholars assessed using the BRI were assigned a nine to capture their minimum upper limit while those assessed with the ESRI were assigned a 10. The analysis allowed us to capture the changes that occurred from -1 to, say, zero or one (for emergent and younger readers) and

from seven or eight to a score of nine (for older or more capable readers). The recoded data did produce slightly higher means for older grades and slightly lower means for younger Scholars because of the assigned numbers. However, this recoding did not impact group comparisons conducted to determine change over time when compared to the data that was not recoded using -1 and nine.

To answer our research question, we computed change scores from pretest to posttest for Independent and Frustration reading performance based on the composite score in both assessments, which captures performance on the Graded Reading Passages miscues and Oral Reading The following section provides three sets of results for each outcome (Independent and Frustration) for each test (BRI and ESRI). The first set of results show means and standard deviations for the pre- and posttest by Level. The next set of results provide a distribution that shows the proportion of children whose reading performance declined, was maintained, or improved over time for each test. To determine whether there is a statistically significant difference from pre- to posttest (or within subjects also referred to as a within subject test), we conducted the Wilcoxon Signed-Ranks Test, which is a non-parametric hypothesis test designed to test differences in a sample that is not normally distributed and who are assessed using repeated measures as is the case in this study. The Wilcoxon Signed Ranks Test allows investigators to determine whether there is a statistically significant difference in means or groups (declined and improved) among Scholars from pre- to posttest. Also, non-parametric methods allow us to work with data that is ranked such as the use of grades. Finally, we provide results for the BRI for 4 sites where both the BRI and ESRI were administered. This allowed us to compare performance on both tests at the same sites to assess whether there were a site-level differences.

#### **RESULTS**

Table 5 shows demographic information for Scholars who completed the pre- and posttest for either the BRI or ESRI. Because the sampling approach was identical for both assessments, results show that Scholar characteristics for both measures are very similar. More than half of the Scholars were African American/Black (59.3% BRI and 57.1% ESRI) and just over a quarter were Hispanic/Latino (29.8% BRI and 25.3% ESRI), with a slightly higher proportion of White, non-Latino in the ESRI sample compared to the BRI sample (2.4%). A higher proportion of Scholars who completed the ESRI had prior FSP experience compared to 54.6% of BRI Scholars. The vast majority participated in the free lunch program and less than 10% of both samples repeated a grade. As in previous years, Level II Scholars represented the largest proportion of participants (44.7% BRI and 46.2% ESRI) followed by Level I Scholars (33.2% BRI and 30.8% ESRI) and Level III Scholars, who represent 22% and 23.1% of the BRI and ESRI sample, respectively.

The smaller proportion of Level III Scholars in the study is not surprising as they represent a smaller percentage of Freedom School enrollment.

**Table 5**. Scholar Demographic Characteristics by Assessment

	BRI Sample (N=295)	ESRI Sample (N = 91)
Race/Ethnicity	, , , , , , , , , , , , , , , , , , ,	/
African American/Black	59.3	57.1
Hispanic/Latino	29.8	25.3
Asian/Asian American	5.1	4.4
European American/White, non-Latino	2.7	6.6
Mixed Heritage	2.4	5.5
Missing	.7	1.1
% Female	50.5	46.2
% Participation in Free/Reduced Lunch	96.6	97.8
% Grade repeated	8.8	8.8
% Prior FSP experience/enrollment	54.6	68.1
Level		
I	33.2	30.8
II	44.7	46.2
III	22.0	23.1

### **Independent Reading Performance for the BRI and ESRI**

Tables 6 and 7 show means and standard deviations by Level for the BRI and ESRI. The results shown on Table 6 indicate that, on average, Scholars at Level 3 improved at least one full grade from pretest to posttest on the BRI. Level 1 and 2 Scholars demonstrated improvement, but to a lesser extent. As measured using the BRI, Scholars in Level III demonstrated the largest growth with a mean improvement of 1.05 from pretest to posttest. Level II Scholars had a mean improvement from pre- to posttest of 0.69, less than one full grade. The youngest cohort (Level I), also showed some improvements over time, but it was less than a full year going from a mean score of 0.94 (SD = 1.40) at pretest to 1.15 (SD = 1.60) at posttest.

**Table 6.** Mean Scores for the BRI Independent Reading Measure by Level

	<u>Pretest</u>			<u>Posttest</u>		
	N	М	SD		М	SD
Level						
1	98	0.94	1.40	97	1.15	1.60
2	132	3.03	2.05	132	3.72	2.30
3	65	4.32	2.21	65	5.37	2.26
Total	295	2.62	2.29	294	3.24	2.62

Performance on the ESRI showed that Level II and III Scholars improved more than a full grade from pre- to posttest (see Table 7). Specifically, Level III Scholars had a mean improvement of 1.52 over time and Level II Scholars had a mean improvement of 2.02 from pre- to posttest. However, Level I Scholars demonstrated very little mean improvement of .06 on this measure.

**Table 7.** Mean Scores for the ESRI Independent Reading Measure by Level

	<u>Pretest</u>				<u>Posttest</u>	
	N	М	SD		М	SD
Level						
1	19	1.21	1.512	26	1.27	1.49
2	40	2.60	1.61	42	4.62	2.38
3	20	3.10	1.74	21	4.62	3.03
Total	79	2.39	1.75	89	3.13	2.64

When comparing mean scores between the two measures, we see that, on average, Level I Scholars performed slightly better on the ESRI at both time points. However, on average, older Scholars performed better on the BRI at the start of the program (pretest), but showed more improvement on the ESRI posttest. To further explore these differences, we examined mean scores among those who completed the ESRI at BRI sites (total 4 sites). As Table 8 shows, Level II and III Scholars at those sites performed slightly better on both pretests, but there was no clear pattern of performance on the posttests. However, the sample size is substantially small and should be taken into account. Despite the differences in mean performance over time across the two measures, the results show that the vast majority of Scholars either maintained performance or improved over time. The following results provide more nuanced information

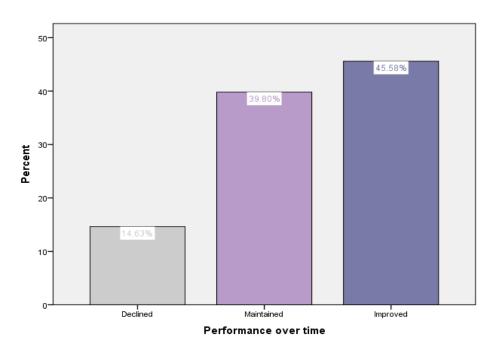
regarding change observed over time for each of the assessments. Each of the figures show change over time in three groups: declined, maintained or improved.

Table 8. ESRI Scores at Four BRI Sites.

	<u>Pretest</u>				<u>Posttest</u>	
	N	М	SD		М	SD
Level						
1	16	0.69	1.20	15	1.27	1.79
2	24	3.29	2.24	24	4.08	2.48
3	12	4.42	2.15	12	6.00	1.41
Total	52	2.75	2.41	51	3.71	2.70

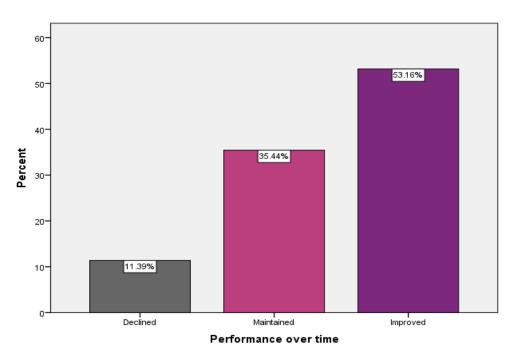
Figure 1 shows that close to half Scholars who completed the BRI improved (45.58%) from preto posttest. More than a third were able to maintain mean performance over time (39.80%) and 14.63% declined over time. To determine whether the differences from pre- to posttest were significant, we conducted a Wilcoxon Signed-Ranks Test. Based on our analysis, the results indicate that there was a statistically significant change from pre- to posttest Z = -6.139, p = .000 on the BRI.

**Figure 1.** Distribution of Scholar Independent Reading Performance Over Time on the BRI (N= 295)



Results from the ESRI analysis also revealed that more than half of the Scholars improved from pre- to posttest (53.61%), which is slightly higher than the proportion who improved using the BRI (see Figure 2 below). Additionally, over a third (35.44%) of those who completed the ESRI were able to maintain independent reading performance from pre to posttest, a slightly lower proportion than those who were administered the BRI. Finally, based on the ESRI 11.39% of Scholars declined. This is lower than the proportion of Scholars who declined using the BRI.

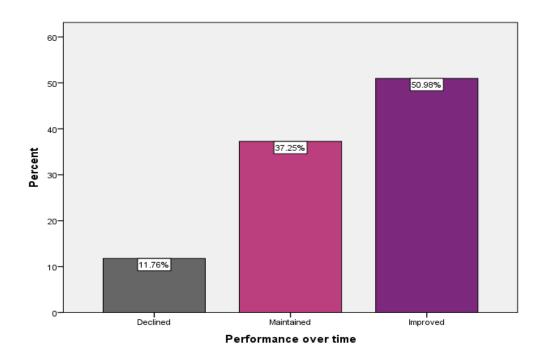
**Figure 2.** Distribution of Scholar Independent Reading Performance Over Time on the ESRI (N= 91)



As with the BRI, results from the Wilcoxon Signed-Ranks Test revealed that there was significant difference over time Z = -4.568, p = .000 on the ESRI.

In addition to examining the distribution of the three performance groups by assessment, we ran the same analysis with the four sites that were administered both the BRI and ESRI. Figure 3 shows that results are very similar to those reported for the ESRI above (see Figure 2). Specifically, just over half of the Scholars who completed the pre and post ESRI at BRI sites showed improvement (50.908%) and more than a third (37.25%) were able to maintain independent reading performance. Much like the performance reported across all ESRI sites, 11.76% showed a decline in performance from pre- to posttest. Results from the Wilcoxon Signed-Ranks Test showed that there were significant group differences Z = -3.202, p = .001.

**Figure 3.** Distribution of Scholar Independent Reading Performance over Time on the ESRI at BRI sites only (N= 51)



# Frustration Reading Performance for the BRI and ESRI

This section focuses on results based on both the BRI and ESRI Frustration reading performance over the course of the evaluations. Table 9 below shows mean and standard deviations for the BRI by Scholar level. As with the independent test results, we found that Scholars improved across all Levels. However, improvement was less than one full grade. Here, we see that Level II and III Scholars improvement on ceiling or frustration performance are very similar, with a mean improvement of .70 and .85, respectively. Scholars at Level I showed the least improvement on this measure with a mean change of .49 from pre to posttest.

Table 9. Mean Scores for the BRI Frustration Reading Measure by Scholar Level

		<u>Pre</u>	Pos	<u>ttest</u>		
	N	М	SD		М	SD
Level						
1	98	2.52	2.47	97	3.01	2.53
2	132	5.48	2.33	126	6.18	2.26
3	63	6.52	2.21	52	7.37	2.10
Total	293	4.72	2.84	275	5.29	2.90

Results from the ESRI Frustration test are reported in Table 10 below and shows that Scholars demonstrated more improvement on this assessment than on the comparable BRI test of frustration/ceiling level. Results reveal that Level II and III Scholars showed the most improvement from pre to posttest on this outcome. On average, Level II Scholars improved more than a full grade (1.19) over time. Level III Scholars showed the most improvement with an average 1.63 change from pre to posttest. In contrast, our youngest cohort, Level I Scholars, showed less than a full grade improvement with a mean change from pre- to posttest of .75.

Table 10. Mean Scores for the ESRI Frustration Reading Measure by Scholar Level

		<u>Pretest</u>			<u>Posttest</u>	
	N	М	SD	Ν	M	SD
Level						
1	28	2.46	2.32	28	3.21	2.41
2	42	5.31	1.71	40	6.50	2.29
3	21	6.05	2.80	19	7.68	2.36
Total	91	4.60	2.62	87	5.70	2.92

When we compare results based on the Scholars who completed the ESRI at BRI sites, we see, again, that Level II and III Scholars performed the best (see Table 11). However, when compared to results reported in Tables 8 and 9, Level II and III Scholars performed better on the ESRI Frustration pre- and posttest. However, the improvement was less than a full grade for Level I and II Scholars; Level III Scholars improved an average of 1.17 from pre- to posttest.

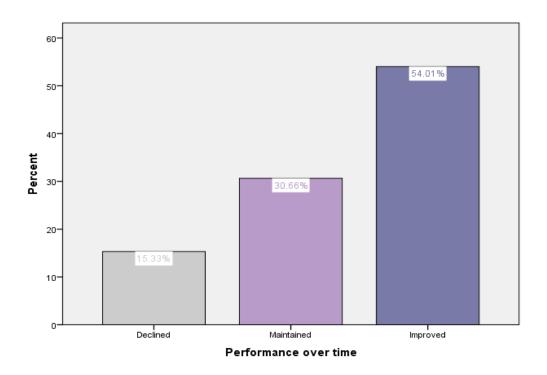
**Table 11.** Mean Scores for the ESRI Frustration Reading Measure by Scholar Level at BRI Sites Only

		<u>Pretest</u>			<u>Posttest</u>	
	N	М	SD	Ν	M	SD
Level						
1	16	2.19	2.29	15	2.67	2.53
2	24	5.79	2.40	22	6.41	2.42
3	12	6.83	1.95	9	8.00	1.00
Total	52	4.92	2.92	46	5.50	3.04

To determine if change over time was statistically significant, we conducted Wilcoxon Signed-Ranks Tests. The following figure illustrates change over time in three categories: declined from pre- to posttest, maintained mean ceiling reading over time and improved from pre- to posttest (i.e., was able to exceed previous threshold) for the BRI Frustration test. Figure 4 shows that more than half (54.01%) of all Scholars who completed the BRI assessment were able to exceed their previous reading threshold in the posttest. Furthermore, a third (30.66%) maintained their mean reading performance from pre- to posttest. However, 15.33% declined over time.

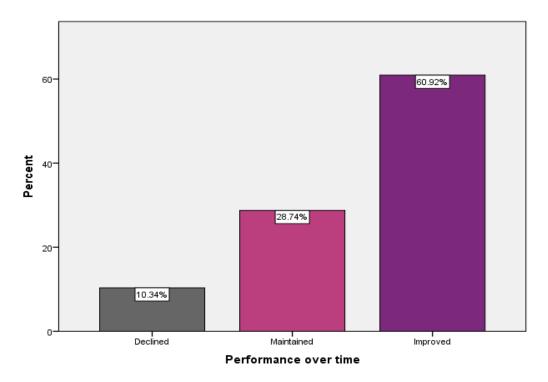
Results from the Wilcoxon Signed-Ranks Test indicated that there was a statistically significant change from pre- to posttest on mean ceiling reading levels Z = -7.175 p = .000.

**Figure 4.** Distribution of Scholar Frustration Reading Performance Over Time on the BRI (N = 274)



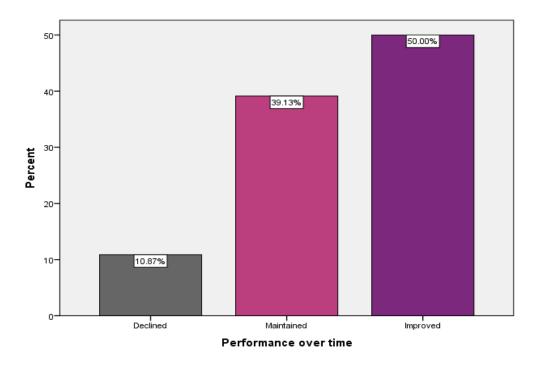
We also examined the distribution of the ESRI over time and found that more than half of Scholars who completed this assessment showed improvement in ceiling reading skills (60.92%), which is a higher proportion than those who improved based on the BRI test of frustration. Another 28.75 were able to maintain pretest frustration reading performance and 10.34% showed a decline over time. Results from the Wilcoxon Signed-Ranks Test showed that there were significant group differences Z = -4.568, p = .000.

**Figure 5.** Distribution of Scholar Frustration Reading Performance Over Time on the ESRI (N = 87)



A comparison of performance over time on the ESRI at BRI only sites revealed that Scholars at those sites had a similar proportion who showed improvement on the test of frustration as those who completed the BRI (see Figure 6). However, a higher proportion of Scholars who completed the ESRI at BRI sites maintained their level of performance, which translated to fewer Scholars declining over time. As with the other assessments and samples reported here, there were significant differences as determined by the Wilcoxon Signed-Ranks Test Z = -2.959, p = .003.

**Figure 6.** Distribution of Scholar Frustration Reading Performance over Time on the ESRI at BRI Sites Only (N= 46)



Given our research questions and interests in determine the most feasible assessment to administer at all sites, we also captured the length of time, in minutes, it took to complete all of the assessments. We found that the BRI pretest took an average of 26.44 minutes to administer and the posttest took an average of 25.16 minutes. In contrast, the ESRI pretest took an average of 14.51 minutes and the posttest took 17.04, on average. This translates into, on average, a savings of 11.93 minutes when using the ESRI pretest and 8.12 minutes using the ESRI posttest.

#### **DISCUSSION AND CONCLUSIONS**

Our first objective in this evaluation was to continue the research begun in 2009 to learn about the effect on reading performance of students participating in Freedom School programs as measured by the *Basic Reading Inventory*. Specifically, we looked at the proportion of Freedom School Scholars who gained, maintained or declined on two measures of reading using the BRI, the Independent Reading Level and the Frustration Reading Level. Across both levels—Independent and Frustration—the majority of Scholars maintained or improved in their ability to read as measured using the BRI. At the Independent or "floor level," nearly 46% of Scholars improved, nearly 40% maintained and just under 15% declined. At the "ceiling" or Frustration levels, 54% increased while nearly 31% maintained and just over 15% declined. The results also

indicate that, on average, all groups (Level I, II and III Scholars) improved from pretest to posttest as measured using the BRI. These results follow a similar pattern those reported in previous studies conducted the Center for Adolescent Literacies but vary by degree. That is, a somewhat smaller group of Scholars showed increases in Independent and Frustration levels than previous years. For example, in 2015, approximately 61% of Scholars showed increases at the Frustration level compared to 54% in 2016. We also note that the level of growth in 2016 was less than noted in 2015 (one year vs. two years growth on average). However, the overall pattern from year to year has been fairly consistent with the largest number of Scholars showing increases and the smallest percentage showing decreases. It is not within the scope of our research to identify the causes of this variation; however, we can speculate that differences in sample size and composition may have an impact as well as site level differences not accounted for within this research (our analysis is across sites, not site by site).

We also introduced a second informal reading inventory to see how students performed when assessed using an alternative to the BRI. We chose the Ekwall/Shanker Reading Inventory (ESRI) based on comparability to the BRI and used the ESRI to look at the proportion of Freedom School Scholars who gained, maintained or declined on two measures of reading, the Independent Reading Level and the Frustration Reading Level. Results at both levels—floor and ceiling—using the ESRI yield a similar pattern to results as measured using the BRI. The greatest percentage is for Scholars showing increases in reading and the smallest percentage is for those who declined. However, we noted small differences in degree with the ESRI with a slight increases in the percent of Scholars showing increases (approximately 61% on the ESRI and 53% on the BRI at the Frustration level). A similar pattern held for reading as measured at the Independent level. There was minor variation across assessments, BRI and ESRI, as to the degree of growth for Level I, II, and III Scholars. The research on IRIs noted earlier suggest possible reasons for these small variations. While the BRI and ESRI are similar in format (word lists, passages, comprehension questions) and use the same assumptions about what constitutes Independent and Frustration Level reading, differences in passages and question types as well as small differences in scoring will likely yield small differences in results.

However, our analysis of the BRI and ESRI suggest that both assessments yield similar patterns of results. Differences are noted but are by degree and do not substantially alter the pattern that has emerged over time that approximately 85 to 90% of Scholars enrolled in Freedom School Partners' Freedom Schools maintain or increase in their ability to read as measured using IRIs. The addition of the ESRI provides some measure of confirmation to results reported using the BRI. Additionally, the ESRI requires less time to administer, eight to 12 minutes per administration on average at pre and posttest, suggesting that using the ESRI would place a "lighter footprint" for assessment on the program and be more cost effective. We see two

other promising benefits of the ESRI: 1) the scoring matrix that accounts for both miscues and comprehension questions lends itself to fidelity in scoring, and 2) it is easier to explain and therefore would likely make training of assessors less time intensive.

#### The Center for Adolescent Literacies at UNC Charlotte

The Center for Adolescent Literacies at UNC Charlotte is an instructional center focused on developing instruction to make literacy and learning relevant and effective for adolescents and those who work with them. The Center also will conduct and support research and service in support of its primary mission.

The mission of the Center for Adolescent Literacies (CAL) at UNC Charlotte is to advance the literacy achievement of adolescents in urban school settings and to develop pedagogies for adolescents and those who work with them to prepare them to be productive and empowered 21st century citizens. Specifically, the objectives of our center are as follows:

- To provide community outreach
- To build cultural understanding and awareness
- To promote community engagements
- To encourage civic engagement through service learning
- To equip teachers, parents and pre-service teachers with knowledge, skills, and dispositions for supporting and scaffolding adolescent literacy and service learning
- To develop and provide collaborative professional development to promote adolescent literacy
- To encourage collaborative involvement among all stakeholders (including teachers, students, parents/guardians and university faculty).

# **Evaluation Leadership Team**

**Dr. Bruce Taylor** is the Director of the Center for Adolescent Literacies at UNC Charlotte and is a Professor in the Department of Reading & Elementary Education. Over the past 13 years, Dr. Taylor has provided leadership in developing the ReadWriteServe (RWS) community-based literacy initiatives at UNC Charlotte. These programs include America Reads, the Urban Youth in Schools Internship, and RWS Tutor Training. He is the author and co-author of numerous peer-reviewed articles, book chapters, and technical reports and co-author of three books. His research examines the social and cultural aspects of literacy and learning of adolescents and, in particular, ways to meet the academic learning needs of diverse and marginalized students. He has led several reading program evaluation projects. Dr. Taylor teaches undergraduate, master's level, and doctoral courses that focus on content-area and adolescent literacy, digital literacies in education, and sociocultural aspects of language and literacy.

**Dr. Sandraluz Lara-Cinisomo** is an Assistant Professor at the University of Illinois at Urbana-Champaign (UIUC) in the Department of Kinesiology and Community Health. Dr. Lara-Cinisomo's research explores the association between biomarkers, psychosocial factors and perinatal depression. Dr. Lara-Cinisomo's research focuses on English and Spanish speaking

Latina mothers. Prior to joining UIUC, Dr. Lara-Cinisomo was an assistant professor an NIH-funded fellow at the University of North Carolina at Chapel Hill, an assistant professor at University of North Carolina at Charlotte and a behavioral scientist at the RAND Corporation. Her research includes qualitative and quantitative methods.

#### References

- Alexander, K., Entwisle, D., & Olson, L. (2007). Lasting consequences of the summer learning gap. *American Sociological Review*, 72 (2), 167 180.
- Allington, R. L., & McGill-Franzen, A. (2003). The impact of summer set-back on the reading achievement. *Phi Delta Kappan, 85*(1), 68-75.
- Applegate, M. D., Quinn, K. B., & Applegate, A. J. (2002). Levels of thinking required by comprehension questions in informal reading inventories. *The Reading Teacher*, (56)2, 174-180.
- Aronson, J., Simmerman, J. & Carols, L. (1998). Improving student achievement by extending school: Is it just a matter of time? WestEd. San Francisco: Far West Laboratory.
- Bethea, S. L. (2012). The impact of Oakland Freedom School's summer youth program on the psychological development of African American youth. *Journal of Black Psychology* 28(4), 442-454.
- Coffey, H. (2010). "'They' taught 'me'": The benefits of early community-based field experiences in teacher education. *Teaching and Teacher Education: An International Journal of Research and Studies*, 26 (2), 335-342.
- Cooper, H., Charlton, K., Valentine, J. C., & Muhlenbruck, L. (2000). Making the most of summer school: A meta-analytic and narrative review. *Monographs of the Society for Research in Child Development*, 65(1), 1-118. EJ 630 022.
- Cooper, H., Nye, B., Charlton, K., Lindsay, J., & Greathouse, S. (1996). The effects of summer vacation on achievement test scores: A narrative and meta-analytic review. *Review of Educational Research*, 66(3), 227-268. EJ 596 384.
- Davis, F. B. (1944). Fundamental factors of comprehension in reading. Psychometrika, 9, 185-197.
- Davis, F. B. (1968). Research in comprehension in reading. Reading Research Quarterly, 3, 499-545.
- Davis, J. H. (2010). Guide our feet: Teacher education and servant-leadership in a Children's Defense Fund Freedom School (Doctoral Dissertation). *ProQuest LLC*.
- Dechenes, S., & Malone, H. J., (2011). Year-round learning: Linking school, afterschool, and summer learning to support student success. *Harvard Family Research Project* (ED521123).
- Dessoff, A. (2011). Is year-round schooling on track? *District Administration*, 47(7), 34-36.
- Dills, A., Hernández-Julián, R., & Rotthoff, K. W. (2016). Knowledge decay between semesters. *Economics Of Education Review*, 5063-74.
- Educational Testing Service. (2012). ETS Research Spotlight 7: Innovation in Reading Assessment. ETS: Princeton, New Jersey.

- Hayes, D. P., & Grether, J. (1983). The school year and vacations: When do students learn? *Cornell Journal of Social Relations*, 17(1), 56-71.
- Howard, T. C. (2015). Why Black Lives (and minds) matter: Race, Freedom Schools & the quest for educational equity. *Journal of Negro Education*, 85(2), 101-113.
- Hughes-Hassell, S., & Rodge, P. (2007). The leisure reading habits of urban adolescents. *Journal of Adolescent & Adult Literacy*, *51*(1), 22-33.
- Jackson, T. O. (2011). Developing sociopolitical consciousness at Freedom Schools: Implications for culturally responsive teacher preparation. *Teaching Education*, *22* (3), 277-290.
- Jackson, T. O. (2009a). Toward collective work and responsibility: Sources of support within a Freedom School teacher community. *Teaching and Teacher Education*, *25*, 1141-1149.
- Jackson, T. O. (2009b). Making the readings come to life": Expanding notions of language arts at Freedom School. *The New Educator*, *5*(3), 311-328.
- Jimerson, S.R., Woehr, S.M., Kaufman, A.M. & Anderson, G.E. (2003). Grade retention and promotion: Information and strategies for educators. National Association of School Psychologists, S3-61 S3-64.
- Johns, J. L. (2005). Basic Reading Inventory: Pre-Primer through Grade Twelve and Early Literacy Assessments,  $9^{th}$  Ed. Dubuque, IA: Kendall Hunt.
- Johns, J. L. (2010). *Basic Reading Inventory: Pre-Primer through Grade Twelve and Early Literacy Assessments, 10<sup>th</sup> Ed.* Dubuque, IA: Kendall Hunt.
- Kim, J. (2004). Summer Reading & the Ethnic Achievement Gap. *Journal of Education for Students Placed at Risk (JESPAR), 9*(2), 169-188.
- Kim, J. S., & Quinn, D. M. (2013). The Effects of summer reading on low-income children's literacy achievement from Kindergarten to grade 8: A meta-analysis of classroom and home interventions. *Review of Educational Research*, 83(3), 386-431.
- Leefatt, S. (2015). The key to equality: Why we must prioritize summer learning to narrow the socioeconomic achievement gap. *Brigham Young University Education & Law Journal,* (2), 549-584.
- Leslie, L. & Caldwell, J. (2009). Formal and informal measures of reading comprehension. In S. E. Israel & G. G. Duffy, (Eds.), Handbook of research on reading comprehension. New York: Routledge, pp. 403-427.
- Leslie, L. & Caldwell, J. (2016). *Qualitative reading inventory-6, 6<sup>th</sup> Ed.* New York: Pearson.
- McCombs, J. S., Augustine, C., Schwartz, H., Bodilly, S., McInnis, B., Lichter, D., & Cross, A. B. (2012). Making summer count: How summer programs can boost children's learning. *Education Digest*, 77(6), 47-52.
- Menard, J., & Wilson, A. M. (2014). Summer Learning Loss among Elementary School Children with Reading Disabilities. *Exceptionality Education International*, 23(1), 72–85.

- Mitchell, C., & Begeny, J. C. (2014). Improving Student Reading Through Parents'
  Implementation of a Structured Reading Program. *School Psychology Review, 43*(1), 41-58.
- National Assessment of Education Progress. (2013). U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics.
- Nilsson, N. L. (2008). A critical analysis of eight informal reading inventories. *The Reading Teacher*, *61*(1), 526-536.
- Nikirk, M. (2012). Stave off summer learning loss with do-at-home activities. *Tech Directions*, 71(10), 16-17.
- Renaissance Learning, Inc. (2010). *Getting the most out of STAR ReadingTM: Using data to inform instruction and intervention.* Wisconsin Rapids, WI: Renaissance Learning.
- Sabatini, J. P., O'Reilly, T. & Albro, E. R. (2012a). Measuring up: Advances in how we assess reading ability (Volume I). Lanham, MD: Rowman & Littlefield.
- Sabatini, J. P., O'Reilly, T. & Albro, E. R. (2012b). Reaching an understanding: Innovations in how we view reading assessment (Volume II). Lanham, MD: Rowman & Littlefield.
- Sandberg Patton, K. L., & Reschly, A. L. (2013). Using Curriculum-Based Measurement to Examine Summer Learning Loss. Psychology In The Schools, 50(7), 738-753.
- Schacter, J. (2003). Preventing summer reading declines in children who are disadvantaged. *Journal of Early Intervention, 26*(1), 47-58.
- Shanker, J. L., & Cockrum, W. (2013). *Ekwall/Shanker reading inventory, 6<sup>th</sup> Ed.* New York: Pearson.
- Silva, E. (2007). On the clock: Rethinking the way schools use time. Washington, D.C.: Education Sector.
- Smith, K. (2010). Fostering regimes of truth: Understanding and reflecting on the Freedom School way. *Pedagogy, Culture and Society, 19*(2), 191-209.
- Smith, L. (2011-2012). Slowing the summer slide. Educational Leadership, 69(4), 60-63.
- Spector, J. E. (2005). How reliable are informal reading inventories? *Psychology in the Schools,* 42(6), 593-603.
- Von Drehle, D. (2010, July 22). The case against summer. *Time Magazine*. Available at <a href="http://www.time.com/time/nation/article/0,8599,2005654,00.html">http://www.time.com/time/nation/article/0,8599,2005654,00.html</a>.
- Watson, M. (2014). Freedom Schools Then and Now: A Transformative Approach to Learning. Journal For Critical Education Policy Studies, 14(1), 170-190.
- WestEd (2001). Making time count. San Francisco: Far West Laboratory.
- Williamson, L. A. (2013). No school like Freedom School. *Teaching Tolerance 52*(43, 25-28.

Woelfel, K. (2005). Learning takes time for at-risk learners. Principal, 85 (Nov./Dec.), 18 -21.