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

Submitted by

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Overview

This report, submitted by the Center for Adolescent Literacies at UNC Charlotte, is the fifth program evaluation of Freedom School Partners’ Children’s Defense Fund Freedom Schools® programs in Charlotte, N.C. This work began in 2009 with a two-site pilot study followed by a 10-site study in 2010, and 15-site study in 2011, and 10 site evaluations in 2012 and 2013. This evaluation examines the program’s effect on the reading performance of students served by Freedom School Partners in Charlotte, North Carolina, in the summer of 2013. The data and findings presented in this report were collected from 10 of the 19 Freedom School sites in Charlotte in June and July 2013.

A second evaluation was conducted by the Center for Adolescent Literacies during the summer 2013. This evaluation of a new Level IV program for high school students, which was piloted at one site, is shared in a separate report.

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.”

Created by the Children’s Defense Fund, the Freedom Schools program engages children in grades K-12 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, as well as 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

1 Information about the Children’s Defense Fund and its programs is available at the CDF website: http://www.childrensdefense.org/.
more than 100,000 children have participated in Freedom School programs since its inception in 1995. In the Summer, 2013, there were approximately 11,500 Scholars in Freedom School programs in 96 cities and 29 states including Washington D.C.

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 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, year-round educational enrichment programs.” Freedom School Partners began hosting Freedom Schools programs in 2004 at one location serving 100 scholars. Through nine years of growth, in 2013, Freedom Schools expanded to 19 sites. FSP partners with community groups, faith-based organizations, colleges and universities, and corporations, which provide volunteer and financial support. Locally, the average Freedom School site costs $60,000 for a six-week, 50-scholar site (or $200 per child per week).

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, and parents are asked to attend parent meetings and volunteer in the program. 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.

This research builds on a pilot evaluation study conducted during the summer 2009. Summer 2010, 2011, and 2012 findings extended that research and the findings were similar in nature. Nearly 90% of Freedom School Scholars grew or maintained in their ability to read as measured by the BRI. Furthermore, important data was 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

*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 leadership aspects of the Freedom School program and 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 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.

*Summer Learning Loss*

The 9-month school schedule currently in widespread use has its roots in 19th and 20th 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 meta-analysis 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-months 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.”
More recent research 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 9th 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.

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; Dechene & Malone, 2011; Dessoff, 2011; Jimerson, Woehr, Kaufman & Anderson, 2003; Silva, 2007; WestEd, 2001; Woelfel, 2005). 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 for to mitigate summer learning loss (McCombs, et al., 2012) and even “do-at-home” activities (Nikirk, 2012).

**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 2011 National Assessment of Educational Progress (NAEP) indicate that 32% of fourth-grade and 26% of eighth-grade public school students in North Carolina scored below the Basic level in reading. Only 34% of fourth-grade and 31% of eighth-grade students scored at or above the Proficient level. 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 their reading levels as assessed in the Basic Reading Inventory, 10th Ed (BRI; Johns,
2008). 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 and its external business unit, Adolescent Literacy Services, 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

The research questions that guided the evaluation were the following:

1. Did Freedom School Scholars show any change in their Independent and Frustration reading levels as measured by the Basic Reading Inventory?
2. What were the academic and recreational reading attitudes of Freedom School Scholars as measured by the Elementary Reading Attitude Survey?
3. What were Freedom School Scholars’ perceptions regarding the reading component in the CDF Freedom Schools program?

**Present Study – Summer 2013**

In 2011 and 2012, the research design for the continued program evaluation of FSP was modified based on the findings of the 2010 evaluation. The research questions that guided the evaluation were adjusted accordingly. The following research question guided the 2011, 2012 and 2013 program evaluations of Freedom Schools:

- What is the effect on the reading performance of students participating in a Freedom Schools program as determined by the Basic Reading Inventory?

**METHODS**

**Study Design and Measures**

The 2013 evaluation aimed to assess 300 Freedom School Scholars across 10 of 19 sites of the 2013 Freedom School Partners Freedom Schools. For summer 2013, there were 1,203 Scholars enrolled in the program. The sample was stratified by level, gender, and ethnicity (see Table 1).
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. The results presented in this report are based on children for whom we obtained complete pre- and posttest data.

Table 1. Criteria for Stratification

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Level I</th>
<th>Level II</th>
<th>Level III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Male</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>Hispanic</td>
<td>Hispanic</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>Other</td>
<td>Other</td>
</tr>
</tbody>
</table>

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.

Instrument

The Basic Reading Inventory (BRI; Johns, 2008) 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 12th 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, 2008). 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, 2008). 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 2 provides characteristics of the Independent and Frustration Reading performance. Scores for each outcome range from pre-primer to eighth grade. For analysis purposes, those 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 nine to capture their upper limit.
While those Scholars may be able to read beyond ninth grade level, assigning a nine allows us to capture the Scholar’s minimum upper limit.

Table 2. Levels of Reading Assessed with the Basic Reading Inventory

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

Data Collection

The pretest was administered to Scholars individually during the first two weeks of the program which began on June 24, 2013 and posttests were administered during the last two weeks of the program which ended August 2, 2013. The Basic Reading Inventory (Johns, 2008) was used to determine Independent (floor) and Frustration (ceiling) reading levels during the pre- and posttest periods. Each session took approximately 20 to 25 minutes to complete.

Prior to the pretest, the researchers obtained demographic information about each participant (gender, age, and last grade completed) from the program coordinator, which was gathered from the program application with parental permission. The child assent was obtained at the time of 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.

Sample

Of the 19 program sites, 10 were selected for the evaluation. These sites were selected to provide a representative mix of Scholar demographics and partnerships. Purposeful selection allowed us to conduct assessment of a reasonable number of Level I, Level II and Level III Scholars in sites sponsored by faith-based, university and community organizations. Although the numbers of Scholars assessed varied, our goal was to obtain data on 30 Scholars during the pre-assessment at each site. Selection was based on level, race/ethnicity and gender (see above). Of the 300 children identified for participation in the study 226 were assessed at pretest; fewer Scholars were assessed due to absence or lack of signed consent forms. We had 81 percent retention, with 185 Scholars assessed at posttest. Nine percent attrition was due to Scholar absence during the posttest period.
Table 3 shows the demographic information for the analytic sample (i.e., those with complete pre- and posttest data) for the Independent and Frustration measures. The first column represents the 158 Scholars who received a pre- and posttest score on the Independent measure; 27 children either did not receive a score in the pre, post or both waves of the test. The descriptive statistics shown in the second column is based on the 167 Scholars who received a Frustration score on the BRI. While we aimed to recruit equal proportions of Scholars by level, gender and race/ethnicity, absences, Scholar enrollments, and attrition resulted in larger proportions of Level II Scholars for both measures. Additionally, some sites did not have programs for Level III Scholars, and for sites that did, there tended to be fewer Level III Scholars than Level I and Level II Scholars.

Table 3. Demographic characteristics of Scholars with pre- and posttest data

<table>
<thead>
<tr>
<th></th>
<th>Analytic Sample for the Pre- and Post- Independent test (N=158)</th>
<th>Percent/Mean(SD)</th>
<th>Analytic Sample for the Pre- and Post- Frustration test (N=167)</th>
<th>Percent/Mean(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>21</td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>44</td>
<td></td>
<td>39</td>
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<tr>
<td>3</td>
<td></td>
<td>35</td>
<td></td>
<td>29</td>
</tr>
<tr>
<td>Race/Ethnicity&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>African-American</td>
<td>78</td>
<td></td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>17</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>5</td>
<td></td>
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</tr>
<tr>
<td>Gender</td>
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<tr>
<td>Male</td>
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<td>50</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>52</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Reduced Lunch&lt;sup&gt;h&lt;/sup&gt;</td>
<td></td>
<td>89</td>
<td></td>
<td>90</td>
</tr>
<tr>
<td>Mean Grades Completed</td>
<td></td>
<td>4.47 (1.99)&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td>3.87 (2.22)&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
<tr>
<td>Percent Prior Grade Retained</td>
<td></td>
<td>17&lt;sup&gt;e&lt;/sup&gt;</td>
<td></td>
<td>17&lt;sup&gt;f&lt;/sup&gt;</td>
</tr>
<tr>
<td>Number of Prior FSP Years&lt;sup&gt;g&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>None</td>
<td></td>
<td>18</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>One</td>
<td></td>
<td>44</td>
<td></td>
<td>41</td>
</tr>
<tr>
<td>Two or more</td>
<td></td>
<td>38</td>
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<td>38</td>
</tr>
</tbody>
</table>

Note: Level I includes Kindergarten through 2nd grade; Level II includes grades 3-5; and Level III includes grades 6-8. <sup>a</sup> Based on a 156 responses. <sup>b</sup> Based on 165 responses. <sup>c</sup> Based on 102 responses. <sup>d</sup> Based on 102 responses. <sup>e</sup> Based on 155 responses. <sup>f</sup> Based on 102 responses. <sup>g</sup>
Number based on 106 self-reported responses on Freedom School applications. Reduced lunch status was self-reported by families on Freedom School Scholar applications.

African Americans made up the vast majority of the participants across the two measures followed by Hispanics; a small percentage of Scholars classified as other, which includes those identified by their parent as biracial (Hispanic and African American), Asian or White, were represented in the study. We were able to include equal proportions of males and females in the Frustration measure sample and slightly fewer males in the Independent measure sample. The vast majority of children are eligible for the free or reduced lunch program at their respective schools.

Grades ranged from Kindergarten to 8th grade, with the average Scholar who completed the pre- and post- Independent test having completed the fourth grade; slightly younger children completed the pre- and post-Frustration test. More Level I Scholars completed the Frustration pre- and posttest test compared to those who completed both waves of the assessment of Independent reading. A smaller proportion of no prior experience with the program received an Independent score on both waves of data collection compared to those who received a Frustration pre- and posttest score.

Analysis Plan

In Freedom School, Scholars are grouped for instructional purposes in grade level cohorts. Therefore, level was used as our grouping variable because this is how the Scholars are grouped for instruction. Level I Scholars are students who have just completed Kindergarten through second grade. Level IIs are students having completed grades three through five. Level IIIs are students having just completed grades six through eight. The second phase of our analysis included all children in the regression model. Level was used as a covariate in the Independence and Frustration regression models (see additional information provided below).

To answer our research question, the analysis proceeded in five steps. First, we computed mean and standard deviations for the Independent and Frustration pre- and posttest reading performance based on the composite score, which captures performance on the Graded Word List, the Graded Reading Passages and Oral Reading Comprehension described above. The mean scores were then tabulated by Level (see below). Next, we computed change scores from pretest to posttest for Independent and Frustration reading measures. Third, we computed the proportion of children whose reading performance declined, was maintained, or improved over the course of the study. Fourth, to determine whether there is a statistically significant difference between these three groups, we conducted the Wilcoxon Signed-Ranks Test, allows
us to investigate changes in scores from one time point to another as is the case of the reading program offered to Scholars. The Wilcoxon Signed-Ranks Test will also enable us to determine whether there is a statistically significant difference in means or groups (declined, maintained and improved) among Scholars who were assessed at pre- and posttest. Non-parametric methods allow us to work with data that is ranked, such as the use of grades. Finally, we ran regression models with difference scores as the outcome and controlling for child characteristics (e.g., gender, race/ethnicity), level, and pretest score.

Prior to conducting data analysis, the data were entered and cleaned. For example, to capture the range in reading performance, pre-primer scores were converted into zeros to capture the Kindergarten level reader and those who exceeded the eighth grade score were assigned a nine to capture their minimum upper limit. Nineteen Scholars were issued a zero to replace a pre-primer or primer score for the independent pretest and 24 received that same score at posttest. Seventeen children received a score of nine on the pretest and 35 received that same score on the posttest because they reached the upper limit before they reached frustration.

RESULTS

The organization of the results follows the analytic steps described above, beginning with mean scores and respective standard deviations for each outcome (e.g., Independent, Frustration), followed by the results from the change scores and ending with the statistics determined by the Wilcoxon Signed Ranks Test described above. The regression results are based on the sample of Scholars who received a difference score.

**Independent Reading Measure**

The following table provides results for the BRI Independent reading measure for Scholars for whom we had pre- and posttest data.

Table 4. Mean scores for the BRI Independent reading measure by level (N=158)

<table>
<thead>
<tr>
<th>Level</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td>1</td>
<td>33</td>
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<td>Total</td>
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</tbody>
</table>
The results show that, on average, children in Level I scored at the first grade reading level at pretest and improved by half a grade by the posttest. Growth was more pronounced among Level II and III Scholars with more than a grade improvement on the BRI.

Figure 1 provided below shows the distribution of Scholars who declined, maintained, and improved Independent reading proficiency over the course of the summer reading program. The vast majority of Scholars either maintained or improved over the course of the program, with over half of the Scholars showing improvement. In contrast, 16.5 percent of Scholars declined over the course time.

The Wilcoxon signed-rank test allows us to investigate changes in scores from pretest to posttest. In this case, we can determine if there were significant differences among the three groups or outcomes shown in Figure 1 above. Based on results from the Wilcoxon Signed-Ranks Test, there is a statistically significant difference in reading performance among these three groups ($p = .001$).

Results from the regression analysis revealed that controlling for child characteristics, level, and pretest score, only one variable was significantly correlated with the Independence difference score (not shown). Scholar pretest score was negatively associated with Independence difference scores. In other words, Scholars with higher pretest scores were less likely to show a large change score. Figure 2 shown below illustrates this correlation. Given that the BRI has a threshold of 8; it stands to reason that those who reach the ceiling score had less room for improvement on the assessment. However, this does not suggest that those children did not
improve. Instead, it illustrates that those Scholars were unable to demonstrate growth on this measure.

Figure 2. Scatter plot of correlation between Scholar Independence score on the pretest and difference score

Frustration Reading Measure

As described above, the BRI yields a Frustration or ceiling reading score. Another way to think of the Frustration score is the point at which the Scholar could no longer continue with the test because he/she reached his/her threshold.

Results shown in Table 5 (below) indicate that Scholars at all levels showed improvement over time. This means that children were able to read at a higher grade level at posttest before they reached frustration or were unable to proceed. Across the three Levels, Scholars improved by at least one full grade.
Table 5. Mean scores for the BRI Frustration reading measure by level (N=167)

<table>
<thead>
<tr>
<th>Level</th>
<th>N</th>
<th>Pretest M</th>
<th>Pretest SD</th>
<th>Posttest M</th>
<th>Posttest SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>53</td>
<td>2.38</td>
<td>2.19</td>
<td>3.08</td>
<td>2.50</td>
</tr>
<tr>
<td>2</td>
<td>66</td>
<td>5.80</td>
<td>1.76</td>
<td>6.82</td>
<td>2.00</td>
</tr>
<tr>
<td>3</td>
<td>48</td>
<td>6.50</td>
<td>1.82</td>
<td>7.88</td>
<td>1.44</td>
</tr>
<tr>
<td>Total</td>
<td>167</td>
<td>4.92</td>
<td>2.60</td>
<td>5.93</td>
<td>2.85</td>
</tr>
</tbody>
</table>

Figure 3 shown below depicts the proportion of Scholars who declined, maintained, or improved reading proficiency over time. More than half (61.7%) of Scholars showed improvement from pretest to posttest. This means that those scholars were able to read beyond their previous threshold. Over one quarter maintained mean frustration reading performance, which suggests that while these scholars did not improve, they also did not decline. Close to ten percent of Scholars declined over the course of the program.

Figure 3. Performance on the BRI Frustration Reading Measure over time (percent based on N=167)

Again, the Wilcoxon Signed-Ranks Tests allows us to explore change scores from pretest to posttest. The results indicated that there is a statistically significant difference in reading performance among these three groups (p = .001).

Results from the regression analysis revealed that after controlling for child characteristics, Level, and pretest Frustration score, there was a positive and statistically significant correlation
between child grade and difference score (not shown). In other words, as child grade went up so did the likelihood that their Frustration threshold would also rise ($p = .05$). However, as Figure 4 below shows there was a negative correlation between pretest score and difference score. Given that there is a threshold to the assessment, with Scholars who had higher the Scholar scored in the pretest less showing less growth on this measure ($p=.05$). The results also revealed that children who participate in the Free Lunch Program were also more likely to show improvement ($p = .01$).

Figure 4. Scatter plot of correlation between Scholar Frustration score on the pretest and difference score.

**Discussion of Findings**

The aim of this study was to evaluate the Freedom School program impact on reading performance on the BRI. Specifically, we were interested in determining whether the intervention had an effect on Scholar independent reading skills and frustration reading (i.e., threshold reading). To answer this question, we assessed Scholar during the first two weeks of the intervention or program and on the last two weeks of the program using a standardized
reading measure. Based on our analyses, the results indicate that the vast majority of Scholar benefitted from participation in the program. Specifically, we found that, on average, scholars tended to improve from pretest to posttest. The results also indicate that over half of the Scholars improved from pretest to posttest. Results from the regression analyses also revealed that pretest score was predictive of difference score (change from pretest to posttest) on the Independent and Frustration outcome. We also found that Scholars who performed well in the pretest were less able to demonstrate growth because the BRI has a cap. Related, the regression analysis also revealed that with each grade level increase Scholar’s performance on the Frustration test also increased. In other words, reading performance improved on this measure as grade improved. Put together, the results suggest that the intervention made an impact on Scholar reading performance. The results also suggest that the Scholar’s reading performance at the onset of the program was predictive of outcome performance.

While this investigation yielded promising results, this study is not without limitations. For instance, the BRI was effective at helping us assess basal levels. However, ceiling level performance and improvement at posttest was difficult to assess among high performing Scholars. This suggests that a measure that allows us to assess growth without pre-established caps is necessary to better assess growth among older and more skilled readers.

The overall approach for this evaluation project has remained consistent since its inception. A group of Level I, II, and III Scholars from a representative group of Freedom School program sites in Charlotte, N.C. were asked to participate in this evaluation using reading assessments from the Basic Reading Inventory (BRI; Johns, 2008). One form (Form A) of the BRI was administered near the beginning of the Freedom School summer program and a similar form (Form B) near the end. Results of this are analyzed each year and suggest that approximately 90% of the Scholars improve or maintain in their ability to read as measured by the BRI. This year’s results, which are shared in this report, maintain that trend.
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 Team

Dr. Bruce Taylor is the Director of the Center for Adolescent Literacies at UNC Charlotte and is an Associate Professor in the Department of Reading & Elementary Education. Dr. Taylor has provided leadership in developing the ReadWriteServe service learning and literacy initiatives at UNC Charlotte as well as the Academy for Qualitative Research. He is the co-author of two books and is the author and co-author of numerous peer-reviewed articles, book chapters, and technical reports. 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, multiliteracies in education, and sociocultural aspects of language and literacy.

Dr. Sandraluz Lara-Cinisomo is currently a postdoctoral fellow at UNC Chapel Hill in the School of Medicine where she is learning about biomarkers associated with perinatal depression. Dr. Lara-Cinisomo’s research focuses on English and Spanish speaking Latina mothers. Prior to
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**Dr. Crystal P. Glover** is a Clinical Assistant Professor in the department of Reading and Elementary Education at the University of North Carolina at Charlotte where she teaches reading and writing methods courses to undergraduate students. Crystal is a National Board Certified Teacher and certified reading specialist. She has ten years of experience as a primary grades teacher. Crystal earned a PhD in Curriculum and Instruction with a focus in Urban Literacy from UNCC. Her research interests include culturally responsive literacy instruction for students of color, urban teacher preparation, and the oral and written language development of children in poverty.

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