THE HILL CENTER REGIONAL EDUCATION MODEL:
EVALUATION RESULTS OF THE HILL READING ACHIEVEMENT
PROGRAM IN BRUNSWICK COUNTY SCHOOLS

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EXECUTIVE SUMMARY

Background

The purpose of this evaluation study was to determine the effectiveness of the Hill Reading Achievement Program (HillRAP) in improving the reading achievement of students who need remediation in reading in Brunswick County Schools. Evaluation questions were:

1. Do students who receive HillRAP instruction improve academic achievement in reading, overall, and by student groups?
2. How many sessions of HillRAP instruction did students receive? Is there a relationship between the number of HillRAP sessions students receive and achievement in reading?
3. Do teachers who receive HillRAP training effectively implement HillRAP in a public school setting?

The study sample included 325 elementary and middle school students who were pretested and posttested during the 2009-2010 school year (first year sample) and 164 elementary, middle, and high school students who continued in HillRAP for a second year (two year longitudinal sample). Data collection included:

- Woodcock-Johnson III Tests of Achievement: Letter-Word Identification, Reading Fluency, Passage Comprehension, and Word Attack tests. These tests were administered prior to HillRAP implementation (pretest) and following one and two years of implementation.
- North Carolina End-of-Grade Reading Comprehension Test: This state assessment is administered at each school to students in grades 3 through 8. Levels I and II indicate below grade level achievement; Levels III and IV indicate at or above grade level achievement. Student scores for the year prior to HillRAP implementation were obtained (pretest) as well as scores for each subsequent year of implementation.
- HillRAP Attendance Record: HillRAP teachers entered these data into the Hill Center Database to document and monitor student attendance in HillRAP sessions.
- HillRAP Teacher Observation Form: In year one, Hill Center Master Teachers/Trainers completed this form as part of their regular observations of HillRAP teachers. In year two, Brunswick County Schools HillRAP mentors also completed observations/forms.
Overall, a pattern of students demonstrating greater growth after two years of HillRAP instruction was evidenced.

- Students who received HillRAP instruction for two years (two year longitudinal sample) demonstrated greater growth than those who received it for one year on all Woodcock-Johnson III reading tests administered.
- Students who received HillRAP instruction for two years (two year longitudinal sample) demonstrated greater movement from lower to higher achievement levels on the North Carolina End-of-Grade Reading Comprehension Test than students who received one year of HillRAP instruction. The figure below shows this movement.
- To better determine the impact of longer participation in HillRAP, future studies should include a larger sample from the beginning and efforts should be made to ensure that as many students as possible remain in HillRAP after one year. In addition, future studies should include an implementation period of more than two years to determine the impact of longer participation in the program.

Overall North Carolina End-of-Grade Reading Comprehension Test Achievement Levels for Two Year Longitudinal Sample

<table>
<thead>
<tr>
<th>Year</th>
<th>0%</th>
<th>20%</th>
<th>40%</th>
<th>60%</th>
<th>80%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>26.6%</td>
<td></td>
<td>41.6%</td>
<td></td>
<td>28.6%</td>
<td>3.2%</td>
</tr>
<tr>
<td>2010</td>
<td>32.9%</td>
<td></td>
<td>43.7%</td>
<td></td>
<td>22.2%</td>
<td>3.3%</td>
</tr>
<tr>
<td>2009</td>
<td>70.1%</td>
<td></td>
<td>24.8%</td>
<td></td>
<td>4.3%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

\( ^{a}2009 \) sample n = 117 and includes only grades 4-8. 2010 sample n = 158, 2011 sample n = 154 and include grades 3-8.
Students Identified to Receive Exceptional Children’s Services who received HillRAP instruction improved academic achievement in reading.

- Students identified to receive Exceptional Children’s services demonstrated statistically significant and greater than expected growth for average ability students their age on all Woodcock-Johnson III reading tests administered. In addition, students decreased the gap between their achievement and the average achievement range of the tests.

- Students identified to receive Exceptional Children’s services demonstrated notable growth on the North Carolina End-of-Grade Reading Comprehension Test. The percentage of students who scored at or above grade level increased from 9.08% prior to HillRAP to 18.18% after one year of implementation. The percentage of students who scored at Level I decreased from 62.3% to 39%. Further, for students who received HillRAP for two years, the percentage who scored at or above grade level increased from 11.36% to 40.91% and the percentage who scored at Level I decreased from 70.5% to 22.7%. Thus, students who received two years of HillRAP demonstrated greater movement from lower to higher achievement levels than those who received one year.

- Future studies of HillRAP should include more students representing the different types of Exceptional Children’s services for which students are identified to better understand the effectiveness of the program in meeting the needs of these groups of students.

White students who received HillRAP instruction improved academic achievement in reading.

- White students demonstrated statistically significant and greater than expected growth for average ability students their age on all Woodcock-Johnson III reading tests administered. In addition, students decreased and sometimes the gap between their achievement and the average achievement range of the tests.

- White students demonstrated notable growth on the North Carolina End-of-Grade Reading Comprehension Test. The percentage of students who scored at or above grade level increased from 7.44% prior to HillRAP to 23.14% after one year of implementation. The percentage of students who scored at Level I decreased from 64.5% to 28.1%. Further, for students who received HillRAP for two years, the percentage who scored at or above grade level increased from 8.62% to 31.04% and the percentage who scored at Level I decreased
decreased and sometimes closed the gap between their achievement and the average achievement range of the tests.

- Hispanic students demonstrated notable growth on the North Carolina End-of-Grade Reading Comprehension Test, moving from lower to higher achievement levels. No student scored at or above grade level prior to HillRAP; 28% scored at grade level after one year of implementation and the percentage of students who scored at Level I decreased from 60% to 28%.

- Subsequent studies of HillRAP should include a larger number of Hispanic students to better determine the impact of the program on this student group.