How They Spent Their Summer Vacation: Impact of a Tutorial Program for Students "At-Risk" of Failing a State Mandated High School Proficiency Test.

The administration of the High School Proficiency Test (HSPT) in the Trenton (New Jersey) School District and the impact of a voluntary summer tutorial program on HSPT scores were examined. New Jersey requires that all ninth graders take the HSPT, and that all school districts achieve a 75 percent passing rate to become state-certified. The same rate is required for testing in grades 3 and 6. The Trenton district, a large, urban, low socioeconomic status district, set up a summer tutorial program in reading, writing, and mathematics to improve HSPT scores. The program was funded by New Jersey's Operation School Renewal program. Students who completed the program were tested again along with the other ninth graders. Pass rates for tutorial vs. non-tutorial students were 67.6 vs. 47.6 percent in reading; 58.1 vs. 36.2 percent in mathematics; and 65.4 vs. 43.3 percent in writing. Tutorial students' mean scores were significantly higher than the non-tutorial students. Although the tutorial students' mean scores were above the passing scores in all subjects, 75 percent of the students did not achieve beyond the state standard. However, the pass rates were higher than for the whole student body, meaning the at-risk students outperformed those students not at risk. (JGL)
HOW THEY SPENT THEIR SUMMER VACATION: IMPACT OF A TUTORIAL PROGRAM FOR STUDENTS "AT-RISK" OF FAILING A STATE MANDATED HIGH SCHOOL PROFICIENCY TEST

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Testing in New Jersey

The State of New Jersey, well before the creation of the National Commission on Excellence in Education, established state requirements for earning a high school diploma. Included among these requirements was the passage of a grade nine statewide test in reading and mathematics: the Minimum Basic Skills Test (MBS). Students failing the test in grade nine were re-tested annually until they passed. Individual school districts in the state could not attain "certification" unless at least 75% of their ninth grade students passed.

Recognizing the need to assess writing, and responding to criticism that a test of "minimum" skills was no longer adequate, the State Department of Education developed the more rigorous High School Proficiency Test (HSPT). Beginning in Spring 1986, this "graduation test" was administered to all ninth grade students statewide. Higher order skills in the areas of reading, mathematics and writing (including a 30 minute essay) were assessed.

This paper describes the impact of the state's new testing program on Trenton, New Jersey public schools, and reports the results of a summer school program designed to prepare "at risk" students to successfully pass the tests.

Trenton Public Schools

Trenton serves as the state capitol of New Jersey. Government may be characterized as the city's largest industry. City population exceeds 90,000. During working hours, these numbers swell to include thousands of state workers - most of whom do not live in Trenton, and few...
of whom send their children to the public schools. The city itself is located within Mercer County. Neighboring suburban towns and their respective school districts bare little resemblance to Trenton.

Within Mercer County, Trenton city accounts for: 73% of all minorities; 75% of all Blacks; 70% of all Hispanics. Comparing the Trenton schools with the remaining Mercer County districts, the district accounts for: 72% of all minorities; 75% of all Black students; and 85% of all Hispanics students. Most of these children are poor.

Trenton is one of the state's larger districts, enrolling approximately 14,000 students in 26 schools. The student population is 69% Black, 18% Hispanic and 13% White. It is one of the 56 urban districts (there are 611 districts statewide), and it ranks in the lowest of the 12 District Factor Groupings (indicators of the socioeconomic status of citizens living in the districts) used by the state in comparative reporting of testing results.

Achieving State Certification

Although the urban districts comprise only nine percent of the state total, they account for over 40% of the student population. For its part, the state department treats all districts alike. The urban question openly the state's definition of equity.

The state department of education is virtually omnipotent. The governor of the state has attempted to build a national reputation on the reforms of his commissioner of education. These reforms, many of which impact most heavily on the urban districts, include a multi-faceted monitoring process. Districts are monitored once every five years. Those failing to pass even one of 51 indicators in the
areas are under Level II monitoring. Here, a district must prepare a corrective action plan which the state must approve.

State evaluation is annual; not only to check on any indicator which has failed, but also to recheck all other indicators to see if they have been maintained.

Districts failing to achieve certification under Level II, even with state assistance, are triggered into Level III. Level III districts unable to show reasonable progress are candidates for state takeover and are characterized by the governor as "educationally bankrupt."

Trenton is in the first year of Level II monitoring. Its major failing is in the area of student achievement. Although NCE's are above the 50th percentile for reading from K-6 and mathematics from K-9, Trenton has been unable to achieve minimal levels of proficiency (MLP) in the three grades identified by the state for monitoring: grades 3, 6 and 9.

To attain certification, 75% of all children in every third grade and every sixth grade in every school must meet or exceed the MLP. MLP's are frequently above the 50th and (in the case of third grade math) 60th national percentile ranks on nationally normed achievement tests.

New Jersey standards are demonstrably higher. Test publishers who spend millions to develop a national percentile rank of 50 struggle with state standards that call for 75% of students to be above the 63rd percentile.

No urban district has attained state certification under these guidelines. It is unlikely that any will.
In ninth grade, certification is dependent upon the High School Proficiency Test. As with grades 3 and 6, 75% of the students must exceed state standards.

Preparing for the H.S.P.T

Although the H.S.P.T did not "count" for graduation until April 1986, practice administration to ninth graders in Spring 1984 and Spring 1985 indicated that as few as 16% of the students might pass the tests. Despite claims that the test was unfair and discriminated against poor children in urban districts, its administration was non-negotiable.

Trenton administrative staff moved to design instructional programs to raise student performance levels to state standards. One such strategy involved the development of a summer tutorial program in the areas of reading, writing and mathematics for students entering ninth grade who were considered to be "at risk" in terms of passing the High School Proficiency Test. The program was voluntary. No course credit was given.

Funding was provided by the state as a part of the Operation School Renewal (O.S.R.) program. Trenton was one of three districts statewide selected for O.S.R. consideration. The district was fully responsible for the O.S.R. summer school's design, implementation and evaluation.

The O.S.R. Summer School

The summer school program had two objectives:

. To raise student performance levels in reading, mathematics and writing to state standards, and

. To provide a summer tutorial program in the areas of reading, mathematics and writing for students who are considered to be "at risk" in terms of passing the High School Proficiency Test.
In developing the summer school program, the method of student selection was based on the results of a pretest. The district pretested students at the end of the eighth grade with the 1985 version of the H.S.P.T. Based on these results, students judged to be "at risk" of not passing the test in ninth grade were invited to attend a six week summer school program. The program began with 175 students; 163 remained at the end of the program. A total of 136 students completed testing in April 1986. No initial achievement differences could be found between at risk students who participated in the tutorial and those that did not. Participants received 45 minutes of instruction in each of the three areas in classes with a teacher/pupil ratio of approximately 1 to 15. Materials were selected for their relevancy to student needs. Weekly tests were administered to check progress and reports were sent home to parents at the end of each week's instructional cycle.

Staffing included an administrator, a guidance counselor, three writing teachers, three reading teachers and three mathematics teachers.

At the completion of the program, students were post tested with the same 1985 version of the test. Results showed average gains of 9.6 points in reading, 6.4 points in mathematics, and 10.1 points in writing. This six week experience, however, was not enough to evaluate the true value of the summer model.

The real impact of this program could not be determined until the 1986 version of the H.S.P.T. was administered to all ninth graders in April 1986. It was expected that these results would show that summer school students' passing rates would exceed those of students who did not have the summer experience.
Determining the Impact of the Summer Tutorial

Students who participated in the O.S.R. summer school program scored higher than students who did not. These findings were significant in all three subject areas.

Preparation the students received in the summer program before entering ninth grade was evident nine months later in the form of higher passing rates.

Table 1 shows differences in passing rates between summer school and non-summer school students. Also shown is the overall district average. In every case, summer students exceeded non-summer students by 20 points or more.

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Percent Passing</th>
<th>1986 High School Proficiency Test Results in Reading, Mathematics and Writing for Summer School and Non-Summer School Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>67.6</td>
<td>47.6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>58.1</td>
<td>36.2</td>
</tr>
<tr>
<td>Writing</td>
<td>65.4</td>
<td>43.3</td>
</tr>
</tbody>
</table>

Figure 1 shows those data graphically. Overall, 67.6% of the summer students passed reading, 58.1% passed mathematics and 65.4% passed writing.
FIGURE 1

1985 OSR SUMMER SCHOOL PROJECT
SUMMARY PASSING SCORES

PERCENT PASSED

READING          48
MATH             36
WRITING          43

SUMMER SCHOOL     NON-SUMMER SCHOOL
Table 2 shows the actual number of students who passed and failed the tests for summer school, non-summer school, and all ninth graders combined.

**TABLE 2**

Number and Percent of Students Passing and Failing the 1986 High School Proficiency Test by Subject Area and Summer School Participation

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Pass/Fail</th>
<th>Summer School</th>
<th>%</th>
<th>No Summer School</th>
<th>%</th>
<th>All Students</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>Pass</td>
<td>92</td>
<td>67.6</td>
<td>325</td>
<td>47.6</td>
<td>417</td>
<td>50.9</td>
</tr>
<tr>
<td></td>
<td>Fail</td>
<td>44</td>
<td>32.4</td>
<td>357</td>
<td>52.4</td>
<td>401</td>
<td>49.1</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Pass</td>
<td>79</td>
<td>58.1</td>
<td>247</td>
<td>36.2</td>
<td>326</td>
<td>37.9</td>
</tr>
<tr>
<td></td>
<td>Fail</td>
<td>57</td>
<td>41.9</td>
<td>425</td>
<td>63.8</td>
<td>492</td>
<td>62.1</td>
</tr>
<tr>
<td>Writing</td>
<td>Pass</td>
<td>89</td>
<td>65.4</td>
<td>293</td>
<td>43.3</td>
<td>382</td>
<td>47.0</td>
</tr>
<tr>
<td></td>
<td>Fail</td>
<td>47</td>
<td>34.6</td>
<td>383</td>
<td>56.7</td>
<td>430</td>
<td>53.0</td>
</tr>
</tbody>
</table>

In Table 3, the mean H.S.P.T. scores for reading, mathematics and writing are presented. Summer school students exceeded the state's passing score. Non-summer school students did not.

**TABLE 3**

Mean High School Proficiency Test Scores in Reading, Mathematics and Writing for Summer School and Non-Summer School Students

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Summer School</th>
<th>Mean Scores</th>
<th>All Students</th>
<th>State Passing Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>77.7</td>
<td>71.3</td>
<td>72.4</td>
<td>75</td>
</tr>
<tr>
<td>Mathematics</td>
<td>62.5</td>
<td>54.2</td>
<td>55.6</td>
<td>61</td>
</tr>
<tr>
<td>Writing</td>
<td>77.8</td>
<td>75.2</td>
<td>75.6</td>
<td>77</td>
</tr>
</tbody>
</table>
Table 4 shows the results of a 2x2 Chi Square analysis to determine if significant differences existed on H.S.P.T. scores between students who participated in the summer program and those that did not. Significant differences (p > .001) were found for each of the subject areas.

**TABLE 4**

Results of 2x2 Chi Square Analysis To Determine Significant Differences Between Summer School Participants and Non-Participants

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Chi Square</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>18.14</td>
<td>p &gt; .001</td>
</tr>
<tr>
<td>Mathematics</td>
<td>22.63</td>
<td>p &gt; .001</td>
</tr>
<tr>
<td>Writing</td>
<td>22.19</td>
<td>p &gt; .001</td>
</tr>
</tbody>
</table>

**Interpreting the Scores**

While recognizing the real achievement differences between students who participated in the summer tutorial and those who did not, it must be stated clearly that students failed to meet the 75% passing criterion established by the state. Average scores (Table 3) were above the state passing criteria. But, 75% of the students did not achieve beyond the state standard.

**Educational Significance**

The statistical significance of the summer school program may not be as important as its educational significance.

The educational significance of these findings is two fold. First,
the Trenton Public Schools have developed a program that, after a thorough evaluation, has proved successful. For the district, a model has been developed which may be used to increase the number of students meeting minimum state standards.

Second, in line with the recent report from the U.S. Department of Education, it is important to report "what works." Students attending summer school who were categorized as "at risk" of failing a state mandated test actually out performed students not at risk. If higher standards are used to evaluate the effectiveness of a local district's educational product, and the district is able to develop an effective strategy for meeting the standards, then those strategies and practices that work must be disseminated.