STUDENT OUTCOMES AFTER REASSIGNMENT
FOR SCHOOL SOCIOECONOMIC DIVERSITY:
YEAR TWO FOLLOW-UP

BACKGROUND

As noted in the earlier district report *Reassignment, School Diversity, and Student Outcomes* (Febbo-Hunt, Lindblad, Baenen, and Banks, June 2004), Wake County Public Schools (WCPSS) has a history of commitment to promote diversity in its schools:

Both voluntary reassignment - based on magnet schools - and involuntary reassignment of some students have been used to accomplish this goal. District commitment to maintaining a diverse learning environment stems not only from the social benefits to students but also from a large body of research indicating that students learn better in economically heterogeneous school environments than in high poverty schools. (See reviews in WCPSS, 1999; Flinspach, Banks, and Khanna, 2003.) Based on this research, and on lower-court decisions regarding race-based student assignment, WCPSS launched a race-neutral assignment policy that takes school socioeconomic status and achievement level into account when making reassignment decisions (in Policy 6200, 2003). The policy sets school-level caps:

- No more than 25% of students performing below grade level,
- No more than 40% of students receiving free or reduced-price lunch (FRL).

Exceptions to these maximums are addressed through instructional review and are taken into consideration when designing the assignment plan.

PURPOSE

This study addresses one of the Superintendent’s performance goals for both 2003-04 and 2004-05, set by the Board of Education, which requested follow-up academic data for students regarding impact of involuntary school change on the academic outcomes of students. These students entered reassigned elementary schools in fall 2002 specifically for the purpose of decreasing the percentage of students receiving FRL at some schools. The 2004 report provided data on 2001-02 and 2002-03 academic performance. This study traces the progress of those students for the second year (2003-04) after reassignment.

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RESEARCH METHODS AND DESIGN

Students are reassigned for a number of reasons, including the need to ease over-crowding, fill new schools, allow children to attend programs not available at their base school, address transportation issues, and maintain diversity within the schools. Although 4,157 students, grades K-12, were reassigned in 2002-03 (Year 1), relatively few students were actually reassigned for the purpose of decreasing the percentage of students receiving FRL (proxy for poverty) at some schools, and the preponderance of those were in elementary schools. Approximately 225 elementary students were identified as being reassigned solely for diversity purposes.

For the Year 1 study, a panel of evaluation experts from area universities and the Department of Public Instruction recommended using a quasi-experimental approach in which the progress of reassigned students was compared to that of similar students not reassigned and from neighboring nodes. Node selection criteria and matching with random assignment were used to find a comparable comparison group. Academic progress for the two student groups has been followed for two years. With reduced sample size in the follow-up year (not compatible with the use of inferential statistics), univariate descriptive statistics are used for analyses in Year 2. Outcome variables are academic achievement, retention, and special education placements of the reassigned and comparison groups.

Because only three reassigned students were in 2nd grade in the second year (former 2nd grade students had moved to 3rd grade where EOG tests are administered), no analyses of WCPSS K-2 Assessment results were conducted in Year 2. At grades 3-5, two sources of data were used for analyses: (1) student locator files for 2002, 2003, and 2004 and (2) Masterbuild End-of-Grade (EOG) achievement data for 2002-03 and 2003-04. Demographic characteristics of the reassigned students (and the comparison group) when matched were: 84% Black/African-American, 16% Hispanic/Latino; 81% receiving FRL; 25% receiving special education services; and none receiving LEP services.

ENROLLMENT PATTERNS

Year 1: Of the 218 K-5 students slated for reassignment for the 2002-03 school year, 29 5th-grade students graduated to the 6th grade (middle school), leaving 189 students for whom reassignment was expected to occur. By the end of the first year of study, only 52 students – about 25% of the original group slated for reassignment - remained in the reassigned group. A major finding of the Year 1 study was that most of the students who were slated to be reassigned did not, in fact, attend the schools to which they had been assigned but, instead, took advantage of the many choices/options available to WCPSS students.

Year 2: Of the remaining 52 students, 12 students in the reassignment group graduated from 5th grade to middle school for the start of Year 2, and another three students transferred to other districts based on change of residence during the second school year. Only 37 (17%) of the 218 original students identified for reassignment based on school poverty levels remained in the schools to which they had been reassigned at the end of the second school year. Attachments A and B track the flow of students from time of reassignment through the second year of reassignment and also present reasons for attrition.
RESULTS

Patterns of Retention and Special Education Services

In Years 1 and 2, there were no retentions in either the reassigned group or the comparison group. However, 34% of students in the reassigned group were identified for special education services in Year 2, compared to 24% of the comparison group.

Patterns of EOG Test Scores

End-of-Grade (EOG) reading and mathematics tests yield both scale scores (which increase across grades and are valuable for measuring growth) and level scores (indicating whether students are scoring at grade level).

Scale Score Gains: Mean/average scale score gains were combined across grades since students were matched on initial achievement scores. (Normally, scale score gains are not combined across grades because the gains expected at each grade vary.)

- In Year 1, students in the reassigned and comparison groups made similar gains in reading and mathematics.
- In Year 2, reassigned students made greater gains than the comparison students in reading but not in mathematics.

Figure 1: Average Scale Score Gains in Reading and Mathematics by Reassigned and Comparison Groups for Two Years

<table>
<thead>
<tr>
<th></th>
<th>Reading</th>
<th>Mathematics</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Year 1 Average Gains (grades 3-5)</td>
<td>Year 2 Average Gains (grades 4-6)</td>
</tr>
<tr>
<td>Reassigned Group</td>
<td>8.47 (N=32)</td>
<td>3.24 (N=29)</td>
</tr>
<tr>
<td>Comparison Group</td>
<td>7.53 (N=32)</td>
<td>1.66 (N=29)</td>
</tr>
</tbody>
</table>

Note 1: The small number of reassigned students per grade level (7 at 4th, 10 at 5th, and 12 at 6th grade in spring 2004) make comparisons problematic.

Note 2: Twelve 5th-grade students in the first year of reassignment in 2002-03 graduated to 6th grade (middle school) for the second year under study. This means that they were no longer in the reassigned school. Because the middle school environment and structure differ greatly from the elementary school environment, variables other than earlier reassignment to an elementary school may be responsible for differences between reassigned and comparison group gains.
Percent of Students at Grade Level: Because of small sample size, the percentage of students performing at grade level was combined across grades.

- In Year 1, the percentage of students in the reassigned and comparison groups scoring at or above grade level was identical in reading (89%) and similar in mathematics (94% and 100% respectively).
- In Year 2, students in the reassigned group fared better in reading than those in the comparison group (83%, compared to 69% at/above grade level for the comparison group), but results were similar in mathematics (96% of the reassigned group and 100% of the comparison group at/above grade level).

CONCLUSION

The purpose of this study was to ascertain whether reassignment, specifically when used to maintain socioeconomic diversity in WCPSS elementary schools, affects the academic outcomes of students over a two-year period. Results indicate that (1) three-fourths of the students slated for reassignment did not attend the schools to which they had been assigned, instead choosing other options available to WCPSS students, such as magnet schools and special programs; and (2) reassigned students who did attend the schools to which they had been reassigned attained reasonable achievement in the two years following reassignment.
REFERENCES


Attachment A
What Happened to Students in Reassigned Nodes?
Spring to Fall 2002

K-5 students in nodes in spring 2002 (N=218)

K-5 students in nodes and sending schools in spring 2002 (N=172)

Graduated to 6th grade (29)

School combination not in scope of this study (1)

K-5 students in nodes but not in sending schools in spring 2002 (N=46)

Magnet (19):
- Magnet (15)
- Magnet without transportation (4)

Special programs (11)

Year-Round Magnet (1)

Transfers (14):
- Transfer student -T (4)
- Student moved, remained at their current school -U (10)

Homeless (1)

K-5 students in nodes, in sending schools, and slated for receiving schools in fall 2002 (N=142)

Students who became inactive between spring and fall 2002 (10)

Reassigned students not attending receiving school in fall 2002 (79)

K-5 students in reassigned nodes, in sending schools and in receiving schools as of fall 2002 (N=53)

Note: From Febbo-Hunt, Lindblad, Baenen, and Banks, June 2004.
What Happened to Students in Reassigned Nodes?
Spring to Fall 2002

A (53 students of interest for this study)

- Added two students in reassigned nodes who were not in the spring sending schools but who were, as of fall 2002, attending the receiving schools to which their nodes were reassigned (2)

- Lost 3 students due to missing test data

K-5 students who were in one of the reassigned nodes and who attended a sending school in spring 2002 and/or are attending one of the receiving schools in fall 2002 (N=52)

B (46 students who were already exercising options/choice to attend a different school)

- Lost two students who became inactive between spring and fall 2002 (2)

- Remaining K-5 students in nodes, not in sending schools and not in receiving schools as of fall 2002 (44)

- One 5th grade student graduated to the 6th grade

Final K-5 students in reassigned nodes in spring 2002 but not in sending schools and not in receiving schools as of fall 2002 (N=43)

Note: From Febbo-Hunt, Lindblad, Baenen, and Banks, June 2004.
Attachment B
What Happened to Students in Reassigned Nodes in Year 2 (2003-04)?

K-5 students in node/reassigned schools in spring 2003 (N=52)

Grades 1-5 students who returned to node school again in fall 2003 (N=40)

Lost 12 5th grade students who graduated to 6th grade (N=12)

Lost three students during the 2003-04 school year because of change in residence (N=3)