This study explored the relationship between general education placements and performance of students with disabilities on state level assessments for grades 4 and 8 and graduation rates of students with disabilities. Analyses were for all 66 school districts in a Southern state. Results indicate there may be a relationship between the percent of students with disabilities receiving their education in general education classes and indicators of educational results. It has been asserted that the movement toward greater inclusion leads to greater positive educational results for students with disabilities. The findings of significant correlations of greater inclusion to higher rates of high school diplomas and of eighth-grade test passage are encouraging. (Contains 5 figures and 13 references.) (Author/SLD)
Does Educational Placement Matter in the Performance of Students with Disabilities?

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Mid-South Educational Research Association
Biloxi, Mississippi
November 2003

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Does Educational Placement Matter in the Performance of Students with Disabilities?

Abstract

In special education there is a presumption that student success occurs most effectively and efficiently when children with disabilities actually receive educational services in general education classrooms and are not removed or segregated in separate special education classes. The second part of this presumptive assertion is that when children with disabilities are educated in general education there is an increased likelihood that these children have improved educational results, such as adequate performance on statewide assessments and, in turn, increased graduation rates.

However, these are presumptions. There has been little correlational examination of the relationship between specific student performance results and educational placements. To date, there has been limited research base to support or refute these presumptions.

This study explored the relationship between general education placements and performance of students with disabilities on state level assessments at grades four and eight and graduation rates of students with disabilities. Analyses were for all 66 school districts in a Southern state. Results indicate there may be a relationship between the percent of students with disabilities receiving their education in general education classes and indicators of educational results.

As an exploratory study, variables considered associated with educational results either because of “common” wisdom or in the literature or as part of accountability systems were also included. These were the degree of participation of students with
disabilities in on-level tests, district performance scores and subgroup (students with disabilities) performance scores.

The current study, therefore, investigates whether there is a positive correlation for inclusion of students with disabilities primarily in general education classes to variables considered to be indicators of student performance and outcomes. The findings indicate possible relationships between the inclusion of students with disabilities and certain educational performance or outcome variables.
Does Educational Placement Matter in the Performance of Students with Disabilities?

With the reauthorization of the Individuals with Disabilities Education Act in 1997, added emphasis was placed on including students with disabilities in general education classrooms as well as in state accountability and assessment programs. The underlying implication being that when students with disabilities are educated in the general education classroom on the general education curriculum and included in testing on that curriculum, students with disabilities have an increased probability of exiting schools prepared. Yell & Drasgrow (1999) wrote, “All students with disabilities have a presumptive right to be educated in integrated settings. The LRE mandate in the IDEA sets forth a clear preference for these settings, and the courts have repeatedly indicated the importance of this preference” (p. 128).

Yet, in Effectiveness of Special Education: Is Placement the Critical Factor? Hocutt (1996) concluded that placement is not the critical factor. One of her conclusions stated, “There is no compelling evidence that placement is the critical factor in student academic or social success; the classroom environment and quality of instruction have more impact than placement per se on the success of students with disabilities” (p. 97). Moore and Gilbreath, in a summary of research on inclusion, wrote, “The research base on inclusion is relatively small and quite varied in methods. In general, it tends to support the continued need for special education and its particular focus on individualizing instruction, while showing positive benefits of inclusion” (1998, p. 2).
The *No Child Left Behind* Act (2000), however, has also taken the presumptive right for all children to be counted in all facets of school accountability and has made this a mandate. Judy A. Schrag wrote, “NCLB ... adds four philosophic pillars of its own to ensure that every child – particularly the neediest – receives a quality education” (2003, p. 1) emphasizing the inclusive expectation of the act for students with disabilities. The President’s Commission on Excellence in Special Education echoed this in their recommendation titled “Set High Expectations for Special Education.” They wrote, “The Individuals with Disabilities Education Act should require each state to establish additional ambitious and conforming goals for students with disabilities by using measures such as graduation rates, post-graduation outcomes and parent satisfaction surveys. States should also be required to define ‘adequate yearly progress’ under IDEA” (U.S. Department of Education, Office of Special Education and Rehabilitative Services, 2002, p. 35).

Lipsky and Gartner (1997) summarized much of the literature and research available describing the benefits of more inclusive education. Among the specific performance based findings they reported are:

- “When comparing student academic achievement in inclusive versus resource programs, only slight measurable differences were discerned” (p. 185).
- “Although students with mild disabilities included full time in general education class progressed more slowly than their peers, the gap was not widening” (p. 186).
"Students with learning disabilities made academic gains as reflected in scores on criterion-referenced tests" (p. 186).

"Using the Metropolitan Achievement Test to make comparisons between students with learning disabilities . . . students in the school serving students in the general classroom had significantly higher overall gains" (p. 186).

Their conclusion, interpreted as supporting inclusive settings as important to improved performance results for students with disabilities, states, "The research and evaluation data on inclusion indicate a strong trend toward improved student results (academically, socially and behaviorally) for both special education and general education students" (p. 197).

In correspondence to the members of the Board of Regents in New York state, Lawrence C. Gloeckler, then State Director of Special Education, wrote, "Research shows that the majority of children identified as eligible for special education services are capable of participating in the general education curriculum to varying degrees with necessary supports" (March 6, 2003).

Yet, even with the greater emphasis on the inclusion of students with disabilities in general education and in accountability systems, Ysseldyke and Bielinski (2002) noted, "In every state [that summarized assessment data], and at each grade that data were available, the results indicated that a substantially smaller percentage of special education students than general education students met state standards. Furthermore, within states, and across grades, the magnitude of the achievement gap grew steadily" (p. 190).
Additionally, preliminary findings of the State Accountability for all Students (SAAS) project released June 30, 2003 found: “States with high school graduation tests tend to place students with disabilities in more restrictive settings” (p. 1). The conclusion states, “From an educational perspective, the finding suggests that the states that have the most demanding graduation requirement (graduation test) provide less access to general education environments and less exposure to general education teachers” (p. 2).

Therefore, even as special educators and others continue to move toward and promote the inclusion of students with disabilities in general education classes and curriculum and in the testing and accountability systems, there is little evidence that either supports or refutes. Villa (2003) wrote in an introductory review of how inclusionary practices lead to more effective education for students: “Over a decade ago, research reviews and meta-analyses known as the special education ‘efficacy studies’ already showed that placement outside of general education had little or no positive effects for students regardless of the intensity or type of their disabilities” (p. 1). So even as special educators acknowledge that separate or segregated placements have not resulted in positive outcomes for students with disabilities, there continues to be limited literature and research to support more inclusive placements. Instead what has been the impetus have been beliefs, indications, and perceived trends to support this practice.
Purpose of the Study

Much of the literature to date has examined the relationship of placement and performance based on disability classification or through school level data analysis (Hocutt, 1996, Lipsky and Gartner, 1997, Moore, 1999). The current study was undertaken as an exploration of data by school district on a statewide basis. Even as it is recognized that each higher level of data aggregation obscures data at the level below, it was determined to be important to begin statewide analyses.

The overarching question asked by the study was whether there is a relationship between placement in general education classes for the majority of the school day and variables considered to be either student or district outcomes. Specifically the question was whether there is a correlation between including students with disabilities in general education and the results of students with disabilities on variables that are considered to be results or outcomes of education – test performance and graduation.

The study was intentionally designed as exploratory. Because of this, additional variables considered to either have a relationship to student results or to the performance of all students were included. For example, the level of participation of students with disabilities in assessments is considered to be important because of the potential for skewed results when participation is limited or restricted.

Also, as schools and districts are "graded" or receive performance scores (District Performance Scores) based on variables that include all students, these scores begin to reflect quality of education of all students. Luster and Durrett (2000) in a very limited examination found a relationship between average school performance scores and the
percent of students with disabilities in general education. They stated, "The district placement does indicate that more inclusive districts are inclusive for all students, while the least inclusive districts are less inclusive for all students" (emphasis in original, p. 17).

Another important variable to consider is that for the group or subgroup of students with disabilities. As required by NCLB, each district must compute a score for subgroups. Therefore, the group performance score is also included in this exploration.

Thus, this study asked whether there is a relationship between the percent of students with disabilities in general education and 1) high school diploma rate for students with disabilities, 2) passage rates for students with disabilities on the fourth grade English/language arts and math tests and on the eighth grade English/language arts and math tests, 3) participation of students with disabilities in on-level tests, 4) group performance scores (GPS) for the group defined as students with disabilities, and 5) district performance scores (DPS).

Method

Data Definitions and Sources

Inclusion is often defined as having students with disabilities in general education classes for the majority of the school day. For the purpose of this study, general education was defined based on the percent of the school day students with disabilities spend in general education. The most inclusive reporting category was defined as the one in which "students with disabilities spend less than 21% of the school day outside general education" (U.S. Department of Education).
Specific outcome or results variables included are graduation rate and passage rate on high stakes tests of English/language arts and math at the fourth and eighth grade level. Graduation rate was defined in the same way as that used in the U. S. Department of Education annual reports to Congress which use the number of students who have exited special education by graduating with a high school diploma, divided by the sum of the number of students graduating with a high school diploma, exiting with a certificate of achievement, dropping out, reaching the maximum age of 22, or dying. Passing the English/language arts and math fourth and eighth grade high stakes tests is defined as achieving a score of "approaching basic or above."

Participation of students with disabilities is calculated as the percent of students with disabilities who took the statewide assessments on-level. There are two additional participation categories – out-of-level and alternate assessment - that are not examined for this study.

District Performance Scores (DPS) are from information obtained about school district accountability. As described in the 2001-2002 Louisiana State Education Progress Report: "This District Accountability System includes two scores: 1) a District Performance Score (DPS) and 2) a District Responsibility Index (DRI). The DPS is a roll-up of the student-level School Performance Score (SPS) data from one year. The DPS is comprised of four indicators (LEAP 21, The Iowa Tests, attendance, and dropout data)" (p. 8 of the Accountability Results section).

The Progress Report also describes Subgroup Performance Scores (GPS):
Does Educational Placement Matter

The [NCLB] Act contains four education principles: stronger accountability results, increased flexibility and local control, expanded options for parents, and an emphasis on teaching methods that have been proven to work.

Under the first principle, stronger accountability results, the Act calls for the reporting of tests in annual state and district report cards, so parents can measure their school's performance and their state's progress. These report cards are mandated to show results for every student group. These specific student groups are: (1) students that are economically disadvantaged, (2) students from racial and ethnic minority groups, (3) students that have disabilities, or (4) students that have limited English proficiency (LEP). . . . Each subgroup's results are reported using the same four indicators used in the SPS [School Performance Score] (CRT, NRT, attendance, and dropout). Furthermore, a Subgroup Performance Score (GPS), which is the composite combination of these four indicators, is calculated for each subgroup. This allows comparison of subgroups (p. 6-7 of the Accountability Results section).

Data were for the 2001-2002 school year for all 66 school districts in Louisiana. The percent of students with disabilities in general education was generated from data submitted to the Office of Special Education Programs for the federal December 1, 2001 child count for children with disabilities ages 6-21. Student participation and performance data for the 2002 testing were analyzed and reported by the state accountability office. Special education data for the percent of students with disabilities 1) in general education, 2) participating in on-level assessments, and 3) passing the
fourth and eighth grade English/language arts and math tests were taken from the Louisiana special education Performance Profiles generated for all school districts, special schools, and charter schools (available at http://www.doe.state.la.us/ide/specialp/501.html).

Data for the District Performance Scores and the Group Performance Scores (GPS) were obtained from downloadable Excel files for District Accountability Reports (available at http://www.doe.state.la.us/ide/pair/1355.html). The GPS is the NCLB subgroup reporting category for students with disabilities also found in the Excel files for the District Accountability Reports.

Analysis

The question to be answered was – is there a significant relationship between the percent of students with disabilities in general education most of the school day and 1) high school diploma rate for students with disabilities, 2) passage rates for students with disabilities on the fourth grade English/language arts and math tests and on the eighth grade English/language arts and math tests, 3) participation rate of students with disabilities in on-level tests, 4) Group Performance Scores (GPS) for the group defined as students with disabilities, and 5) District Performance Scores (DPS). To answer this question, a one-tailed correlation analysis was run. This analysis was performed using SPSS 11.5. A visual examination of the data was made to compare the eight most and eight least inclusive districts. This represented approximately 25% of the 66 school districts.
Results

Significant correlations were found for general education placement and diploma rate (p<.05), eighth grade ELA performance (p<.01), eighth grade math performance (p<.01), and for the DPS (p<.01) (see Table 1). None of the other variables even approached significance. With the exception of on-level test participation, which did not show a significant relationship, all correlation coefficients were positive. The smallest correlation coefficients were for fourth grade test performance.

Table 1: Correlations of Placement in General Education Most of the School Day with Student Performance Variables

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Significance</th>
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<tr>
<td>Diploma rate</td>
<td>0.245</td>
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<tr>
<td>On-Level Test Participation</td>
<td>-0.143</td>
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<td>4th grade English/Language Arts Test Performance</td>
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<td>4th grade Math Test Performance</td>
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<td>8th grade ELA Test Performance</td>
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</tr>
<tr>
<td>8th grade Math Test Performance</td>
<td>0.370</td>
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<tr>
<td>District Performance Score (all students)</td>
<td>0.327</td>
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<tr>
<td>Group Performance Score for students with disabilities</td>
<td>0.099</td>
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*correlation is significant at the 0.05 level (1-tailed)
**correlation is significant at the 0.01 level (1-tailed)

Discussion

It has been asserted that the movement toward greater inclusion leads to greater positive educational results for students with disabilities. The findings of significant correlations of greater inclusion to higher rates of high school diplomas and
of eighth grade test passage are encouraging. The diploma rate correlation is particularly positive in light of the SAAS preliminary findings that states with high stakes graduation tests tended to be less inclusive. Also, the significant correlation of greater inclusion to higher DPS goes contrary to some perceptions that including students in a school's and school district's accountability system will drive down overall scores. As was found on a limited basis three years ago in the Louisiana study, there is a statistically significant positive relationship between including students with disabilities in general education and higher District Performance Scores.

In addition to the statistical analysis, visual examinations were conducted for the eight most and eight least inclusive districts. Variables included were those on which significant relationships were obtained. Figures 2 – 5 compare these districts on diploma rate, eighth grade ELA pass rate, eighth grade math pass rate and for the DPS. It can be seen that in general the more inclusive districts are noticeably higher overall than the less inclusive districts, although some variation is evident.

**Figure 2: Comparison of High and Low Inclusion Districts on Diploma Rate**
Figure 3: Comparison of High and Low Inclusion Districts on 8th grade ELA

Figure 4: Comparison of High and Low Inclusion Districts on 8th grade math

Figure 5: Comparison of High and Low Inclusion Districts on DSP
An average difference score was also calculated. For diploma rate, eighth grade math pass rate, and District Performance Scores, the eight high inclusion districts were approximately 21 points higher than the eight low inclusion districts. This demonstrates practical implications for more inclusionary school districts.

Specifically it must be reinforced that the literature repeatedly references effective instructional practices as the reason for better results for students with disabilities, albeit for all students. Therefore, while this exploratory study found relationships between greater inclusion and student results, the finding that there was also a significant relationship to greater inclusion and the DPS lends support to the premise that districts that are effective in educating all students, include all students.

An important implication and caution, however, is that this exploratory study needs to be replicated in other states. Louisiana has had high stakes testing for a number of years in various iterations. Also, Louisiana compared to other states, Puerto Rico, and Washington, DC was ranked 35 out of 52 on the placement of students with disabilities in general education (Louisiana map on National Center for Special Education Accountability Monitoring web site at www.monitoringcenter.lsuhsc.edu from data in memo to states from the Office of Special Education Programs dated April 8, 2003). It would be worthwhile to compare findings for states ranked more inclusive and ones ranked less inclusive. Also the issue of high stakes statewide assessment needs to continue to be factored into examinations, especially where high stakes standards are applied to all students. Yet, even with these cautions and next steps, the results add support to the IDEA’s mandate as stated in section 1400 (c)(1): “Improving educational
results for children with disabilities is an essential element of our national policy of ensuring equality of opportunity, full participation, independent living, and economic self-sufficiency for individuals with disabilities” (IDEA, 1997).
References

Gloeckler, L. C. (March 6, 2003). Correspondence to The Honorable Members of the Board of Regents regarding Increasing Opportunities for Students with Disabilities to be Educated in the Least Restrictive Environment.


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Note: Opinions expressed in this paper are solely those of the authors and do not necessarily reflect the position or opinions of the U.S. Department of Education or offices within it or the Louisiana Department of Education or offices within it.
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