The Relationship Between Special Education Placement and High School Outcomes

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METHODS

We used propensity score matching to create equivalent control and treatment groups for the study. By generating two groups that are approximately the same on variables pertaining to placement, we were more able to accurately determine the effect of placement upon outcomes. Comparative analysis of academic outcomes were conducted for students designated as high inclusion and low inclusion. Low inclusion is the treatment.

Student Level Matching Variables:
• 8th grade ISTEP+ math and ELA scale score
• 10th grade ISTEP+ math and ELA scale score (graduation analyses only)
• Reading Scale Score (IRead)
• Attendance (in days)
• FRL status
• ELI Status
• Gender
• Ethnicity
• Primary Disability
• Suspension and Expulsion

School Level Matching Variables:
• FRL percent
• Racial and Ethnic Composition (percent African American, Latinx, White, & Asian)

Matching yielded a strong distributional and mean balance for all matching variables and propensity scores.

INTRODUCTION

The purpose of this study was to determine the relationship between special education placement and the academic outcomes of students with disabilities in high school. The study combined multiple cohorts of Indiana students with disabilities to assess the relationship between special education placement and state academic assessment and graduation results. These cohorts were included all students passing through 8th to 12th grade between 2013 and 2018.

RESULTS

- Students with placements classified as “high inclusion” scored better on the 10th grade ELA and Math ISTEP.
- Students in high inclusion settings were more likely to graduate with a core 40 or general diploma via passing the GQE.
- Students in low inclusion settings were more likely to graduate with a waiver
- All differences were highly significant

<table>
<thead>
<tr>
<th>Grade 8 Matching</th>
<th>10th Grade ISTEP</th>
<th>Graduate (Any)</th>
<th>Graduate (Core 40)</th>
<th>Graduate (General Diploma)</th>
<th>Graduate (Waiver)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>-18.42***</td>
<td>.002</td>
<td>-0.21***</td>
<td>-0.05</td>
<td>0.13***</td>
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<tr>
<td></td>
<td>(N = 3,596)</td>
<td>(N = 3,964)</td>
<td>(N = 260)</td>
<td>(N = 382)</td>
<td>(N = 654)</td>
</tr>
<tr>
<td>ELA</td>
<td>-24.32***</td>
<td>-.04***</td>
<td>-0.22***</td>
<td>-0.11*</td>
<td>0.22***</td>
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<tr>
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<td>(N = 3,570)</td>
<td>(N = 3,932)</td>
<td>(N = 248)</td>
<td>(N = 376)</td>
<td>(N = 638)</td>
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<table>
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<th>10th Grade ISTEP</th>
<th>Graduate (Any)</th>
<th>Graduate (Core 40)</th>
<th>Graduate (General Diploma)</th>
<th>Graduate (Waiver)</th>
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</thead>
<tbody>
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<td>Math</td>
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<td>-0.03</td>
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<td>(N = 1,090)</td>
<td>(N = 1,090)</td>
<td>(N = 276)</td>
<td>(N = 396)</td>
<td>(N = 688)</td>
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<tr>
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<td>-0.22***</td>
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<td>(N = 1,086)</td>
<td>(N = 1,086)</td>
<td>(N = 276)</td>
<td>(N = 396)</td>
<td>(N = 68)</td>
</tr>
</tbody>
</table>

DEFINITIONS

High Inclusion: In the general education classroom 80% or more for all years of study
Low Inclusion: In the general education classroom less than 80% or more for all years of study
Primary Disabilities in study: Any student in Indiana who took the state assessment and did not take the alternate assessment. This included students with a Cognitive Disability, Learning Disability, ASD, Emotional Disability, Other Health Impairment, Blind/Low Vision, Deaf/Hard of Hearing

FUTURE RESEARCH

Conduct a study with a similar research design, researching high school and post-secondary outcomes using qualitative and quantitative data. High School data will include an array of outcome measures including diploma type, state assessments, courses taken, i.e., career pathways, etc. Post-secondary outcome data will include school experiences, higher education participation, employment type and wages, etc.

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