

A Longitudinal Study to Determine the Impact of Inclusion on Student Academic Outcomes Sandi Cole, Ed.D., Hardy Murphy, Ph.D., Michael Frisby, Teresa Grossi, Ph.D., Hannah Bolte

Students with placements classified as "high inclusion" scored better on ELA and Math for all analyses.

INTRODUCTION RESULTS

The purpose of this study was to determine the impact of inclusion on the academic outcomes of students with disabilities. The study followed a single cohort of Indiana students with disabilities to assess the relationship between special education placement and state academic assessment results. This cohort was in 3rd grade in 2013 and was followed over time through 8th grade in 2018.

METHODS

We used propensity score matching to create equivalent controls 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 and low inclusion. Low inclusion is the treatment.

Student Level Matching Variables:

- 3rd grade Reading Scale Score
- Attendance (in days)
- FRL status
- ELL status
- GenderEthnicity
- Primary Disability
- Suspension and Expulsion

School Level Matching Variables:

- FRL percent
- Racial and Ethnic Group composition

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

Matched Comparisons of High and Low Inclusion

Matched ATET estimate

Student Grades 3-8.

✓ In all analysis the results are significant.

	Math difference	ELA difference
	2014 –20.97*	<i>-22.34***</i>
	2015 –20.18***	-15.67*
	2016 -18.83***	-16.3*
	2017 –21.48***	-27.32***
	2018 -33.71***	<i>-21.03*</i>
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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.