

INDIANA INSTITUTE ON DISABILITY AND COMMUNITY **CENTER ON EDUCATION AND** LIFELONG LEARNING

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

INTRODUCTION

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**
- Gender
- Ethnicity
- **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 Student

Matchec

Math dif 2014 -2 2015 -2 2016 -1 2017 -2 2018 -3

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.

RESULTS

Students with placements classified as "high inclusion" scored better on ELA and Math for all analyses. \checkmark In all analysis the results are significant.

Comparisons of High and Low Inclusion Grades 3–8.		High classr
		study
d ATET estimate		Low
		class
fference	ELA difference	years
20.97*	-22.34***	stud
20.18***	-15.67*	the s
18.83***	-16.3*	alter
21.48***	-27.32***	stude
		Lear
33.71***	-21.03*	Disa
		Blind
		ТТ

FUTURE RESEARCH

h Inclusion: In the general education sroom 80% or more for all years of

v Inclusion: In the general education sroom less than 80% or more for all rs of study **Primary Disabilities in** ly: Any student in Indiana who took state assessment and did not take the rnate assessment. This included lents with a Cognitive Disability, rning Disability, ASD, Emotional ability, Other Health Impairment, nd/Low Vision, Deaf/Hard of Hearing