

INDIANA INSTITUTE ON DISABILITY AND COMMUNITY

**CENTER ON EDUCATION AND** 

LIFELONG LEARNING

# The Relationship Between Special Education Placement and High School Outcomes Sandi Cole, Ed.D., Hardy Murphy, Ph.D., Michael Frisby

## **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:** 

- 8<sup>th</sup> grade ISTEP+ math and ELA scale score
- 10<sup>th</sup> grade ISTEP+ math and ELA scale score (graduation analyses only)
- **Reading Scale Score (IRead)**
- Attendance (in days)
- **FRL** status
- **ELL 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 propensities.

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 8<sup>th</sup> to 12<sup>th</sup> grade between 2013 and 2018.

# **RESULTS**

- Students with placements classified as "high inclusion" scored better on the 10<sup>th</sup> 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

Grade 8 Matching	10 <sup>th</sup> Grade ISTEP	Graduate (Any)	Graduate (Core 40)	Graduate (General Diploma)	Graduate (Waiver)
Math	-18.42*** (N = 3,596)	.002 (N = 3,964)	-0.21*** (N = 260)	05 (N = 382)	$0.13^{***}$ (N = 654)
ELA	-24.32*** (N = 3,570)	04*** (N = 3,932)	-0.22*** (N = 248)	-0.11* (N = 376)	$0.22^{***}$ (N = 638)
Grade 10 Matching	10 <sup>th</sup> Grade ISTEP	Graduate (Any)	Graduate (Core 40)	Graduate (General Diploma)	Graduate (Waiver)
Math	NA	03 (N = 1,090)	-0.23*** (N = 276)	19*** (N = 396)	$0.19^{***}$ (N = 688)
ELA	NA	06* (N = 1,086)	$-0.22^{***}$ (N = 276)	-0.11* (N = 396)	$0.17^{***}$ (N = 68)

## **INTRODUCTION**

#### 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.