

Our primary model for student-level outcomes will control for strata (classroom) and student covariates (e.g., gender, race, English learner status, grade level, beginning of year scores). To evaluate the impact of being assigned to the treatment condition (versus the control), we will conduct OLS regressions to generate intent-to-treat estimates. We will also run a model that only controls for strata, to assure that the additional controls affect the power but do not substantially change the point estimates. We will use robust standard errors (see Abadie et al., 2023).

$$Y_{ij} = \alpha + \beta Treatment_{ij} + \omega_j + \gamma X_i + \epsilon_{ij}$$

Y_{ij} = outcome of interest for student i in classroom j

α = intercept

β = the parameter of interest (ITT effect)

$Treatment_{ij}$ = indicator for student i in classroom j

ω_j = fixed effect for classroom

X_i = vector of student-level covariates, grade level, including demographics and baseline test scores

ϵ_{ij} = robust standard errors