

Why Should You Come to Class?

Human Capital

- You learn better by attending the lectures in person

Skeptics

- But ...
 - “double-speed zoom may be more effective”
 - “I’m not a morning person”
- What is the evidence?
- How large is the effect, if any?

Design

- How would you design a study that will answer these questions?

Treated and Untreated Outcomes

- Learning outcome of student i is *treated* if i goes to class—call it y_{i1}
- Learning outcome of student i is *untreated* if i doesn't go to class (studies remotely)—call it y_{i0}
- *Casual effect* of class attendance on student i is $y_{i1} - y_{i0}$

Fundamental Challenge of Causal Inference

- You can never observe both y_{i1} and y_{i0}
- One is an *actual outcome* and another is a *potential outcome*

Some Evidence

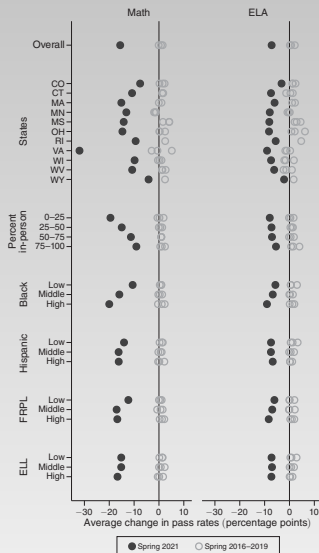


FIGURE 1. AVERAGE CHANGE IN PASS RATES ON STATE STANDARDIZED ASSESSMENTS IN SPRING 2021 VERSUS SPRING 2016-2019