DiD Approach to Examining TIF Impact

Low-performing schools participating in TIF are compared to schools experiencing similar trends. Two differences are compared: the difference in outcomes after vs. before schools are exposed to TIF (B2-B1) and the difference after vs. before in outcomes of schools not exposed to TIF (A2-A1). If TIF is associated with positive changes, then the outcomes following implementation will improve to a greater extent in the intervention group.

Challenge
Providing evidence that a TIF intervention had an effect on an outcome of interest when the intervention was not assigned at random.

Question
How does TIF affect student outcomes in low-performing schools?

Requirement
DiD uses panel/longitudinal data to measure the differences between the group receiving the intervention and the group not receiving the intervention, before and after the intervention.

Solution
DiD design can estimate the part of the change in outcomes due to the intervention by comparing the intervention group’s outcomes to outcomes of a group that was experiencing similar trends but not the intervention.

Analysis
Changes in outcomes before and after the intervention are compared between the group receiving the intervention and a comparison group. The impact of the intervention is estimated by the difference in the changes, (B2-B1) – (A2-A1).

Result
By comparing changes in outcomes, DiD can provide estimates of program impact without requiring a comparison group that is completely equivalent.