Was Implementation Left Behind? A National Analysis of State and Federal School Accountability

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Abstract

No Child Left Behind (NCLB) and the state accountability systems implemented during the 1990s have included an increasingly intense series of interventions for low-performing schools. If the initial steps were insufficient, schools were supposed to be closed, taken over by other education organizations, or reconstituted. Using event study and difference-in-differences analyses, I find that state accountability and NCLB itself did not affect the frequency of closure and takeover of publicly funded schools in the country. Moreover, I find that NCLB generated an anticipatory but transitory increase in closures and led to a rise in closures among schools with small enrollments. Overall, my findings suggest that the infrequent and weak implementation of the most extreme sanctions on low-performing schools is partly behind the limited effects of accountability policies on student performance.

Introduction

- Accountability policies based on rewards and sanctions have been implemented to improve academic performance. Under school accountability, closures of low-performing schools were part of the intended policy.
- Evidence of positive effects of state accountability on student performance (Carnoy and Loeb, 2002; Hanushek and Raymond, 2005) but null to positive effects of NCLB on student performance (Dee and Jacob, 2009; Dee and Dizon-Ross, 2019; Bonilla and Dee, 2020).
- Evidence that policies do not work if they are weakly implemented/enforced or if their implementation never occurs. In this paper, I explore if accountability policies were implemented as intended by addressing the following questions:
  - Did state accountability affect the closure rate of publicly funded schools?
  - Did NCLB affect the closure rate of publicly funded schools?
- This study contributes to the literature as one of the first to explore the effect of accountability policies on nationwide school closures using causal inference.

Data


Method

The effect of pre-NCLB state accountability policies on school closures - Event study approach, 1995 to 2000:

\[
\text{Closed}_{st} = \beta_0 + \sum_{t=0}^{\tau} \beta_t (Accountability_{st}) + X_{st} + \mu_s + \gamma_t + \epsilon_{est}
\]

- \(\text{Closed}_{st}\): indicator variable of closure for school \(s\) in state \(st\) and school year \(t\).
- \(Accountability_{st}\): state policy based on “Dee-Jacob”/“Carnoy-Loeb”.
- \(X_{st}\): school and student characteristics.
- \(\mu_s\) and \(\gamma_t\): state and time fixed effects.

The effect of NCLB on school closures - Difference-in-Differences approach, 1998 to 2010:

\[
\text{Closed}_{st} = \beta_0 + \beta_1 (\text{NCLB}_{st} \times \text{Accountability}_{st}) + X_{st} + \mu_s + \gamma_t + \epsilon_{est}
\]

- \(\text{NCLB}_{st}\): dummy variable that equals 1 for observations after the implementation of NCLB (starting on 2003).
- \(\text{Accountability}_{st}\): dummy variable that identifies whether a state did not implement accountability before NCLB based on “Dee-Jacob”/“Carnoy-Loeb”.

Conclusions

- State and federal school accountability policies have an insignificant effect on the public school’s closure rate.
- Evidence that the announcement of NCLB generated an anticipatory but transitory increase in closures.
- NCLB also seems to have led to a rise in closures among small-size schools.
- Suggestive evidence that accountability policies may not have been implemented as intended, therefore, the weak and almost null implementation of the most extreme sanctions could be behind the limited capacity of school accountability policies to affect student performance positively. Although it is unclear that closures implemented under test-based accountability policies would produce significant gains in learning, interventions on low-performing schools are required and districts must work to produce better results for students and those who benefit from an open school in their community.

Notes: TWFE estimation. The unit of observation is the school year from 1995 to 2000. Treated states are those where state accountability introduced test-based accountability for the first time. In the “Dee and Jacob” classification, the treated states implemented test-based accountability. In the “Carnoy and Loeb” classification, the treated states implemented test-based accountability with strong repercussion to low performance. Estimates expressed in relative time. 95% confidence intervals are reported based on standard errors clustered at the state level. Source: Author’s calculations using the NLSD.

References