

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



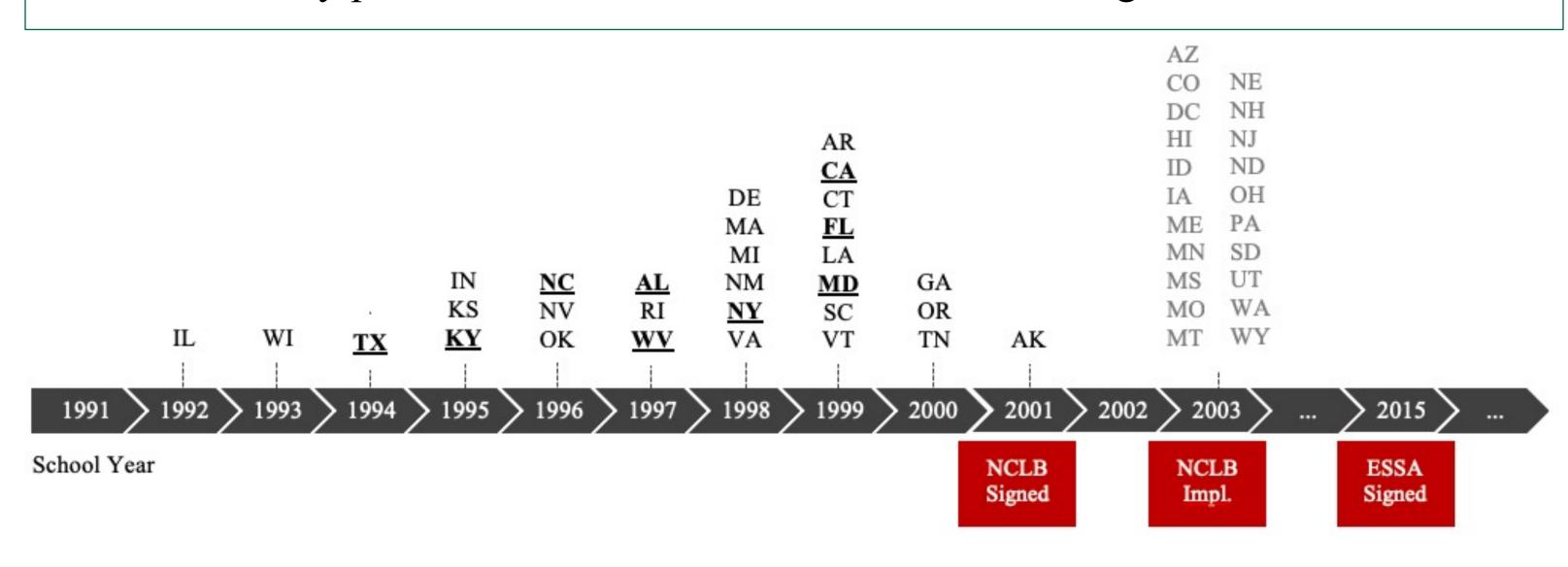
Valentina Martinez Pabon Tulane University

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.



Notes: The 30 states in black font are the ones that implemented state accountability policies before NCLB (of those, the 9 underlined are the ones with stronger accountability). The 21 states in gray font are the ones where NCLB introduced test-based accountability for the first time. Source: Author's based on Carnoy and Loeb (2002) and Dee and Jacob (2011).

Data

The National Longitudinal School Database (NLSD): panel of traditional public and charter schools in the US from 1995 to 2019.

Method

The effect of pre-NCLB state accountability policies on school closures

- Event study approach, 1995 to 2000:

$$Closed_{ist} = \beta_0 + \sum_{t \neq 0} \theta_t (Accountability_{st}) + X_{st} + \mu_s + \gamma_t + \varepsilon_{ist}$$

- $Closed_{ist}$: indicator variable of closure for school i in state s and school year t.
- $Accountability_{st}$: time relative to the implementation of the state accountability policy based on "Dee-Jacob"/"Carnoy-Loeb".
- X_{st} : school and student characteristics.
- μ_s and γ_t : state and time fixed effects.

The effect of NCLB on school closures

- Difference-in-Differences approach, 1998 to 2010:

$$Closed_{ist} = \beta_0 + \beta_1 (NCLB_t \times No\ Accountability_s) + X_{ist} + \mu_s + \gamma_t + \varepsilon_{ist}$$

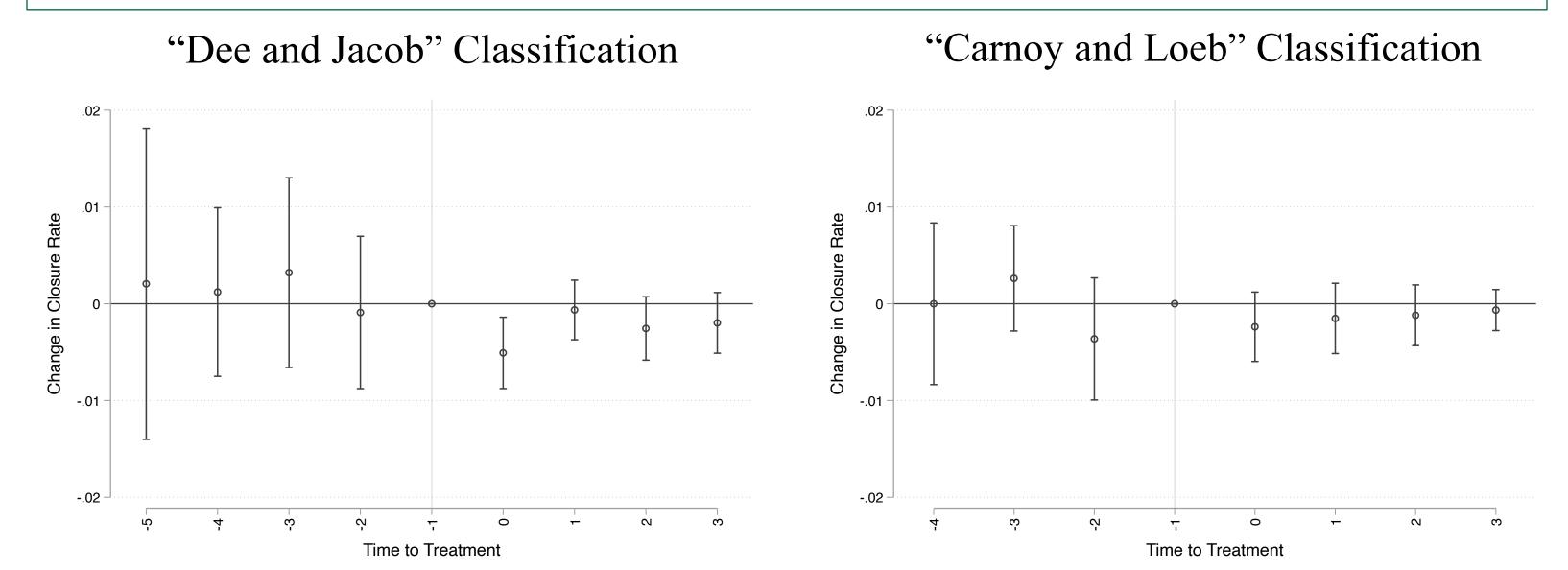
- $NCLB_t$: dummy variable that equals 1 for observations after the implementation of NCLB (starting on 2003).
- No Accountability_s: dummy variable that identifies whether a state did not implemented accountability before NCLB based on "Dee-Jacob"/"Carnoy-Loeb".

Valentina Martinez Pabon Email: vmartinezpabon@tulane.edu Website: https://vmp1.github.io/

Contact

Results

The Effect of State Accountability Policies on School Closures



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.

The Effect of NCLB on School Closures "Dee and Jacob" "Carnoy and Loeb" "Dee and Jacob" "Carnoy and Loeb" Variables Classification Classification Classification Classification Post x Treatment 0.0004 0.0022 0.0014 0.0034* 0.0025 0.0009 0.0010 0.0030 (0.0024)(0.0021)(0.0026)(0.0024)(0.0018)(0.0024)(0.0020)(0.0018)Mean Rate 0.011 0.011 0.011 0.011 97,075 70,155 Unique schools 101,170 73,241 101,170 97,075 73,241 70,155 Observations 1,132,957 648,436 812,576 904,160 812,576 1,132,957 904,160 648,436

No

Yes

2003

Notes: The unit of observation is the school year from 1998 to 2010. The sample only includes Title I schools. Treated states are those where NCLB introduced test-based accountability for the first time. In the "Dee and Jacob" classification, the control states implemented test-based accountability before NCLB. In the "Carnoy and Loeb" classification, the control states implemented test-based accountability with strong repercussion to low performance before NCLB. Standard errors in parenthesis are clustered by state. * Statistically significant at the 0.10 level, ** at the 0.05 level, *** at the 0.01 level. Source: Author's calculations using the NLSD.

Yes

2003

No

Yes

Yes

2001

No

2001

Yes

Yes

2001

• Heterogeneous effects:

School controls

Post-treatment year

Year, State Fixed Effects

• No effect on the closure of low-performing schools.

Yes

2003

Yes

2003

• Increase in the closure rate of small-size schools.

Sanction Stage	Schools in states with accountability before NCLB			Schools in states where NCLB introduced accountability		
	No	Yes	70 C10860	No	Yes	/0 C1086U
	None	41,646	4,657	10.1	17,432	2,449
School Improvement	8,350	718	7.9	5,237	336	6.0
Corrective Action	3,783	232	5.8	1,477	98	6.2
Restructuring	7,630	501	6.2	3,004	144	4.6
Total	61,409	6.108	9.0	27.150	3.027	10.0

Notes: The unit of observation are schools that were ever open between 2004 and 2010. The sample only includes Title I schools. The sanction stage is the most severe NCLB-related sanction faced by the school between 2004 and 2010. Source: Author's calculations using the CSPR, the NAYPI, and the NLSD.

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 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.

References

- 1. Bonilla, S., and T. Dee. (2020). The Effects of School Reform Under NCLB Waivers: Evidence from Focus Schools in Kentucky. Education Finance and Policy, 15(1), 75–103.
- 2. Carnoy, M. and S. Loeb. (2002). Does External Accountability Affect Student Outcomes? A Cross-State Analysis. Educational Evaluation and Policy Analysis Winter 2002, Vol. 24, No. 4, pp. 305–331.
- 3. Dee, T. S., and Dizon-Ross, E. (2019). School performance, accountability, and waiver reforms: Evidence from Louisiana. Educational Evaluation and Policy Analysis, 41(3), 316-349.
- 4. Dee, T. and B. Jacob. (2011). The impact of No Child Left Behind on student achievement. Journal of Policy Analysis and Management, Vol. 30, No. 3, 418–446.
- 5. Hanushek, E. A., and Raymond, M. E. (2005). Does school accountability lead to improved student performance? Journal of Policy Analysis and Management, 24, 297–327.