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POLICY BRIEF

The Effect of the Policy of Reconstitution on Student Achievement in Texas

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What We Studied

The failure of schools across the country to ensure students meet federal, state, and community standards continuously plagues the education system. More than a quarter of all schools in the nation failed to meet federal requirements in 2007, with 38% failing to do so in 2010. By 2011 that figure rose to nearly 50%. Failing schools ostensibly produce failing students who experience poorer outcomes than their peers including reduced earnings over their lifetime. A potential solution to failing schools is to reconstitute them. School reconstitution requires all staff at a failing school to reapply for their positions with the stated aim of improving student achievement.

Started as a court-mandated desegregation action in San Francisco in 1983, school reconstitution quickly spread across the country in the 1990s. Incorporated into local and state accountability systems, scholars estimate thousands of schools reconstituted between 1983 and 2011. Despite its prevalence, information regarding how reconstitution began, spread, and made its way into Texas statute is scarce and theories related to why reconstitution should improve student performance lack cohesion. Even worse, little to no quantitative evidence demonstrates whether reconstitution improves student achievement.

This report takes advantage of a Texas law passed in 2003 mandating that schools failing to meet state standards for two years in a row must reconstitute. Estimated effects of reconstitution on student achievement apply state-wide student and school data between 2003 and 2011. Several methods, including regression discontinuity and student-level fixed-effects determine whether reconstitution improves student achievement and if developed theories explain this improvement.

How We Analyzed the Data

This study seeks to determine whether reconstitution achieves its goal of improving student performance on state mandated tests. Assuming that reconstitution plays a role in student performance, this study attempts to attribute where possible the mechanisms through which reconstitution works, be it changes in school-level human capital or teacher-student racial balance. The analysis presented informs the policy debate related to reconstituting schools. The guiding research question of this dissertation asks: What is the effect of the policy of reconstitution on student achievement in Texas?

This overarching question consists of three separate research questions:

- How is reconstitution applied in Texas? (RQ1)
- Does reconstitution help failing schools improve their minimum passing score? (RQ2)
- What is the effect of reconstitution on student performance on standardized mathematics and reading tests? (RQ3)

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What We Discovered

Contrary to the qualitative assessments of scholars in other locations, reconstitution in Texas appears to improve school and student academic achievement. Reconstitution improved the minimum passing score performance of failing schools in two ways. It improved the average minimum passing score by roughly 7 percentage points. It also improved the minimum passing score more for schools with the worst performance than would be expected without reconstitution. While these results are marginally subject to specifications of the regression discontinuity model, they are generally consistent. Reconstitution improved the academic performance of students attending failing schools the years they reconstituted, though reconstitution did not improve academic performance compared to all other schools in Texas. Generally, students attending a reconstituted school improved their math performance by roughly 0.026SD and their reading performance by roughly 0.023SD. This is true for multiple samples of analysis (students attending a failing school, students who attended a reconstituted school in its planning year and the next) and regardless of model specifications (including additional control variables and, where possible, district fixed effects).

Broadly speaking, white students attending a reconstituted school received no statistically significant benefit from reconstitution. Hispanic students experienced improvements in their math (0.056SD) and reading (0.056SD) performance compared to Hispanic students attending a failing school not required to reconstitute. African American students experienced positive effects from reconstitution in math, but negative effects in reading. Asian students, whose are not singled out in the state accountability system, experienced the largest gains in performance (roughly 0.13SD for math and reading) after attending a reconstituted school compared to their peers attending a failing school. Economically disadvantaged students also received benefits from attending a reconstituted school with improvements in reading performance (0.026SD), but particularly in math (0.043SD).

Most surprising, and perhaps frustrating, are that potential mediating variables failed to consistently attenuate the effect of reconstitution on student achievement. Campus-level teacher racial/ethnic similarity to their students (vector distance) failed to account for any improvements when comparing students attending reconstituted to failing schools. However, this similarity did meditate the effect of reconstitution in relation to all students in Texas when reconstitution is defined only as those students attending a school before and immediately after a school is reconstituted, but only for math. Additionally, the mean number of years the staff at a school worked with their principal failed to account for any reconstitution improvements in student performance. Traditional measures of human capital at schools, such as teacher and principal experience and education, tended to either increase the estimate of the effect of reconstitution (for students ever attending a threatened school) or have no effect (for students attending reconstituted schools just before and after they reconstitute). Most notably, the shares of staff new to a campus, one of the purported drivers behind the effect of school reconstitution, does not attenuate its effects on student test performance.

Results are broadly consistent across different units of analysis (school and student) and different specifications within those analyses. School-level regression discontinuity designs indicate reconstitution improves school minimum passing scores. Student fixed effects models provide evidence under multiple specifications that reconstituting schools improves student performance on math and reading tests. While results including mediating variables leave an open question about the mechanisms which might be behind these impacts, this report demonstrates that reconstitution improves student performance on standardized tests.

One implication of this report is that providing principals the ability at failing schools to replace staff without requiring a certain percentage of teachers be removed produced positive impacts at Texas schools. Though given this broad authority, principals judiciously applied it. Some federal and other state efforts now ask for large shares of teachers to be removed from their campuses. While these efforts are not considered here, this report demonstrates that improvements in school and student performance clearly do not require unusually large shares of teachers be removed from the school, even though such actions are currently in vogue.

Policy Recommendations

Several avenues of research present themselves. First, examine reconstitution on the other side of 2011, when other performance measures were in place in Texas. While outside the original scope of this dissertation, these years include some state-level linking between teachers and their students, which could allow the inclusion of alternative measures of

human capital such as teacher effectiveness. This was not possible using the data described here, but could be done for a couple of years in Texas.

New state requirements passed in the most recent legislative session require campuses and their districts to submit a 'turnaround' plan to the Texas Education Agency after failing for two years in a row (HB 1842). This new law may provide additional state resources to schools (according to its fiscal note), but also allow researchers a glimpse into the planning and (ostensibly) the implementation of reconstitution-like measures.

In an era where large administrative datasets provide the opportunity to effectively evaluate state mandated programs and policies, that such efforts rely solely on the interests (and dogged determination) of scholars means that effective policies go unnoticed and ineffective ones continue on. Reconstitution in its current form existed from 2003 to 2015 with little effort to determine whether it performed as claimed. This lack of independent scholarly oversight reduces the perception of the effectiveness of government and likely costs taxpayers money. After the turn of the last century, progressives spent considerable time developing methods and means to increase the efficiency and efficacy of administration. Our current era offers a wealth of data allowing for truly accurate evaluations of programs and policies and yet too often legislative priorities and decisions neglect to ask the critical questions: "Is it possible to evaluate whether this program is working as it was intended? Is it possible to use the evaluation to improve the program's performance?" Surely Texas would benefit from inclusion in statute of a requirement to evaluate (or at least consider the feasibility of evaluating) old and new programs and policies.

Finally, the vast wealth of administrative datasets (which allow for excellent and terrific work) would benefit from the collection of state-wide qualitative data collections. Much of the most important decisions regarding how schools and districts operate, such as the decision to use a new curriculum or the development of new tools to help counselors provide services to their students, are absent from datasets maintained in Texas. Hence, much of the variation of district choices goes unseen and unexamined. Administrative datasets are the first step, but qualitative evidence regarding what transpires on campuses should also be readily collected and maintained.

(This brief was derived from the author's full dissertation document, titled "*The Effect of the Policy of Reconstitution on Student Achievement in Texas"* available at the following link: https://repositories.lib.utexas.edu/handle/2152/33298.)