Closing Schools to Improve Student Achievement: What the Research and Researchers Say

School districts close schools for many appropriate reasons. Very small schools operating within population-dense urban districts with fewer than 300 students, or high schools with fewer than 600 students, are a resource drain (Andrews, Duncombe and Yinger, 2002). Subsidizing the operations of very small schools takes resources away from other things. Concentrated poverty— high concentrations of children from very low-income families—is very hard to overcome (Duncombe and Yinger, 2005), as is racial isolation in schools (Baker, 2011a). To the extent that school districts can better distribute, balance or integrate populations, academic outcomes can be improved.

School closure has now evolved into a school improvement strategy. Sometimes the strategy is to close the lowest-performing schools rather than low-enrollment schools and move the students into higher-achieving neighborhood schools. School closure also has become a common strategy to expand charter school density, despite extensive evidence that charter schools do not improve student achievement—especially for chronically low-performing students—any more than regular schools do (Brownstein, 2012). The strategy of closing neighborhood schools by test scores and expanding charter school density has been formalized into the concept of the "portfolio school district."

One problem with this portfolio district strategy is that it does not articulate specific instructional interventions for low-scoring students or even strategies to improve school staffing. Further, the test-driven accountability can lead to selective admissions, pushing out troublesome students and focusing on hitting test score targets rather than on instruction, teacher quality, innovation and serving all students well. High-needs students can be labeled as failures, forced into remedial interventions, subjected disproportionately to test prep programs, offered the narrowest curricula, and even denied recess.

Research on the Academic Impact of Closing Schools

School closings raise concerns about the possible negative impacts on student achievement, neighborhoods, families and teaching staff. Sunderman and Payne (2009) note a lack of research on the effect school closures have on student outcomes—even though a broader literature on the effects of student mobility exists and consistently finds adverse effects of mobility on student outcomes (Hanushek, Kain and Rivkin, 2004 Booker, Gilpatric, Gronberg and Jansen, 2007; Xu, Hannaway and D'Souza, 2009). Students transferred to new schools reported differing academic norms, routines and expectations in the new schools, which could create adverse learning effects (Kirshner et al., 2009). A comprehensive long-term study in Maryland demonstrated that even when students stayed in the same neighborhood school building, but the teaching staff was replaced, this turnaround strategy called "reconstitution" inadvertently reduced the social stability and climate of schools, and was not associated with either organi-

zational improvements or heightened student performance (Malen, Croninger, Muncey and Redmond-Jones (2002).

Researchers at Mathematica Policy Research, RAND and Vanderbilt (Engberg et al., 2012), in a study partially supported by the U.S. Department of Education Institute of Education Sciences, examined an anonymous urban district that, faced with declining enrollment, chose to make student achievement a major criterion for school closure and sought to move students to higher-performing schools. Results showed that students displaced by school closures initially experience adverse effects on tests. Students moving to higher-performing schools saw smaller declines in achievement, but those who moved to substantially higher-performing schools could have seen no negative net impact because the benefit of the highest-performing school canceled out the negative effect of moving. This study found no adverse effects on students in the schools that received the transferring students. According to the researchers:

> "Our analysis does not necessarily support school closures as means for improving student achievement. These results suggest that the achievement of students transferring from closed schools will improve only if students are moved to schools that are dramatically higher-performing than the ones they left."

A study of 44 schools that closed between 2001 and 2006 as part of Chicago's Renaissance 2010 initiative by the Consortium on Chicago School Research (de la Torre and Gwynne, 2009) found that most students from closed schools transferred into schools that were academically weak. Only 6 percent of students transferred to schools that had test scores in the top quartile of the district, while 40 percent of displaced students enrolled in schools on academic probation and 42 percent enrolled in receiving schools with scores in the lowest quartile of the distribution of scores in the system. On average, the additional effects on their learning were neither positive nor negative. Further, the mere prospect of a school's closure affected student achievement, with the largest negative impact on students' reading and math scores occurring in the year before their schools were closed. New schools that replaced the neighborhood schools enrolled students from all over the city and tended to resemble the demographic averages of the public school system as a whole.

A second Chicago study by SRI International examined the Renaissance 2010 initiative which had the goal of closing 60 to 70 schools and opening 100 new smaller schools by 2010. This study used a matching strategy to examine two cohorts of students from closed schools attending 23 newly created schools and found that students generally performed at the same levels as matched comparison students (Young et al., 2009).

Research on Student Dislocation After School Closure

While not tracking the academic progress of individual students, some studies in New York City show that students dislocated from low-scoring high schools that were closed (many converted to several new thematic, small high schools) migrated to academically similar schools:

- Hemphill et al. (2009) found that of 34 large high schools studied, 26 saw their enrollments sharply increase as other schools were closed, and the majority of these schools experienced subsequent declines in attendance or graduation rates. Of the 14 schools where spikes in enrollment caused declines in attendance and graduation rates, half were on the state's list of persistently low-achieving schools.

- A report by Advocates for Children (AFC, 2009) on the restructuring of two large Brooklyn high schools found that the new small schools created to replace the closing high schools took very few ELL students and often failed to provide them with mandated services. Even though both the large schools had housed large bilingual education programs, none of the small schools that replaced them provided bilingual programs.

The 21st Century School Fund with the Urban Institute and Brookings Institution (2009) examined the enrollment patterns resulting from the District of Columbia's 2008-09 school closings. The analysis of student-level data suggested that several nonacademic factors influenced enrollment patterns of students after displacement from the closed schools: (1) major transportation and safety barriers; (2) proximity of

the receiving school to the closed school; (3) consolidating into a single school rather than multiple schools; and (4) students from closed schools attended charters at more than double the rate (16.7 percent) that students from non-closed schools moved to charters (7 percent).

What Researchers Say About Closing Schools to Improve Student Performance

Many researchers believe that the wrong schools are often targeted for closing and emphasize that the impact on student achievement is about what happens to students, not what happens to the school building after the school closes. Further, limited and singular measures of school performance may be relied upon to make the judgment.

Mathematica researcher Steven Glazerman (2011) says that when policymakers rely on flawed measures of school performance, they risk closing schools that are best prepared to work with challenging populations and risk replacing these schools with ones that would fail miserably if they started working with a different student body. For example, writes Glazerman, closing a low-scoring school and reopening it as a Spanish immersion school could draw high-performing students from all over the city, but residents of the immediate neighborhood may either not want to attend such a program or not be able to rely on being admitted because the pool of students in the lottery is so large. In Chicago, for example, the charter schools that replaced closed neighborhood schools tended to enroll students demographically similar to the city as a whole, while students from the closed schools tended to enroll in schools similar to the ones from which they were displaced (de la Torre and Gwynne 2009).

Proficiency is a poor measure of school performance. Student proficiency rates have long been discredited by researchers as a school performance measure because proficiency rates capture student achievement at a single point in time and say little about how much the school or its teachers contributed to its current students' performance (Glazerman, 2011). Yet almost every school closure model relies mostly on school proficiency at a single point in time.

When compared with using test score averages and value-added growth models, school proficiency levels and change in school proficiency levels are susceptible to striking distortions related to the proximity of proficiency cut scores to school averages (Ho, 2008). Strenuous cautions against using proficiency level statistics have been made, including those in Neal (2010), Holland,(2002), Bracey (2006), Koretz and Hamilton (2006), and Linn (2007). The most obvious distortion is the incentive to focus on the bubble students just below the proficiency cut score and ignore other students. Less obvious is that proficiency rates are not equal-interval units, and they should not be mathematically manipulated (e.g., added, subtracted or averaged) to calculate gaps and trends. As in most value-added modeling, using average test scores converted to equal-interval measures instead of proficiency levels would solve this problem (Harris, 2011).

Trends in school proficiency are a poor measure of a school's contribution to learning. At a bare minimum, a sensible measure of school performance accounts for what a student knew before enrolling in the school (for example, using the student's score from the prior year). This is why more and more states have adopted student achievement growth measures instead of proficiency rates for their teacher and school performance indicators (Glazerman, 2011). However, using a trend in school proficiency rates doesn't help (Di Carlo, 2011a), and only creates a false sense of "gains" (Di Carlo, 2011b). Proficiency trends are more likely to measure demographic change and other differences between successive cohorts of students cycling through a school than the performance of the school's educators (Glazerman and Potamites, 2011). That's because proficiency trends compare students in one year to different students, instead of students in one year to the same students in the prior year.

For example, a middle school could have declining proficiency rates if a feeder school begins sending more at-risk students to it, even if the teachers are especially skilled at working with a challenging population.(Glazerman, 2011). Threatened by school closing, schools can falsely improve "school proficiency" and demonstrate growth by recruiting higher-achieving students and pushing out low-achieving students.

Researchers Critique School Closure Consulting Firms

Washington D.C.: A study commissioned by Washington D.C. Mayor Vincent Gray recommended closing dozens of public schools and transferring the buildings to the D.C. Public Charter School Board for use as "incentives" to charter schools. The study was paid for by the Walton Foundation, an advocate for charter schools, and prepared by the Illinois Facilities Fund (IFF, 2011), a Chicago-based charter finance and real estate advisory organization. IFF has made similar recommendations in Chicago, Denver, Kansas City, Milwaukee and St. Louis.

An analysis of the study by the 21st Century School Fund (Siegel and Filardo, 2011) concluded that there was no valid evidence to justify the outcomes of IFF's rankings and recommendations. The authors of the IFF study were unable to identify a low-performing school (in any of the five large urban cities mentioned above, where it had made similar recommendations to close schools) that was transformed to high-performing status upon transfer to a charter operator. Siegel and Filardo speculated that much of the "creaming" effect that can result from re-sorting existing student populations to charter schools may have already occurred in charter-dense Washington D.C. IFF's only predictable results, according to the 21st Century School Fund, would be the disruption of the lives of thousands of students and families; the imposition of an arbitrary process to select schools for disinvestment, demolition and closure; the transfer of control of school facilities to a publicly unaccountable charter school board; and the attendant loss of public trust.

Newark, N.J.: According to Rutgers professor Bruce Baker (2011b), a report by Global Education Advisors on Newark Public Schools sorts schools from highest to lowest proficiency rates to identify schools for closing. Closure schools were high-poverty schools, with two of them having the highest concentrations of low-income children in the city, which means, according to Baker, that they were performing pretty much where you'd expect high-poverty schools to perform.

Baker conducted a more sophisticated analysis that statistically controlled for the impact on student achievement of school poverty, racial composition, English language learners and gender. Baker found that both closure schools and charter schools had a mix of student outcomes, some beating expectations and others falling short. In Newark, charter schools serve substantively less-impoverished populations than Newark public schools and when this fact is taken into account, some of those charter schools fall further below their "expected" performance levels than the worst of the Newark public schools slated for closure. Baker concludes that high-poverty schools slated for closure cannot simply be converted into lower-poverty schools and made more successful.

Discussion and Conclusion

Researchers have put forward various proposals for systematically identifying successful school turnarounds (Hansen, 2012; Meyers et al., 2012). Yet there is no single agreed-upon definition for the amount of growth that is required, the length of time in which this growth should take place, or the requisite sustainability of the results. As a result, studies of successful turnarounds tend to be based on anecdotal evidence or reputation, and they ignore counter-examples in which turnaround efforts are associated with decreased test scores (Trujillo and Renée, 2012).

This review of research, focusing specifically on school closure turnaround strategies rather than staff reconstitution models, shows that we *cannot* simply shut down schools in high-poverty neighborhoods, blaming teachers and principals for the failure, and then expect the low-performing students to enroll in a dramatically higher-performing school. The research shows a more likely outcome is that school closure imitates an inevitably continuous pattern of academically harmful displacement from school to school to school for children already disadvantaged.

As for restarting closed schools with charter schools, the research generally shows that charter schools are no more effective than regular public schools. Furthermore, in a review of the school turnaround research, Education Writers Association (Brownstein, 2011) noted that none of the charter school research looked specifically at the charter effect on the kind of chronically low-performing schools that undergo turnarounds. Even if a charter school occupying the building of a closed neighborhood school is conceived of as a turnaround, the track record of turnaround efforts generally is not promising. The U.S. Department of Education Institute for Education Science's Turning Around Low-Performing Schools project, systematically analyzed three years' worth of

test score data to identify and study sustained turnarounds (Sparks, 2012). Out of 750 low-performing schools, the researchers identified 15 percent that were able to sustain an increase in the number of proficient students by at least five percentile points, usually in math.

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