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# Assessing Permanent School Closures: A Conceptual Framework

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Amid widespread declining enrollment, the expiration of COVID-19 ESSER funding, and looming uncertainty in federal P-12 education involvement, many school districts may soon consider permanent school closures. While extant permanent school closure literature provides a starting point for future analyses, it often fails to advise the breadth of contexts in which future closures may occur, limiting what education leaders might learn from a disruptive intervention. In this article, we present a conceptual framework to guide permanent school closure research, inclusive of schooling and local contexts, idiosyncratic closure processes and dynamics, relevant analytic mechanics, and myriad important outcome measures and objectives.

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#### **Abstract**

Amid widespread declining enrollment, the expiration of COVID-19 ESSER funding, and looming uncertainty in federal P-12 education involvement, many school districts may soon consider permanent school closures. While extant permanent school closure literature provides a starting point for future analyses, it often fails to advise the breadth of contexts in which future closures may occur, limiting what education leaders might learn from a disruptive intervention. In this article, we present a conceptual framework to guide permanent school closure research, inclusive of schooling and local contexts, idiosyncratic closure processes and dynamics, relevant analytic mechanics, and myriad important outcome measures and objectives.

#### **Introduction and Motivation**

School closures are a remarkably understudied phenomenon despite the frequency with which they occur. On average, 2,000 schools close every year affecting more than 200,000 students in urban, suburban, and rural districts across the country (Gallagher & Gold, 2017). In their 2021 literature review, Ewing & Green call on fellow scholars to address gaps in the literature as a means to "expand the research base and make it more closely aligned with the reality of school closures" (p. 4). The current context provides the perfect moment to answer this call. Amid declining enrollment (Schueler & Miller, 2024; Goulas, 2024), the expiration of pandemic stimulus funding (LeFebvre & Master, 2024), and concerns over demographic cliffs of the child-aged population (Copley & Douthett, 2020), many public school district leaders are considering permanent school closures as a policy intervention.

In particular, the staggering decline of public school enrollment elevates school closure research to a matter of urgency. In the 2023-24 school year, 64.8% of public schools enrolled fewer students than they did four years prior in 2019-20. The median school's enrollment decreased 4.9%, while one quarter of all public schools had a drop of at least 13.6%. These figures, while striking, are more modest than those of the past decade, over which time the median school lost 7.2% of its enrollment and one quarter of schools declined at least 19.6%. Moreover, these calculations only include schools which operated continuously over that timeframe, excluding those that closed permanently, suggesting that the full extent of enrollment decline may be even higher. Today, decision makers at nearly two in three schools must weigh how the effects of enrollment decline shape a multitude of policy considerations like staffing and budgeting, considerations which, for many, include the possibility of permanent school closure.

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<sup>&</sup>lt;sup>1</sup> Authors' calculations from data obtained from the National Center for Education Statistics Common Core of Data.

However, what is known about the consequences of permanent school closures is informed largely through research evaluating large-scale school closure events in a narrow and idiosyncratic set of public school contexts and outcome measures. Furthermore, while declining enrollment and budget pressures are frequently cited by district leaders as conditions necessitating school closure (Barnum, 2022), other causes may drive closures as well. This may be especially true in regions with substantial charter school enrollments where market principles suggest lower-performing schools be replaced by higher-performing schools, though the metrics used to judge charter schools often are contested (e.g., Hamilton & Stecher, 2010). Existing empirical evidence, therefore, may be less applicable to some school settings than others, limiting the ability of policymakers and practitioners to engage in research-based and data-driven decision making.

In this article we propose an initial conceptual framework of key considerations for school closure outcome research informed by our work in St. Louis, Missouri. While not exhaustive of every scenario or possibility one may encounter, it is intended to stimulate thinking and guide researchers' understanding of permanent school closures in the reality of today's post-pandemic circumstances. As such, this framework is intended to be adaptable to the varied local conditions and priorities closure conversations must consider and to which future research must respond.

# **Conceptual Framework**

Notwithstanding the availability of advanced and ever-evolving quasi-experimental econometric techniques to evaluate school closures (e.g., difference-in-differences; see Roth et al., 2023), it is critical for quantitative researchers to avoid simplifying the conceptualization of school closures in ways that may bias findings. Instead, sound school closure research requires

careful attention to: 1) far-ranging consideration of student, school, educator, and community outcomes impacted by closure; 2) the contextual and often interrelated factors in schools and neighborhoods which precede and inform closure debates and decisions; 3) the dynamics and processes school and district administrators construct to enact closure decisions and implementation; 4) rigorous and detailed research procedures geared to minimize measurement error, support strong internal validity through sound comparisons, and expand the evidence base across heterogeneous contexts; and 5) investigate mediating and moderating factors which may shed light on potential disproportionality in closures' effects.

In this light, we summarize our conceptual framework in Figure 1. We have two primary objectives. First, to capture factors relevant to post-pandemic school closures research, ranging from key outcome measures to variation in local precipitating circumstances. Second, and perhaps most important, to highlight factors crucial to sound research processes, especially for quantitative design. Absent these considerations a researcher might, for example, consider an inappropriate closure counter-factual (e.g., an enrollment-based versus an achievement-motivated closure); fail to include relevant neighborhood variables (e.g., geography of trends in child-aged population depending on catchment or district-wide enrollment patterns) or school enrollment patterns (e.g., prevalence and growth of school choice options); or define closure events inconsistently (e.g., conflate school mergers or relocations with complete closures).

The framework categorizes these factors to guide researchers who are designing a study intended to investigate the outcomes of school closures so that they may appropriately select the data; define study boundaries; choose independent and dependent variables; consider the effects of confounding variables; and evaluate their findings. The left side of the figure considers the schooling context as well as the local and neighborhood context. The details of both of these

contexts influence the school district's decision to consider closing schools and the rationale by which they justify the need to do so. There are also mediating factors and moderating factors (listed at the bottom of the figure) that further refine who is impacted by potential school closures and how the school district and the surrounding community perceive the need to close schools and manage the resulting policy implications. Researchers should consider each of these aspects and their relevance to the research question. At the top of the figure, we outline key data and research mechanics. In our experience, these all represent decisions that must be made while obtaining, cleaning, and analyzing a data set. All of these factors directly impact relevant outcomes and objectives, listed at the right of the figure. While most research projects will not address each outcome, their breadth offers researchers an opportunity to contextualize their findings within a broader range of impacts and how their results of interest may relate or interact with other key outcomes.

#### < INSERT FIGURE 1 ABOUT HERE >

# **Relevant Outcomes and Objectives**

Digesting Figure 1 from left to right follows the temporal sequence over which permanent school closures occur and their outcomes are evaluated. However, quantitative researchers often start with the end in mind—their evaluation of relevant outcome measures plausibly affected by permanent school closure, which we outline on the right-hand side. We acknowledge that even this outcome list will be incomplete to some and others will dispute the very notion that permanent closures should ever be employed as a policy solution. However, of equal or greater importance to fully understanding closures' effects is understanding the contexts that precipitate closures, the processes and dynamics through which closure events transpire,

how researchers scaffold analyses to estimate their causal effects, and how closure effects vary across different populations and in different locales.

In short, the effects of permanent school closures remain under-studied. Perhaps surprisingly, little is known about the long-term impact of permanent school closures on student academic outcomes, the educator workforce, or district finances. Much of what we do know about these topics comes from the Consortium on Chicago School Research which has published multiple reports concerning students, educators, and community over the nearly fifteen years since Chicago Public Schools' 2012 school closures. The Consortium identified negative effects on learning outcomes (as measured by standardized test scores and GPA) for students who attended closed schools (de la Torre & Gwynne, 2009; Gordon et al., 2018) and documented "feelings of grief" on behalf of students and teachers who noted difficulties "integrating and socializing into the welcoming schools" (Gordon et al., 2018, p. 4). Attendance rates, on the other hand, did not change substantially following the closures (Gordon et al., 2018). Additional research from Chicago demonstrated limited and inequitable access to schools (Lee & Lubienski, 2017), increased teacher exits from closed schools (Lee & Sartain, 2020), and increased crime (in the case of mergers) (Brazil, 2020).

Likewise, Philadelphia serves as the backdrop for much of what we know about the connection between school closures and the surrounding community. Bierbaum (2021), Good (2017), and McWilliams and Kitzmiller (2019), for example, articulate the ways in which history, injustice, and power inform school closure processes resulting in disparate impacts against marginalized communities in the short- and long-term. Inequities in the process may also stem from relying on quantitative data to select schools for closure. Numerical metrics such as building utilization, building condition, financial savings, and academic performance, allow for

"unequal distribution of closure recommendations across communities, all while maintaining the appearance of fairness and objectivity" (Caven, 2019, p. 38).

In schools, student outcomes can vary widely, predicated on decisions dictating postclosure student movement. Steinberg and MacDonald (2019) document variation in Philadelphia
students' outcomes depending on subsequent school assignment. For instance, displaced students
perform better when assigned to higher-performing schools, while their attendance and school
disciplinary engagement suffer when assigned to schools farther away. And that's just one side
of the student closure "ledger"; academic achievement among Philadelphia students in schools
receiving displaced students declined. Even subsequent school assignment policies can vary,
including whether mass closures dictate the creation of an (often contentious) receiving school
roster, as in Philadelphia, or one-off closures lead to a general dispersal of students and educators
to many surrounding schools.

However, that so much of our collective knowledge about school closures comes from a few cities is indicative of the need to broaden our research horizons. Ewing and Green (2021) identify significant differences between the school closure literature and where closures occur. Most research utilizes qualitative methodologies and focuses on large urban areas, especially those with mass closure events, even though most school closure public engagement processes, decisions, and ultimate implementation evolve over multiple school years and occur in suburban areas (Gallagher & Gold, 2017). In addition, school closure research often neglects the impacts on the most affected stakeholders such as students (especially those receiving special education services or those who are English language learners), teachers, and administrators. By identifying these gaps in research, Ewing and Green (2021) reveal new pathways for researchers to engage with the topic of school closures.

Our research team is motivated by the desire to address these literature gaps—both to expand our work about St. Louis and to inform the work of others across the country. In particular, much remains to be learned concerning the long-term effects of school closures on student, educator workforce, and district finance outcomes, especially across the diverse school contexts in which they occur. This drives our current project which seeks to uncover the effects of forced mobility due to school closures by assessing student outcomes like standardized test scores, attendance, disciplinary actions, and graduation rates as well as teacher outcomes like attrition and transfers. Additionally, we are tracking the pathways students and teachers take during and after school closure processes to determine where they end up and how these changes may moderate student and teacher outcomes. Unfortunately, our own data limitations mean several critical aspects will remain unexplored in our project: social-emotional student outcomes (e.g., belonging); long-term academic outcomes (e.g., post-secondary attainment); measures of teacher job satisfaction and burnout; school organizational outcomes (e.g., expenditure reductions); and out-of-school "collateral" effects, including outcomes like neighborhood changes in population, demographics, and community connectedness.

As mentioned previously, school closure processes and dynamics are influenced by schooling and local and neighborhood contexts. Though the literature remains sparse, especially that of out-of-school effects, some patterns emerge in existing research regarding students, schools, and communities, which we review below.

# **Schooling Contexts**

Returning to the left-hand side of the conceptual framework at closures' temporal beginning, we classify the conditions precipitating closure into two categories: schooling and non-schooling (i.e., local and neighborhood). This dichotomization is somewhat arbitrary given

the inherent interconnectedness between what happens inside of a school and what happens outside. Indeed, broad literatures explore how housing choices can be driven by schooling preferences (e.g., Bayer et al., 2007), as well as the circumstances which weaken relationships between residential and school choice (e.g., Candipan, 2020; Cuddy et al., 2020). Here, we highlight that both schooling *and* non-schooling conditions inform closure considerations.

School closures are often preceded by decades of declining enrollment and financial challenges. In the years leading up to the closure recommendation, affected high schools have higher per-pupil costs, while the district experiences an overall decline in both enrollment and child population (Billger & Beck, 2012). When compared to schools that remain open, closed schools have a lower student-teacher ratio and may have more trouble meeting state accountability standards (Hill & Jones, 2021). Additionally, schools that close often have higher proportions of students who are Black or living in poverty (Gallagher & Gold, 2017; Hill & Jones, 2021), higher deferred maintenance costs (Dowdall, 2011), and lower building utilization rates (Weber et al., 2020).

Two decades ago, a hallmark feature of No Child Left Behind-driven school turnaround policy centered on shuttering and/or re-staffing academically low-performing schools (e.g., VanGronigen & Meyers, 2019). In the post-pandemic environment, however, low academic performance may or may not motivate closures, at least not from a federal policy mandate. Rather, concerns like the aforementioned enrollment decline, building utilization figures (the proportion of current enrollment to building capacity), and district funding concerns may rise to the forefront of post-pandemic school planning.

School leadership concerns may also assume center stage, including the presence or lack of elected decision makers (e.g., unelected mayoral or state-appointed boards) and public charter

school management (both discussed subsequently). Here, it is important to note that while school enrollment decline and neighborhood population decline may be linked, these trends need not be—especially in expanding school choice contexts with greater charter school and school voucher or other private school choice mechanisms available—as parents may seek to find what they perceive to be better schooling options for their children or otherwise explore alternatives to their zoned traditional public school.

# **Local and Neighborhood Contexts**

From a neighborhood perspective, closures may represent a classic chicken-and-the-egg story—in other words, does depopulation drive school closure, or vice versa? In rural communities school closures prompt population loss in some circumstances (Sageman, 2022), while in urban communities closures may be more likely to occur in potentially gentrifying neighborhoods where population has declined and home values have risen (Good, 2017). Gentrification considerations are nuanced, however, as overall population figures may increase without increasing—or even decreasing—public school enrollment as families without children and/or children who attend private schools move in (Candipan, 2020). In a national school closure analysis, Pearman and Greene (2022) find that closures increased both the likelihood and extent of gentrification, but only in segregated Black neighborhoods, not in white or Latinx contexts.

Echoing disparate closure impacts on Black neighborhoods, in Chicago, majority Black census tracts with closed schools had a steeper population decline (9.2%) as compared to majority Black census tracts that did not (3.2%) in the five years following Chicago's 2012 mass closures (Karp et al., 2023). Conversely, majority White census tracts and those with no racial majority saw increases in population during the same time period (Karp et al., 2023).

Neighborhoods surrounding schools considered for closure may also see increasing poverty rates and higher property taxes (Billger & Beck, 2012).

Beyond their broader effects across neighborhoods, school closures typically leave buildings vacant which imparts local impacts as well. Vacant school buildings are often difficult to sell or repurpose because of their large size, school-specific layout, or deteriorating condition (Dowdall & Warner, 2013; FitzPatrick et al., 2023) and their presence in neighborhoods may contribute to additional localized population loss (Bierbaum, 2020). On the occasions when closed schools are sold, the proceeds are often far less than the buildings are worth (Dowdall & Warner, 2013). Further, school districts maintain responsibility for the upkeep of vacant buildings, so when buildings remain unsold or are not repurposed these expenses may attenuate any potential cost savings associated with closing the school in the first place (Karp et al., 2023).

# **Closure Process and Dynamics**

Though grouped as one intervention—permanent school closures—the process, politics, dynamics, and details of closures often vary widely and each of these components may shape both the public discourse and the effects of closure. For instance, some closures occur as a mass policy event (e.g., Chicago and Philadelphia), while others occur as individual events within a narrow geographic boundary. Such dynamics often relate to the original rationale for closure, such as sharp financial pressures, and bear on critical student outcomes, like the need to reassign thousands of students and school personnel following mass closure, or relatively few following a one-off closure. Some closures may take years to transpire and include robust public engagement processes or extensive community protests, whereas others may occur suddenly and without much opportunity for stakeholder input. Moreover, even in closure processes employing multifaceted decision inputs and stated safeguards against sociodemographic disproportionality,

quantitative closure metrics can both drive disproportionality *and* be used as a tool to inform the overturning of closure decisions, as Caven (2019) concluded regarding Philadelphia's mass school closures.

How the closure process unfolds and how these debates are settled may hinge on the type of school governance. On the whole, school boards—both democratically elected boards of traditional public schools (Houston & Hartney, 2025) and appointed boards at charter schools (Wilson & Lubienski, 2022)—tend not to mirror the demographic variation of their students and local populations. In addition, many prominent urban districts have shifted to mayoral control (e.g., Wong & Shen, 2007) or oft-contentious state takeover (Morel, 2017), contexts with appointed school boards. So, whether closure decision-makers are democratically elected by local constituents or appointed through other channels may bear significantly on the strength and influence of local stakeholder voice and agency in closure considerations, particularly in marginalized communities or neighborhoods with fewer sources of conventional power. We note, however, that the relationship between these specific elements of school governance and closure decisions and outcomes remains underexplored in the literature.

Often, closure debates center on the validity and breadth of metrics used in closure determinations and how those metrics are communicated and interpreted (Caven, 2019; Deeds & Patillo, 2015; Ewing, 2018). These power dynamics also influence discussions about alternatives to closure, whether closures actually address the problems they purport to solve, and which schools proposed for closure are spared.

#### **Data and Research Mechanics**

#### Measurement Error

Quantitative school closure research often is challenged by issues related to: 1) measurement error; 2) internal validity; and 3) external validity. Starting with measurement error, "simply" identifying treatment status—which schools closed and when—eludes many datasets and in doing so may bias many research results. To illustrate this point, we compared federal NCES data to a dataset of closures and new school openings in St. Louis that was hand-constructed using state administrative data and confirmed through local newspaper coverage and other archival documents like board meeting materials and charter sponsor correspondence.

Figure 2 provides an example of a school closure decision matrix that describes various factors we considered while cleaning and interpreting our administrative data. Since 2009, we note data discrepancies in 15.3% of permanent school closures (nine mismatches) and 11.7% of new school openings (seven mismatches), either pertaining to whether a school actually closed (or opened) or misidentifying the school year the event transpired. What causes these data mismatches? Sometimes, something as minor as a misspelled school name (e.g., Humboldt vs Humbolt); name styling (e.g., middle school vs junior high); a school or district code change; or a difference in punctuation (e.g., Saint Louis vs St. Louis) may mistakenly make it appear that a school closed. In other cases, local, state, and federal reporting to CCD may not match researcher closure definitions. For example, some closure data includes schools that co-located with another school; merged with another school; moved to a new physical location; changed names and/or management (e.g., NCLB-era school turnaround); or changed authorizer (i.e., charter schools).

We do not offer Figure 2 as an immutable closure definition; rather, it serves as a reminder to researchers to clearly identify how they define closure, so their readers may assess potential issues of internal and external validity applicable to their own research contexts. The differences between the data and reality may potentially bias any quantitative estimates of

closures' effects. While our list of factors that can cause measurement error is not exhaustive, it underscores the importance of triangulating suspected closures in administrative data with archival records like newspapers, school board minutes and meeting documents, or other district records. In short, researchers must triangulate their closure data, conceptualize what a closure means in their specific context, enter the research conversation with this in mind, and articulate their definition clearly in all reports, articles, and publications. As school closures increase in frequency, these definitions will be integral in interpreting the findings of a particular study, triangulating results across studies (and study contexts), developing policy recommendations, and inspiring future research.

#### < INSERT FIGURE 2 ABOUT HERE >

# Internal Validity

Concerning internal validity, selection bias remains a large challenge in the research on school closures. However, this bias is not necessarily due to researcher decisions, but rather the phenomenon itself. School closures are rarely random. Rather, school leaders and policy-makers typically quite literally "select" the schools to close. Thus, determining what constitutes a meaningful counterfactual requires careful attention to closure intent and context. Should the comparison group consist of schools that were under consideration for closure but ultimately remained open (and is such a list accessible to researchers and/or the public)? Schools with similar trends in enrollment, academic performance, and facility quality? Or schools serving demographically similar populations in similarly resourced neighborhoods? Each choice has implications for the plausibility of the comparison, balancing internal validity against policy relevance and generalizability. Moreover, selection into or away from closure may correlate with some unobserved (or unmeasured) school characteristic which also influences relevant outcome

measures, heightening the need for careful comparison group identification and communication. In the case of iterative school closures over multiple years (e.g., year-by-year closure events rather than more discreet, mass-closure events), endogeneity may be difficult to parse out, as a prior school closure may affect subsequent closures (or prevent subsequent closures), school composition or neighborhood conditions.

These challenges are compounded by the methodological reality that most quantitative strategies employed in closure research—such as event studies and matching—depend on preclosure covariates and/or outcome trends to approximate what would have happened in the absence of closure. This makes the definition of the baseline period a critical design decision. In the context of gradual or protracted closures, it may be unclear when the "pre" period begins and ends, as schools often experience years of public deliberation, disinvestment, or student attrition before the official closure date. In this regard, researchers must therefore consider whether to anchor baseline measures to the announcement date, the start of public debate, or earlier signals of vulnerability. These decisions can shape the interpretation and comparability of findings, and thus should be made transparently and aligned with the theory of change guiding the study.

While econometric techniques, like matching, can partially reduce the potential for selection bias, more quasi-experimental work must be done. Here, exogenous sources of variation should be sought and exploited whenever possible. In St. Louis, for example, a devastating tornado tore through the northern part of the city, leading to the closure of seven schools. Unlike studies in which closures are endogenous to school performance or enrollment trends, tornado damages serve as an exogenous mechanism, allowing a more reliable identification of closure effects. Outside of these types of exogenous shocks, discontinuities related to commonly used metrics that inform closure decisions (e.g., performance and

enrollment; e.g., Carlson & Lavertu, 2016) can also be used to better identify school closure effects.

# External Validity

Moving onto eternal validity, as noted earlier, much of the extant research on school closures is not representative of the broad set of closure contexts. While large cities, like Chicago and Philadelphia, serve a large number of students, other cities may be equally or more prone to future school closure. Indeed, moderate size cities, like St. Louis, Detroit, and Cleveland—due to population decline—may be especially prone to school closure in the future. Steady population decline may also represent a different type of closure: instead of a rare "mass-closure" event, these cities may incur more long-term "faucet-drip" closure events, which could produce markedly different effects on students. Moreover, as many rural areas continue to depopulate (Lichter et al. (2025), school closure research should consider events in these areas as well (Sageman, 2022), which may include an entirely different form of closure—school district consolidation (e.g., Sher & Tompkins, 1976).

Beyond the geographic area in which school closures occur, external validity also relies on school governance type—both in closure and comparison groups. For instance, extant research often excludes charter schools, special education schools, career and technical education schools, and/or other alternative schools. Excluding charter schools may be of particular concern, given their frequent closure and disproportionate presence in urban and/or low-income communities. Based on market principles, charter school closures and openings may occur "by design," such that lower performing charter schools—in theory—could be closed and be replaced by higher performing charter schools (e.g., Carlson & Lavertu, 2016). Magnet school

presence is also a key consideration in the generalizability of school closure research, as districtwide enrollment may shape where students relocate after a school closure.

### **Mediating and Moderating Factors**

For some, the factors mediating and moderating the effects of closure matter just as much, if not more, than the closures themselves. These may include the sharp disproportionality of closures on communities of color, especially Black students and their families and communities (Morris et al., 2022). Since they are more likely to occur in neighborhoods with changing demographics like increasing poverty rates and declining population, school closures are more likely to descend upon and disproportionately harm already marginalized populations like low-income residents, African Americans, or those lacking a high school diploma (Billger & Beck, 2012; Burdick-Will et al., 2013; Good, 2017; Tieken & Auldridge-Reveles, 2019; Weber et al., 2020).

Student outcomes may depend on the type of schools and neighborhoods where students subsequently enroll. Therefore, both the contexts of the departure and destination schools may act as significant moderators. For example, students who are relocated to a higher performing school after the closure of their original lower performing one have higher levels of academic achievement (Brummett, 2014; Engberg et. al. 2012). Similarly, the long-term outcomes of students affected by school closures may depend on short-term outcomes. This may be especially important as policymakers consider additional interventions for students affected by school closures. For example, school closures may decrease a student's sense of belonging (Gordon et al., 2018), which can lead to lower attendance rates, and, ultimately, higher dropout rates.

# **Conclusions and Next Steps**

Given many schools' current public education challenges include enrollment decline, the expiration of pandemic-era stimulus funding, and an increasingly uncertain federal role in public education more generally, we expect permanent school closure debates to increase in number and expand to new locations across the nation. Though the research base on closures grew significantly following Great Recession-era closures, it often excludes much of the context relevant to contemporary circumstances. These details provide the requisite grounding for a holistic review of closures as an educational and community intervention.

While we plan on using this framework in our current research on school closures, we hope that it will guide other researchers in this area as well. Comprehensive and rigorous research is needed not only because school closures are an important education policy matter, but also because they are contentious and poorly understood by many policy makers and community members alike. School closures are accompanied by political pressure (Nuamah, 2022) and involve numerous intergovernmental considerations (Dowdall, 2011; Sigel-Hawley et al., 2017). Moreover, the quantitative data that forms the narrative utilized by policy makers often stands in sharp contrast to the lived experiences of community members, heightening tensions between policymakers and affected communities (Bierbaum, 2021; Deeds & Patillo, 2015; Ewing, 2018). This conflict exacerbates the lack of trust between policy makers and community stakeholders that stems, in part, from the belief that school closures do not correct the financial, infrastructure, or equity problems the district is trying to solve. If Chicago is any indication, this mistrust may exist for good reason. Analyses of the promises made by Chicago Public Schools during its 2012 mass closure process finds them to be largely unfulfilled, in part because the district did not monitor many critical outcomes (Karp et al., 2023).

This, too, justifies the importance of school closure research. While there is so much more to understand, what is known suggests the stakes of closure are high for school communities and their surrounding neighborhoods. Stakeholders fight for these objectives with good intent. In the absence of comprehensive and rigorous research, both predictors of closure and its outcomes, the public discourse surrounding school closure becomes dominated by political factors, historical context, and anecdotal evidence as that is the overwhelming source information broadly accessible to stakeholders who wish to engage on the issue. However, this may lead to incomplete or misinformed policies that could further harm students and communities who are already disadvantaged. School closure decisions can change life trajectories for students, educators, and neighborhoods. Given the present likelihood that school closures will increase, researchers hold an obligation to fill the knowledge gaps that prevent data-driven and research-informed policymaking across diverse contexts and needs.

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Figure 1. School closures conceptual framework

#### **Schooling Context**

- Enrollment & Academics
- Enrollment levels and trends (declining?); building utilization, neighborhood distribution
- Achievement/attainment levels and trends
- Funding: state (e.g., hold harmless); local (e.g., bond referenda); federal (e.g., emergency relief, Title I)
- · Management & Leadership
- School board representation: elected, mayoral control, state takeover, etc.
- Charter school authorizer (e.g., policy coordination)

#### **Local & Neighborhood Context**

- Demographics: Population levels and trends (declining?); specific to student-aged population
- Locale: urbanicity, rurality
- Transportation & related issues
- Catchment boundaries and noncatchment-based option
- Bussing, public transportation, walkability
- Racial/ethnic and socioeconomic segregation/ integration (e.g., courtordered programs)

#### **Data & Research Mechanics**

- Correctly & consistently identifying permanently closed schools
- Correct year of closure and/or identification of closure announcement/consideration (e.g., anticipation effects?)
- Considering the school inclusion criteria
- o Charter schools
- o Special admission schools (e.g., magnet)
- Special education, career and technical education, and/or alternative schools
- Constructing the comparison group(s)
- o Similar schools to closure rationale?
- o Low and/or declining enrollment/academic outcomes

# **Closure Process & Dynamics**

- Scale & timing: Mass closures? Incremental? One-off? School and/or district consolidation; Immediate or phase out?
- Student and teacher/staff assignment to new schools
- Rationale for closure
- Public feedback and/or appeals process

Mediating factors: Contemporary policy reforms, political/economic climate Moderating factors: Student, teacher, school, & neighborhood characteristics

# Relevant Outcomes & Objectives

- Students: mobility and school choice (e.g., subsequent school transfer outcomes), attendance, academic achievement & attainment (i.e., course grades, standardized assessments, graduation), discipline
- Teachers & school staff: mobility, attrition, burnout
- School finances: total expenditures, capital expenditures
- Neighborhood: demographic change, community hub/anchor institutions; building reuse/vacancy

Figure 2. School closure decision matrix

	School Status	<b>LEA Status</b>	<b>Determination</b>
Ex. 1	Closes	Remains open	Closure
Ex. 2	Closes	Closes	Closure
Ex. 3	Name change	No change	Not closure
Ex. 4	Name change	Name change	Not closure
Ex. 5	Co-location with another school	No change	Likely not closure, but may be context dependent
Ex. 6	Move to new location or new building is constructed and retains same name	No change	Not closure
Ex. 7	No changes	Changes name and/or sponsor (charter)	Not closure
Ex. 8	State ID change	No change	Usually not closure
Ex. 9	No changes	State ID change	Usually not closure
Ex. 10	Merger with other school(s)	No change	Unclear, context dependent