Review of recent literature on optimal school size

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Aims & objectives

The brief aims to enable individuals to gain a better understanding of recent research on achieving ideal school size, especially as a rationale for school reorganization and closure. It aims to provide information to assist schools, districts, parents, and communities in developing evidence-based strategies for creating efficient learning environments and experiences for students that raise student achievement in schools. A broader goal is to inform educational leaders, government agencies, and policymakers, so they can make better decisions concerning today's schools and identify carefully what option best fits each school's context.

Methodology

This brief presents analysis of eighteen peer-reviewed academic articles published between 2000 and 2024 on the effects of school size, examining student outcomes ranging from academic performance to student behavior. The literature, which primarily focuses on K-12 levels, was purposefully selected to reflect the most recent empirical research on school size, rather than literature reviews. The vast majority of the reviewed research was conducted in the United States. In addition to these eighteen major articles, other works providing context and background are also cited throughout the text.

Does the size of a school really make a difference in improving student achievement?

In 2013, the United States experienced the largest mass school closure in the nation's history (Gorden et al., 2018). The Chicago Public School (CPS) district closed fifty schools, largely elementary schools, citing underutilization, financial difficulties, and under-enrollment, with many schools serving fewer than 300 students. The same rationale has also been used to shutter rural schools: in 2015, the Hughes School District, in the rural Arkansas Delta, was merged with the West Memphis School District, leading to the closure of Hughes Elementary and High Schools. The Arkansas Board of Education ordered this consolidation due to declining enrollment at Hughes School District schools. These cases are just a few among many examples of school consolidation and closure as a strategy for school reform. Before the pandemic, about 2000 U.S. public schools were closed each year (Gallagher & Gold, 2017), and now the country seems to be experiencing an uptick in closures (Lieberman, 2024).

There is a growing demand for public educators to take accountability for improving U.S. public schools, particularly as schools and districts face increasing budget constraints and persistent gaps in educational quality. In response, educators, administrators, and policymakers are continuously seeking optimal learning conditions, which naturally would include considerations of school size (McMillen, 2004; Riggen, 2013). High-profile closures driven by

under-enrollment and efficiency concerns, like those in Chicago, continue to reinforce the perception that many of the challenges faced by schools today are tied to school size. The current debate in school reform largely centers on whether schools should be small or large. In the examples of CPS and Hughes, small schools were cited as "under-enrolled," unfavored due to presumed lack of efficiency, and thus consolidated and closed.[1] This reflects the broader school consolidation movement of the 20th century, which was based on the belief that larger schools could offer more specialized instruction, improve administrative efficiency, and reduce per-student costs through economies of scale (Riggen, 2013). As a result, the average U.S. school enrollment increased from fewer than 100 students in 1930 to about 514 students by 2022 (Gershenson & Langbein, 2015; Riser-Kositsky, 2025).

While earlier (pre-1999) research on optimal school size tended to argue for larger schools and the consolidation of small schools, more recent evidence in the 21st century increasingly supports small schools and initiatives that boost their growth. Many major urban districts in the U.S. have implemented programs to open new small schools (Schwartz et al., 2016). The New York Network for School Renewal and the Chicago High School Redesign Initiative are a few of the projects designed to develop small schools within large urban neighborhoods. The most notable of recent initiatives is the Gates Foundation's investment of about $1 billion to create about 2,000 small schools in urban areas. These efforts reflect the belief that rigor, relevance, and relationships thrive best in small schools (Weiss, Carolan & Baker-Smith, 2010).

Research on optimal school size has yielded mixed results, though, and no clear consensus exists. While some support small schools and others advocate for larger schools, many argue that no one size fits all. Some scholars even call for deconstructing the notion of an "optimal" school size, viewing it as a distraction from more pressing issues, such as poverty, that affect students' learning experiences and academic outcomes.

Review of research

Research on optimal school size is complex, and there is simply no agreement across studies. While recent research often highlights the benefits of smaller schools, other studies challenge the very notion of an "ideal" size, instead emphasizing the tradeoffs associated with schools of all sizes. These findings suggest that the effectiveness of any particular school size is highly context-dependent, influenced by factors such as student demographics, socioeconomic background, and individual capacity and needs (Weiss et al., 2010). Notably, recent studies generally provide little evidence that large schools are inherently more effective, a sharp contrast to much of the 20th-century literature that frequently mentioned "economies of scale" to justify the benefits of larger schools. Even defining what counts as "small" or "large" school presents challenges. For instance, Riggen (2013) classified small schools as those enrolling between 34 and 319 students, whereas Fairman (2003) defined small schools as those with fewer than 500 students. Such inconsistencies illustrate how relative terminology like "smaller" and "larger" complicates comparisons across studies.

[1] This brief focuses on ideal *school* size, rather than *district* size, and references to consolidation, unless otherwise noted, refer to school consolidation. However, school consolidation and closure is often closely related to district consolidation, since, when two districts consolidate, schools are often closed. Thus, this brief does touch on district consolidation in a few places.

Most existing research focuses on the relationship between school size and academic achievement, often measured through standardized test scores. Far fewer studies investigate other important outcomes such as student and teacher behavior, teacher attitudes, school climate, or graduation rates. While some studies provide explicit recommendations or specific size ranges, others provide a more nuanced picture of potential benefits and drawbacks without providing an exact figure or range. Although literature on optimal school size may appear inconsistent, it is not necessarily contradictory (Slate, 2005). Rather, it reflects the multifaceted nature of schooling contexts. To make sense of the varied findings, this brief organizes the research into three categories: (1) studies supporting small or medium-sized schools as optimal, (2) studies favoring large schools, and (3) studies rejecting a single "one-size-fits-all" approach to school size.

Benefits of smaller schools

As emphasized throughout this brief, the majority of 21st-century research on optimal school size demonstrates support for smaller schools. Of the 18 articles analyzed, 12 highlight advantages associated with smaller schools over larger schools. Stewart (2009) found that students in smaller schools tended to be more academically successful than their peers in larger schools. The study reported that in all but the highest socioeconomic quartile, smaller schools had higher percentages of students passing all four sections of Texas's eleventh-grade TAKS test compared to larger schools. Similarly, Antoniou, Alghamdi, & Kawai (2024) found that student readiness and achievement began to decrease once enrollment surpassed 801 students, providing further evidence for the effectiveness of smaller schools. This threshold raises an important question: how small is "small," really? Among the 12 articles supporting small schools, the ideal small size ranges from 350 students (Lowen et al., 2008) to 801 students (Antoniou et al., 2024). Across all 18 studies—both those in support and those opposing small schools—definitions range even more widely, from fewer than 84 students (Howley & Howley, 2004) to 801 students (Antoniou et al., 2024). This relativity in defining size will be explored later in this brief.

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The body of literature identifies a plethora of reasons why smaller schools may be more effective than larger schools. Smaller schools are affiliated with stronger positive behavioral outcomes in students and increased achievement (McMillen, 2004). They also promote higher student engagement, which contributes to higher student achievement and graduation rates (McMillen, 2004; Weiss et al., 2010). Research also finds that smaller schools foster safer learning environments (Schwartz et al., 2016), as well as better individualized assistance. Crosnoe et al. (2004) demonstrated that increases in school size were associated with decreases in both predicted extracurricular participation of a student and interpersonal climate. Small schools are particularly important in rural contexts, where they often promote strong community relationships and a sense of family (Hopkins, 2005; Stewart, 2009). Moreover, the inverse relationship between school size and outcomes is more pronounced for students from disadvantaged backgrounds. Bickel & Howley (2000) for example, found low-income students to especially benefit from small schools and districts.

Across literature, the benefits of smaller schools are evident. Howley & Howley (2004), noted rural education scholars, even call for urban areas in particular to establish small and autonomous schools. However, context matters. For example, Riggen (2013) found that while

small schools had many advantages, they also had higher dropout rates compared to larger schools. Weiss et al. (2010) similarly acknowledged that small schools are not a "one size fits all solution" and must be carefully implemented to reflect a school's individual capacity and needs. Furthermore, transition to smaller schools requires corresponding improvement to educational inputs such as teacher recruiting and training to avoid compromising the overall quality of education (Antoniou et al., 2024).

Benefits of larger schools

Recent research on school size provides little explicit support for large schools. Of the 18 articles analyzed, none advocated for larger schools outright. Even when benefits were acknowledged, they were typically framed within the "one size *doesn't* fit all" perspective and often accompanied by support for small schools. Like small schools, the definition of "large" is relative. In the literature reviewed, large school size ranged from greater than 85 students (Howley & Howley, 2004) to between 1,600 and 2,499 students (Weiss et al., 2010).

Riggen (2013) found that large schools outperformed small and medium schools in mathematics. However, the benefits of large schools appear to be closely tied to context. Across research, studies indicate that large schools are more beneficial in affluent schools and districts and in urban or suburban areas (Abbott, Joireman, & Stroh, 2002; Johnson et al., 2002). Larger schools also tend to offer a wider and more diverse range of classes, including advanced-level courses (Busby, Martinez-Garcia, & Slate, 2020). They can allow for input and resource specialization, which may improve classroom instruction and contribute to higher educational outcomes. Additionally, large schools often have more diverse student bodies (Busby et al., 2020), and students may find it easier to find a "niche" community (Crispin, 2016). Large schools can also be associated with greater economic efficiency due to economies of scale, as they can often offer more resources and educational inputs. However, the cost-saving benefits of economies of scale diminish as school size increases, eventually becoming negligible (Gershenson & Langbein, 2015).

Despite these potential benefits, emerging research suggests that the disadvantages of large schools often outweigh their advantages. Crispin (2016) emphasizes that although large schools may be beneficial, their benefits are offset by a lower quality of educational inputs, indicating that quantity does not necessarily equate to quality. Busby et al. (2020) similarly argue that not all students may achieve academic progress in large schools. In fact, their study found that white students made more progress in large schools than middle-sized or small schools for white students, but not black or Hispanic students. Large schools may also burden teachers with increased responsibilities outside of the classroom and provide fewer opportunities for meaningful interaction (Crispin, 2016). Large-sized schools have also been associated with higher rates of student absence, social disorder that may affect cognitive and social development, and lower levels of extracurricular participation (Gershenson & Langbein, 2015).

Overall, the research portrays large schools–and their benefits–as highly context-dependent. While they may offer certain advantages for certain populations or settings, they are not broadly favored as a model for improving educational outcomes.

No one size fits all

Research on school size shows that results go beyond simple and convenient labels like small, medium, or large schools. Some studies find no significant effect on school size and academic achievement, while others identify the various benefits of schools across all sizes. Evidence from high schools in Chicago and New York City suggests that focusing on school size alone may not be a sufficient research strategy, as observed advantages may actually reflect other factors unrelated to size (Schwartz et al., 2013). This body of research emphasizes that no single school size—small or large—can be universally optimal for all contexts. Instead, factors such as demographics, location, and internal dynamics within schools should be considered regardless of size (Crispin, 2016; Weiss et al., 2010). In fact, Roeder (2002) labels the debate over optimal school size as a distraction from more important issues of disadvantage and equal opportunity. Much of the literature critiques the narrow correlations between school size and academic achievement, stating that such correlational approaches often fail to account for heterogeneity in education across location and in inputs that may systematically vary by school size (Crispin, 2016). Even research favoring smaller schools recognizes that size is intertwined with other factors tied to academic and behavioral outcomes for students (McMillen, 2005).

Roeder (2002) argues that if education officials are searching for methods to improve performance in larger urban/suburban school districts, focusing on school size does not seem to offer solutions. Instead, he urges attention to equity issues linked to student achievement, as well as issues correlated to instructional practice. Considering this and that SES emerges as the number one predictor of student performance (Riggen, 2013), researchers recommend prioritizing strategies to support students from low-SES backgrounds and improving educational inputs such as course offerings, curriculum, teacher training, and teacher retention (Antoniou et al., 2024; Crispin, 2016). This approach recognizes that all school sizes entail trade-offs and calls for optimizing performance within each school's unique context and circumstance, regardless of size. In some cases, this may even involve developing schools that incorporate the strengths of both small and large schools to better meet community and student needs (Fairman, 2003; Riggen, 2013). In addition, Weiss et al. (2010) caution against adopting school size reforms too quickly, emphasizing the importance of aligning policies with evidence that reflects the demographics and needs of specific student populations rather than relying on generalized findings.

Table 1. Studies of Optimal Size

Research Study	**Data Sample**	**Variables/Methods (other than size)**	**Main Findings**
Antoniou et al., 2024	21,903 schools across 80 countries. Students aged 15 years 3 months to 16 years 2 months, grade 7 and above (2018 PISA Database, OECD)	School readiness (capacity for instruction), student and teacher behaviors	School readiness is no longer predictable at the threshold of 801 students, suggesting larger sizes have less capacity for instruction.

Weiss et al., 2010	Scores from ELS:02 mathematics assessment	School achievement and engagement in the 10th grade	Schools should be sized at 600 students
Howley & Howley, 2004	National Education Longitudinal Study (NELS:88)	Scores in math, reading, science, history, and geography	Smaller school size has an achievement advantage for all but the highest-SES students
Johnson et al, 2002	Arkansas Stanford Achievement Test (grades 5,7 &10), Benchmark Test (grades 4 & 8)	SES (free and reduced lunch rate as a measure), student achievement	Smaller schools are more successful in disrupting or mitigating the relationship between poverty and student achievement
Gershenson & Langbein, 2015	North Carolina Department of Public Instruction databases, including End of Grade tests and High School Comprehensive Test (HSCT). Elementary: 3rd graders in 96-97, followed by the 5th grade. Middle: 6th graders in 97-98, followed by the 8th grade. High: 8th graders 97-98, followed by 10th grade (HSCT)	Reading & mathematics scores, ethnicity, and parent education	Socioeconomically disadvantaged students and students with learning disabilities are significantly harmed by larger school size.
Lee & Loeb, 2000	1997 Test of Basic Skills (ITBS), Consortium on Chicago School Research data	Student achievement (mathematics), college responsibility	Small schools (<400 students) were associated with higher teacher responsibility attitudes and higher student math achievement
Abbott et al., 2002	4th and 7th-grade students' WASL scale scores in reading and mathematics	Student achievement	Tendency for larger schools to be more beneficial in affluent districts

Stewart, 2009	All traditional public high schools in Texas are reporting 11th-grade TAKS results from 2005-2006	Percentage of 11th graders passing all four TAKS sections (reading, writing, science, math), SES (quartiles of % economically disadvantaged students)	Significant relationship between school size and TAKS pass rate when SES is considered Passing % is higher in small, rural schools than in larger urban/suburban schools
Crispin, 2016	National Education Longitudinal Study (NELS:88)	10th-grade math test scores (primary), 10th-grade reading scores	Small and large schools benefit students in most locations
Busby et al.,2020	Texas Academic Performance Reports (TAPR) 4th and 5th grade students	STAAR reading and mathematics scores	Larger schools benefited White students in reading and math
Schwartz et al., 2016	NYCDOE administrative and survey databases, 52,217 students entering 9th grade in 2009/10	Socioeconomic status (free lunch eligibility), race/ethnicity, gender, ELL status	Students in small schools reported more supportive and safe environments than in large schools
Fairman, 2003	4th, 8th, and 11th grade students; Maine Educational Assessment	MEA test scores	Both small and large schools have important strengths; school size alone does not determine student outcomes
Crosnoe et al., 2004	14,966 high school students from 84 U.S. schools (grades 9-12) drawn from the National Longitudinal Study of Adolescent Health	Student school-attachment, student-teaching bonding, extracurricular participation	Increasing school size is associated with decreasing student attachment to school and to teachers, as well as extracurricular participation.

Mediating factors

Other factors also appear to mediate the relationship between school size and various outcomes. These include school level, socioeconomic status, race, (dis)ability, and place.

School level: Research suggests that the effectiveness of school size varies with school level. Much of the literature highlights a stronger relationship between school size and student outcomes at higher grade or school levels. For example, Egalite & Kisida (2016) found that an increase of 100 students is associated with a decline in students' math test scores of approximately 1% of a standard deviation. However, they observed that this effect is strongly driven by large middle and high schools or schools serving grades 6 through 10, where the negative impact of larger school size increases by 5% of a standard deviation. One explanation of these differential impacts based on grade level lies in the structural differences of classrooms across levels. The absence of these effects in lower school levels may be attributed to the "self-contained" nature of elementary school classrooms, where students spend the majority of their time in the same classrooms, with the same teacher and peers (Howley & Howley, 2004). This self-contained structure may serve as a protective factor against challenges associated with larger and/or higher school levels. In contrast, students in middle and high school are constantly interacting with different teachers and peers, which may increase academic and social difficulties as school size increases. Additionally, schools tend to be larger at higher grade levels, which also amplifies these challenges (Howley & Howley, 2004). Overall, the evidence indicates that school size matters most at the secondary level, where schools are typically largest and where students may be most vulnerable to its effects.

Socioeconomic status: A consistent theme across the literature is the relationship between school size and socioeconomic status (SES). SES and poverty levels emerge as the strongest predictors and threats to academic achievement (Riggen, 2013; Johnson et al., 2002). Research suggests that smaller schools and districts are considerably more successful in mitigating the negative effects of poverty on academic achievement (Howley & Howley, 2004; Johnson et al., 2002), whereas larger schools may benefit affluent communities (Abbott et al., 2002).

Johnson et al. (2002) argue that, while not all schools need to be small, they need to be the smallest in precisely those places, such as impoverished communities, where they are least likely to be. At the same time, Howley & Howley (2004) caution against creating small schools exclusively for lower-SES students, warning that such policies place students at risk of class-based and racial segregation. They emphasize that SES balance helps to achieve increased educational equity and excellence, whereas isolating students from low-income backgrounds would constitute "a particularly insidious form of tracking" (Howley & Howley, 2004, pp. 26-27).

Stewart (2009) found that in schools with fewer than 25% socioeconomically disadvantaged students, larger schools reported higher percentages of students passing all four parts of the TAKS test. In more affluent, urban contexts, larger schools were linked with better performance than smaller rural schools, suggesting that resources, geography, and demographics may mediate the relationship between size and achievement. However, across most contexts, smaller schools have an achievement advantage for all but the highest-SES students (Howley & Howley, 2004).

Marginalized populations: The relationship between school size and marginalized groups, including racially minoritized students and students with disabilities, is another recurring theme that emerges from the literature. Roeder (2002) found that neither maintaining small schools with high concentrations of disadvantaged students nor consolidating them into larger schools with greater proportions of disadvantaged students is likely to improve academic performance. Other studies point to the specific benefits of a smaller school size for specific groups. Johnson et al. (2002) reported that African American students—many of whom attend large, urban schools— benefit disproportionately from smaller schools and districts. They found that the negative effects of poverty and size are much stronger in high-percentage African American schools than elsewhere, suggesting that breaking up larger districts and constructing smaller schools could promote equity in educational opportunities for African American students.

Research on school size and demographics further reveals that large schools are associated with better outcomes for White students, whereas smaller schools are more beneficial for Hispanic students (Busby et al., 2020) and Black students (Johnson et al., 2002). Students with disabilities may also be particularly sensitive to increases in school size. Gershenson & Langbein (2015) found that students with learning disabilities experience more pronounced challenges in larger schools, particularly at the high school level, where weaker social bonds and reduced access to tailored support programs may limit their success.

Overall, this body of research clearly demonstrates the intersection of school size with racial demographics and disability status. It further confirms the importance of schools approaching reform based on their specific contexts rather than implementing generalized, one-size-fits-all solutions.

Place: Research examines the role of location in determining ideal school size, raising a distinction between schools that are small or large "by design" versus "by necessity." School size reform must therefore be sensitive to place, as it plays out differently in rural and urban contexts. As rural schools are small by necessity, reform efforts there may focus less on creating small schools and more on resisting pressures to close or consolidate small schools (Howley & Howley, 2004). On the other hand, urban reform typically aims to break down larger schools into smaller ones. Howley & Howley (2004) warn against the dangers of overgeneralization, noting that urban reform may not fit rural settings and can sometimes cause more harm than good.

Crispin (2016) adds that school size often reflects differences in geographic and demographic factors. Students of color and low-income students, for instance, frequently attend large urban schools, and the marginal effect of adding 100 students differs greatly between an urban and a rural school. Urban schools also show greater variation in size compared to suburban or rural ones.

Local context further shapes the relationship between school size and achievement, as different communities emphasize different aspects of schooling. For example, rural schools are often rooted in strong community involvement, which may create a more engaging school climate even at larger sizes. Overall, size effects are found to be stronger in rural schools than in schools more broadly. Johnson et al. (2002) also note that small rural schools appear to mitigate the impact of poverty more effectively, echoing Stewart's (2009) finding that smaller rural schools often outperform larger urban and suburban schools serving low-income populations.

Critique of the research

A number of critiques can be levied against the existing literature, including inconsistent definitions of school size, narrow measures of student success, and a lack of generalizability.

Inconsistent definitions of school size

Research on optimal size and on what qualifies as small and large, including in the 18 studies analyzed, varies widely. Consequently, what one study labels as small may be considered as medium or even large in another study. For example, while Fairman (2003) defines schools with fewer than 500 students as small, Riggen (2013) and Lee and Loeb (2000) classify a population of 500 as medium-sized. See the size chart below.

Table 2. School Size Classifications

Author	Small	Medium	Large
Weiss et al., 2010	1 to 599	600 to 999 (Moderately small)	1,000 to 1,599 (Moderately large) 1,600 to 2,499 (Biggest Schools)
Stewart, 2009	1A, <195 students 2A, 195 - 414 students	3A, 415 - 949 students	4A, 950-1,984 students 5A, >1985 students
Riggen, 2013	34 to 319	322 to 1,107	1,110 to 4,522
Howley and Howley, 2004	<84 (smaller)	–	>84 (larger)
Lee and Loeb, 2000	<400 (elementary)	400-750 (elementary)	> 750 (elementary)
Fairman, 2003	<500	501-750	751-1,000
McMillen, 2004	<400 (elementary) <700 (HS)	400-549 (elementary) 700-1,199 (HS)	550-699 (elementary) 1,200-1,699 (HS)

This variability in size complicates research on optimal school size, as it dilutes the strength of any argument asserting that “small” schools are the best. After all, small could mean 100 students in one study and 300 in another, which is a figure that a third study could classify as large. The debate highlights the importance of defining size within a school's context and demographics; McMillen (2004), for instance, provides separate size classifications for elementary and high schools.

Related, quantitative studies often present broad ranges rather than precise figures. For example, Lee & Loeb (2000) suggest fewer than 400 students at the elementary level, while Antoniou et al. (2024) identify a threshold of 801 students. Such intervals are often quite wide, making it difficult for educators and policymakers to draw specific conclusions (Egalide & Kisida, 2016) and, again, challenging the concept of an "ideal" or "optimal" size.

Narrow and restricted measures

As researchers seek optimal learning conditions for students, they often rely on state-mandated test scores—primarily in mathematics and occasionally reading—as indicators of student success. These metrics prioritize performance in a limited set of subjects, overlooking students who excel in the arts or social sciences, or who simply do not perform well on standardized tests. The focus on mathematics as a determinant of student achievement stems partly from findings that school size tends to exhibits stronger effects on math outcomes than on reading (McMillen, 2004; Riggen, 2013). Gershenson & Langbein (2015) call for the use of broader measures of student success, noting the heavy reliance on test scores in existing research. Similarly, Barrow et al. (2015) report that Chicago's small schools boosted graduation rates by fostering skills such as attendance and perseverance—benefits not reflected in test scores.

In short, student experience and success can and should be assessed in many ways. Factors such as school attendance, parent involvement, students' sense of school attachment, participation in extracurriculars and community activities, and career opportunities upon graduation should also inform decisions about school size.

Generalizability of results

Studies on school size are typically conducted in specific contexts, limiting how broadly their findings can be applied. For instance, Busby et al. (2020) conducted their multi-year study amongst elementary schools in Texas, while Schwartz et al. (2016) utilized a New York City sample for their study. Results from these settings may not be applicable in other states or other settings. Lee & Loeb (2000) explicitly acknowledge that their Chicago-based research has limited external validity and should not be generalized beyond the public elementary schools in Chicago.

Recommendations and policy implications

While many states, such as New York, Kentucky, Florida, and California, have adopted class size limits, no state has imposed a strict cap on the total enrollment of an entire school. In Maryland, Humann et al. (2015) surveyed local districts within the state to see whether they had adopted school size policies or guidelines. Only 11 LEAs had adopted recommendations, and they varied widely. At the time of their research, only one state—Florida—had adopted maximum school size requirements, but it repealed it after only two years, due to fiscal concerns. Arizona and North Carolina were the only states to offer school size guidelines for facility planning.

From the literature, a number of recommendations related to school-size reforms emerge. First, research suggests that one-size-fits-all policies nearly do more harm than good (Johnson et al., 2002), leading some researchers to argue that decisions about optimal school size should be made by individual school districts and schools according to local demographics and community needs. Busby et al. (2020) encourage policymakers not to interfere with local decisions regarding school size. Rather than adopting strict size mandates, policymakers should let schools should determine their ideal size based on the student population, available resources, and the specific needs of the students and the surrounding community. For example, because research indicates that small schools provide a better learning environment and stronger academic benefits for low-income and rural populations (Riggen, 2013; Johnson et al., 2002), a rural district or school with a high concentration of socioeconomically disadvantaged students is likely to benefit more from relatively smaller schools than from consolidating into larger ones.

Low socioeconomic status (SES) and poverty remain among the strongest predictors of—and threats to—academic achievement (Riggen, 2013; Johnson et al., 2002). Roeder (2002) suggests that remedies should target the barriers that poverty might have on academic performance, such as using a smaller school size to allow for more individualized attention.

School-size reforms must serve as tools for equity rather than unintentionally reinforcing segregation. Howley and Howley (2004) warn of the danger of isolating low-income students when attendance boundaries are drawn in ways that cluster disadvantaged students. Policymakers and administrators should consider drawing more equal attendance boundaries that balance the composition of socioeconomically disadvantaged students across schools (Howley and Howley, 2004; Roeder, 2002). The Arkansas *Lake View School District v. Huckabee* (2001) case highlighted how unequal funding distribution can foster inequities. As funding for schools is often tied to state and local property taxes, equitable boundary drawing can reduce these disparities and address underlying issues that have negative impacts on student achievement.

Because recent research mostly demonstrates the academic and social benefits of small schools, researchers recommend the conservation of existing small schools and the establishment of new ones wherever appropriate (Howley & Howley, 2004; Johnson et al., 2002). However, efforts to strengthen schools should also include increasing educational inputs such as teacher incentives, expanding the range of course offerings, and investing in other resources that will improve learning environments. Scholars also caution against increasing the size of already small schools, especially those in economically disadvantaged areas (Howley & Howley, 2004).

Both district consolidations and school closures are often justified by the pursuit of economies of scale, with the assumption that larger districts and schools are more cost-efficient (Higgins, 2013; Howley & Howley, 2004). And the two are linked: in practice, district mergers frequently lead to school closures. However, merging districts does not have to mean closing schools, and closing schools may not be the best academic and equitable decision for all students (Busby et al., 2020; McMillen, 2004). Howley & Howley (2004) recommend shifting state policies from "big school" to "small school" norms. While merging schools may appear to reduce expenses, for example, by eliminating a principal's position, it can simultaneously increase other costs, such as transportation, and can widen educational disparities (McMillen, 2005). Therefore, efficiency analyses must take all costs into account.

Conclusion

Despite the appeal of finding an "ideal" school size, the body of literature analyzed shows evidence that school size alone does not guarantee student success. While research consistently alludes to the benefits of smaller school size—particularly for low-income, marginalized, and rural students—no single enrollment number can be considered optimal. Instead, school size is highly context-dependent, and effective policy must account for local demographics, available resources, and student and community needs. Policy makers should therefore shift from the "bigger versus smaller" debate and work towards improving educational inputs such as curriculum quality, expanding student opportunities, and addressing socio-economic disparities regardless of size. Districts and schools should make context-sensitive decisions grounded in research evidence to advance equity and achievement in schools rather than applying rigid size limits.

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