



## CONSOLIDATION OF SCHOOLS AND DISTRICTS

WHAT THE RESEARCH SAYS AND WHAT IT MEANS

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# CONSOLIDATION OF SCHOOLS AND DISTRICTS: WHAT THE RESEARCH SAYS AND WHAT IT MEANS

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## Executive Summary

Arguments for consolidation, which merges schools or districts and centralizes their management, rest primarily on two presumed benefits: (1) fiscal efficiency and (2) higher educational quality. The extent of consolidation varies across states due to their considerable differences in history, geography, population density, and politics. Because economic crises often provoke calls for consolidation as a means of increasing government efficiency, the contemporary interest in consolidation is not surprising.

However, the review of research evidence detailed in this brief suggests that a century of consolidation has already produced most of the efficiencies obtainable. Indeed, in the largest jurisdictions, efficiencies have likely been exceeded—that is, some consolidation has produced diseconomies of scale that reduce efficiency. In such cases, deconsolidation is more likely to yield benefits than consolidation. Moreover, contemporary research does not support claims about the widespread benefits of consolidation. The assumptions behind such claims are most often dangerous oversimplifications. For example, policymakers may believe “We’ll save money if we reduce the number of superintendents by consolidating districts;” however, larger districts need—and usually hire—more mid-level administrators. Research also suggests that impoverished regions in particular often benefit from smaller schools and districts, and they can suffer irreversible damage if consolidation occurs.

For these reasons, decisions to deconsolidate or consolidate districts are best made on a case-by-case basis. While state-level consolidation proposals may serve a public relations purpose in times of crisis, they are unlikely to be a reliable way to obtain substantive fiscal or educational improvement.

## Recommendations

As is evident in the above summary, findings based on available research suggest that decision makers should approach consolidation cautiously. Specifically, we recommend that policymakers:

- **Closely question claims about presumed benefits of consolidation in their state.** What reason is there to expect substantial improvements, given that current research suggests that savings for taxpayers, fiscal efficiencies, and curricular improvements are unlikely?

- **Avoid statewide mandates for consolidation and steer clear of minimum sizes for schools and districts.** These always prove arbitrary and often prove unworkable.
- **Consider other measures to improve fiscal efficiency or educational services.** Examples include cooperative purchasing agreements among districts, combined financial services, enhanced roles for Educational Service Agencies, state regulations that take account of the needs of small districts and schools, recruitment and retention of experienced teachers for low-wealth districts, distance learning options for advanced subjects in small rural schools, smaller class sizes for young students, and effective professional development programs.
- **Investigate *deconsolidation* as a means of improving fiscal efficiency and improving learning outcomes.**

# CONSOLIDATION OF SCHOOLS AND DISTRICTS: WHAT THE RESEARCH SAYS AND WHAT IT MEANS

## Introduction

This policy brief has five goals: (1) to explain what consolidation is and what it entails; (2) to describe what proponents expect from consolidation; (3) to synthesize the several strands of evidence related to both the experience and the results of consolidation; (4) to state the major research findings; and, finally, (5) to offer recommendations based on the findings.

School and district consolidation have once again been brought to the fore as a timely school-reform strategy. This seems to occur whenever state revenues fall. That is certainly the current context, with the near-collapse of the world banking system and the subsequent and ongoing economic crisis. State legislatures around the nation have been urged by various policymakers and state officials to trim the number of school districts and schools. Thus a brief examining the relevant research is timely for legislative staff, state school leaders, citizens, parents and other interested stakeholders. Recent efforts, for instance, have been enacted or proposed in Arizona, Arkansas, Indiana, Kansas, Maine, Nebraska, New York, and Vermont.

Because of the way the literature is divided between econometric studies and school quality studies, an introductory observation is needed. Econometric studies of district consolidation tend *not* to include the value of important educational contingencies such as extracurricular participation rates, parental involvement, and community support. These are what economists consider “externalities”—they don’t count in the analysis. This tendency is, for example, even evident in the good work of the economists of the Duncombe team cited throughout this brief.

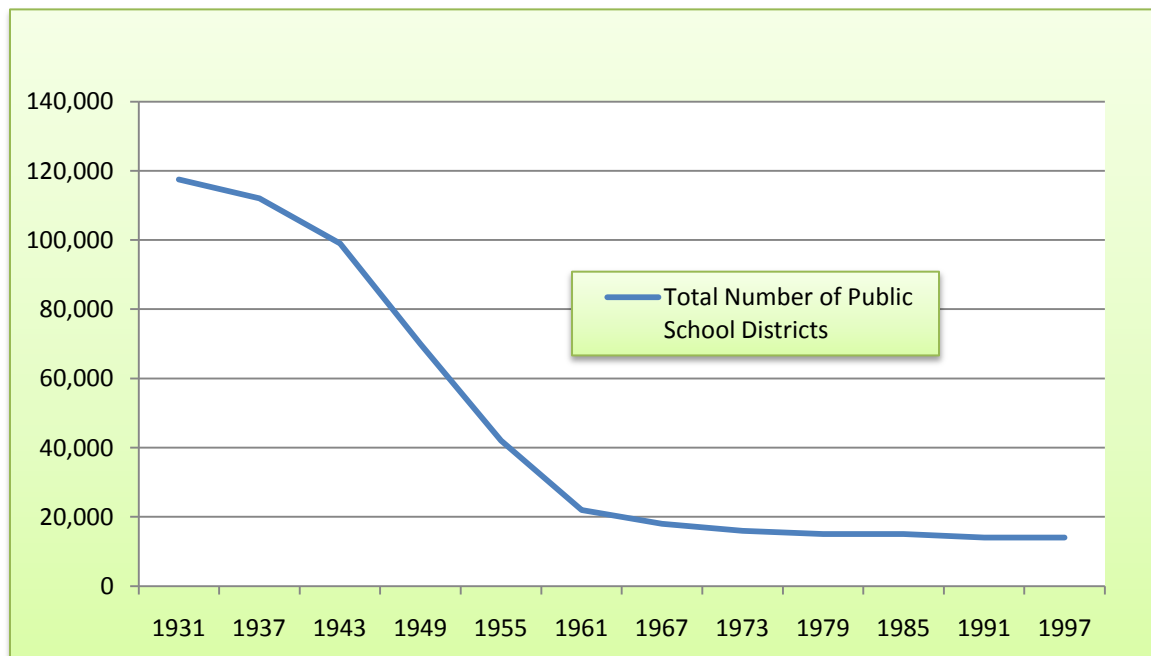
## What Is Consolidation?

Consolidation is a familiar strategy used by business management to reduce costs and increase uniformity.<sup>1</sup> In education, the term usually refers to (a) combining districts and (b) closing schools and sending students from the closed schools to other schools (or building a new and larger school).

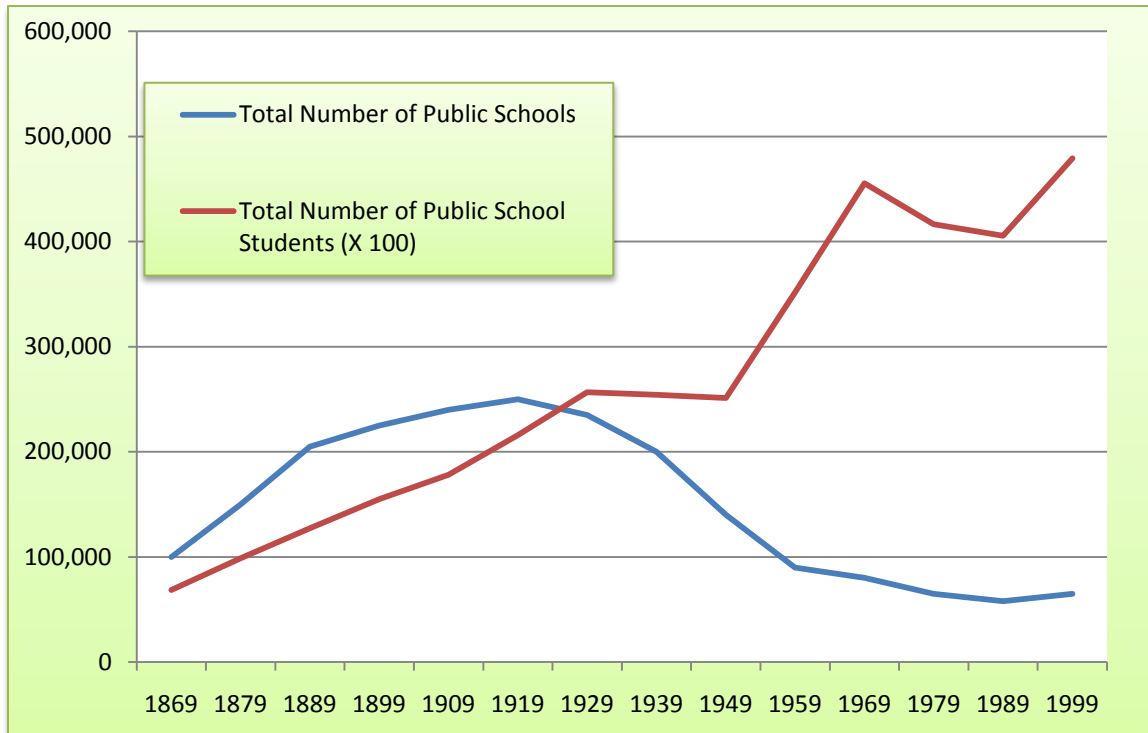
Although district consolidation is sometimes referred to as “district reorganization” and distinguished from school consolidation, this brief follows the common usage of the word to refer to combining either schools or districts.<sup>2</sup> This is an important point to keep in mind and helps explain the presentation of research throughout this brief. With a single exception, the recent literature on *school* consolidation is essentially research on school size. This means that the focus is on educational effectiveness rather than

economic efficiency. In contrast, recent research on *district* consolidation explores the reform as an efficiency measure. And the attempts to gain efficiency through district consolidation are often through school consolidation—thus the overlap. Accordingly, in the discussion that follows, research that is specifically applicable to district consolidation (or school consolidation) will be identified as such. Where no distinction is made, the discussion applies to the strategy of consolidation in general. As an historical note, the efficiencies secured by consolidation were generally intended to improve educational inputs that were believed (historically) to lead to improvements in educational outcomes. Also, in the early days of consolidation, most schools existed in single-school districts, so the distinction between school and district consolidation was initially small.

Centralization is a close synonym, referring to the combination of previously separate functions or entire enterprises under a single administration. Managers in education have often adopted business practices perceived to be successful,<sup>3</sup> and consolidation and centralization are among the earliest such adoptions.<sup>4</sup> Within that context, older research—from the 1930s to the 1970s—aimed to discover the benefits of consolidation, which had been put on the agenda a decade earlier, around 1920. Benefits were usually affirmed by research in that era, which was the time of major consolidation in American schooling (see Figures 1 and 2 for trend depictions of change in the number of U.S. schools and districts). These benefits included single-grade classes (age-grading), specialized subject-matter teachers, more intense professional supervision and leadership, and, increasingly, free transportation to and from school.



**Figure 1. Total Number of Public School Districts, 1931-1997<sup>5</sup>**



**Figure 2. Total Number of Public Schools, 1869-1999<sup>6</sup>**

Perhaps the most famous report of those decades was James Conant’s 1959 book, *The American High School Today*. Conant argued that high schools needed at least 400 students in grades K-12 to offer a “comprehensive” curriculum.<sup>7</sup> The last major report to argue for larger sizes for districts or schools, however, appeared in 1970.<sup>8</sup> Since that time—that is, subsequent to the aggressive consolidation of the American K-12 system—the contemporary research, as a body and almost to a study, has not recommended consolidation either to save tax dollars or to improve the outcomes or quality of schooling.<sup>9</sup> This research literature suggests that consolidation has exceeded the goals set by past leaders like Conant. Indeed, in the past 25 years, five state-level studies (in Indiana, Louisiana, Michigan, Montana, and North Carolina) reached this conclusion.<sup>10</sup>

In any case, in both business and schooling, reduction in the “span of control” is the clear result of centralization and consolidation. A narrow span of control is generally easier to manage than a wide one,<sup>11</sup> and by definition school and district consolidation reduces the number of administrative units that higher-level managers must deal with: it yields fewer schools and districts than formerly prevailed. After school consolidation, superintendents have fewer schools to manage, and after district consolidation, State Education Agencies have fewer districts to manage. District consolidation does yield more schools for a central district office to manage, but consolidated districts often close schools, and they often employ or add middle-managers. Very large districts employ large central office staffs—a significant diseconomy of scale—for just such a purpose.

For educational and industrial management, both consolidation and centralization have evident benefits—but only to a point.<sup>12</sup> Just as the well-known endpoint of business consolidation is monopoly, extreme school consolidation could potentially produce some ill effects associated with lack of competition, as one recent study suggests.<sup>13</sup> This concern is particularly relevant given the historical record of extensive consolidation and the creation of extremely large districts and schools.<sup>14</sup>

## Recent Developments and Expectations

Notwithstanding the concerns about consolidation, a number of states have promoted wide-scale school and district consolidation in recent years through various combinations of incentives, disincentives, and direct policy interventions.<sup>15</sup> Offering state funds to build new consolidated schools that meet minimum size requirements has been a popular inducement in states like Kentucky, West Virginia and Ohio, where many smaller school districts have limited fiscal capacity and depend on state dollars for capital construction projects.<sup>16</sup> Other states (including Idaho, Illinois, Kansas, and New York) have offered direct financial inducements to consolidating districts, via one-time incentive grants or multi-year commitments, purportedly to cover the costs of consolidating.<sup>17</sup>

Policy disincentives that make the operation of smaller and community-based schools and districts difficult include: (1) facilities construction policies mandating minimum enrollments or disallowing renovations of existing structures (in Alabama, Kentucky, Ohio, North Carolina, Tennessee, Virginia, and West Virginia, for example), or both;<sup>18</sup> and (2) unfunded mandates related to staffing, curriculum offerings, or graduation requirements that result in the need for additional and specialized staffing that smaller districts cannot readily afford (as in California, New York and Texas).<sup>19</sup> Because the trend has been toward larger and larger units, state policies are most often formulated with larger schools and districts in mind.

In a more direct approach, Arkansas recently enacted and has actively enforced legislation that simply eliminated all districts with enrollments below an arbitrary number (350 students), forcing voluntary mergers or forced annexations.<sup>20</sup> Similar legislation has been debated or is still under consideration in a number of other states.<sup>21</sup>

Particularly in states with many districts and smaller schools, it seems self-evident that reducing the number of schools and districts will reduce administrative costs. Yet as the next section demonstrates, research offers remarkably little support for that position.<sup>22</sup> Reforming and improving educational opportunities is a somewhat distant second motivation for consolidation, based on the assumption that offering a greater variety of courses equates with expanding opportunities for students. However, this once widely held belief, made especially popular by Harvard president James Conant, is also contradicted by the evidence.<sup>23</sup>

Given the combination of an economic downturn (manifested particularly sharply at the state level where education is governed and where it often constitutes the largest budget item) and the aggressiveness of contemporary education reform, the push for



consolidation is no surprise. Indeed, consolidation may assume an even higher profile across the states if genuine economic recovery remains elusive in the coming months and years. But do the empirical assumptions underlying the push find evidentiary support?

## Evidence

This section considers reports on the history, experience, and results of consolidation. We know that school and district consolidation play a strong public relations role in times of crisis (supplying policymakers and educational leaders with ready-made talking points for discussions about belt-tightening and school reform, for example). Less obvious, however, is whether or not there is good evidence to predict that increasing consolidation is likely to improve efficiency and student opportunities—or to save tax dollars in an economic emergency. This segment reviews evidence relative to those concerns.

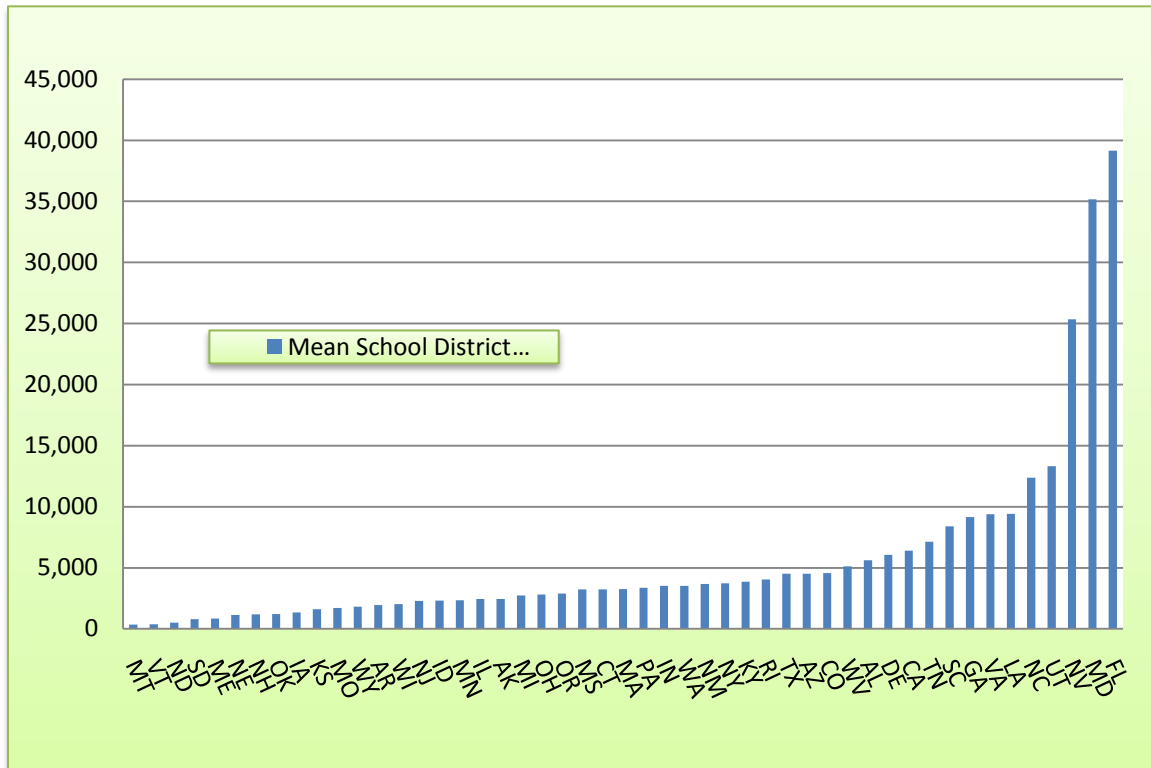
### History of Consolidation

In the decentralized system of U.S. schooling, organizational variation is substantial.<sup>24</sup> Schools are configured with all sorts of grade levels, and in all sizes from very small (several students) to extremely large (up to 5,000). School districts exhibit similar variation in size and configuration. Many states, for example, maintain separate elementary and high-school districts.<sup>25</sup> Hawaii operates just one district (the entire state), while Texas operates more than 1,000 districts. Many states maintain hundreds of districts; for example, New Jersey, which is geographically small but highly populated, maintains more than 600. Not surprisingly, this considerable organizational variation has produced notable differences among states with regard to school and district size (see Figure 3, which shows state variability for district size only).

Such variation is neither accidental nor permanent. Rather, it reflects ongoing changes in population dispersion, adaptation to geography (e.g., island or desert schools), and the outcomes of professional, political, and popular struggles.<sup>26</sup> As late as 1930, more than 262,000 public schools enrolled students (compared with 86,470 now), but many of these schools existed as the only school in a district. Tens of thousands of dispersed one-teacher schools (and one-school districts) were systematically closed between 1930 and 1960.<sup>27</sup> As of the 2008-2009 school year, the U.S. public system operated just 13,879 districts (housing the 86,470 schools), serving a much larger student population (e.g., about 49 million public school students in 2005, as compared to about 26 million in 1929) in many more communities and neighborhoods.<sup>28</sup> The size of the average district increased ten-fold, and the size of the average school increased five-fold.<sup>29</sup>

Although the historical trajectory has been toward ever-larger schools and districts, substantial variability persists within and among states. Originally, the colonies and then the young nation had no public education system. Schools were subsequently established and governed locally. Evolving legal provisions, however, beginning with 1789 Constitution's *de facto* delegation of educational responsibility to the states, began the slow systematization of a public enterprise. Fiscal responsibility throughout the 19<sup>th</sup> and

early 20<sup>th</sup> century, though, remained a substantially local one.<sup>30</sup> In many states today, in fact, the local share of education funding remains greater than the state share.<sup>31</sup>



**Figure 3. Average Enrollment (in Regular School Districts) by State, 2008-09<sup>32</sup>**

Note: Hawaii excluded because it is organized as a single district.

Perhaps the major event that enabled the systemic transformation of American schooling, and the associated consolidation of districts, was the arrival of the automobile. Improved roads and motorized vehicles meant children could be moved over greater distances to ever-more-distant “central” schools. Roads and automobiles created widely distributed suburbs, especially after the Second World War, and in those years new, larger schools were built to serve the suburbs.

In cities, separate school districts were consolidated very early on, starting at least in the mid-19<sup>th</sup>-century. Centralization was similarly regarded as a best practice suitable for “scaling up” in rural places and in towns and villages that were becoming more suburban.<sup>33</sup> Not coincidentally, the largest districts operated the largest schools, then as now, both in cities and in suburbs: today, the 500 largest school districts are so large that they enroll 43% of public school students nationwide; the remaining 17,453 enroll the remainder.<sup>34</sup>

For rural areas, where one-teacher schools were most common, county-level consolidation was first proposed in 1922.<sup>35</sup> That configuration has been fully realized in some states (such as West Virginia), substantially realized in others (such as Virginia), and less

systemically realized elsewhere. In general, the more impoverished and exploited a rural region, the greater the apparent likelihood of county-level consolidation.<sup>36</sup> For example, although Ohio has hundreds of township-sized districts, county-level consolidations are common in its Appalachian region. Historical circumstances have influenced both the realization of consolidation and successful resistance to it.<sup>37</sup>

## Experience of Consolidation

Reports of subjective experiences with consolidation highlight the variable and even contradictory nature of its impact on students, families, educators, and community members—particularly according to the individual’s role (as teacher, student, or parent, for example) and orientation to the consolidation (that is, affiliation with the receiving school or with the closed school).<sup>38</sup> One recent study,<sup>39</sup> for example, found that students adjusted to consolidation somewhat more readily than did teachers and administrators; for all three groups, individuals associated with the receiving school reported a less negative experience than did those associated with the closed school.

An extensive account<sup>40</sup> of West Virginia students and their families depicts the experience as inflicting considerable harm. After the school consolidation (closures), students attended larger schools where they received less individual attention, endured longer bus rides to and from school (and hence longer days), and had fewer opportunities to participate in co-curricular and extracurricular activities (a result of both increased competition for limited spots and transportation issues). Families’ experiences included fewer opportunities to participate in formal school governance roles (as members of site-based leadership teams, for example) and increased barriers to participating informally in their children’s education: increased travel time, for example, proved a barrier to volunteering, visiting classrooms, and taking part in parent-teacher conferences.

As compared to reports of superintendents’ successful leadership of consolidation efforts, studies of the experience of district consolidation from community and teacher perspectives are rare, yet remain classics in the education literature.<sup>41</sup> In contrast to West Virginia, one recent inquiry<sup>42</sup> that investigated the perceptions of Ohio parents and students eight years following a school district consolidation reported overall satisfaction with outcomes. Notably in that case, the consolidation resulted from a local decision and was not part of a sweeping state mandate.

Accounts of educators suggest that consolidation may result in professional benefits (such as improved professional development opportunities, increased salaries and enhanced job security), but that it may also result in personal costs (including increased stress, loss of confidence and heavier reliance on support networks).<sup>43</sup> Accounts of educational leaders’ experiences tend to focus on the processes involved and to emphasize lessons learned, often offering advice for managing future consolidation efforts, most particularly with regard to public relations.<sup>44</sup> In general, such accounts suggest that negative feelings about consolidation can be mitigated when leaders actively attempt to understand community cultures and actively seek to involve parents and

community members in the process. Needless to say, such consultation and involvement is an opportunity for citizens to voice objections, and the process of citizen involvement is therefore usually limited, in that it is very carefully managed and contained by educational leaders and policymakers.<sup>45</sup>

## Results of Consolidation

Even in the early 21<sup>st</sup> century, consolidation is still promoted as a way to reduce costs through economies of scale and to improve teaching and learning. The early waves of consolidation did produce arguable improvements: graded schools, special teachers, professional administration, and more solid buildings (wooden schools have all but disappeared).<sup>46</sup> The two purported benefits are, however, potentially contradictory,<sup>47</sup> because economies of scale can undermine teaching and learning. Indeed, the originators of consolidation warned that its purpose was *not* to save money, but to improve schools. Ideally, the resources rescued with internal efficiencies (if economies of scale are actually obtained) would be redirected to other—possibly better—purposes. It was precisely such redirection of resources that early reformers sought and obtained with the creation of graded schools, specialized teachers and professional administrators. Whether or not these changes improved learning outcomes is unknown, although an important new longitudinal study of earnings provides unique historical (1920-1949) evidence on the question. It looked at school consolidation and determined that earnings for white males in a particular age range were substantially higher in states that had sustained smaller schools than in those that did not.<sup>48</sup>

Research on the effects of contemporary consolidation suggests that new consolidation is likely to result in neither greater efficiency nor better instructional outcomes—especially when it results from state policy that implements large-scale forced consolidation. The window of opportunity for useful state-level efficiencies seems to have closed because the desired systemic benefits were substantially realized in earlier consolidation pushes. The consolidation strategy seems to have reached the point at which markedly diminished returns should be anticipated.

While cost analyses seem to validate predictions of increased fiscal efficiencies resulting from some consolidations,<sup>49</sup> the opportunities are small and now involve only the smallest districts (those enrolling very few students).<sup>50</sup> Even if efficiencies somehow cut the costs per student in half, the overall benefit to the state would be minimal since the number of affected students is so small. Further, the available research comparing pre- and post-consolidation expenditures finds that district consolidation does *not* on average reduce educational expenditures.<sup>51</sup> Indeed, other studies report increased costs, as operational budgets are affected by *diseconomies* of scale resulting from increased expenditures for transportation, operation, management and supervision, security, and guidance.<sup>52</sup> Related research that predicts the likely result of making schools or districts larger through consolidation is more nuanced, indicating that efficiencies can be achieved in some expenditure areas and for certain types of schools or districts, but also suggesting caution for policymakers pursuing consolidation in the hope of cutting costs.<sup>53</sup>

In terms of its influence on teaching and learning, contemporary school consolidation efforts often fail to deliver the promised enhancement of academic offerings.<sup>54</sup> Even when consolidation does produce a wider menu of educational experiences for students, evidence suggests that large school and district size negatively affects desirable academic outcomes.<sup>55</sup> A sizable body of research investigating school size has consistently found larger size (after moving beyond the smallest schools) to be associated with reduced rates of student participation in co-curricular and extracurricular activities, more dangerous school environments, lower graduation rates, lower achievement levels for impoverished students, and larger achievement gaps related to poverty, race, and gender.<sup>56</sup> In particular, moreover, larger district size has been shown to be negatively associated with the achievement of impoverished students.<sup>57</sup> It is fair to note here that this research is correlational; that is, while the studies show that large schools often exhibit these negative trends, they do not demonstrate that size itself causes them. In addition, the correlations are largest for the most impoverished students. The overall pattern is nonetheless clearly negative and is sufficient to raise serious doubts that substantial benefits will accrue from making a given school or district larger—especially in terms of academic outcomes for poor and minority students. The doubts are much more serious for a statewide policy that makes schools and districts larger without regard to or allowance for their specific characteristics and constraints.

As noted at the beginning of this discussion, *economists'* studies of district consolidation tend not to count important educational contingencies. For patrons of school districts, however, such contingencies do count in reality. This is true even if no cost, or capital value, is easily estimated for them. Indeed, sociologists refer to such things as “cultural capital.”<sup>58</sup> In this sense, econometric studies of district consolidation can be faulted for underestimating the associated costs, and this possible underestimate could be especially relevant in the very districts identified as the likeliest candidates for consolidations. As previously noted, small district size is associated with higher achievement for poor and minority students.<sup>59</sup>

Still more cause for concern comes from one very recent school-size study by an economist that did *directly* link the effects of changes in size to student achievement. This study, which examined “shocks to enrollment” (increases and decreases, via either consolidation with another school or by removing grades), found that increasing the size of Indiana elementary schools (partly by school consolidations) lowered student achievement significantly, with a predictable future economic cost that, according to the researcher, far outweighed the marginal fiscal savings of sustaining smaller schools.<sup>60</sup>

The influence of school and district consolidations on the vitality and well-being of communities may be the most dramatic result, if the one least often discussed by politicians or education leaders. Put simply, the loss of a school erodes a community's social and economic base—its sense of community, identity and democracy—and the loss permanently diminishes the community itself, sometimes to the verge of abandonment.<sup>61</sup> The comparative silence surrounding this issue is likely the result of its frequent rural character—the block of affected voters is both numerically small and politically and economically insignificant.<sup>62</sup>

By contrast, massive city systems are still with us, and despite the evident challenges of mammoth (and likely diseconomies of) scale and contingent organizational dysfunctions, no movement of deconsolidation has seriously arisen.<sup>63</sup> This urban legacy is only rarely acknowledged to also be an efficiency problem bequeathed by consolidation. Possibly the urban consolidation issue is so intertwined with numerous other difficult urban legacies (such as racism, economic inequality and environmental degradation) that addressing it proves impossible.<sup>64</sup>

Finally, the results of consolidation need to be understood symbolically as well as literally. For instance, whether it plays out at the school level or district level, consolidation has both literal and symbolic importance. The literal results are very clear: schools and districts get larger. Although district consolidation often results in school closures several years down the line,<sup>65</sup> it also regularly involves the immediate closing of one or more schools. Either way, district consolidation means schools are closed and children are sent elsewhere (most often to a different community). For local people, this literal result predictably carries substantial symbolic import<sup>66</sup> that policymakers must understand and take seriously.<sup>67</sup>

Symbolism aside, the reality is that those consolidations that are most likely to generate efficiencies of scale have long been realized, at least according to available state-level efforts that have examined the issue systematically.<sup>68</sup> In those rare instances where this is not the case, it makes more sense to consider school and district consolidation on an individual basis, and not as a widespread state mandate.<sup>69</sup>

An additional argument for making decisions on a case-by-case basis rather than through a blanket state policy is that experience has shown markedly different consolidation outcomes for communities with markedly different socio-demographic characteristics. Specifically, low-wealth and minority populations tend to be inordinately and negatively affected by consolidation initiatives.<sup>70</sup> Consolidation proposals involving low-wealth and minority communities especially need to be very carefully reviewed, with community participation strongly cultivated. Similarly, any deconsolidation should be done with an eye toward enhancing community and family well-being in poor and minority communities.<sup>71</sup>

## Findings and Policy Recommendations

Once again we want to stress the historically divided nature of the research on consolidation. First, education leaders set an agenda for consolidation, basically closing America's one-teacher schools, but as another part of the movement creating huge urban districts and, in many cases, huge suburban districts. Second, between about 1930 and 1970, research efforts tended to confirm the results of larger size—for instance, longer school years, students sorted by age into classrooms, greater professionalism for the role of teacher, professional leadership (more principals and superintendents), and ultimately a much larger proportion of the population attending high schools. Most of these were major historical achievements, but they represent alterations in inputs and

processes desired by previous generations of reformers—and they have already been accomplished. Early consolidations, in other words, achieved efficiencies but did not save taxpayer money. Instead they improved inputs and processes—which, though desired at the time, cannot be confirmed as having improved outputs that are of interest today (e.g., achievement levels or achievement growth).

Achieving more of the same is not what contemporary reformers or policymakers are after. And no wonder: the circumstances of the early 21<sup>st</sup> century are remarkably different from those that prevailed in the early 20<sup>th</sup> century. The current interest in smaller schools and districts—in schools and districts that are not so large as to damage learning, especially among impoverished students—reflects the changed priorities and circumstances because the current generation of reformers is focusing on improving outcomes, especially higher achievement. Curiously, so far as the interest in outcomes goes, even before the big push for consolidation, education reformers did have some research on hand that might have made them more cautious: some of the early 20<sup>th</sup> century school-size researchers studied the key outcome of achievement and, as a result of focusing on outcomes instead of inputs and processes, recommended schools that were half the size of those recommended by authors of input studies.<sup>72</sup>

From a contemporary outcomes-based approach, recent studies such as Kuziemko’s “shocks-to-enrollment” study<sup>73</sup> and Berry’s “school-inflation” study<sup>74</sup> are among the most revealing, but studies dating from the late 1980s and 1990s showed that larger districts and schools lower achievement for students in low-wealth communities.<sup>75</sup> Additionally, *very large districts* (those enrolling 15,000 or more students—the 500 largest among all 17,953 districts in the U.S.) are quite likely to be fiscally inefficient, according to the work of the Duncombe team.<sup>76</sup> This new wave of studies provides evidence supporting the view that consolidation has already proceeded beyond the point of a favorable cost-benefit ratio.

## Findings

- **In many places, schools and districts are already too large for fiscal efficiency or educational quality; *deconsolidation* is more likely than consolidation to achieve substantial efficiencies and yield improved outcomes.**
- **Financial claims about widespread benefits of consolidation are unsubstantiated by contemporary research about cost savings (mostly, but not exclusively, from research on district consolidation) and learning (mostly, but not exclusively, from school-size research).** The assumptions behind such claims are most often dangerous oversimplifications. For example, policymakers may believe “We’ll save money if we reduce the number of superintendents by consolidating districts”; larger districts, however, need—and usually hire—more mid-level administrators.<sup>77</sup> School closures often result in extra costs due to added expenses of transportation, management, and the like.

- **Claims for educational benefits from systematic statewide school and district consolidation are vastly overestimated and have already been maximized.** Schools that are too large result in diminished academic and social performance, and some evidence suggests that the same conclusion applies to districts that are too large.
- **Which deconsolidations would likely produce improvement can be judged only on a case-by-case basis, with attention to the devilish details that sweeping state policies cannot provide.** The same is true for the few consolidations involving very small numbers of administrators, teachers, and students that might seem advisable.
- **Impoverished places, in particular, often benefit from smaller schools and districts, and can suffer irreversible damage if consolidation occurs.**
- **Overall, state-level consolidation proposals appear to serve a public relations purpose in times of fiscal crisis, rather than substantive fiscal or educational purposes.**

## Recommendations

Writing in the *Journal of Education Finance* in 2002, Jacob Adams and Michael Foster gave some good advice to policymakers: “Assume nothing and analyze much when considering [consolidation] proposals. Purported benefits of larger organizational units do not materialize automatically. Context is important, and issues of efficiency, cost, student performance, educational climate, and community relations must be addressed.”<sup>78</sup>

The best available evidence supports this counsel for two fundamental reasons: First, the industrial benefits of larger scale were likely fully achieved during the 20<sup>th</sup> century. Remaining efficiencies from consolidation are very likely not systemic, but spotty and marginal: the cost-benefit ratio is at best doubtful. Second, the 20<sup>th</sup> century’s extensive consolidation has likely gone too far and has likely violated efficiency requirements, thereby producing widespread diseconomies of scale. Moreover, during this expansion, consolidation reforms were driven by a different set of circumstances with a state policy focus on inputs. Today, however, the reform agenda is focused on higher test scores—and consolidation appears to be a very unlikely contributor (and more probably an impediment) to improved outcomes.

Given these many considerations, we specifically recommend that policymakers:

- **Closely question claims about presumed benefits of consolidation in their state.** What reason is there to expect substantial improvements, given that current research suggests that savings for taxpayers, fiscal efficiencies, and curricular improvements are unlikely?



- **Avoid statewide mandates for consolidation and steer clear of minimum sizes for schools and districts.** These always prove arbitrary and often prove unworkable.
- **Consider other measures to improve fiscal efficiency or educational services.** Examples include cooperative purchasing agreements among districts, combined financial services, enhanced roles for Educational Service Agencies, state regulations that take account of the needs of small districts and schools, recruitment and retention of experienced teachers for low-wealth districts, distance learning options for advanced subjects in small rural schools, smaller class sizes for young students, and effective professional development programs.
- **Investigate *deconsolidation* as a means of improving fiscal efficiency and improving learning outcomes.**

## Notes and References

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1 Timar, T. & Tyack, D. (1999). *The invisible hand of ideology: Perspectives from the history of school governance*. Denver, CO: Education Commission of the States (ERIC Document Reproduction Service No. ED433609).

2 As subsequent discussion shows, district consolidation often leads to school closures (consolidation). The two phenomena can be studied separately, and they have been. More than that, as the discussion shows, they have been studied separately in different ways. At root, however, consolidation at all levels centralizes operations and management, often in the expectation of improved efficiency, inputs, processes, and outcomes. The American national system, for instance, remains far less consolidated than other national systems because a national ministry is not in charge of schooling in the U.S. Rather, the authority for schooling still rests with the several states as a “reserved” constitutional right of states. Obviously, consolidation to the national (federal) level could become a more explicit goal of education reform.

2 Callahan, R. (1962). *Education and the cult of efficiency*. Chicago: University of Chicago Press.

4 Strang, D. (1987). The administrative transformation of American Education: School district consolidation, 1938-1980. *Administrative Science Quarterly*, 32(3), 352-366.

5 Berry, C. (2004). School inflation. *Education Next*, 4(4), 56-62.

6 Berry, C. (2004). School inflation. *Education Next*, 4(4), 56-62.

7 Conant, J. (1959). *The American high school today*. New York: McGraw-Hill.

8 see Meeker, R. & Weiler, D. (1970). *A new school for the cities*. Santa Monica, CA: System Development Corporation. Retrieved from ERIC database. (ED104977); Gregory (2000) claims that Meeker and Weiler (1970) was the last such report; see *School reform and the no-man's-land of high school size*. Retrieved from ERIC database. (ED451981).

9 Current research is conducted with more careful methods and with greater safeguards against statistical bias than was the case for the earlier studies—this is a matter of progress in research methods. In general, we tend to agree that consolidation has indeed succeeded; recent research (Duncombe and colleagues—cited later) tends to show that many districts are far too large to be fiscally efficient. The consolidation agenda has likely over-reached its aims, in this view.

10 See (1) Coulson, A. (2007). *School district consolidation, size, and spending: An evaluation*. Midland, MI: Mackinac Center for Public Policy. Retrieved January 28, 2011, from <http://www.mackinac.org/archives/2007/s2007-06.pdf>;

(2) Louisiana Department of Education (2003). *Small school districts and economies of scale*. Baton Rouge, LA: Author. Retrieved January 28, 2011, from <http://www.louisianaschools.net/lde/uploads/3475.pdf>;

(3) Schwinden, T. & Brannon, L. (1993). *School reorganization in Montana: A time for decision*. Helena, MT: Montana School Boards Association. Retrieved from ERIC database. (ED444769);

(4) Spradlin, T., Carson, F., Hess, S., & Plucker, J. (2010). *Revisiting school district consolidation issues (Education Policy Brief)*. Bloomington, IN: Center for Evaluation and Education Policy, Indiana University. Retrieved January 28, 2011, from [http://www.indiana.edu/~ceep/projects/PDF/PB\\_V8N3\\_Summer\\_2010\\_EPB.pdf](http://www.indiana.edu/~ceep/projects/PDF/PB_V8N3_Summer_2010_EPB.pdf);

and (5) Sher, J. (1986). *Heavy meddle: A critique of the North Carolina Department of Public Instruction's plan to mandate school district mergers throughout the state*. Raleigh, NC: North Carolina School Boards Association. (ERIC Document Number ED270245).

11 Gulick, L. & Urwick, L. (Eds.). (1937). *Papers on the science of administration*. New York: Institute of Public Administration.

12 In education, see, for example:

Ornstein, A. C. (1993). School consolidation vs. decentralization: Trends, issues, and questions. *Urban Review*, 25(2), 167-74;

and Bjork, L. G. & Blase, J. (2009). The micropolitics of school district decentralization. *Educational Assessment, Evaluation and Accountability*, 21(3), 195-208.

13 Brasington, D. (2003). Size and school district consolidation: Do opposites attract? *Economica*, 70, 673-690. Brasington argues that school consolidation tends to reduce school quality by reducing competition among schools.

14 See, for example, Lee, V. & Smith, J. (1997). High school size: Which works best, and for whom? *Educational Evaluation and Policy Analysis*, 19(3), 205-227. Lee and Smith argue that high schools enrolling 600-900 students. Metropolitan high schools are very often much larger than 900 students 9-12.

See also Brasington, D. (2003). Size and school district consolidation: Do opposites attract? *Economica*, 70, 673-690.

15 Buchanan, B. (2004, July). What consolidation could mean for your district. *American School Board Journal*, 191(7), 1-18.

New York State Commission on Local Government Efficiency and Competitiveness (2008). *School district consolidation in other states*. Albany: Author. Retrieved January 28, 2011, from [http://www.nyslocalgov.org/pdf/School\\_District\\_Consolidation\\_in\\_Other\\_States.pdf](http://www.nyslocalgov.org/pdf/School_District_Consolidation_in_Other_States.pdf).

Rural School and Community Trust. (2006, March); Anything but research-based: State initiatives to consolidate schools and districts. *Rural Policy Matters*. Retrieved January 28, 2011, from <http://www.ruraledu.org/articles.php?id=2034>.

16 Hughes, B. (2003). Surviving closings and consolidations. *School Administrator*, 60(7), 16-18;

Richard, A. (2005, November 24). West Virginia Governor cool to school consolidation. *Education Week*, 24(31), 28, 36.

17 Rodine, K. (2010, October 3). Idaho school districts consolidations are often discussed, rarely embraced. *Idaho Statesman*. Retrieved January 28, 2011, from

<http://www.idahostatesman.com/2010/10/03/1365005/school-mergers-often-discussed.html>;

Ryden, K. (2010, October 22). School boards learn consolidation brings financial incentives. *The Daily Register*. Retrieved January 28, 2011, from

<http://www.dailyregister.com/newsnow/x2030537011/School-boards-learn-consolidation-brings-financial-incentives>;

Tonn, J. (2007, March 28). Savings from school consolidation plans uncertain. *Education Week*, 26(29), 10;

Yount, L. & Mann, F. (2010, February 14). Report: Savings from school district consolidation not as great as thought. *Wichita Eagle*. Retrieved January 28, 2011, from

<http://www.kansas.com/2010/02/14/1180733/report-savings-from-school-district.html>.

18Lawrence, B.K. (2001, June 23) as cited in Howley, C. (2002) Small schools. In A. Molnar (Ed.) *School reform proposals: The research evidence*. Boulder, CO: National Education Policy Center. Retrieved December 30, 2010, from

<http://nepc.colorado.edu/publication/school-reform-proposals-the-research-evidence>.

- 19 Association of California School Administrators. (2008). State sued over unfunded mandates. Sacramento, CA: Author. Retrieved January 28, 2011, from <http://www.acsa.org/FunctionalMenuCategories/AboutACSA/Councils/Superintendency/Statesuedoverunfundedmandates.aspx>;
- Boulat, E. (2010, July 30). Are unfunded mandates suffocating our public schools? *Rivertowns Patch*. Retrieved January 28, 2011, from <http://rivertowns.patch.com/articles/are-unfunded-mandates-suffocating-our-public-schools>;
- Kappes, H. (2010, May 30). Schools seek help on unfunded state mandates. *Galveston County Daily News*. Retrieved January 28, 2011, from <http://galvestondailynews.com/story/157437>.
- 20 Office for Education Policy. (2010, September 15). Act 60: The past, present, and future of school consolidation in Arkansas. Fayetteville, AR: University of Arkansas. Retrieved January 28, 2011, from [http://www.uark.edu/ua/oep/policy\\_briefs/2010/Consolidation.pdf](http://www.uark.edu/ua/oep/policy_briefs/2010/Consolidation.pdf).
- 21 For an unusually thoughtful report of a North Carolina example from the 1980s, see Sher, J. (1986). *Heavy meddle: A critique of the North Carolina Department of Public Instruction's plan to mandate school district mergers throughout the state*. Raleigh, NC: North Carolina School Boards Association. (ERIC Document Number ED270245);
- for a list of state actions as of summer 2010, see Spradlin, T., Carson, F., Hess, S., & Plucker, J. (2010). *Revisiting school district consolidation issues (Education Policy Brief)*. Bloomington, IN: Center for Evaluation and Education Policy, Indiana University. Retrieved January 28, 2011, from [http://www.ceep.indiana.edu/projects/PDF/PB\\_V8N3\\_Summer\\_2010\\_EPB.pdf](http://www.ceep.indiana.edu/projects/PDF/PB_V8N3_Summer_2010_EPB.pdf).
- 22 Actual research literature offers little in the way of empirical support for what otherwise seems so self-evident, as described later in this brief.
- 23 Conant, J. (1959). *The American high school today*. New York: McGraw-Hill.
- The contrary evidence is given by David Monk and colleagues in the following excellent studies:
- Monk, D. & Haller, E. (1993). Predictors of high school academic course offerings: The role of school size. *American Educational Research Journal*, 30(1), 3-21;
- Haller, E., Monk, D., Bear, A., Griffith, J., & Moss, P. (1990). School size and program comprehensiveness: Evidence from high school and beyond. *Educational Evaluation and Policy Analysis*, 12(2), 109-120.
- 24 Ready, D., Lee, V. & Welner, K. G. (2004). Educational equity and school structure: School size, overcrowding, and schools-within-schools. *Teachers College Record*, 106(10), 1989-2014.
- 25 Consolidating elementary and high school districts has been on the agenda in Arizona recently, but many other states (e.g., Nebraska and New Jersey) also maintain elementary-only districts and “regional high school districts” (e.g., New Jersey).
- 26 DeYoung, A., & Howley, C. (1992). The political economy of rural school consolidation. *Peabody Journal of Education*, 67(4), 63-89;
- Strang, D. (1987). The administrative transformation of American Education: School district consolidation, 1938-1980. *Administrative Science Quarterly*, 32(3), 352-366;
- Tyack, David (1974). *The one best system*. Cambridge, MA: Harvard University Press.
- Policy in this realm has seldom, if ever, been based on scientific—or even systematic—knowledge.

27 U.S. Department of Commerce. (1960). *Public school systems in 1960*. Washington, DC: Author. The Department reported a decrease of 20 percent from 1958 to 1960 alone, and estimated that the 1960 figure represented a two-thirds decline since 1942.

28 Data on schools and districts from 2008-2009 Common Core of Data (CCD), delimited to regular schools and LEA code 1 and 2 (Local School District and Local School District component of a supervisory union). CCD data are available from the National Center for Education Statistics at

<http://nces.ed.gov/ccd/ccddata.asp>.

Current enrollment data from U.S. Department of Education. (2005). *Digest of education statistics*. Washington, DC; Author. Retrieved January 28, 2011, from

<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2006030>.

Historical data from Snyder, T. (Ed.). (1993). *120 years of American education: A statistical portrait*. Washington, DC: National Center for Education Statistics, U.S. Department of Education. Retrieved January 28, 2011, from

<http://nces.ed.gov/pubs93/93442.pdf>.

29 Lawrence, B., Bingler, S., Diamond, B., Hill, B., Hoffman, J., Howley, C., Mitchell, S., et al. (2003). *Dollars and sense: The cost effectiveness of small schools*. Retrieved January 28, 2011, from

[http://www.ruraledu.org/user\\_uploads/file/Dollars\\_and\\_Sense.pdf](http://www.ruraledu.org/user_uploads/file/Dollars_and_Sense.pdf).

30 Strang, D. (1987). The administrative transformation of American Education: School district consolidation, 1938-1980. *Administrative Science Quarterly*, 32(3), 352-366;

Tyack, D. (1974). *The one best system*. Cambridge, MA: Harvard University Press.

31 Total general funds derived from local sources exceeds total general funds derived from state sources in 22 states (in order from the lowest proportional state contribution, starting at 33%: MO, IL, NV, NE, PA, SD, NH, CT, ND, NJ, RI, FL, VA, MA, MD, CO, NY, ME, OH, TX, IA, GA). Computed by the authors from 2008-2009 Common Core of Data (CCD), delimited to LEA code 1 and 2 (Local School District and Local School District component of a supervisory union). CCD data are available from the National Center for Education Statistics at

<http://nces.ed.gov/ccd/ccddata.asp>.

32 Computed by the authors from 2008-09 Common Core of Data (CCD), delimited to regular schools and LEA code 1 and 2 (Local School District and Local School District component of a supervisory union) and excluding Hawaii (which operates as single district). Puerto Rico, a U.S. territory that has not become a state, also operates as a single school district.

33 Tyack, D. (1974). *The one best system*. Cambridge, MA: Harvard University Press.

34 See U.S. Department of Education. (2010). *Characteristics of the 100 largest public elementary and secondary school districts in the United States: 2008-2009*. Washington, DC: Author. Retrieved January 28, 2011, from <http://nces.ed.gov/pubs2011/2011301.pdf>;

enrollment in these districts ranged from 16,000 students (smallest of the 500) to about 1 million students (New York City).

For an earlier and more scholarly analysis see

Ornstein, A. C. (1993). School consolidation vs. decentralization: Trends, issues, and questions. *Urban Review*, 25(2), 167-74.

Using 1988 data, Ornstein reported that though 1% of the nation's school districts enrolled at least 25,000 students, these districts accounted for 28% of all enrollments.

35 Cubberley, E. (1922). *Rural life and education: A study of the rural-school problem as a phase of the rural-life problem*. Boston, MA: Houghton Mifflin. (ERIC Document No. ED392559).

36 We are not aware of any empirical research that confirms this claim, which is based on the authors' personal experience in Arkansas, West Virginia, Kentucky, and Ohio.

37 Full support of this claim cannot be given due to space limitations. For relevant scholarly detail see

(1) DeYoung, A. J. (1995). *The life and death of a rural American high school: Farewell Little Kanawha*. New York: Garland;

(2) Strang, D. (1987). The administrative transformation of American Education: School district consolidation, 1938-1980 *Administrative Science Quarterly*, 32(3), 352-366;

(3) Tyack, David (1974). *The one best system*. Cambridge, MA: Harvard University Press.

For sharply contrasting views, eastern and western, in original source documents, see

(1) Cubberley, E. (1922). *Rural life and education: A study of the rural-school problem as a phase of the rural-life problem*. Boston, MA: Houghton Mifflin. (ERIC Document No. ED392559) [eastern]

and (2) Kennedy, J. (1915). *Rural life and the rural school*. New York: American Book Company. Retrieved from ERIC database. (ED392531).

38 Reports of administrators who have successfully consolidated schools, for instance, are very common in the literature; they typically contain advice on how to close schools and reorganize districts. These sorts of reports have value, but their evidence is always personal and very local. The individual actors take committed positions and have experiences that result from those commitments. These commitments, moreover, are not usually formed on the basis of evidence, but on the basis of interest. The interests of community members opposing a closure and a superintendent pushing it through are, of course, very different—and so their accounts, too, are dramatically different. In short, though valuable as reports of experience, the basis of evidence behind the reports is very slender. Additionally, the pre-existing commitments and the nature of the experiences preclude the skepticism that actual research requires. The accounts are, in general, quite properly biased—and most are not research.

39 Nitta, K., Holley, M., & Wrobel, S. (2010). A phenomenological study of rural school consolidation. *Journal of Research in Rural Education*, 25(2), 1-19. Retrieved January 28, 2011, from <http://www.jrre.psu.edu/articles/25-2.pdf>.

40 Eyre, E. & Finn, S. (2002, August-October). Closing Costs: School Consolidation in West Virginia. *Charleston Gazette*.

41 See, e.g.,

(1) DeYoung, A. (1995). *The life and death of a rural American high school: Farewell, Little Kanawha*. New York: Garland;

(2) Peshkin, A. (1982). *The imperfect union*. Chicago: University of Chicago Press.

42 Self, T.L. (2001, October). *Post-consolidation evaluation: The effects eight years later*. Paper presented at the Annual Meeting of the Mid-Western Educational Research Association, Chicago, IL.

43 Nitta, K., Holley, M., & Wrobel, S. (2010). A phenomenological study of rural school consolidation. *Journal of Research in Rural Education*, 25(2), 1-19. Retrieved January 28, 2011, from <http://www.jrre.psu.edu/articles/25-2.pdf>.

Nitta and colleagues cite two studies for this claim:

Kiracou, C. & Harriman, P. (1993). *Stress-busting for teachers*. Cheltenham, UK: Nelson Thornes Ltd.;

and McHugh, M. & Kyle, M. (1993). School Merger: A stressful challenge? *School Organization*, 13(1), 3-21.

44 Chance, E., & Cummins, C. (1998). School/community survival: Successful strategies used in rural school district consolidations. *Rural Educator*, 20(2), 1-7;

Ward, J.G., & Rink, F.J. (1992). Analysis of local stakeholder opposition to school district consolidation: An application of interpretive theory to public policy making. *Journal of Research in Rural Education*, 8(2), 11-19.

45 Maine recently mandated widespread consolidation, with districts given the option of selecting “partners” for consolidation. Though the goal was to reduce the number of districts from 290 to 80, as of May 2010, 215 districts persist. See

Cronin, J. (2010). A case study of school district consolidation, *School Administrator*, 67, 19-23.

In Kentucky, when members of the Harlan County School District’s Local Facilities Planning Committee (a decision-making body established as part of the Kentucky Education Reform Act and tasked with making recommendations regarding capital construction projects) was unable to reach the required super-majority to approve a plan to consolidate its three high schools, the state Board of Education simply overruled them. See

Johnson, J. (2007). School size, social justice, and conflicting state objectives: An investigation of achievement distributions among Kentucky public schools. *Education Leadership Review*, 8(1), 51-64.

46 We have, however, occasionally seen modern wooden school buildings on our travels in rural places.

47 The contradiction lies in the professional intention, as Cubberley (1922) insisted it ought, that consolidation would redirect available funds to more educationally productive purposes, rather than reducing taxes. See

Cubberley, E. (1922). *Rural life and education: A study of the rural-school problem as a phase of the rural-life problem*. Boston, MA: Houghton Mifflin. (ERIC Document No. ED392559)

48 Berry, C. (2004). School inflation. *Education Next*, 4(4), 56-62.

For the academic version of this study, see

Berry, C., & West, M. (2007). *Growing pains: The school consolidation movement and student outcomes (Harris School Working Paper Series 07.03)*. Chicago: Harris School, University of Chicago.

Economists and many others argue that returns-to-education (income) are the ultimate educational outcome. This rare historical-economic analysis examines the school-size-related returns to education for white males born between 1920 and 1949. No similar study exists in the literature.

49 Andrews, M. Duncombe, W. & Yinger, J. (2002). Revisiting economies of size in American Education: Are we any closer to a consensus? *Economics of Education Review*, 3(21), 245-262;

Duncombe, W. & Yinger, J. (2005, January). *Does school district consolidation cut costs?* Syracuse, NY: Center for Policy Research, Maxwell School of Citizenship and Public Affairs. Retrieved January 28, 2011, from [http://www.njleg.state.nj.us/propertytaxsession/opi/does\\_school.pdf](http://www.njleg.state.nj.us/propertytaxsession/opi/does_school.pdf).

50 Results vary somewhat by state, but the advantages are generally realized in consolidating districts that are quite small by contemporary standards. Zimmer and colleagues (2009, p. 111) found that district enrollment levels in Indiana within 5% of optimum cost enrolled from just 547 students to 6,889 students. Larger districts are almost as inefficient as very small ones—but they enroll far, far more students than districts with fewer than 547 students, so the absolute magnitude of the associated diseconomies actually does have arguable statewide significance in Indiana. As Duncombe & Yinger (2010, p. 13) observe in the case of New York, “Even though consolidation-induced cost savings may be large for an individual district, they are inevitably small for the state as a whole because only the smallest districts in the state are involved.” See

Duncombe, W. & Yinger, J. (2010). School district consolidation: The benefits and costs. *The School Administrator*, 67(5), 10-17.

51 Cox, B. & Cox, B. (2010). A decade of results: A case for school district consolidation? *Education*, 131(1), 83-92;

Groan, R., & Murray, V. (2004). Competition or consolidation? The school district consolidation debate revisited. *Center for Educational Opportunity. Goldwater Institute Policy Report # 89*. Retrieved January 28, 2011, from <http://www.goldwaterinstitute.org/Common/Files/Multimedia/401.pdf>;

Streifel, J.S., Foldes, G., & Holman, D.M. (1991). The financial effects of consolidation. *Journal of Research in Rural Education*, 7(2), 13-20.

A conservative position on expenditures is to accept what researchers call the “null hypothesis”—that is, on average, no significant difference in expenditures pre- and post-consolidation. Single cases, as always, can be exceptions to the

general state of affairs. In a 2007 article about New York's consolidation from 1985-1997, Duncombe and Yinger answered the question "Does it cut costs?" with a yes—but only for the smallest New York districts. Further, they found that among the associated adjustment costs were some, especially capital expenditures, that steeply reduced the "savings"—dramatically so in the case of combining two 1,500 student districts to produce one 3,000-student district. See

Duncombe, W. & Yinger, J. (2007). Does school district consolidation cut costs? *Education Finance and Policy*, 2(4), 341-375.

52 Coulson, A. (2007). Savings from school district consolidation would be limited and difficult to capture, study finds. *Mackinac Center for Public Policy*. Retrieved January 28, 2011, from <http://www.mackinac.org/article.aspx?ID=8618>.

See also:

(1) Andrews, M. Duncombe, W. & Yinger, J. (2002). Revisiting economies of size in American Education: Are we any closer to a consensus? *Economics of Education Review*, 3(21), 245-262,

and (2) Duncombe, W. & Yinger, J. (2010). School district consolidation: The benefits and costs. *The School Administrator*, 67(5), 10-17.

Andrews and colleagues conclude that cost efficiencies are maximized in districts at about 2,000-4,000 students and that "sizeable diseconomies of size may begin to emerge for districts above 15,000 students" (p. 246). In 2008-2009, about 4% (n=500) of all U.S. regular school districts had enrollments of 15,000 or more. As noted elsewhere, those 500 districts enrolled 43% of all students in the nation. See

U.S. Department of Education. (2010). *Characteristics of the 100 largest public elementary and secondary school districts in the United States: 2008-2009*. Washington, DC: Author. Retrieved January 28, 2011, from <http://nces.ed.gov/pubs2011/2011301.pdf>.

53 Alpsaugh, J. (1994). The relationship between school size, student teacher ratio, and school efficiency. *Education*, 114, 593-597.

Andrews, M. Duncombe, W. & Yinger, J. (2002). Revisiting economies of size in American Education: Are we any closer to a consensus? *Economics of Education Review*, 3(21), 245-262.

54 For example, consolidated schools in West Virginia failed to fulfill their promises of maintaining AP courses and foreign language courses; see

Eyre, E. & Finn, S. (2002, August-October). Closing Costs: School Consolidation in West Virginia. *Charleston Gazette*.

55 Monk, D., & Haller, E. (1993). Predictors of high school academic course offerings: The role of school size. *American Educational Research Journal*, 30(1), 3-21. Monk's work shows that high schools of 400 students are sufficiently large offer a comprehensive curriculum (recall that 400 was Conant's advised minimum size for comprehensive high schools), but that smaller schools can focus on academics and provide excellent offerings. Too often, Monk shows, large size results in the proliferation of remedial courses, which can be understood as setting up a system of low expectations. One might theorize that larger high schools widen achievement gaps in just this way (that is, by tracking low-achieving students into increasingly lower comparative levels of achievement). More recent work includes the following:

(1) Johnson, J. (2006). *More doesn't mean better: Larger high schools and more course offerings do not boost student achievement in Iowa*. Arlington, VA: The Rural School and Community Trust. (ERIC Document Reproduction Service No. ED497981);

(2) Lee, V. E., Croninger, R. G., & Smith, J. B. (1997). Course-taking, equity, and mathematics learning: Testing the constrained curriculum hypothesis in U.S. secondary schools. *Educational Evaluation and Policy Analysis*, 19(2), 99-121;

(3) Uerling, D. F. & Dlugosh, L. (1999). *Selected indicators of a quality high school: program offerings and student participation*. Paper Presented at the 8th Annual Conference on Creating Quality Schools in Memphis, TN.



56 Cotton, K. (1996). *Affective and social benefits of small-scale schooling*. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED401088).

Bickel, R. & Howley, C. (2000). The influence of scale on student performance: A multi-level extension of the Matthew principle. *Educational Policy Analysis Archives*, 8(22). Retrieved January 28, 2011, from <http://epaa.asu.edu/epaa/v8n22/>;

Howley, C. & Howley, A. (2004). School size and the influence of socioeconomic status on student achievement: Confronting the threat of size bias in national data sets. *Educational Policy Analysis Archives*, 12(52). Retrieved January 28, 2011, from <http://epaa.asu.edu/epaa/v12n52/>;

Johnson, J. (2007). School size, social justice, and conflicting state objectives: An investigation of achievement distributions among Kentucky public schools. *Education Leadership Review*, 8(1), 51-64;

Klein, R. & Johnson, J. (2010, October). On the use of locale in understanding the mathematics achievement gap. In P. Brosnan (Ed.), *Proceedings of the 32nd Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Columbus, Ohio: PMENA;

Pittman, R.B. & Haughwout, P. (1987). Influence of high school size on dropout rate. *Educational Evaluation and Policy Analysis*, 9(4), 337-343;

Raywid, M.A. (1999). *Current literature on small schools*. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED425049).

57 See, e.g.,

(1) Bickel, R., & Howley, C. (2000). The influence of scale on school performance: A multilevel extension of the Matthew principle. *Education Policy Analysis Archives*, 8(22). Retrieved January 28, 2011, from <http://epaa.asu.edu/epaa/v8n22/>;

(2) Friedkin, N., & Necochea, J. (1988). School system size and performance: A contingency perspective. *Educational Evaluation and Policy Analysis*, 10(3), 237-249.;

(3) Howley, C. (1996). Compounding disadvantage: The effects of school and district size on student achievement in West Virginia. *Journal of Research in Rural Education*, 12(1), 25-32.

58 See, e.g.,

(1) Coleman, J. (1988). Social capital in the development of human capital: The ambiguous position of private schools;

(2) Putnam, R. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.

59 For the classic account of such damage in several small districts, see

Peshkin, A. (1982). *The imperfect union*. Chicago: University of Chicago Press. For the achievement costs, see above.

60 Kuziemko, I. (2006). Using shocks to school enrollment to estimate the effect of school size on student achievement. *Economics of Education Review*, 25(1), 63-75.

Kuziemko calculates the cost-benefit figures for decreasing the size of elementary schools by a full 50%. On the basis of her model (pp. 72-73), which includes the cost of constructing and financing many thousands of new schools, the estimated *net per-pupil return* to this investment would be about \$3,300.

61 For an empirical study of these phenomena, see

Lyson, T. (2002). What does a school mean to a community? Assessing the social and economic benefits of schools to rural villages in New York. *Journal of Research in Rural Education*, 17(3), 131-137;

for a fictional rendering, see

Berry, W. (2001). *Jayber Crow*. Washington, DC: Counterpoint.

The classic study, again, is

Peshkin, A. (1982). *The imperfect union*. Chicago: University of Chicago Press. .

62 Some policymakers and educators argue that the well-being of local communities. should not concern public schooling; see, for example, the perspective presented by the superintendent in DeYoung, A.J. (1995). *The life and death of a rural American high school: Farewell Little Kanawha*. New York: Garland.

63 The conclusions of the best and most current review—Andrews, M. Duncombe, W. & Yinger, J. (2002)—directly warrant this inference: such systems are far beyond the sizes at which efficiency is maximized. Diseconomies of large systems include increased expenditures for transportation (greatest in rural areas), for additional levels of central office management, specialized positions such as guidance and counseling, and security. In smaller systems, according to one hypothesis, the typically unacknowledged and un-costed social capital of parent and community involvement and support provides the related goods and services in small systems. Coulson, in a Michigan study, estimated that the projected “savings” from deconsolidation of very large districts in that state would exceed by 12 times the projected “savings” from consolidating small districts; see Coulson, A. (2007). *School district consolidation, size, and spending: An evaluation*. Midland, MI: Mackinac Center for Public Policy. Retrieved January 28, 2011, from <http://www.mackinac.org/archives/2007/s2007-06.pdf>.

64 Deconsolidation has rarely if ever been attempted, even in rural districts, and though urban decentralization schemes of one sort and another have been adopted, they cannot address issues related to diseconomies of scale simply because they do not alter district operational scale. Decentralization is perhaps the district-level practice analogous to the creation of schools-within-schools in schools that are too large. Both are after-the-fact attempts to undo the disadvantages of huge scale. Neither has proven very effective. See, e.g., Lee, V., & Ready, D. (2007). *Schools within schools: Possibilities and pitfalls of high school reform*. New York: Teachers College Press.

65 Whether or not policymakers intentionally deploy district consolidation as a *shoehorn* for school consolidation (as some community activists believe), the empirical fact is that school closings regularly follow from district consolidations.

66 The classic study of what closures mean to a community is Alan Peshkin’s *Imperfect Union*, which documented a decades-long struggle for both district de-consolidation and keeping schools open. Peshkin, A. (1982). *The Imperfect Union*. Chicago: University of Chicago Press. See also DeYoung, A. (1995). *The life and death of a rural American high school: Farewell, Little Kanawha*. New York: Garland.

67 In the view of the authors of this brief, the chief utility of consolidation proposals is not improved efficiency or improved education, but improvement in public relations for the state—which is a symbolic purpose. Sticking with the symbolic rather than the literal results (which are at best dubious), if the public relations strategy produces substantial backlash, even the symbolic state purpose in floating the proposals fails. See DeYoung, A., & Howley, C. (1992). The political economy of rural school consolidation. *Peabody Journal of Education*, 67(4), 63-89.

68 State-level investigations of the benefits of consolidation in recent years have concluded the benefits were vastly exaggerated. See

(1) Coulson, A. (2007). *School district consolidation, size, and spending: An evaluation*. Midland, MI: Mackinac Center for Public Policy. Retrieved January 28, 2011, from <http://www.mackinac.org/archives/2007/s2007-06.pdf>;

(2) Louisiana Department of Education. (2003). *Small school districts and economies of scale*. Baton Rouge, LA: Author. Retrieved January 28, 2011, from <http://www.doe.state.la.us/lde/uploads/3475.pdf>;

(3) Schwinden, T., & Brannon, L. (1993). *School reorganization in Montana: A time for decision*. Helena, MT:

Montana School Boards Association. Retrieved from ERIC database. (ED444769); and (4) Spradlin, T., Carson, F., Hess, S., & Plucker, J. (2010). *Revisiting school district consolidation issues (Education Policy Brief)*. Bloomington, IN: Center for Evaluation and Education Policy, Indiana University. Retrieved January 28, 2011, from [http://www.ceep.indiana.edu/projects/PDF/PB\\_V8N3\\_Summer\\_2010\\_EPB.pdf](http://www.ceep.indiana.edu/projects/PDF/PB_V8N3_Summer_2010_EPB.pdf).

Each of these studies—in quite different states—concludes that very little would be gained by closing remaining small schools and districts, many of which exist in sparsely populated areas. The authors of the Louisiana study offer a particularly harsh assessment of early research on consolidation, which they call “biased” because, they claim, so many of the studies start by intending to prove the benefits of consolidation and larger size. Spradlin and colleagues (p. 4) provide a list of 16 recent state-level consolidation proposals across the nation.

69 Though many states likely harbor a few cases where advantages might be predicted for consolidation, each state likely offers more promising opportunities to secure efficiency and educational benefits from deconsolidation.

70 In Arkansas, for instance, *school* consolidation started immediately following implementation of the state law mandating *district* consolidations (immediately, that is, after the conclusion of a one-year moratorium on school closings). Johnson showed that (1) nearly all closed schools were ones in districts that went out of existence (and so lost their school boards) and (2) both district annexations and school closures were disproportionately forced on low-wealth and African-American communities. See Johnson, J. (2006). *District reorganization leads to school closures in Arkansas, especially in high poverty and African-American Communities*. Arlington, VA: The Rural School and Community Trust. Retrieved January 28, 2011, from <http://www.ruraledu.org/articles.php?id=2029>; Jimerson, L. (2005). *The impact of Arkansas Act 60 consolidation on African-American school leadership and the racial composition of school districts*. Arlington, VA: The Rural School and Community Trust.

71 Such considerations make the dissolution of gargantuan districts in the name of improved efficiency problematic indeed precisely because these huge urban districts, on average, enroll students from highly segregated and impoverished neighborhoods. The proportion of black and Hispanic students in the 100 largest school districts nationally is 63%, and these districts (many of the suburban) also exhibit higher subsidized meal rates than other districts; see

U.S. Department of Education. (2010). *Characteristics of the 100 largest public elementary and secondary school districts in the United States: 2008-2009*. Washington, DC: Author. Retrieved January 28, 2011, from <http://nces.ed.gov/pubs2011/2011301.pdf>.

72 The best summary of this early research is Stemnock, S. (1974). *Summary of research on size of schools and school districts*. Arlington, VA: Educational Research Service.

73 Kuziemko, I. (2006). Using shocks to school enrollment to estimate the effect of school size on student achievement. *Economics of Education Review*, 25(1), 63-75.

74 Berry, C. (2004). School inflation. *Education Next*, 4(4), 56-62.

75 Andrews, M., Duncombe, W., & Yinger, J. (2002). Revisiting economies of size in American Education: Are we any closer to a consensus? *Economics of Education Review*, 3(21), 245-262.

Duncombe, W. & Yinger, J. (2005, January). *Does school district consolidation cut costs?* Syracuse, NY: Center for Policy Research, Maxwell School of Citizenship and Public Affairs. Retrieved January 28, 2011, from [http://www.njleg.state.nj.us/propertytaxsession/opi/does\\_school.pdf](http://www.njleg.state.nj.us/propertytaxsession/opi/does_school.pdf).

Berry, C. (2004). School inflation. *Education Next*, 4(4), 56-62. For the academic version of this study, see: Berry, C. & West, M. (2007). *Growing pains: The school consolidation movement and student outcomes (Harris School Working Paper Series 07.03)*. Chicago: Harris School, University of Chicago.

Friedkin, N., & Necochea, J. (1988). School system size and performance: A contingency perspective. *Educational*

*Evaluation and Policy Analysis*, 10(3), 237-249.

Howley, C. (2002) Small schools. In A. Molnar (Ed.) *School reform proposals: The research evidence*. Boulder, CO: National Education Policy Center. Retrieved December 30, 2010, from

<http://nepc.colorado.edu/publication/school-reform-proposals-the-research-evidence>.

Kuziemko, I. (2006). Using shocks to school enrollment to estimate the effect of school size on student achievement. *Economics of Education Review*, 25(1), 63-75.

76 See (1) Andrews, M. Duncombe, W., & Yinger, J. (2002). Revisiting economies of size in American Education: Are we any closer to a consensus? *Economics of Education Review*, 3(21), 245-262;

(2) Duncombe, W. & Yinger, J. (2005, January). *Does school district consolidation cut costs?* Syracuse, NY: Center for Policy Research, Maxwell School of Citizenship and Public Affairs. Retrieved January 28, 2011, from [http://www.njleg.state.nj.us/propertytaxsession/opi/does\\_school.pdf](http://www.njleg.state.nj.us/propertytaxsession/opi/does_school.pdf);

and (3) Duncombe, W. & Yinger, J. (2010). School district consolidation: The benefits and costs. *The School Administrator*, 67(5), 10-17.

77 Again, according to Duncombe and Yinger (2010, p. 13), “Even though consolidation-induced cost savings may be large for an individual district, they are inevitably small for the state as a whole because only the smallest districts in the state are involved.” The proportionately “large” savings referred to here thus concern the smallest operating budgets in a state system. In absolute terms, as Duncombe and Yinger write, the savings are very small. Again, the traction from deconsolidation—where very large budgets are concerned—seems more substantial.

Duncombe, W. & Yinger, J. (2010). School district consolidation: The benefits and costs. *The School Administrator*, 67(5), 10-17.

78 Adams, J.E., & Foster, E.M. (2002). District size and state educational costs in Kentucky: Should consolidation follow school finance reform. *Journal of Education Finance*, 27, 833-855.