

School District Consolidation in Ohio: What Makes Sense?

In the summer of 2011, Governor John Kasich announced his intent to pursue school district consolidation, a decision based partly on the recommendations of a 2010 white paper (Bradley, Brachman, & Katz, 2010) advocating specific economic reforms in Ohio, including the elimination of 200 districts. This policy brief describes the principle of “consolidation,” interprets it for an Ohio audience concerned with the influence of school district size on the cost and outcomes of schooling, and offers research-based recommendations to community members and policymakers alike.

The Practice and Theory of Consolidation

Consolidation is a commercial and industrial marvel of the late 19th and early 20th centuries. The underlying principle is economies of scale. If organized well, a large industrial enterprise can radically lower unit costs of production of cars or computers, for instance, and offer consumers an excellent product at a very low price. Achieving economies of scale allowed Cornelius Vanderbilt to provide efficient and affordable rail transportation, and it permitted Henry Ford’s operation to cover America’s roads with Model Ts within a decade of 1915 (Brinkley, 2004; Stiles, 2009). Schooling followed suit, consolidating massively during the 20th century, to such an extent that more than 95% of school districts have disappeared since the days of the Model T (Snyder, 1993).

Consolidation made schooling more accessible, but not less expensive. Indeed, it has become much, much more expensive since the early 20th century when consolidation became prevalent (Hanushek & Rivkin, 1997). This trend is strange: consolidation, after all, is supposed to drive costs for consumers down, not up.

Until 1970 or so, the value of educational consolidation was judged not on the basis of cheaper products, but on the basis of “better” inputs. Not surprisingly, these “better” inputs were more expensive, and everyone assumed, quite logically, that better inputs would create better outputs. We take these inputs for granted today, but they were remarkable a century ago, and many nations have not yet attained them: widespread access to high school and college; graded elementary schools in place of one-teacher schools; college-

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educated instructors; psychologists, counselors, and nurses; substantial buildings; standardized testing; and transportation to schools on buses. In short, consolidation enabled more costly inputs—even though it has often been sold to worried taxpayers, then and now, as a way to save money.

Because these inputs are now understood as necessities of schooling, the focus has since shifted to outputs—that is, to student performance, especially as demonstrated on achievement tests. According to influential critics (e.g., Hanushek & Rivkin, 1997), the outputs of schooling have failed to keep pace with the improved and more expensive inputs, and these influential critics have therefore demanded accountability. After nearly 30 years, these demands are old news, and so are the policy frameworks intended to improve outputs. Improvement in outputs, however, has been only modest (Berliner & Biddle, 1997).

Oddly, though, consolidation is once again receiving attention from politicians and business interests in Ohio. Once again, powerful influence groups insist that consolidation will save money and improve education (e.g., Bradley et al., 2010).

In light of history, the renewed claims seem at best dubious. One has to look deeper, though: superficialities are insufficient for sensible policy or for sensible policy analysis. This brief relies on findings from substantial peer-reviewed studies to put the key insights about size-related district economics and achievement in context for Ohio community members, educators, and policymakers.

Twentieth-Century Consolidation in Ohio

The status of the consolidation effort in Ohio over the past century is well documented. In 1900, Ohio maintained 2,402 districts. Ten years later, the number had risen to 2,643. Then, by 1920, it had declined slightly to 2,576 (Belcher, 1995, p. 101).

This early decline was the beginning of an enduring trend, partly because in 1911 Frederick Taylor published *The Principles of Scientific Management*. Henry Ford had just begun to exploit these principles with the aim of building automobiles that average people might be able to buy. Economic efficiency was the objective, and larger organizational size (plus careful control of the time and motion inputs in industrial production) dramatically lowered the cost per unit of output. It worked most famously and radically at Ford. Everyone was impressed, and rightly so.

Educational leaders immediately took up the phrase “scientific management” (e.g., Rice, 1913). Among them, Cubberley (1914) pushed hardest for consolidation, arguing that the efficiencies being secured in industrial settings should be adopted as a way to improve schools. Of one Ohio consolidation, he wrote, “The total cost was but . . . \$245 more than the nine little inefficient schools had formerly cost” (Cubberley, 1914, p. 233). The extra cost is modest even in today’s dollars (about \$5,600)—but although bigger might have been better in terms of inputs, education leaders did not, even then, present consolidation to the public as cheaper.

By 1935, the number of districts in Ohio had dropped to 1,893 (Belcher, 1995) and by 1950 to 1,462 (DeGood, 1968), a proportional decline of 45% over 40 years. But the rate of consolidation was actually accelerating, so that by 1966, only 712 districts remained (DeGood, 1968). Since the late 1960s, district consolidation has slowed, and today Ohio maintains 614 districts (Ohio Department of Education, 2011), a decline of 14% over 45 years.

If consolidation is still desirable, then the state has, it seems, missed an opportunity. But on the basis of the national track record of costs and benefits, it is difficult to see exactly what that opportunity might be. To evaluate the extent to which consolidation might be seen as an opportunity requires a turn to published studies about district consolidation—its likely costs and benefits as assessed in research.

Research on District Consolidation

Throughout most of the 20th century, educators believed, like Cubberley (1914), that securing better inputs would improve outputs. For a long time they assumed that better inputs would necessarily produce more and better learning in students. The truth of this point remained unclear until recently.

A new study from the Hoover Institute (Berry, 2004), however, casts some doubt on this long-standing assumption. Analyzing information on white males who were students between 1920 and 1949, the researchers found that states that had retained smaller schools, a con-

sequence of retaining smaller districts, produced adults who were more economically successful (with controls for differences in race and social class). In other words, states that were aggressive in consolidating schools tended to impair the economic prospects of their residents. Unlike studies of the achievement consequences of consolidation, which typically show its depressing effects, this one showed a direct and deleterious economic consequence. It represents, in dollars, a hidden cost of consolidation.

But what about costs incurred by school districts themselves? Are larger districts cheaper (per student, not per unit of achievement output) to operate? What are the odds, in the modern world, that district consolidation will help close state budget gaps in a substantial way? Despite 100 years of massive consolidation, very few studies have examined costs before and after consolidation. Those that have done so conclude that there is no significant difference in expenditures or costs (Cox & Cox, 2010; Groan & Murray, 2004; Streifel, Foldes, & Holman, 1991). Despite such findings, there still remains ample room for doubt; since larger districts do enable larger classes and larger schools, it seems reasonable to suppose that savings might result eventually, even if the few short-term before-and-after studies have not found this benefit.

With respect to both assumptions (improvement and savings), however, the research situation has changed dramatically in recent decades. New studies have addressed both the economic benefits (cost efficiencies) and the achievement benefits (edu-

cational improvements) of consolidation. Most of these are national findings, but Ohio is one state that famously mirrors national averages. Its arrangement of school districts, too, follows the midwestern and eastern U.S. model, which evolved with township governance. Illinois, Michigan, Ohio, Pennsylvania, New York, and New Jersey, for instance, all maintain more than 500 districts largely because of this shared history. Grassroots local governance, including the governance of school districts, is thus arguably stronger in these states than in those where county organization prevails (e.g., West Virginia, Kentucky, Tennessee, Georgia).

Recent Research About Cost Efficiencies Related to District Size

A series of very recent studies by a research team from Syracuse University's Maxwell School of Citizenship and Public Affairs (Andrews, Duncombe, & Yinger, 2002; Duncombe & Yinger, 2005; Duncombe & Yinger, 2010) demonstrated that some merger cost savings are likely when very small districts merge. Indeed, these researchers found that, as an approximation across all phases of district operation, a district enrollment level of about 3,000 students maximizes cost efficiencies.

There is a catch, however: "Although 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" (Duncombe & Yinger, 2010, p. 13). More significantly, the scale

efficiencies disappear for districts larger than 3,000 students, and at a size of about 15,000 students, school districts begin to accumulate significant diseconomies of scale. Simply put, deconsolidating very large districts would produce greater efficiencies statewide than consolidating very small districts (Spradlin, Carson, Hess, & Plucker, 2010). Notably, the Syracuse team observed that half the savings were sacrificed to transition costs and that places that lose schools to district consolidation experience a \$3,000 average decline in home values (Brasington, 2004).

Ohio maintains 11 districts enrolling at least 14,500 students (for a total of about 283,000 students) and 145 districts enrolling fewer than 1,000 students (for a total of about 110,000 students). Thus, the budgetary traction achieved by consolidating the smallest districts would apparently be much weaker than the savings realized by deconsolidating the largest ones. Yet the idea of deconsolidation has rarely been raised, perhaps because of the persistent assumption that bigger is always better. Nevertheless, these new studies provide evidence that consolidation has already proceeded beyond the point of a favorable cost-benefit ratio. In light of these findings, it is worth quoting the conclusion of a recent examination of the costs of Ohio districts in various size categories:

While an initial analysis based on the number of administrators and administrative expenditures seems to suggest that the 192 very small districts tend to show some "inef-

iciency” in their operations, expansion of the analysis to include other expenditures tends to show just the opposite. The very small districts deliver their services for fewer dollars per pupil (Asbury et al., 2011, p. 19).

Of course, all of these findings concern only the cost side, not the production side, of the issue. Benefits are usually measured in terms of outputs—most often, achievement test scores. The cost advantage of smaller units, however, also harbors a key to the value of money spent: what students learn as measured by tests. The cost-to-benefit ratio is the measure of educational value—not just cost.

Recent research about educational outcomes and district size

A long series of studies (many of them peer-reviewed) relates district and school size to differences in achievement levels. Briefly, this body of work (e.g., Friedkin & Necochea, 1988; Howley, 2002; Howley, 1999; Kuziemko, 2006; Walberg & Fowler, 1987) concerns the achievement costs associated with larger size, costs that are especially sharp for the disadvantaged students whose performance is the focus of concerns about the achievement gap. Studies conducted in a dozen states, including Ohio, demonstrate that poor kids do better, sometimes much better, in small schools and districts. One Ohio study (Howley, 1999), showed that smaller districts and schools in fact reduced the influence of poverty on achievement in the range of 20% to 70% across grade and unit (district or school) levels. This weakening of the influ-

ence of poverty is itself a substantial contribution to narrowing the achievement gap. Consolidations in small, rural, and impoverished Ohio districts would predictably widen achievement gaps. A study conducted by Princeton economist Ilyana Kuziemko (2006) computed the economic cost related to the lower achievement resulting from consolidation. She found that the dollar cost associated with lower academic achievement in consolidated districts paled in comparison to the somewhat higher per-pupil costs incurred by those districts.

These findings raise serious concerns about the cost-benefit dynamics in Ohio’s largest (mostly urban) districts, most of which also enroll large proportions of students from impoverished backgrounds. Such districts not only are likely to be cost inefficient but also are likely to be less educationally effective than would be the case were they a lot smaller. Large size imposes a predictable educational cost—achievement inefficiency—on top of fiscal inefficiency.

Thus, deconsolidating some of Ohio’s largest districts (those serving a substantial portion of disadvantaged students) would make sense, all else being equal. Pursuing such a path would require careful study, of course, and it would raise a great deal of concern. Recent research, however, indicates that undertaking such an investigation may be worthwhile.

The circumstances in Ohio’s smaller districts vary somewhat, according to the types of students they serve. Small districts in wealthy suburban settings, for example, may have

higher than average per-pupil costs, but their perceived inefficiency is actually a matter of local option and likely will remain so. In small districts in impoverished rural areas, on the other hand, fiscal inefficiency may be a matter of concern—but only if achievement levels are very low. If a largely disadvantaged population of students is achieving at average levels or higher, however, these districts should be judged as returning good value for the dollar. Such a judgment

is rarely made, however, because the standard applied—the typically fabulous performance of affluent districts—is itself unreasonable. When small, impoverished districts do rather better than average, few educators or policymakers acknowledge this educational miracle. But even when they do not, simply sending disadvantaged students to larger districts and larger schools is not likely to improve their achievement.

Another factor often ignored in the rush toward consolidation is the economic effect of school closures on local communities; newly consolidated districts nearly always close some schools on the grounds that they are too expensive. This is a particular issue in rural communities because the small school districts targeted for consolidation often are located in rural communities (see, e.g., Asbury et al., 2011). Strong rural towns, however, require the presence of a school, as Lyson (2002) discovered in his study of towns in New York State. Lyson found that towns without schools fared notably worse on social and economic measures than did towns with schools, and that in the smallest towns the presence of a school imparted an especially strong positive influence. He warned that consolidation involved lost taxes, lost businesses, and lost property values—unintended effects that could erase any “savings” generated by consolidation. Lyson’s findings accord with Brasington’s (2004) estimates of lost home value attributable to school closures and the cautions articulated by the Syracuse team (e.g., Duncombe & Yinger, 2010). Although rural communities in Ohio are struggling for survival,

Policy Recommendations

The following recommendations are those of the author alone, but they are based partly on those in Howley, Johnson, and Petrie (2011):

- Recognize the damage done to student achievement (that of impoverished students) by increasing the size of districts and schools, a result obtained in both correlational studies and examinations of pre- and postconsolidation data.
- Retain small districts currently serving at least a substantial minority of impoverished students (e.g., those receiving subsidized meals). Consolidating these districts will damage the achievement of such students.
- Retain small districts in Ohio’s rural towns. When districts merge, school closures are a predictable consequence. School closures are often the death knell of struggling rural towns (Lyson, 2002), and they impose a real cost on homeowners (Brasington, 2004).
- Make consolidation a local option. That is, do not adopt a state-wide target for consolidation or provide inducements to districts whose residents are reluctant to consolidate.
- Arrange up-or-down votes for proposed consolidations in the areas to be affected. Local voters should have the final say, not remote political leaders or bureaucrats.
- Investigate other methods to improve educational outputs and reduce costs (e.g., cooperative purchasing agreements, combined financial services, enhanced roles for Educational Service Centers). Consolidation can no longer be relied upon to produce substantial improvements. Indeed, based on contemporary research, deconsolidation seems a better option overall, but especially in very large districts serving many impoverished students and families.

many of them are still vibrant in comparison to rural towns elsewhere (e.g., in massively consolidated West Virginia). A strong grassroots sense of identity, governance, and freedom is evident in Ohio, and many observers believe it is worth preserving. It should be easier to preserve if citizens recognize that research suggests that consolidation is unlikely to produce the advertised benefits and likely to produce the unadvertised damages.

In this context, then, a statewide policy of merging small districts that serve poor students may produce small improvements in fiscal efficiency, but at clearly predictable costs to student achievement and to small town life. Moreover, as the Kuziemko (2006) and Berry and West (2004) studies demonstrate, this lower achievement level translates directly into actual reductions in future earnings.

These findings suggest that consolidation is likely to harm the education of students in impoverished communities and is unlikely to take place at all in affluent communities. To put the matter simply: Large scale handicaps the learning of Ohio students from impoverished communities, but small schools and districts improve achievement in impoverished communities and secure the well-being of rural towns.

District Size in an Era of Fiscal Retrenchment

Overall, consolidation seems an inadequate means to achieve the aims usually announced for it. Raising

educational achievement levels in a diverse population is not like creating railroad monopolies or manufacturing Model Ts. Instruction is not, in other words, a manufacturing process—and few people would even suppose that it was. Instead, it is a process of character formation conducted on intellectual, moral, and emotional terms. If manufacturing principles were applicable to education, they would also have to be applicable to other personal and social relationships—family life, civic engagement, religious worship—and they clearly are not.

One might wonder why, then, influential state figures are proposing school district consolidation once again. One theory is that in times of crisis, as in the present economic recession, state leaders feel the need to demonstrate that things have not gotten out of hand—that the government is in control and that its leadership is strong. A series of decisive responses from government leaders can help reassert public perceptions of governmental legitimacy. But although commerce and industry have always strongly influenced thinking about educational and governmental management, the role of these sectors in bringing about the current economic disaster renders the politicians' choice of guiding principle for educational reform all the more curious and calls into question the motives underlying the proposed changes. Instead of their stated intentions, they accomplish something else, something arguably even more important in political circles: school consolidation serves as an indication that government is doing something.

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