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Research Brief

Closing Small Rural Schools

Question: What are the benefits and costs of closing a small rural school?

In a Nutshell

As school districts face declining enrollment and stable or reduced funding they look for ways to contain costs and continue to provide a quality educational experience. In many states "a new wave of consolidation…may be at hand" (Kysilko, 2003).

The research cites advantages for both consolidation and for maintaining small schools. The challenge of consolidation is how to reap the system wide benefits—cost savings, improved levels of efficiency, and more specialized use of human resources—while retaining the advantages—improved academic achievement, personalization of the learning environment, and a sense of community—offered by smaller schools and/or districts

Summary of Findings:

The decision to close schools or consolidate districts is perhaps the most troubling and painful challenge a community can face. "While most of the nation's consolidation activities took place in the early and middle part of the 20th century," Kysilko of the National Association of State Boards of Education warned (2003), "a new wave of consolidation…may be at hand" (p. 23). Faced with declining enrollments and budget constraints, rural school districts are once again facing the possibility of a new round of consolidation.

Given the renewed interest in consolidation, this brief examines the arguments made by the supporters of consolidation, as well as its detractors. This analysis will consider the financial implications, but also the implications of consolidation on student achievement, school climate, curriculum, participation in extracurricular activities, and on the community itself.

School Costs

Supporters of school consolidation have argued that small schools are inefficient. The logic behind this assertion is grounded in an industrial era concept where one reduces costs and increases productivity by increasing the size of an operation (Duyar & Collins, 2008; Self, 2001a). Dodson and Garett (2002) in their series on school consolidation asserted that, "A consolidated school district can produce an equivalent level of output at a lower cost per student by avoiding redundant expenditures" (p. 2). They claimed that consolidation reduces the need for teaching and administrative personnel. In addition, they argue that economy of scale exists for supply costs, and operational expenses and as well as the use of facilities (Self, 2001a, 2001b; Benton, 1992). They emphasize that lowering education budgets frees funds that could be used to improve the quality of education.

Evidence suggests that consolidation of school districts can reduce costs, especially in small districts (1,000 students or less) (Duncombe, 2007). These studies emphasize that costs per pupil decline up to enrollment levels between 2000-4000 students for operating costs and 5,000-7,000 for total costs (Duncombe). In a review of studies related to economies of scale Andrews, Duncombe, & Yinger (2002) reported that evidence suggested moderately sized elementary schools (300 to 500 students) and high schools (900 to 1200 students) may optimally balance economies of size with the negative effects of large schools cited by some of the studies. Supporters of consolidation admit that cost savings can be partially offset by increases in capital costs if consolidated districts build new facilities to accommodate larger enrollments. Even in this situation, however, proponents insist long term per pupil expenditures will be reduced. They do caution that consolidation needs to be evaluated on a case-by-case basis as the studies reviewed represented evaluations of specific districts and/or states and the overall range of savings varied.

Opponents of consolidation argue that economies of scale may not accurately reflect school expenditures. While consolidation my offer some cost savings, it may also generate additional costs (Dodson & Garrett, 2002). A review of literature by Bard, Gardner, & Wieland (2006) claimed that "there has not been evidence that consolidation of small districts into larger districts has necessarily reduced fiscal expenditures per pupil" (p. 43). Studies that suggest savings, they argued, do not reflect additional taxes levied to support mergers and build larger facilities. Purcell & Shackelford (2005) cited evidence that there is a higher percentage spent on maintenance and utilities as a result of consolidation. Most importantly, though, detractors of consolidation claim that studies of costs do not take into account higher transportation costs and travel and opportunity costs of students and parents (Lambert, 2009; Duyar & Collins, 2008; Duncombe, 2007; Andrews, Duncombe, & Yinger, 2002). Even proponents of consolidation concede that geographical constraints may make consolidation of rural school districts impractical due to transportation costs (Dodson III & Garrett, 2002).

Curriculum and Student Achievement

Whether consolidation always delivers what it promises in terms of cost savings, policymakers who support consolidation claim, "that larger schools are superior due to technology, resources, and curriculums that provide a deeper and broader education" (Bailey, 2000, p. 4). Self (2001a) found that consolidated schools can offer expanded curriculum and provide more opportunities for students, especially in specialized areas such as math and science. These increases in academic options, it is claimed, improve the educational performance of teachers and students concomitantly raising test scores. Self (2001a) stressed in his study of consolidation in rural Ohio that students could have more educational opportunities while eliminating the redundancy of advanced and specialized courses and teachers in multiple districts, thus saving tax dollars. He continued that this allows districts to hire more highly qualified teachers as districts are able to offer increased salaries and benefits and more opportunities for professional development.

Critics argue that small schools are able to provide high-quality instruction by concentrating on the core curriculum and responding to individual student interests and needs through the application of technology (Lambert, 2009). Hobbs (2003) argued that the application of

technology in creating distance-learning networks was less expensive than building and operating larger schools. She claimed that technology could provide high-quality instruction and engage students with technology while preserving the advantages of small schools. In addition, the smaller size makes it easier to organize hands-on learning opportunities that engage students in more rigorous and meaningful academic.

While Gardner, Ritblatt, & Beatty (2000) reported that Scholastic Aptitude Test (SAT) scores were higher in large high schools; the majority of data on student achievement suggests that students in small schools perform as well or better than students in large schools. In a review of 22 major studies examining academic achievement by school size, Bailey (2000) found that none of the studies reviewed reported superior performance for large schools; 14 studies found equivalent achievement and 8 found smaller schools superior. Bard, Gardner, & Wieland (2006) found similar results in their review. "Research consistently demonstrated," wrote Gleb (2002), "that students in small schools, typically less than 300 for elementary schools and 600 to 700 for a high school, have …better grades and…higher test scores" (p. 1). Small schools also have much lower dropout rates, more graduates who go to college, and those who attend college do as well or better in college than those from larger schools. These results, according to Fine & Powell (2001), are especially true for low-income families and for minority students. "Because small schools graduate a higher percentage of students," Lambert (2009) declared, "their cost per graduate is comparable to larger schools even if cost per student enrollment is not" (p. 1).

School Climate

Those who oppose consolidation suggest that the improvement in student achievement can be attributed to a superior learning environment. Large schools, they claim, create an impersonal school climate causing students to feel anonymous and alienated resulting in lower parental involvement and student participation (Duyar & Collins, 2008; Lewis, 2004 J27). Consolidation policies, asserted Bailey (2000), create "large, economically 'efficient' schools full of strangers that are less schools than educational factories" (p. 4). Smaller schools, it is countered, are more capable of providing closer relationships between faculty, administration, students, and parents (Duyar & Collins, 2008). Research would tend to confirm these assertions as smaller schools have higher attendance rates, lower dropout rates, greater student and teacher satisfaction, fewer discipline problems, and less violent behaviors (Vander Ark, 2002; Gelb, 2002; Gardner, Ritblatt & Beatty, 2000; Raywid, 1999).

Extracurricular Activities

Just as it is claimed that consolidated schools can offer broader and more specialized curricular offerings it is also emphasized that larger schools present more extracurricular opportunities. Prior research has supported this claim with several studies showing significantly more extracurricular activities in schools that have undergone consolidation (Duyar & Collins 2008; Self, 2001a, 2001b; Coladarci & Cobb, 1996; Fanning, 1995). However, many of these same studies found that, while a wider range and greater number of activities are found in consolidated schools, these schools experience lower levels of participation. Bailey (2000) suggested "larger schools are polarizing; larger schools generally have relatively small groups of very active students at one end and a larger group of nonparticipating students at the other, and these groups are estranged" (p. 2). As schools

become larger, many students are not able to participate because they are not "good enough," whether in athletics, band, cheerleading, or acting. "Larger schools are good for extraordinarily talented children—the best athletes, artists, or academics," stated Bailey (2000). "Yet those students make up only 10-20 percent of a student body…. the rest risk being lost or left out" (p. 4). Small schools create more opportunities for participation because of the need for a larger percentage of students to fill each activity. Not only do more students participate, but they also engage in more kinds of activities (Lambert, 2009; Black, 2002).

Community Effects

Typically, the debate about school consolidation focuses on economic or educational issues; however, researchers have suggested that the relationship of the school to the community should not be overlooked (Duyar & Collins, 2008; Bard, Gardner, & Wieland, 2006). Closing schools through consolidation can be a severe blow to communities as schools are often a major part of the cultural fabric of a community (Kysilko, 2003). As Duyar and Collins (2008) pointed out, "many communities rely heavily upon schools for facilities, entertainment, and information networking—schools are the lifeblood of the community" (p. 1). Lambert (2009) reported one study by Lyson (2001) "that rural communities with schools had higher rates of growth, higher housing values, a lower percentage of households receiving public assistance, more professional workers and entrepreneurs, and higher per capita self-employment income than rural communities that had lost their schools" (p. 1) Terms like "loss of community identity" or "loss of community attachment" are often used to describe the impact of closing a school (Bard, Gardner, & Wieland, 2006). In addition to the social costs, schools are often the major "industry" in a rural community and contribute to the economic stability of a community (Purcell & Shackelford, 2005).

Summary

This brief cannot provide a definitive answer to the questions surrounding school consolidation. The challenge of consolidation is how to reap the system wide benefits of consolidation—cost savings, improved levels of efficiency, and more specialized use of human resources—while retaining the advantages—improved academic achievement, personalization of the learning environment, and a sense of community—offered by smaller schools and/or districts (Dunn, 2001).

Electronic Resources:

The Rural School and Community Trust http://www.ruraledu.org/index.php

Center on Rural Education and Communities http://www.ed.psu.edu/educ/crec

National Rural Education Association http://www.nrea.net/

National Rural Education Advocacy Coalition http://www.nreac.org/

University of Illinois: School Consolidation
http://www.library.illinois.edu/schoolreform/sconsol.htm

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