Neither "Creatures of the State" nor "Accidents of Geography": The Creation of American Public School Districts in the Twentieth Century

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American public school districts numbered more than 200,000 in 1910. By 1970 there were fewer than 20,000. The decline was almost entirely accounted for by the consolidation of one-room, rural schools into larger school districts. Education leaders had long urged districts to consolidate, but local residents voted to do so, I argue, only after high school education became widespread. Graduates of one-room schools found it difficult to get into high school. Rural districts that were not "making the grade" were unattractive to home and farm buyers, and the threat of reduced property values induced voters to agree to consolidate.

INTRODUCTION

This Article is derived from Chapter 3 of my book, *Making the Grade: The Economic Evolution of American School Districts.*¹ The book is an attempt to understand the origins and development of that most distinctive unit of American local government—the public school district. My overall theme is that school districts were selforganizing institutions. Their chief external discipline was not the state school bureaucracy. The development of school districts was governed by the geographic mobility of the population and the rewards and penalties doled out by the market for land.

The first substantive chapter in the book (Chapter 2) describes the development of one-room school districts, which numbered more than 200,000 in 1910.² One-room schools accounted for almost all public education in the nineteenth century. It is not widely appreciated that early one-room schools had no age-specific grades. Students were instead arranged by prior knowledge into recitation groups, whose members studied assigned material until it was their turn to "recite" what they had learned for the teacher.³ I argue that these institutions and their ungraded pedagogy were efficient adaptations to the rural

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¹ William A. Fischel, Making the Grade: The Economic Evolution of American School Districts (Chicago 2009).

² Id at 13-66, 68-69.

³ See Barbara Finkelstein, Governing the Young: Teacher Behavior in Popular Primary Schools in Nineteenth-Century United States 42 (Falmer 1989).

circumstances in which the vast majority of Americans dwelled in the nineteenth century.⁴ An ungraded system allowed children to advance their education despite attendance lapses caused by the exigencies of farm life and frequent moves by their families.

Almost all accounts of the transition from ungraded to age-graded schools imply that the local districts had to be dragged into consolidation against the will of the locals.⁵ I argue the contrary. Consolidation was locally desired by a majority of voters because it plugged them into what was developing as a national system of age-graded schools that led to high school. In one sense, what I am arguing for is a "demand side" view of the transition. The state school establishment such as it was—had always been an eager "supplier" of centralized institutions, particularly age-graded schooling and the bureaucratic infrastructure that this system entailed. But age grading and its accoutrements could not be put in place until there was a widespread shift in the demand for access to high school, which was facilitated by age grading. District consolidation required in most cases the consent of the local voters, and they had to be persuaded that consolidated, age-graded schools were desirable.

I. SCHOOL DISTRICT CONSOLIDATION

Figure 1 illustrates the dramatic decline in the number of oneroom schools since 1916 and of the number of school districts since 1938. One-room schools went from more than 200,000 early in the century to near zero in 1972. The decline in the total number of school *districts* appears to have been largely accounted for by the decline of rural, one-room schools. Most one-room schools were the only school in the district,⁶ so consolidation of several one-room schools almost always meant consolidation of several districts. The downward trajectories of one-room schools and districts in Figure 1 are almost perfectly parallel from 1938, when data on district numbers were first kept

⁴ See Fischel, *Making the Grade* at 65 (cited in note 1).

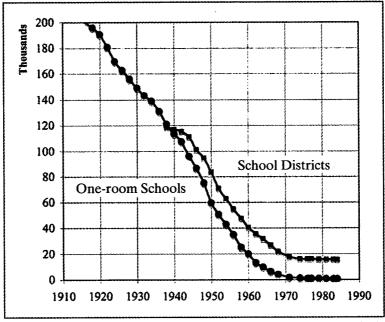
⁵ See, for example, Lawrence W. Kenny and Amy B. Schmidt, *The Decline in the Number* of School Districts in the U.S.: 1950–1980, 79 Pub Choice 1, 15–16 (1994) (arguing that "state government" was largely responsible for the decrease in the number of the school districts and that the presence of farming families was a factor that tended to lead to less consolidation); David Tyack, Thomas James, and Aaron Benavot, *Law and the Shaping of Public Education,* 1785–1954 120–21 (Wisconsin 1987) (arguing that the consolidation of rural schools was the result of a postwar wave of litigation made possible by "enabling legislation and mandatory laws on consolidation" and characterizing locals as opposed to such consolidation).

⁶ See Wayne E. Fuller, *The Old Country School: The Story of Rural Education in the Middle West* 43–44 (Chicago 1982).

continuously, until 1972. Moreover, after 1972, when there were virtually no one-room schools left, the decline in the number of school districts slowed to a trickle. No other unit of American local government followed this trend.⁷ The count of counties remained constant over this period, and general-purpose municipalities increased in numbers—mostly by proliferation in the suburbs[®]—but one-room school districts virtually disappeared.

FIGURE 1

One-Room Schools, 1916–1984, and School Districts, 1938–1984



Source: Adapted from Nora Elizabeth Gordon, Essays in the Economics of Education *132 (unpublished PhD dissertation, Harvard University, 2002).

Data from a special study by the United States Bureau of the Census in 1960—one of the earliest that listed the number of school districts by county—confirm that district consolidations in the last forty years of the twentieth century continued to occur almost entirely

⁷ Id.

⁸ See Jon C. Teaford, City and Suburb: The Political Fragmentation of Metropolitan America, 1850–1970 76–104 (Johns Hopkins 1979).

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in rural areas.⁹ The 1960 study listed the number of districts for each county in every state, and one can compare the statewide declines through the year 2000 to those of urban counties in the state. Between 1960 and 2000, the number of districts in New York State declined by 582 (43 percent of its 1960 total), but the suburban counties adjacent to New York City—Westchester and Nassau—had almost exactly the same number in both years.¹⁰ Between 1960 and 2000, the number of districts in Illinois declined by 657 (62 percent of its 1960 total), but during this period the number of school districts in counties closest to Chicago—Cook, Dupage, Kane, and Will—was virtually unchanged.¹¹

Factors that accounted for the decline in one-room schools included the steady trend in urbanization and the concomitant decline in farming.¹² The farm population declined from 39 percent of total United States population in 1900 to 15 percent in 1950, and it now hovers around 1 percent.¹³ Not only did the number of farms decline, but the average size of farms rose steadily after 1870.¹⁴ Rural birth rates, like those in cities, declined throughout the nineteenth century and most of the twentieth, although rural rates have always been above urban rates.¹⁵ These trends were in turn the result of mechanization of farm work, which made large farms viable and reduced the demand for child labor.¹⁶ For all of these reasons, the number of rural

⁹ See US Census Bureau, *State and Local Government Special Studies: Public School Systems in 1960* 3–5 (showing that the 21 percent decrease in the number of districts since 1957 was due primarily to the closing of elementary schools with small enrollment and focused in five heavily rural states—Iowa, Michigan, Missouri, Nebraska, and Wisconsin).

¹⁰ Compare id at 24 (noting that, in 1960, New York had 1,361 school districts, with 49 in Westchester County and 58 in Nassau County) with National Center for Education Statistics, *Build a Table*, online at https://www.nces.ed.gov/ccd/bat (visited Oct 22, 2009) (allowing the user to build a table showing that in 2000 New York had 779 school districts, with 49 in Westchester County and 58 in Nassau County).

¹¹ Compare US Census Bureau, *Special Studies* at 18 (cited in note 9) (noting that Illinois had 1,710 school districts in 1960, with 157 in Cook County, 56 in Dupage County, 9 in Kane County, and 40 in Will County) with National Center for Education Statistics, *Build a Table*, (cited in note 10) (allowing the user to build a table showing that, in 2000, Illinois had 1,055 school districts, with 160 in Cook County, 50 in Dupage County, 13 in Kane County, and 34 in Will County).

¹² See Kenny and Schmidt, 79 Pub Choice at 15 (cited in note 5).

¹³ Lorraine Garkovich, *Population and Community in Rural America* 98 (Greenwood 1989) (measuring farm population as a proportion of total US population: 39.3 percent in 1900, 15.3 percent in 1950, and 2.7 percent by 1980); Environmental Protection Agency, *Ag 101 Demographics*, online at http://epa.gov/oecaagct/ag101/demographics.html (visited Oct 21, 2009) (noting that less than 1 percent of Americans claim farming as an occupation).

¹⁴ See Garkovich, *Population and Community* at 48 (cited in note 13).

¹⁵ Id at 191, 193.

¹⁶ Deborah K. Fitzgerald, Every Farm a Factory: The Industrial Ideal in American Agriculture 102, 186 (Yale 2003).

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children per square mile declined, so that the number of children within walking distance of a given school shrank.

As school enrollments declined, a one-room school could not easily cut costs. There was only one teacher to start with, so the only costsaving possibility was to consolidate with another school nearby. This sometimes did happen, but it meant even longer walks for rural children, and a long walk was the most important deterrent to attendance and regular progression through school.¹⁷ Further consolidation in rural areas could only be accomplished with the aid of nonhuman transport. By the late nineteenth century, road quality was getting better. Improvements were often specifically motivated by the need to get children to consolidated schools.¹⁸

The negatives of district consolidation were higher transport costs (including loss of children's availability for farm work) and less community control.¹⁹ Advocates of consolidation pointed to the possibility that taxes would be lower.²⁰ But tax savings were seldom realized by consolidating schools and restoring the larger student-teacher ratios in an age-graded setting.²¹ There was an undeniable economy in class-room size in consolidated schools, but this was offset by a more profound change in education. The one-room school's continuously variable school year, the curriculum tailored to local preferences, and the locally good-enough teaching staff yielded to the insistent demands for uniformity. This resulted in the age-graded system that we now take for granted as necessary to a "real school."²⁰ The modern system swamped the local economies of the age-graded classroom by dramat-

 20 See id at 232 (noting consolidation advocates' claim that after one Ohio school consolidation, the cost of tuition per pupil had decreased from \$16.00 to \$10.48).

²¹ See Larry Cuban, How Teachers Taught: Constancy and Change in American Classrooms 1880–1990 24–25 (Teachers College 1993).

¹⁷ See George H. Reavis, *Factors Controlling Attendance in Rural Schools* 12–13 (Teachers College 1920) (reporting that, in 1920, children living more than two miles from school attended only half as many days as children living within a quarter of a mile of school).

¹⁸ See, for example, David R. Reynolds, *There Goes the Neighborhood: Rural School Consolidation at the Grass Roots in Early Twentieth-Century Iowa* 61 (Iowa 1999) (noting that Iowa school districts sometimes maintained roads to facilitate access to schools); Clayton E. Ellsworth, *The Coming of Rural Consolidated Schools to the Ohio Valley, 1892–1912, 30 Ag Hist 119, 122 (1956)* (insisting that improved roads had an "inseparable connection" with school consolidation).

¹⁹ See Fuller, *The Old Country School* 234-37 (cited in note 6) (documenting the objections of farmers to consolidation, including their loss of control over curriculum and cost, the length of school terms, the perception that city children were not made of the same moral fabric as "good country boys," and the greater distance their children would be forced to travel).

²² See David B. Tyack and Larry Cuban, *Tinkering toward Utopia: A Century of Public School Reform* 7–9 (Harvard 1995) (defining a "real school" as one that follows the "grammar of schooling," which includes the age grading of students, the division of curriculum into separate subjects, and the self-contained classroom with a single teacher).

ically increasing the *amount* of schooling that students were required to have.

Age grading required regular attendance, and its logical culmination was high school. Ungraded one-room schools were cheaper not just because the teacher and building were less expensive, but because students could take as much or as little as they wanted of what the school had to offer.²³ A twelve-year-old who went to work on the farm for three months could come back to an ungraded, one-room school and master his next reader. In the graded school system, he was a dropout and would have to repeat his most recent grade from the beginning.

The age-graded school was, of course, the product of increased demand for education by both rural and urban voters.²⁴ Voters surely knew that the consolidated schools would mean more expenditures, even if the labor cost per unit of education (teacher wage per student hour) was lower. The tide of age-graded schooling swept away local resistance to consolidation by making one-room schools obsolete. Just as the word-processing computer has vacuumed up even the most dedicated users of manual typewriters, age-graded schooling created an irresistible impetus for greater school expenditures.

II. AGE-GRADED SCHOOLS

Age grading is an idea whose origins were once hotly debated.²⁵ What is not debated about age grading is that it was first adopted in cities.²⁶ Cities had sufficient population density to enable a large number of children to be assembled in a single school building and divided by age group into classrooms of homogenous age groups.

²³ See Carl F. Kaestle, *Pillars of the Republic: Common Schools and American Society, 1780–1918* 15 (Wiley 1974) (noting that in rural schools the sessions were usually only two or three months, and older children often only attended during the winter); William J. Reese, *America's Public Schools: From the Common School to "No Child Left Behind"* 69 (Johns Hopkins 2005).

²⁴ See Claudia Goldin and Lawrence F. Katz, *The Race between Education and Technology* 195 (Harvard 2008).

²⁵ See, for example, Frederick D. McClusky, *Introduction of Grading into the Public Schools* of New England, 21 Elementary Sch J 34, 37–38 (1920) (arguing that American schools adopted the idea of age-graded schooling from the European system); Ellwood P. Cubberley, *Public Education in the United States: A Study and Interpretation of American Educational History* 226–28 (Houghton Mifflin 1914) (arguing that the emergence of age-graded schooling was largely the result of school districts constructing new buildings to accommodate growing student bodies and using the new space to divide students based on age, and began in Rhode Island in 1800).

²⁶ See William J. Reese, *The Origins of American High School* 56 (Yale 1995); David L. Angus, Jeffrey E. Mirel, and Maris A. Vinovskis, *Historical Development of Age-Stratification in Schooling*, 90 Teachers Coll Rec 211, 231–32 (1988).

While the idea of age grading took hold fairly early, the details had to be worked out over a long period of time. It was not obvious to everyone how skills and subjects should be introduced. An early division of students among classrooms was by subject matter.²⁷ Until 1855 in Boston, one room in a multiroom building would be for teaching reading, and students would be divided within the room by reading-skill groups. Once they had mastered reading, they would be sent to another classroom in which writing would be taught.²⁸ The now-prevalent idea that each early grade should impart some of every skill was not immediately obvious. The eight years of elementary school and four of high school did not become a national norm until the twentieth century.²⁹

Age grading is relevant to school district consolidation because it required coordination between classes within the same school and among other schools. All of the teachers in a multigraded school had to agree to the curriculum in each grade. The sole teacher in a one-room school could teach skills and subjects in just about any order that she pleased. In most cases, teachers just followed textbook order, but they could select which textbook subjects would be studied.³⁰ Age-graded schooling could tolerate much less variety among classrooms. Within the same school it was essential to have curricula in the upper grades follow from material taught in the immediately preceding grade.³¹

Grading in turn required parallel standardizations that had been less critical to educational success in the one-room school. Foremost was more regular attendance.³² The chief advantage of a graded classroom was that all students could be taught the same, age-appropriate material. A student who missed two weeks of school was in this setting a far greater liability to the rest of the class. The teacher would have to spend time with the truant to get him up to the level of the rest of the class, and this attention subtracted from the overall pace of the class. If

²⁷ See McClusky, Introduction of Grading at 37 (cited in note 25).

²⁸ See Garrett E. Rickard, *Establishment of Graded Schools in American Cities, Part II: The Primary School*, 48 Elementary Sch J 326, 333 (1948).

²⁹ See id at 326.

³⁰ See Cuban, *How Teachers Taught* at 31 (cited in note 21).

³¹ See William H. Wells, *The Graded School* 7–8 (Barnes & Burr 1870) (noting, in the introduction to his proposed curriculum, the necessity of a course of study in which there are "certain stand-points... at which the pupils shall be required to reach a given standard of attainment in the parallel branches" before moving on to the next grade). See also Mary J. Herrick, *The Chicago Schools: A Social and Political History* 41–43 (Sage 1971) (describing Wells's system and the logical progression of coursework through the different grades).

³² See Stephen Lassonde, *Learning to Forget: Schooling and Family Life in New Haven's* Working Class, 1870–1940 29–31 (Yale 2005).

time could not be spared, the former truant would have to limp along through material that often involved cumulative knowledge, some part of which he now lacked.

By 1900, most large urban schools had something that looked like modern age-graded systems and a curriculum that allowed students within the same district to move from one school to another and fit in with their classmates." But why would rural schools feel compelled to get with the age-graded program? When most of the American population was rural, children whose parents moved most likely went to another rural area.³⁴ Even if families did move to urban areas and sent their children to graded schools, the consequences were mitigated in the nineteenth century by the coarse fabric of most grading. Agegraded schools circa 1870 usually had wide bands of ages contained in two, three, or at most four "grades."³⁵ In this setting, the irregularities incurred by a student's attendance in an ungraded, one-room school were less detectable and easier to accommodate. But consider what happened when a majority of children in the United States attended urban, age-graded schools, and grading itself became more closely aligned with a single birth year. Now the rural-to-urban migrant had a more serious problem of adjusting to the new school, and age-graded schools found that nonstandard migrants were more disruptive.³⁶ By 1915, fully one-third of urban residents were native-born migrants from rural areas."

One-room schools could not do age-graded education very well. Teachers with students in each of eight grades simply did not have time to give a separate recitation lesson in their individual grades. A teacher with students in each cohort would have to cover on average six subjects in each grade. That would be forty-eight separate recitations per five-hour day, or six minutes per lesson.³⁸ In theory, students would be in "study hall" for seven-eighths of the school day. In reality,

³³ See Rickard, 48 Elementary Sch J at 331 (cited in note 28).

³⁴ See Joseph Ferrie, Migration to the Frontier in Mid-Nineteenth Century America: A Re-*7-8 "Safety-Valve" (Northwestern of Turner's University examination Paper, Department of Economics Working July 1997). online at http://faculty.wcas.northwestern.edu/~fe2r/papers/munich.pdf (visited Oct 18, 2009).

³⁵ See Rickard, 48 Elementary Sch J at 326 (cited in note 28).

³⁶ See Reese, *America's Public Schools* at 109 (cited in note 23) (noting the disruption caused in the graded classrooms of larger towns by "ill-prepared rural youth").

³⁷ Charles Nelson Glaab and A. Theodore Brown, *A History of Urban America* 136 (Macmillan 1967).

³⁸ See Cuban, *How Teachers Taught* at 123 (cited in note 21).

teachers usually compromised by grouping many students as they had in the ungraded schools.

The period during which ungraded schools became obsolete corresponds roughly with the trends in urbanization. Between the 1910 and 1920 censuses, the number of Americans in rural areas was surpassed by the number living in "urban places" of at least 2,500 people.³⁹ A town this size would be able to assemble enough children to make a multigraded school, especially if nearby rural children could be induced to attend it. At about the same time, one-room schools were attempting to fit themselves into the garb if not the reality of age-graded education.

The lore about resistance to rural school consolidation is full of quotes from hayseed types who disparaged the need for consolidated schools.⁴⁰ No doubt there were such types, but another force was drowning out their complaints. After 1870, the American economy began to demand a large number of workers who were numerate and literate to a degree that went beyond the typical one-room school curriculum. This demand grew rapidly after 1900.⁴¹ Those with the ability to read blueprints, write contracts, do some algebra, keep account books, and draft business letters with that new word processor, the typewriter, were widely sought and well rewarded. These skills were not typically produced by the classical academies. Public high schools of the latter quarter of the nineteenth century transformed themselves to be able to produce graduates with these skills. In doing so, they put most of the private academies out of business, often taking over their former buildings.⁴²

The role of high schools in my present inquiry is that their growing popularity put pressure on the rural, imperfectly graded, one-room schools. High schools required a standardized preparation, to which the eight grades of primary school were increasingly attuned. Voters in rural school districts could not ignore this pressure even if their own children had no interest in high school. In 1870, the small town of Franklin, Indiana, established a high school program. Upon establishing its high school, Franklin simultaneously created consolidated, age-

³⁹ Leo F. Schnore and Gene B. Petersen, *Urban and Metropolitan Development in the United States and Canada*, 316 Annals Am Acad Polit & Soc Sci 60, 61 (1958) (showing an increase in the proportion of Americans living in urban areas from 45.7 percent in 1910 to 51.2 percent in 1920).

⁴⁰ See, for example, David B. Tyack, ed, *Turning Points in American Educational History* 121 (Blaisdell 1967).

⁴¹ See Goldin and Katz, *The Race* at 1–2 (cited in note 24).

⁴² See Bruce Leslie, Where Have All the Academies Gone? 41 Hist Educ Q 262, 269 (2001).

graded schools, because "in the one room school no teacher could be expected to conduct classes for all eight grades in six subjects."⁴³ Small towns in Iowa followed a similar path after about 1870,⁴⁴ as did those in North Carolina.⁴⁵

III. PROPERTY VALUES

The economic factor that induced rural voters to support agegraded schools was the threat of declining property values. We know from many twentieth-century studies of urban areas that declining school quality is bad for home values.⁴⁶ The threat of such declines usually motivates voters to support school spending when it appears to be efficiently allocated.⁴⁷ Rural voters earlier in the century had an even greater incentive to pay attention to factors that affected property values, as it constituted both their business—mainly farming—and residential wealth.

Many historians of public schools would assign a different direction to the role of property values. They would rightly point out that one of the most frequent objections to consolidation that rural voters voiced was that removal of the old district school would reduce their property values.⁴⁸ The New Hampshire Superintendent of Public Instruction got so tired of hearing this from local school boards that he felt compelled to declare in an official report, "The public school was not established, nor is it demanded, by our state laws for the purpose of

⁴³ See Patricia Albjerg Graham, Community & Class in American Education, 1865–1918 38 (Wiley 1974).

⁴⁴ See Reynolds, *There Goes the Neighborhood* at 64 (cited in note 18).

⁴⁵ See James L. Leloudis, *Schooling the New South: Pedagogy, Self, and Society in North Carolina, 1880–1920 22–23* (North Carolina 1996) (explaining that Wilmington and Greensboro established the state's first graded schools in 1868 and 1870, respectively, and that graded schools subsequently spread across the state).

⁴⁶ See, for example, Kenneth A. Rasinski and Susan M. Rosenbaum, *Predicting Citizen Support of Tax Increases for Education: A Comparison of Two Social Psychological Perspectives*, 17 J Applied Soc Psych 990, 1002 (1987) (concluding that in a large Illinois school district concern about property values had a "consistent[] and substantial impact" on attitudes toward tax support of the school system); Jon C. Sonstelie and Paul R. Portney, *Take the Money and Run: A Theory of Voting in Local Referenda*, 8 J Urban Econ 187, 187 (1980) (noting the confirmed hypothesis that the price of houses reflects the quality and cost of public services in the community).

⁴⁷ William A. Fischel, *The Homevoter Hypothesis* 151 (Harvard 2001) (summarizing the findings of several scholars to the effect that even childless homeowners will support school spending when they believe that it will increase the value of their homes).

⁴⁸ See Ellsworth, 30 Ag Hist at 124 (cited in note 18); William A. Link, A Hard Country and a Lonely Place: Schooling, Society, and Reform in Rural Virginia, 1870–1920 146–47 (North Carolina 1986).

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enhancing the value of property in the vicinity of the schoolhouse."⁹ It is important, then, to divide the influence of schools on property values into two components: proximity effects and systemic effects.

The size of the rural school district was governed by the distance a child could reasonably be expected to walk. A homestead located close to the school had an advantage over others for prospective buyers. The children could, after doing their morning chores, walk a few hundred feet to school. This advantage over other homes and farms in the district surely became reflected in the value of the closer property. Indeed, the site for many a rural school had been donated by a local landowner, who also often got his name attached to the informal designation of the district.⁵⁰ The donor doubtlessly had both an altruistic and a selfish motive for doing so. The selfish advantage was the proximity advantage of being closer to a school. Thus, some schoolhouses surely *were* established "for the purpose of enhancing the value of property in the vicinity of the schoolhouse."⁵¹

The systemic effect of having a desirable school is different from the proximity effect. The systemic value of a better-than-average school accrues to everyone in the district. Having a school that attracted buyers to the district as a whole would be capitalized into the value of all properties in the district, not just those close to the school. This is the effect that most modern studies of school districts find to be capitalized into home values.⁵² The school district boundary, not proximity to the school itself, is the "systemic" benefit that homebuyers care most about.

It is unlikely that the systemic quality of local schools had much effect on property values in most nineteenth-century, one-room districts. Not having any school would be a drawback, of course, but once that relatively low hurdle was overcome and an ungraded one-room school was established, the quality of the school depended almost exclusively on the quality of the instructor. Since one-room school teachers seldom stayed at a single school for more than a year or two,³³

⁴⁹ New Hampshire State Board of Education, *Fifty-first Annual Report* 272 (1900).

⁵⁰ See, for example, Fuller, *The Old Country School* at 62 (cited in note 6) (detailing the founding of Uphoff School in Dunn, Wisconsin, built after Cristian Uphoff, a local farmer, agreed to give up his land for "virtually nothing").

⁵¹ New Hampshire Board of Education, Annual Report at 272 (cited in note 49).

⁵² See Wallace E. Oates, *The Effects of Property Taxes and Local Public Spending on Property Values: An Empirical Study of Tax Capitalization and the Tiebout Hypothesis*, 77 J Polit Econ 957, 968 (1969).

⁵³ See Joel Perlmann and Robert A. Margo, Women's Work? American Schoolteachers, 1650–1920 127 (Chicago 2001).

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there was almost no way for the district to establish a reputation beyond making the schoolhouse itself a little more pleasant. This may account for why almost all evaluations of one-room schools focused exclusively on the physical plant.⁴

After age-graded schools became the norm and high-school attendance became common, however, rural schools could be evaluated on a systemic level. A school district that had a consolidated and graded school that channeled its students towards high school or actually provided the high school would have a systemic advantage. Superintendents, principals, and much of the teaching staff could stay long enough to establish a reputation. The lack of a consolidated, agegraded system put local property owners at a disadvantage when it came to selling their homes and farms to people with children.

IV. STUDENT TRANSITION FROM RURAL SCHOOLS TO HIGH SCHOOL

Children from one-room districts in the twentieth century were usually entitled to attend a nearby high school, but the curriculum had to be fitted to the graded curriculum to enable its "eighth grade" graduates to go on to high school. Because this fit was almost always imperfect, urban public high schools usually required that the rural applicants take an entrance examination, whose function was usually served by an eighth-grade "graduation" exam.⁵⁵ Many contemporary recollections attest that the high school entrance exam was a daunting experience with a high failure rate, the prospect of which surely deterred many rural children from even taking the test.⁵⁶ There was no guarantee that the applicant would succeed just because he had passed through the one-room school's curricular offerings, even if the school was nominally "graded."

Avis Carlson recalled the eighth-grade graduation examination, which was necessary to enroll in high school, of her one-room school in Kansas in 1907. "The questions on that examination in that primi-

⁵⁴ See, for example, F.M. Thrun, *Rural School Organization in Michigan* 5–22 (Michigan State 1933) (detailing the author's evaluation of area schooling by surveying the location of the school, the location of the students, and a physical inventory of the school building and education equipment).

⁵⁵ See Reese, *The Origins of the American High School* at 143 (cited in note 26). Urban students in graded schools were also subject to exams, but their preparation was more systematic and geared towards the high-school curriculum, and pass rates were correspondingly high.

⁵⁶ Id at 141–43 (noting that the admissions tests were deliberately made difficult in order to give credibility to the public schools, with, for example, nearly half of pupils failing the first entrance exam for Boston's English Classical School). See also Robert L. Leight and Alice Duffy Rinehart, *Country School Memories: An Oral History of One-Room Schooling* 87–91 (Greenwood 1999).

tive, one-room school taught by a young person who never attended a high school positively daze me," she wrote." Carlson, who had herself become a distinguished educator, had saved the eighty-question test and offered some examples from it. Among them were: "give a brief account of the colleges, printing, and religion in the colonies prior to the American Revolution"; "find the interest on an eight-per-cent note for \$900 running 2 years, 2 months, 6 days"; and, this being Kansas, "write 200 words on the evil effects of alcoholic beverages!"³⁸

It was this systemic disadvantage of one-room schools—the children could not get into high school as easily—that I believe eventually offset the location and governance advantages of the one-room district and made rural voters agree to consolidate schools. I do not have access to property values that would support this claim, however. My evidence in support of the importance of "demand side" effects is to show that the contrary story about consolidation—that it was imposed from above without regard for local opinion—is not as plausible.

The dominant "supply side" story about rural school consolidation is that it was forced upon unwilling rural districts.³⁹ Farmers and other rural folk clung to their one-room schools until state legislation forced them to consolidate. It is something both the right and left seem to agree about. Edwin G. West, a conservative who was an early supporter of privatization of education, regarded New York State's attempts to establish rural central school districts in the middle of the nineteenth century as largely the product of bureaucratic machinations at the state level.⁶⁰ (As John W. Myer and his colleagues point out, however, there were almost no state-level education officials other than the state superintendent anywhere in the nation before 1900.⁶¹)

On the leftward side of the political spectrum, Michael Katz examined the disestablishment of the high school in Beverly, Massachu-

⁵⁷ Avis Carlson, Small World ... Long Gone 178 (Curley 1979).

⁵⁸ Id at 179–81.

⁵⁹ See, for example, David Strang, *The Administrative Transformation of American Education: School District Consolidation, 1938–1980, 32* Admin Sci Q 352, 352 (1987) (arguing that school district consolidation was the product of the state's "penetration and organization of the local arena"); Jonathan P. Sher and Stuart A. Rosenfeld, *Public Education in Sparsely Populated Areas of the United States* 28–29 (National Institute of Education 1977) (describing the rural school consolidation movement as led by "liberal reformers, professional education associations, state education agencies, urban-oriented business organization, and leading management experts" and resisted by rural residents).

⁶⁰ Edwin G. West, *The Political Economy of American Public School Legislation*, 10 J L & Econ 101, 104 (1967).

⁶¹ See John W. Myer, et al, Public Education as Nation-Building in America: Enrollments and Bureaucratization in the American States, 1870–1930, 85 Am J Soc 591, 596 (1979).

setts.⁶² Demographic data from an 1860 city referendum in which voters rebelled against the new high school survived to make Beverly famous among quantitative historians. Katz's revisionist education history was premised on the idea that the high school was, as he titled Part I, "reform by imposition" carried out by capitalist and upper-class interests who wanted schools to produce a skilled but docile workforce.⁶³ He saw the disestablishment vote as a brief rebellion by the common people.⁶⁴

Left and right, triumphalist or revisionist, education historians regard the creation of a standardized system of education, with its consolidated, age-graded, state-certificated schools, as having been forced upon a sullen, if not actively unwilling, electorate. To be fair, most of the aforementioned sources do mention at some point that local voters had to approve of the change. Beverly residents, for example, voted first to abolish its high school but within a few years voted to reestablish it. But even in these cases, the implication is that the voters were presented with a Hobson's choice, as the state or interest groups set the agenda for centralization of schools that local voters could hardly resist.

V. STANDARDS AND MOBILITY

My first response to the top-down claim is that the development and acceptance of a standard, bureaucratized system of age-graded schools was not itself invented by a central committee that bent its mind to the task. Most blue-ribbon committees appointed to examine education issues came up with recommendations that were ignored or twisted so badly that the resulting reforms could hardly be said to have evolved from the original recommendations. For example, a Rockefeller-sponsored committee of distinguished educators was empanelled in 1923 to study school districts in Indiana, which seems to have been a magnet for reformers. After much research and deliberation, the committee recommended that school districts be formed en-

⁶² Michael B. Katz, The Irony of Early School Reform: Education Innovation in Mid-Nineteenth Century Massachusetts 19 (Harvard 1968).

⁶³ See id at 20–21 ("The wealth of the town was clearly on the side of the high school," while "[m]ost of the men who favored abolition lived in the outlying districts, which were sparsely populated.").

⁶⁴ See id at 86. But see Maris Vinovskis, *The Origins of Public High Schools: A Reexamination of the Beverley High School Controversy* 104 (Wisconsin 1985) (finding that the opposition to high school was more from residents of remote areas of the town who did not want to pay for a school their children could not conveniently attend). My own reaction to Katz's hypothesis was to wonder what other mischief capitalists were up to when they were not setting up free high schools.

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tirely along county lines.⁶⁵ The legislature gratefully accepted the report and then simply ignored it. Indiana's township system of school districts, which actually was more centralized at the time than those of other Midwestern states,⁶⁶ is still the basis for school district organization in the state.

A more successful reform was proposed by another blue-ribbon committee, this time named for Andrew Carnegie. The committee examined the offerings of the rapidly growing number of high schools and noted the difficulty in comparing courses from one school to the other, a problem that was especially vexing for college admissions and teacher compensation. The Carnegie group in 1906 proposed that each course be taught in periods of 50 minutes per day every day for 32 weeks. Each course was thus assigned a "unit" that consisted of 180 instruction hours, an hour being in this case 50 minutes plus the 10 minutes to move from classroom to classroom. This pattern came to be known as the "Carnegie unit," and it was almost universally adopted.⁶⁷ A slight variation of it persists to the present day.

The Carnegie unit has been criticized as a kind of straitjacket for instruction. David Tyack and Larry Cuban conclude that it and other standardized practices formed an inflexible "grammar of schooling" that made progressive experiments to escape the lockstep of agegrading impossible to implement.⁴⁸ But the advantages of standardization for a system of schools are nonetheless pervasive. Having a uniform Carnegie-unit schedule allows reasonable comparisons of coverage, if not accomplishment, by students from various schools. It makes it easier to integrate new students who transfer from another school into ongoing courses, and it simplifies the preparation of teachers who change jobs. The Carnegie unit, like the Australian ballot and the Prussian age-grading system, is one of those logical standardizations that has a proper name. If it were not for this particular commission, some other commission would soon have come up with something very similar, and it would have straightened out the edges of what was already becoming standard practice.

⁶⁵ See James H. Madison, John D. Rockefeller's General Education Board and the Rural School Problem in the Midwest, 1900–1930, 24 Hist Educ Q 181, 184–85 (1984); Hal S. Barron, Mixed Harvest: The Second Great Transformation in the Rural North, 1870–1930 75 (North Carolina 1997).

⁶⁶ See Fuller, *The Old Country School* at 119 (cited in note 6).

⁶⁷ See Tyack and Cuban, *Tinkering toward Utopia* at 91 (cited in note 22) (asserting that there has been no successful attempt to dislodge the Carnegie unit, save for in peripheral programs, such as vocational training).

⁶⁸ Id at 107-08.

As these examples suggest, the standards that were introduced successfully were those that accommodated the mobility of the population. For some, it was useful to have a high-profile commission urging their adoption. This approach made for quicker and more uniform adoptions, but recommendation by a high-profile set of experts was no guarantee of success. Other standards seem to have arisen without much discussion at all. The most prominent one in my mind is the standard school calendar, which I argue was the product of age-graded education and the need to accommodate the mobility of students and teachers.[®] Regardless of their source, though, standardizations imposed a penalty on districts that did not conform to them. Prospective migrants would likely be put off by an unusual schedule or creative curriculum that did not build on their children's previous experiences

VI. STATE LEGISLATURES AND RURAL VOTING DISTRICTS

The belief that states simply forced consolidation on local districts may stem from the legal truism that school districts are "creatures of the state."ⁿ The state's authority to regulate schooling is supposedly derived from state constitutional provisions that are specific about their grant of authority. Local school boards are, in this view, little more than state functionaries, having no more authority to go their own way than the state's road builders could determine the routes of highways without the approval of legislatures and executive agencies in the state capital.

There is no doubt, of course, that local school districts are subservient to state law. This legal status means that courts will seldom intervene to protect districts if the state legislature acts to alter their powers, borders, or their very existence. The same is true for other municipal corporations, although the "creature" theory seems to be applied more stringently to school districts than to municipalities. But this merely states a necessary condition for state power to revise school district boundaries and authority. The relevant question is under what conditions the state legislature would actually do this without the consent of the local districts affected.

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⁶⁹ William A. Fischel, Will I See You in September? An Economic Explanation for the Standard School Calendar, 5 J Urban Econ 236, 248–49 (2006).

⁷⁰ See Keyes v School District No 1, Denver, Colorado, 413 US 189, 227 (1973); Mabra Glenn Abernathy and Barbara Ann Perry, Civil Liberties under the Constitution 355 (South Carolina 6th ed 1993). See also Roald F. Campbell, et al, The Organization and Control of American Schools 90 (Macmillan 6th ed 1990).

The answer is ... hardly ever. Writing of mid-nineteenth-century consolidation proposals, William Reese observed, "Legislatures, dominated by rural constituencies, pushed reform measures more slowly than educators precisely because they had to answer to the electorate."ⁿ Even historians who champion the top-down view of consolidations concede that the legislature almost always got the consent of local school-district voters or their representatives.ⁿ

Why the disconnect between state supremacy in theory and local self-determination in practice? The answer is the method by which state legislatures are selected. Every state elects both houses of its legislature (and the unicameral Nebraska legislature) by geographically contiguous electoral districts. No American state has at-large elections for legislatures, as some other nations do.

The geographic basis of state electoral districts was perturbed by the 1960s rulings by the United States Supreme Court that resulted in the "one person, one vote" rule.⁷⁹ Prior to the Court's reapportionment rulings, some states either enshrined a unit of local government as an electoral district (typically the county in the upper house of the legislature) or had population-based districts that were not reapportioned for many census decades. Such prior deviations from the Court's 1960s "one man, one vote" principles usually meant that rural areas got more representation than urban areas.⁷⁴ A lightly populated county would get its representative in the state senate alongside the giant urban county's single senator, as was once the case in California. Or a rural district that was populous in 1910 might still get a representative who in 1960 was elected by a far smaller number of voters than a city whose population had greatly increased between 1910 and 1960.

In either case of malapportionment, it was rural areas, where nearly all the one-room school districts were located, that had disproportionate clout in the legislature. Yet they concurred with consolidation legislation in most cases.⁷⁵ Any applied theory of the politics of

⁷¹ Reese, The Origins of American High School at 69 (cited in note 26).

⁷² See David Tyack and Thomas James, *State Government and American Public Education: Exploring the "Primeval Forest,"* 26 Hist Educ Q 39, 68–69 (1986); Clifford P. Hooker and Van D. Mueller, *The Relationship of School District Reorganization to State Aid Distribution Systems* 1 (Minnesota 1970).

⁷³ See Gray v Sanders, 372 US 368, 381 (1963) ("The conception of political equality from the Declaration of Independence, to Lincoln's Gettysburg Address, to the Fifteenth, Seventeenth, and Nineteenth Amendments can mean only one thing—one person, one vote."); Baker v Carr, 369 US 186, 208–37 (1962) (Douglas concurring).

⁷⁴ Paul T. David and Ralph Eisenberg, *Devaluation of the Urban and Suburban Vote: A Statistical Investigation of Long-Term Trends in State Legislative Representation* 10 (Virginia 1961).

⁷⁵ See Tyack, James, and Benavot, *Law and the Shaping of Education* at 121–22 (cited in note 5).

school district consolidation would have to account for this. If there was any geographic bias in state legislation, it surely would have favored rural areas.⁷⁶

The notion that rural voters were not getting what they wanted from consolidation invariably points to the state education establishment as the interest group that is swaying the legislature. The problem with this story is that this "establishment" had almost no political base.⁷⁷ The National Education Association (NEA) did not begin its militant, union-like phase until the 1960s,⁷⁸ after one-room schools had become almost extinct. The early NEA, which typically represented urban school administrators, certainly did support consolidation, but its clout in the state legislature was minuscule compared to that of farmers.

The widespread belief that rural consolidation was forced on rural voters is partly the product of the bias in historical sources. The most accessible historical documents about education are reports of state superintendents of schools. Horace Mann was the first state superintendent in Massachusetts, and he persistently urged consolidation of the rural schools.⁷⁹ Virtually every state superintendent thereafter echoed these sentiments. In 1861, an Illinois superintendent recommended that the state's ten thousand rural districts be consolidated and reduced in number to two thousand.⁸⁰ If one reads enough of them, one might conclude that they were the source of the consolidation movement. Moreover, their reports constantly complain of local resistance, so that when that resistance is finally overcome, it would seem logical to conclude that it was because of the superintendent's influence rather than assent of the local districts.

This conclusion actually does not seem so logical. It seems more logical to infer from their constant complaints about local resistance that state superintendents were *not* getting their way. The aforementioned Illinois superintendent would have had to wait a century before districts in his state numbered fewer than two thousand.⁸¹ Mann's

⁷⁶ See Scott Allard, Nancy Burns, and Gerald Gamm, *Representing Urban Interests: The Local Politics of State Legislatures*, 12 Stud Am Polit Dev 267, 294–97 (1998).

⁷⁷ See Myer, et al, 85 Am J Soc at 596 (cited in note 61).

⁷⁸ See Myron Lieberman, *The Teacher Unions: How the NEA and AFT Sabotage Reform and Hold Students, Parents, Teachers, and Taxpayers Hostage to Bureaucracy* 10–28 (Free Press 1997).

⁷⁹ See West, 10 J L & Econ at 110 (cited in note 60) (quoting Mann's questionnaire to teachers: "how much improvement, in the upright conduct and good morals of the community, might we reasonably hope and expect, if all our Common Schools were what they should be").

⁸⁰ See Kaestle, *Pillars of the Republic* at 112–13 (cited in note 23).

⁸¹ Hooker and Mueller, *The Relationship of School District Organization* at 154 (cited in note 72) (finding that by 1960 the number of districts in Illinois had dropped to 1,689 from 2,212 in 1956).

campaign to consolidate Massachusetts districts at the town level was a failure.⁸² Town districts were established by statewide legislation only in 1883, long after Mann had retired from his post in 1848. Early consolidation legislation in Massachusetts did have a coercive element at one stage, but the next legislature promptly countermanded the rule and returned to a system in which districts could accept or reject a consolidation plan.⁸³ Only in 1882, after almost all towns had voted to consolidate their districts, was clean-up legislation passed that forced the remaining holdouts into the town-wide system. Hal Barron makes it clear that legislative deference to local voters was the rule in all of the states he examined, which included New York, Ohio, Indiana, and all of New England.⁸⁴

VII. CONSENSUAL CONSOLIDATIONS

Because my view here is so contrary to most historians' views about consolidation, I buttress it with evidence that I found in an extensive review of district consolidation. *Your School District*, by the self-designated National Commission on School District Reorganization ("National Commission"), was a project conceived by the University of Chicago's Rural Education Project and a committee of the National Education Association.⁴⁵ Its various authors give an overview of the consolidation situation in the recent past and then provide detailed chapters about consolidation in Arkansas, Illinois, Iowa, Kansas, New York, Washington, and West Virginia, and thumbnail sketches of ten other states.

The picture of consolidation that emerges from this and other sources might be summarized as "the state proposes, the voter disposes." State education leaders proposed, usually by a commission report, a plan of consolidation for rural districts. It was adopted by the legislature with the proviso that local voters approve it district by district. In many states, the first attempt to rationalize the process of consolidation was to nominate preexisting political units, such as counties and townships, as the basis for consolidated schools, at least in the rural

⁸² See Barron, *Mixed Harvest* at 45–49 (cited in note 65) (noting the failure of Mann's approach-allowing the "enlightened few" in each community to convince voters of the wisdom of consolidation).

⁸³ See id at 49.

⁸⁴ See id at 66–67.

⁸⁵ National Commission on School District Reorganization, Your School District 13 (Department of Rural Education 1948) (arguing that "[a] proper reorganization of local school districts is one of the most important needs for the provision of adequate public elementary and secondary schools in practically all states of the Union").

areas. The ideal was the New England town. New England states had, by 1900, largely consolidated their many school districts along township lines.⁵⁶ There were still one-room schools in the rural areas, but their budgets and governance were at least nominally in the hands of town-wide officials. Most New England towns had been established as a political unit from the beginning of European settlement,⁵⁷ and so it was natural for school districts to be organized along those lines.

State officials in the early twentieth century tried to reorganize districts in New York along New England lines. Thus, New York in 1917 passed a law that attempted to channel consolidations along town boundaries.⁵⁸ This generated enormous political dissatisfaction, and within two years the law was repealed. New York towns were not settled by groups with strong common interests, and residents in one part of the town often had little social or political contact with residents of the same town living five miles away, across the river, or over the mountain.

The same problem arose elsewhere. Illinois attempted to create township high school districts in 1905 without much success, even though the township was still the basis for entitlement to the (modest) revenues from the federal "school section" provided for by the Land Ordinance of 1785 and its successors.⁸⁷ Kansas and Iowa tried both the county and the township as a unit for providing high schools in the late nineteenth century, but local voters did not accept the change.⁸⁰

Even after years of rural consolidations, the boundaries of school districts in most of the North do not follow county boundaries. As indicated by the two maps below, Iowa school districts in the year 2000 have almost no correspondence with county boundaries. None of Iowa's ninety-nine counties contains all of its school districts. This jig-saw-puzzle pattern is typical of the Midwest and much of the rest of the country outside the South. (Iowa is useful to illustrate the lack of correspondence because its county boundaries are grids, but even in states with irregular county shapes, modern school districts often spill over the county lines.)

⁸⁶ See Barron, *Mixed Harvest* at 49–56 (cited in note 65).

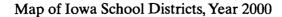
⁸⁷ See John Frederick Martin, Profits in the Wilderness: Entrepreneurship and the Founding of New England Towns in the Seventeenth Century 9-45 (North Carolina 1991).

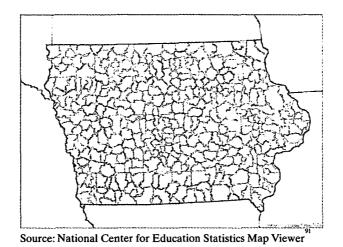
⁸⁸ See National Commission, Your School District at 113 (cited in note 85).

⁸⁹ See id at 112–13. See also Land Ordinance of 1785, reprinted in Henry S. Commager, ed, *Documents of American History* 123–24 (Vail-Ballou 1940) ("There shall be reserved for every township the lot No. 16, of every township, for the maintenance of public schools within the said township.").

⁹⁰ See National Commission, Your School District at 113-14 (cited in note 85).

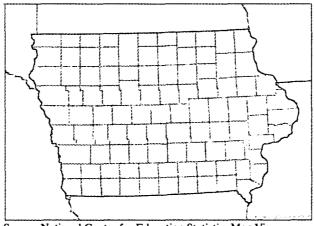
FIGURE 2







Map of Iowa Counties, Year 2000





⁹¹ I would like to thank Sarah Battersby, Department of Geography, University of South Carolina, for preparing these maps.

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After failing to get voters to approve county or township districts, most state leaders pursued a more subtle approach, which the 1948 National Commission described and endorsed." State legislation set up county commissions to propose consolidation zones. County commissions then undertook studies to see where the "organic" or natural community boundaries might be. These commissions were so dedicated to the concept of organic communities that they often allowed proposed districts to cross county lines. The commissions did sociological studies and held public meetings to determine the ideal districts. To improve the chances of public acceptance, local residents without any ties to the state education department were put in charge. Once the commissions came up with a plan for consolidation, they sent it up to the state education department for approval. The reason for this step was to avoid gerrymandering to grab tax base and otherwise undesirable geographic configurations. After state approval, the proposed consolidation was given to local voters to accept or reject."

This orchestrated, bottom-up process had been recognized early in the century. The preeminent academic advocate of consolidation, Ellwood P. Cubberley, described a Douglas County, Minnesota plan that was similar to that commended by the 1948 National Commission.⁴⁴ The county superintendent and his local commission sought to discover the "natural community boundaries" around which local voters would rally, and the county created about two dozen consolidated schools as a result.⁵⁵ Cubberley only grudgingly approved of this process—he gave unqualified approval to the South's top-down, countywide consolidation process—because it resulted in too many districts of irregular shapes: "The township lines also bore little relationship to the natural community boundaries," the latter being the districts that residents actually chose in his Minnesota example.⁵⁶

CONCLUSION: THE PERSUASION OF PROPERTY

The twentieth-century decline in rural population, better roads and motor vehicles, and the demand for high school education all contributed to the transformation of American education norms. As education moved towards multiroom schools with age-graded classes, it

⁹² See National Commission, Your School District at 125 (cited in note 85).

⁹³ See id at 108-25.

⁹⁴ See Ellwood P. Cubberley, Rural Life and Education: A Study of the Rural-School Problem as a Phase of the Rural-Life Problem 246–49 (Houghton Mifflin 1914).

⁹⁵ Id.

⁹⁶ Id at 248.

became important to coordinate the school experience from one place to another. This coordination came about without much central direction. Education leaders certainly deserve credit for proposing the consolidations and standardizations that a coordinated system required, but local voters almost always had to assent to them.

They assented to them, I believe, because remaining outside the age-graded system was hard on their property values. Families would not move to places that had nonstandard schools. Deborah Fitzgerald quotes a USDA-conference participant in the 1920s: "The intelligent man will not go out in an isolated district where his children cannot have educational advantages."⁷⁷ Weighing the benefits of a small, one-room district (democratic control, shorter distances, the possibility of part-time schooling) against the costs of remaining outside the system (the less-specialized instruction, the difficulty in accessing high school) almost all voters eventually agreed to the necessary school district consolidations.

Finally, I would point out that the account of school district creation in this Article indicates that the lines that were drawn were anything but arbitrary "accidents of geography." One-room districts were themselves almost entirely consensual associations, and the one-room districts coalesced into age-graded, multiroom school districts largely by the consent of the governed. Many proposals were rejected, and only when those proposing consolidation identified "organic communities" by on-the-ground research did local voters consent. The school districts we see today are largely produced by the same process, and they deserve more respect than the disdainful "creatures of the state" designation suggests.

⁹⁷ Fitzgerald, *Every Farm a Factory* at 30 (cited in note 16).

