HANDBOOK OF RESEARCH IN EDUCATION FINANCE AND POLICY

Edited by

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The Changing Federal Role in Education Finance and Governance

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INTRODUCTION

This chapter details the transition from a historically nearly absent federal role in education finance and governance, through significant expansions in federal influence in the post-World War II period, to the current peak of federal involvement in educational policy and practice at the classroom level with the implementation of the No Child Left Behind Act (NCLB).

The U.S. Constitution does not explicitly give the federal government jurisdiction over education, and its Tenth Amendment reserves all rights not explicitly granted to the federal government to the states. Thus the relatively (from a comparative international perspective) decentralized educational system in the United States is not surprising. The states, which have final constitutional authority, have allowed school districts to play the dominant role in the governance and finance of elementary and secondary education (see the chapter by McGuire and Papke in this volume). In recent decades, however, the states have become significant contributors to education revenue—on average about equal to local districts, but with great variation across states (see the chapter by Corcoran and Evans in this section). A common and not inaccurate characterization of the federalist evolution of education finance and governance in the United States is that much power has shifted from local districts to states and that the federal role has been relatively small over time. A more complete characterization, however, would acknowledge significant expansions in the federal role in recent decades and the potential for still more to come.

The magnitude of the federal role cannot be measured fully using any one dimension, but its relative magnitude may be quantified most simply by the amount of federal funds directed towards educational activities through the legislative process. The majority of federal funding related to education historically has come from agencies other than the Department of Education. This pattern of funding reflects the fact that federal policies related to education often arise from goals unrelated to education, such as attempting to support key economic sectors through vocational education, strengthening national security post-Sputnik with the increased emphasis on science and math education, or protecting civil rights through desegregation, bilingual education, and other efforts.

Congress may affect educational practice more through the conditions it attaches to the receipt of federal funds than through appropriations alone. Because of constitutional limitations on federal powers, Congress relies primarily on such grant conditions rather than simply enacting

laws that dictate behavior by state and local agencies.[1] In principle, state governments and local school districts have the option of passing up federal funding and not complying with whatever conditions have been placed on them. Once Congress has set forth conditions for receiving federal grants, federal agencies such as the Department of Education write policy guidance that interprets the law in greater practical detail and has significant impact on the implementation process. Federal courts also play an important role in influencing the behavior of state and local educational agencies. The evolution of the federal role is marked by important changes by all these players, in all their decision-making capacities.

What Should the Federal Role Be?

While theoretical arguments can be made in favor of both a strong and a weak federal role, the practical political reality in the United States is that local governments, historically, have dominated the control and financing of education. There remains great resistance to reductions in this local control, and voters perceive local control to be closely linked to local finance.

Academic arguments for a relatively small federal role typically draw on the efficiency implications of the Tiebout (1956) model of local public finance, in which many small geographically distinct jurisdictions, such as school districts, provide public goods.[2] The Tiebout model predicts that these jurisdictions and the bureaucrats who run them will compete against one another for residents, thus ensuring that residents receive high quality, low cost services. In this model, households with different tastes can choose the school district that best meets their desired levels of local taxes and school spending. Hoxby (2000) finds that geographic areas with more school districts (and therefore more competition for residents) for reasons of geographic accident, such as more rivers and streams, produce higher test scores for lower educational spending levels, in support of these efficiency arguments and the Tiebout model. (Rothstein, 2005, critiques Hoxby's work; see also her reply in Hoxby, 2005.) Their detailed exchange has been followed closely because there has been so little empirical work, aside from the paper in question, using variation in centralization that is not likely to be correlated with variation in other determinants of efficiency in educational production; there is still less work finding statistically significant positive effects of jurisdictional competition on efficiency.

Arguments for a strong federal role, more akin to the pattern found in other industrialized nations, often emphasize the limited ability of state and local governments to redistribute resources within jurisdictional boundaries in a context of inequality across such boundaries. These arguments also rely on the fact that the quality of education in one school district can affect the well-being of residents of other districts through mechanisms such as worker productivity (Moretti, 2004), crime (Lochner and Moretti, 2004), and civic participation (Dee, 2004; Moretti, Milligan, and Oreopoulos, 2004). Residents, therefore, may wish to subsidize education outside of their own districts, requiring a more centralized level of government to be involved. Finally, to the extent that some education-related activities have large fixed costs, like research and development, centralized provision across local jurisdictional lines allows an efficient pooling of resources.

Growth of the Federal Role

Why has the federal role grown so significantly? In many cases, the federal role in education has grown for reasons not directly related to the previous economic arguments about how to optimally finance and govern an educational system, but rather for reasons more closely related to the political and economic issues of the day. These issues have ranged from concerns about national security to concerns about civil rights and the War on Poverty. As the following summary of key instances of major expansions in federal powers reveals, these non-educational issues were

often instrumental in generating the political will necessary to expand the federal role. It is only relatively recently, beginning with the 1983 release of *A Nation at Risk,* a report issued by the National Commission on Excellence in Education at the request of the Reagan administration, that the federal push for greater involvement has focused exclusively on educational quality for its own sake. This coincides with a shift towards focusing on educational quality broadly, rather than attempting to improve conditions for particular categories of typically disadvantaged students, such as the poor or the disabled, through distinct categorical programs.

The remainder of this chapter first provides a brief chronological overview of milestones in the federal role in U.S. education. It then reviews issues of current interest with respect to the federal role, compares the U.S. federal role to that of other countries, and, finally, lays out some of the major issues to be resolved in defining the ongoing federal role.

THE EVOLUTION OF THE FEDERAL ROLE IN THE UNITED STATES

The first federal education agency was established in 1867 with a commissioner and a staff of three (Office of Education Library). This agency changed its name, bureaucratic status, and home several times before gaining the prestige of a cabinet-level agency, the Department of Education, in 1980. (See Goldin, 2006, for more on this bureaucratic evolution.) Throughout most of this period, the federal role in governing and financing schools remained small. Congress did appropriate limited funds to states, but it did not interfere in decisions about curriculum, attendance requirements, graduation and promotion (Goldin, 2006). When the federal government increased its role in educational governance, it tended to do so in conjunction with the award of federal revenue in the form of conditional grants-in-aid.

Changes in federal revenue to local educational agencies reflect many changes in the importance of the federal role over time. The earliest estimate of federal revenue to public elementary and secondary schools is from 1917, when it totaled approximately $1.7 million dollars and comprised just 0.2 percent of total revenue received by local educational agencies, or school districts (Goldin, 2006). By 2002, federal revenue totaled about $37.5 billion dollars and comprised 8.5 percent of total revenue (Digest of Education Statistics). As Table 17.1 shows, this transition was

TABLE 17.1
Federal Revenue for Elementary-Secondary Education, Selected Years, Fall 1919–2003.

Fall of school year	*Federal revenue per student (in current dollars)*	*Federal percentage share of all elementary-secondary revenue*
1919	(rounds to 0)	0.3
1929	(rounds to 0)	0.4
1939	2	1.8
1949	6	2.9
1959	19	4.4
1965	47	7.9
1970	82	8.4
1977	141	8.9
1980	239	9.2
1985	253	6.7
1990	334	6.2
1995	426	6.6
2000	616	7.3
2002	779	8.5

Source: Digest of Education Statistics 2005, Table 152. Retrieved November 6, 2006 from National Center for Education Statistics Web site, http://nces.ed.gov/programs/digest/d05/tables/dt05_152.asp

marked by periods of discontinuous increases in federal spending post-World War II and again in 1965, with the passage of the Elementary and Secondary Education Act (ESEA).

A major theme in this evolution is the extent to which major federal policy changes closely follow social crises outside the education realm.[3] The following chronology emphasizes federal involvement in elementary and secondary education.

Early Federal Education Policy: Support for Manufacturing and Agriculture

The National Vocational Education (Smith-Hughes) Act of 1917, Public Law 347, marked the first major federal foray into elementary and secondary education policy and a substantial increase in federal funding.[4] The Act resulted from concerted advocacy efforts by representatives from manufacturing, agriculture, and labor. The Act allocated $1.5 million current dollars to agricultural and vocational education in 1918. This amount, comprising about 90 percent of total federal spending on education at that time, accounted for well under 1 percent of total revenues for elementary and secondary education. In contrast, as demonstrated in Table 17.2, in fiscal year (FY) 2006 the Department of Education's total spending on elementary and secondary vocational education comprised only 3 percent of the Department's total spending on elementary and secondary education.[5]

Have federal vocational education funds been well spent? It is difficult to assess the success of vocational or "career-technical" education (CTE) because students self-select into vocational coursework. The impact of the coursework itself on later academic and labor market outcomes is thus inextricably linked to the type of student who chooses that curriculum. The literature estimating effects of vocational coursework, therefore, attempts to control for as many student characteristics as possible to limit bias from unobservable student characteristics. Its findings are mixed. In explaining its initial budget proposals to eliminate vocational education funding completely, the Bush Administration cited the National Assessment of Vocational Education's June 2004 Final Report that "found no evidence that high school vocational courses themselves contribute to

TABLE 17.2
Composition of Department of Education Elementary and Secondary Expenditures (FY 2006)

Program	*In thousands of dollars*	*Share of total*
ESEA Title I Grants to Local Educational Agencies	12,713,125	33.6%
Special Education	11,653,013	30.8%
Other	3,847,116	10.2%
Improving Teacher Quality State Grants	2,887,439	7.6%
Vocational Education	1,296,306	3.4%
Impact Aid	1,228,453	3.2%
Reading First	1,132,352	3.0%
21st Century Community Learning Centers	981,166	2.6%
English Language Acquisition	669,007	1.8%
State Assessments	407,563	1.1%
Safe and Drug-Free Schools and Communities	346,500	0.9%
Educational Technology State Grants	272,250	0.7%
Mathematics and Science Partnerships	182,160	0.5%
Indian Education	118,690	0.3%
Teacher Incentive Fund	99,000	0.3%
Striving Readers	29,700	0.1%
Total, Elementary and Secondary	37,863,840	100.0

Source: Education Department Budget History Table. Retrieved November 6, 2006 from Department of Education Web site, http://www.ed.gov/about/overview/budget/history/edhistory.xls.

academic achievement or college enrollment" (Fiscal Year 2006 Budget Summary). Bishop and Mane (2004) review much of this literature and, using National Education Longitudinal Study data for the high school class of 1992, estimate positive effects of high school vocational coursework on later employment and earnings. Perhaps the most convincing evidence comes from a randomized study of career academies by the non-profit policy research organization MDRC.[6] Demand for enrollment at the academies studied outstripped the supply of student slots, so students were randomly accepted to the academies, and researchers followed the treatment group of academy attendees and the control group of those who lost the assignment lottery. They found that academy attendance had a significantly positive impact on labor market outcomes for males, but no labor market impact for females and no impact on educational attainment for either males or females. This provides strong evidence that well-targeted investments in vocational programs can improve job prospects, at least for men, without hurting educational attainment.

World War II: Impact Aid and the GI Bill

The federal government's role in education began to grow in earnest during World War II. The Lanham Act of 1940 provided funds for home construction in communities with tax-exempt military plants and depots, and its 1941 reauthorization expanded the Act to include funds for school construction and operations (Kaestle, 2001). These efforts were extended with the 1950 impact aid laws for school construction and operations, and were later incorporated into the Elementary and Secondary Education Act under Title VIII. While current impact aid legislation still funds school operations and construction in federally-impacted areas, the majority of its funding follows "federally connected children" such as members of Indian tribes to their respective school districts, which need not be impacted districts (About impact aid). Table 17.2 shows that $1.2 billion was appropriated for impact aid in 2006, comprising about 3 percent of the Department of Education's elementary and secondary education budget. Both the Lanham Act aid and the Impact Aid program were uncontroversial at their inceptions; political support for their beneficiaries was strong, and the programs provided funds to districts while explicitly retaining local control over the funds.

The best known federal education response to World War II was the GI Bill (the Servicemen's Readjustment Act of 1944). It included, among other programs, assistance for post-secondary education and training of returning veterans. The education component of the GI Bill provided subsidies for the training of about 7.8 million veterans; approximately 2.2 million attended college (History of the G.I. Bill). The GI Bill was extended in 1952 to cover veterans of the Korean War (Korean War GI Bill of Rights). In 1984 the current version of the law, known as the Montgomery GI Bill, was passed. In 2002, the Department of Veterans Affairs spent $2.1 billion on these education, training, and readjustment provisions (Committee on Ways and Means, 2004). Although the main impetus for the original G.I. Bill likely was to prevent unemployment among returning veterans, the Bill had a substantial impact on educational attainment. Stanley (2003) finds that the World War II and Korean War GI Bill bills increased college attainment of the cohort most likely to be affected, men born between 1921 and 1933, by 15 to 20 percent.

The Cold War and Science Education

The launching of Sputnik in 1957, accompanied by widespread fear about U.S. ability to compete in math and science during the Cold War, generated the political momentum necessary for another categorical federal education bill in 1958, the National Defense Education Act (NDEA). The Department of Health, Education and Welfare actually had produced a bill "nearly identical

to NDEA" (Kaestle, 2001) in 1957 prior to Sputnik, reflecting a more general desire for the federal government to improve math and science education. Most of the federal funds allocated under NDEA were for higher education student loans and for math, science and foreign language education at the elementary and secondary levels. A number of different and permanent federal programs since have absorbed the substantive components of NDEA (Clowse, 1981).

The Civil Rights Movement and Racial Desegregation

The federal role continued to expand through key court decisions and legislation, often driven by civil rights concerns. In *Brown v. Board of Education* (1954), the Supreme Court reversed its previous endorsement of the "separate but equal" doctrine of school segregation established by *Plessy v. Ferguson* in 1896. Not until the Civil Rights Act of 1964, however, did Southern schools begin to desegregate in earnest. Recent evidence suggests that this rapid decline in segregation was due not solely to the Civil Rights Act, but to its combined impact with Title I of the Elementary and Secondary Education Act of 1965, which provides compensatory education funding to districts based largely on child poverty. Title VI of the Civil Rights Act of 1964 specified that federal funds could be denied to public agencies not in compliance, and Title I of ESEA of 1965 then provided sufficient federal funds to make Title VI relevant. Many have speculated that without the creation of the Title I program, the Civil Rights Act would have been less effective in inducing school desegregation (Boozer, Krueger, and Wolkon, 1992; Clotfelter, 2001; Rosenberg, 1991). Recent work by Cascio, Gordon, Lewis, and Reber (2006) provides empirical evidence for this hypothesis. They find that school districts with more Title I funding at stake desegregated more intensively than demographically comparable districts eligible for smaller grants.

The ultimate impact of any federal policy depends on state and local responses to it, and one much-discussed local response to desegregation policies is "white flight" to residentially segregated school districts. Reber (2005) uses variation in the timing of implementation of major court-ordered desegregation plans to assess the effects of such plans on segregation and white enrollment. She concludes that court-ordered desegregation plans, largely implemented after 1968, did induce decreases in white enrollment, but on net reduced segregation substantially. Clotfelter (2001) finds that factors historically established as contributing to white flight—the exposure of white students to blacks in local public schools and the availability of alternative public school districts in the metropolitan area with lower black enrollment shares—continued to affect white enrollment in the 1980s and 1990s.

Ashenfelter, Collins, and Yoon (2006) examine the broad impact of federal civil rights policy on outcomes for African Americans. They note that resources began to improve in black schools relative to white schools in the South well before *Brown*. Schools did not effectively desegregate until well after *Brown*, however, following the passage of the Civil Rights Act and ESEA. They find that state efforts to make black schools "equal," at least in easily measurable and litigable dimensions (i.e., expenditures), had significant positive impacts on labor market outcomes for African Americans while schools remained segregated, and that desegregation further improved these outcomes. Their findings on resources are consistent with Card and Krueger's (1992) findings that increased education quality, as measured by teacher-student ratios, teacher salaries, and length of school year, in black schools relative to white schools in the segregated South prior to 1967 explains about 20 percent of the narrowing of the black-white male wage gap from 1960 to 1980. Ashenfelter, Collins and Yoon's findings on desegregation are consistent with research by Guryan (2004), who finds that desegregation plans account for about half of the drop in black high school dropout rates from 1970 to 1980, with no effect on white dropout behavior.

Despite these measured benefits to desegregation, more recent Supreme Court decisions have

lessened the federal pressure on school districts to fully desegregate. In *Board of Oklahoma City v. Dowell* (1991), the Court ruled that school districts are freed from court supervision once they have taken all "practicable" steps to eliminate segregation, even if *de facto* school segregation due to residential segregation remains. In *Freeman v. Pitts* (1992), the Court ruled that schools in DeKalb County, Georgia, could be released from some aspects of their district court-ordered desegregation plan even if the schools exhibited other segregated characteristics. Again, the Court emphasized the distinction between segregation caused by "private choices" about residential location as opposed to *de jure* segregation. In *Missouri v. Jenkins* (1995), the Court ruled that while Kansas City schools were unacceptably segregated, lower courts could not order the state of Missouri to pay for continued (and in this case, ineffective) efforts to integrate the district.

Civil Rights and Title IX

The civil rights movement affected federal education legislation related to gender as well as race. Title IX of the Education Amendments of 1972 established that, "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." This is analogous to Title VI of the Civil Rights Act, in which a new condition is attached to all existing federal funds but no new funds are established.[7]

A much-studied aspect of Title IX has been its impact on athletic programs at all educational levels, as these were one of the few areas in which schools explicitly devoted different resource levels to males and females. As Kaestner and Xu (2006) report, the rate of girls' participation in organized high school sports rose from 5 percent in 1970–71 to 26 percent in 1977–78, while the participation rate for boys was essentially unchanged. They find that this increase in athletic participation was associated with increased physical activity and decreased weight and body mass increase for girls, presumably with associated health benefits. Stevenson (2006) finds that a 10 percentage point increase in girls' high school sports participation at the state level is associated with a 1 percentage point increase in female college attendance and a one to 2 percentage point increase in female labor force participation.

Civil Rights for Language Minority Students

Congress first legislated how language minority students should be educated, and first allocated federal funds specifically for this group in the Bilingual Education Act of 1968. The Act created Title VII of the Elementary and Secondary Education Act, which awarded grants on a competitive basis to a small number of bilingual education programs, in which students are taught new subject matter content in their primary languages rather than in English. Title VII evolved over time to allow these funds to be targeted to the education of language minority students without restricting their use to bilingual programs. In NCLB, Title VII was eliminated as a separate program, consistent with the current federal emphasis on teaching English to language minority students. The magnitude of federal funding for programs for language minority students consistently has been a small share of federal education spending and has not grown commensurately with the language minority population of U.S. public schools. Table 17.2 shows that current federal funds for English language acquisition programs constitute less than 2 percent of the Department of Education's elementary and secondary budget. Just over 10 percent of all public school students in the United States received some type of services for English language learners in the 2003–04 school year. Less than 1 percent of students in Mississippi and West Virginia received such services, while one-quarter of California public school students did.

Title VII funded some programs directly and may have encouraged states to develop similar categorical programs of their own. Far greater federal impact, however, stemmed from the Supreme Court's interpretation of the Civil Rights Act as applicable to language minority students in the 1974 *Lau v. Nichols* case. It required schools to "establish programs"—and specifically mentioned isolated bilingual classrooms as one acceptable type of such programs—for students who do not speak English so they may have "meaningful" participation in class, and ruled that failure to do so constituted a violation of the Civil Rights Act. As Nelson (2005) discusses, this requirement was particularly burdensome to districts also faced with a requirement that their schools be integrated if possible.

Since *Lau*, there has been considerable controversy over whether bilingual education, in which students are taught subject-specific material in their native languages, or English immersion, in which students are taught academic subjects in English while typically participating in additional English as a second language courses, is a superior method for teaching language minority students. Matsudaira (2005) uses the assignment rule to bilingual education in a large urban school district to compare students with similar initial English language proficiency but different bilingual/immersion assignments. He finds a statistically insignificant difference in reading outcomes across the classroom settings, and a statistically significant but relatively small positive effect of bilingual education on math scores (a 0.08–0.10 standard deviation difference, two years after assignment). The chapter by Rumberger in this volume provides much greater detail on bilingual education, including recent state-level movements towards English immersion.

The War on Poverty: ESEA and Federal Approaches to Redistribution

By far the greatest single increase in federal funding for elementary and secondary education to date came with the passage of ESEA of 1965. The largest component of ESEA 1965 was Title I, designed to assist school districts in providing programs for poor, "educationally disadvantaged" children. As with earlier war-related efforts, the design of Title I reflected the more general social agenda of the times, the Johnson administration's War on Poverty, in its focus on providing "compensatory education" funds to school districts based in large part on the number of poor children in the district. Title I dramatically affected federal school funding almost immediately. During the fall of 1965, Congress doubled federal expenditure on education when it appropriated almost one billion dollars for the new program. For decades, Title I has remained the cornerstone of federal education policy. The 1994 reauthorization, the Improving America's Schools Act, reflected the growing movement for standards-based reform, and the 2001 reauthorization, NCLB, brings the types of accountability provisions previously present in some states, but not at the federal level, to federal policy.

The formula for allocating Title I funds to school districts has changed over the years, but its basic components have not. In the current formula, school districts (rather than states) are allocated funds primarily based on the number of poor children who reside in the district and on the average level of school spending in the state. The program is not fully funded, which means that the amount appropriated for the program does not equal the sum of its grant obligations as determined by the formula. The current funding formula includes a "hold harmless" provision to prevent districts from experiencing declines in funding commensurate with any declines in the number of poor children, and also a "small state minimum" which ensures that the sum of district allocations in each state meets some minimum level. These provisions, in the context of the lack of full funding, disproportionately limit the amount of funds available for districts with growing poor populations as districts with relatively shrinking poor populations are held harmless.

Traditionally, Title I has mandated schools to target funds to students whose academic per-

formance is inadequate rather than to economically disadvantaged students, while the targeting of funds to districts and schools has been driven by child poverty. To the extent that the letter and spirit of the law prevailed, Title I maintained the federal tradition of targeting funds to specific categories of students. As lawsuits from advocacy groups reveal, Title I was in fact treated more like general aid in many cases.[8] Over time, Congress has permitted more general uses of Title I funds, most notably by allowing schoolwide (as opposed to targeted assistance) programs in schools meeting various poverty thresholds over time. These schoolwide programs support general expenditures such as hiring more teachers to reduce class sizes.

The magnitude of the Title I program and its continued existence for over 40 years naturally prompts the question of whether it has improved educational quality and outcomes. Given the targeting of Title I funds to schools serving poor students, and, in particular, to poorly achieving students within these schools, this is a difficult question to answer. Gordon (2004) investigates the possibility that Title I funds are used to substitute for rather than supplement state and local revenue. She finds that the revenue generated by local districts and given to districts by states changes in response to changes in Title I funds, so total revenue and school spending do not increase significantly with Title I grants.[9] Consistent with these findings, van der Klaauw (2006) uses a regression discontinuity approach to compare New York City schools just eligible for Title I funds with their just-ineligible counterparts and finds that the two groups of schools do not have significantly different instructional spending. Given these findings, van der Klaauw's finding that Title I funding does not improve student outcomes is not surprising.

Title I is an important program for redistribution across states, but it also represents the main mechanism through which the federal government is involved in redistribution within states. In 1973, the U.S. Supreme Court ruled in *San Antonio Independent School District v. Rodriguez* that the U.S. Constitution did not require the state of Texas to guarantee students in different school districts equal resources. This decision asserted that education was not among the 'fundamental rights' protected by the U.S. Constitution. Since the *Rodriguez* decision, it has been the states rather than the federal government whose courts have made the key rulings on school finance adequacy and equity.[10]

Civil Rights for Disabled Students

The disabled were the next category of students to have their rights explicitly delineated. In 1975, Congress passed the Education for All Handicapped Children Act (P.L. 94-142) and President Ford signed it into law. It took effect in 1977, and was renamed the Individuals with Disabilities Education Act (IDEA) in its 1990 and subsequent reauthorizations. Unlike Title IX for girls and the *Lau* ruling for language minority students, IDEA does not simply mandate changes in district behavior. It provides funds for the education of students with physical and mental disabilities, and conditions receipt on states providing a "free appropriate public education" in the "least restrictive environment" to all children, regardless of disability status. Just before the law's passage in 1975, the Department of Education spent 3.7 percent of its elementary and secondary budget on special education. By 1980, this share had grown to 12.4 percent, and by 2005, to 27.1 percent. Chambers, Parrish, and Harr (2002) estimate that IDEA funding in 1999 ($605 per student) covered 4.9 percent of total spending on special education. See chapter 7, this volume, for further discussion of special education funding and policy.

Although most special education funding does not come from the federal government, federal laws have been critical in making states and districts increase their spending on special education. Just over 10 percent of students are classified as disabled and receive special education services, and up to 20 percent of all school spending is devoted to special education (Hanushek, Kain, and

Rivkin, 2002). This naturally prompts questions about the efficacy of this spending on outcomes for the disabled, as well as concerns about potential crowding out of resources for other students (see Cullen, 1997). Hanushek, Kain, and Rivkin (2002) compare outcomes for the same students over time as they move in and out of special education services, as well as outcomes for other students in these schools whose non-special education resources are simultaneously fluctuating. They find that the average special education placement has a modest but statistically significant positive impact on math performance for special education students, and that the achievement of students who are not disabled is not affected by placement decisions for the disabled.

A Nation at Risk and the Charlottesville Summit: Moving Towards a Stronger Federal Role

In a departure from the civil rights and anti-poverty motivation driving much federal education policy in the 1960s and 1970s, the National Commission on Excellence in Education's 1983 report *A Nation at Risk* reflected concern with the state of America's schools from the perspective of their impact on national competitiveness. The first two sentences of the report make this clear: "Our Nation is at risk. Our once unchallenged preeminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world" (National Commission on Excellence in Education, 1983, p. 5). Through use of the bully pulpit rather than any new funding or legislation, *A Nation at Risk* prompted what Fiske (1991) describes as "an era of feverish educational reform efforts" in the 1980s. While President Reagan's then Secretary of Education, T. H. Bell, created the Commission and the Administration released the report, the reform efforts following it were largely at the state rather than federal level.

President George H. W. Bush, who had run for office as "the education president," began his term by convening a meeting of the nation's governors to discuss education policy. At this meeting, at the University of Virginia in Charlottesville in September of 1989, attendees set goals for the country's schools to meet by 2000. With a new Secretary of Education, Lamar Alexander, in place, President Bush released his America 2000 plan for school reform in April 1991. While *A Nation at Risk* pointed out deficiencies in American schools, America 2000 made specific proposals to address these problems. These included school-based innovation (through New American Schools, a not-for-profit effort to implement and evaluate promising comprehensive school reform models); national standards and tests; school report cards; and some federally-supported school vouchers. Though New American Schools was established, most of the content of the original proposal never made it into federal legislation. In many ways, some components of NCLB are a direct response to the criticisms of America 2000. For example, the push for national standards and tests, even a voluntary national test, drew so much criticism that it is unsurprising that NCLB mandates state-determined standards and tests.

Federal Education Aid from Outside the Department of Education

Given the tendency for federal education policy to come from other social, political, and economic pressures, it is not surprising that until 2003 more than half of spending by the federal government on elementary and secondary education came from agencies other than the Department of Education. In 2005, an estimated 44 percent of federal spending on elementary and secondary education came from other agencies. The Department of Agriculture spent more than any other agency through its support of school lunches and related programs. Other sizeable federal programs include Head Start (under the jurisdiction of the Department of Health and Human Services), job training programs (under the Department of Labor), schools for children of

military personnel (under the Department of Defense), and spending on Indian education (under the Department of the Interior).

The Department of Agriculture spent over $7.1 billion in fiscal year 2003 serving over 28 million children per day through the National School Lunch Program (National School Lunch Program), and also provides breakfast, milk, snack (for after-school programs), and summer feeding programs. These programs provide fully and partially subsidized meals and snacks to economically disadvantaged school children using surplus commodities, purchased from farmers who otherwise would face excess supply or low prices (Gunderson, n.d.).

Research on the impact of school meals on child health has yielded mixed results. Schanzenbach (2005) finds that participation in the National School Lunch Program increases consumption of calories per day, and estimates that these additional calories are responsible for a 2 to 4 percentile point increase in the incidence of overweight children. Bhattacharya, Currie, and Haider (2006) examine the effects of the School Breakfast Program (SBP). Using data from serum measures of nutrients, they find that the SBP has positive impacts on several measures of child nutrition and do not find any evidence of the increased caloric intake Schanzenbach found from the lunch program.

The Head Start program began in 1965 as part of the War on Poverty and provides early childhood education along with health and nutrition services for economically disadvantaged children, mostly ages three and four. The program is politically popular, in part due to the findings of the Perry Preschool Study in which Head Start participants and a control group were followed from enrollment in Head Start through adulthood. Participants fared significantly better than a control group into adulthood, but this may not be generalizable as the educational component of the Perry Preschool was of higher quality than the average Head Start program (Garces, Thomas, and Currie, 2002). Much of the more recent literature looking at a wider sample of Head Start programs has identified positive but short-lived effects on academic achievement (for a review, see Karoly et al., 1998). Garces et al. (2002) compare outcomes across siblings with differential exposure to Head Start. They find that effects vary by the race of the student, with positive educational attainment and labor market outcomes for whites, and significant reductions in criminal activity for blacks. Ludwig and Miller (2007) find quite large and statistically significant positive effects of Head Start on reductions in child mortality due to diseases for which children can be tested and treated, but not due to other causes of death. Despite this history of generally favorable research findings, the Head Start program has never had sufficient funding to serve all eligible children (children in households below the federal poverty line). About half of eligible three- and four-year-old children currently are served by Head Start.

THE FEDERAL ROLE AS REDEFINED BY NO CHILD LEFT BEHIND

With its enactment in 2001 of NCLB, Congress reauthorized and fundamentally changed ESEA. The subsequent years have been filled with the issuance of rules and regulations for its implementation, and the federal response to challenges to NCLB by states, districts, and advocacy groups. While many constituencies have protested the new law, it was in fact crafted and pushed through by a diverse political coalition (Rudalevige, 2003). Although most input from the nation's governors in the 1989 education summit did not translate into immediate changes in federal education legislation, the summit was critical in establishing the role of the states as advisors to the federal stance on education, and NCLB draws heavily on the experiences of individual states' accountability systems. NLCB has resulted in a stronger federal influence at the school and classroom level than ever before.

Content of the Law

NCLB reauthorizes the funding stream for ESEA, but adds significant accountability provisions and other conditions to federal aid from ESEA. Both the full text of the law and the regulations governing its implementation are available at the Department of Education Web site (www.ed.gov). The law and the regulations alone paint an incomplete picture of the policy as enacted, as parts of the law have been waived at the state or district level. Some conditions of NCLB apply only to schools which receive federal Title I funds, while others apply to all schools in any state receiving Title I funds (historically and currently, all states receive these). I describe only some of the most notable characteristics of the law here and refer the reader to the chapter in this volume by Figlio and Ladd on accountability.

The stated goal of NCLB is to close the academic achievement gap that currently exists among students of different races and between those from economically disadvantaged and other families. NCLB as written requires states receiving Title I funds to implement annual standardized testing in grades three through eight in reading and math and to set state standards of proficiency on those tests.[11] The law mandated that by 2005–06, all schools in Title I states must be staffed entirely by "highly qualified" teachers, with bachelors degrees, state certification and some proof of subject-level competency in each subject they teach.

Title I schools are monitored for their annual yearly progress (AYP) in working towards having all students and all sufficiently large "subgroups" of students (defined by racial/ethnic category, free lunch eligibility, English proficiency, and disability) meet state standards by 2014. Various penalties exist for failing to meet AYP with the severity of the penalty depending on the number of consecutive years of failing to meet the standards. Key sanctions include giving students the option to transfer to another public school and giving low-income students the opportunity to use part of the Title I funds previously allocated to the school on their behalf. Students can use these funds with the supplemental educational services (tutoring) provider of their choice, including a private provider. While take-up of these private services has been low so far, this change in the law represents a significant and largely unregulated expansion in the use of federal education funds in the private sector, as some school districts are explicitly prohibited from providing these tutoring services themselves, leaving private providers as the sole option in those districts. All Title I schools, regardless of progress in meeting state standards, must use federal funds only for programs grounded in "scientifically based research." This requirement is both ambiguous and highly controversial.

While states retain authority over what constitutes proficiency on their own tests, the federally-determined sanctions for failure to make AYP provide an incentive for states to set lower proficiency thresholds that schools are more likely to attain (or, alternatively, to choose easier tests that yield higher scores). In lieu of a national test, the National Assessment of Educational Progress (administered to a changing sample of all schools in each year) has provided the opportunity to benchmark perceived gains in state test scores against a measure of achievement that cannot be manipulated by state-level policy.

Costs of NCLB: An Unfunded Mandate?

States, districts, and advocates have raised too many objections to NCLB to list here. Among these, litigation has focused on the cost to the states of complying with the NCLB conditions for receipt of Title I funding and the question of whether NCLB is an unfunded mandate. This was the central issue in *Pontiac v. Spellings*, a lawsuit brought by the National Education Association, its affiliates in ten states, and several school districts in Michigan, Texas, and Vermont.[12]

In reviewing this issue before the lawsuit was filed, the General Accounting Office found that NCLB did not meet the definition of an unfunded mandate, as specified in the Unfunded Mandates Reform Act of 1995, "because the requirements placed on states and local school districts were a condition of federal financial assistance" (General Accounting Office, 2004, p. 27). The GAO's reasoning, notably, does not depend on the actual costs of complying with NCLB. Some states have considered legislation to pass up Title I funds and effectively to opt out of NCLB, but so far, no state has done so. Imazeki and Reschovsky (2006) show that the costs of complying with NCLB in Texas exceeded the accompanying *increase* in Title I funding. States would lose all Title I funding, not just new funding, if they did not comply, so compliance is to be expected so long as the *total* amount of Title I funding exceeds these compliance costs.

Impact of NCLB

However much controversy surrounds NCLB, there is consensus that it has sparked significant changes in educational practice. The Center for Educational Policy has conducted one of the most comprehensive data collection efforts tracking the impact of NCLB since its implementation. Jennings and Rentner (2006) describe major findings from this tracking effort. These include changes in activities undertaken by state education agencies, ranging from adopting standards and creating corresponding standardized tests to establishing state-specific criteria of what constitutes a highly qualified teacher. The bulk of NCLB-induced changes, however, have been at the school level. Jennings and Rentner describe schools increasing time spent teaching reading and math (the only subjects currently mandated for testing), aligning their curricula to better match state standards and tests, and increasing attention to the subgroups of students most likely to cause schools to fail to meet AYP goals.

THE FEDERAL ROLE IN COMPARATIVE PERSPECTIVE

While NCLB is viewed by many as an excessively large role for the federal government, this does not change the fact that the U.S. federal role is small in both absolute and relative terms compared to most other countries, particularly in Europe.[13]

The OECD provides 2002 data (OECD statistics) for 28 countries on total primary and secondary education spending and total central government primary and secondary education spending. Among these countries, the United States, with 8.3 percent, has the third smallest central government share, behind Switzerland (2.3 percent) and Poland (7.0 percent). Essentially, all of total spending is done at the central government level in the Slovak Republic, Ireland, New Zealand and Turkey. In both the mean and the median country in the sample, just over half of all primary and secondary education expenditures are attributed to the central government.

Centralization in finance provides only part of the picture. The regulation of educational decision-making is another important aspect of educational policy, which could vary independently of financing arrangements (for example, the regulatory role of the U.S. federal government has recently expanded without a correspondingly large increase in its funding role). Of 25 OECD countries responding to a 2003 survey about secondary education, 13 countries reported that the central governments had full control over teacher salary scales and 10 reported that the central government had full autonomy over required hours of instruction (Education at a glance: OECD indicators). In a similar pattern, many European countries have long traditions of centralized secondary school exit examinations, which require centralized curricula. In the United States, none of these decisions are made by the federal government.

This comparison is admittedly a broad one, and the countries with full central government control over pay scales and hours requirements are disproportionately countries with large central government roles in education financing. Using either definition of centralized decision making (control over salary scales or minimum instructional hours), the average share of government education spending coming from the central government is about 69 percent for countries where the central government has total control over the decision, well above the full sample mean of 53 percent. Ideally, we would like to know how large the U.S. federal role in governance is compared to other countries with similarly small central government roles in school financing. There are, however, few countries that meet these criteria in the OECD sample. When we limit our focus to other countries with less than 25 percent of total government education spending coming from the central government responding to the survey (Belgium, the Czech Republic, Germany, Japan, and Spain), we see only one country, the Czech Republic, with full central autonomy over hours of instruction and none of the five with full central decision making power over setting teacher salary scales. In summary, the United States has an unusually small central government role in both spending and regulation, and regulatory and spending roles appear to be correlated for most countries.

Claudia Goldin (2003) discusses the virtues and vices of American decentralization in international perspective. She argues that the relative decentralization of the U.S. system hastened the high school movement in the United States, which took place more quickly than its European counterparts. In part, this is likely because smaller jurisdictions could decide when they were ready to open a high school rather than waiting for a democratically elected central government to push for the expansion of high school education nationwide. At the same time, Goldin notes that decentralization allows for greater inequality in school resources. As Corcoran and Evans show in their chapter in this volume, spending differences between states remain quite large.

OPTIONS FOR THE FEDERAL ROLE MOVING FORWARD

Legislation like the 1941 Lanham Act reauthorization and the 1950 Impact Aid Act provided new federal funds for schools but emphasized that increased federal revenue did not imply an increase in federal control over local schools. NCLB, which at least some consider "the greatest extension to date of federal authority over public school governance" (McDermott and Jensen, 2005), takes nearly the opposite approach. It transforms Title I grants from essentially an entitlement into a reward for compliance with federal policies that significantly depart from existing state and local practice. While controversial, this strategy is not new to federal education policy. The Second Morrill Act of 1890, for example, conditioned receipt of higher education funds on the availability of institutions for blacks. Nor is the presence of conditions new to Title I, as the historical experience of Southern school districts opposed to desegregation emphasizes. Furthermore, NCLB was not the first time the federal government conditioned Title I funds on state standards and accountability policies. The 1994 ESEA reauthorization (the Improving America's Schools Act) did so eight years earlier, albeit less stringently and with less enforcement.

The impact of federal education policy in the near future depends critically both on how the current version of NCLB is enforced and on how NCLB is amended and enforced in its next reauthorization. Increased federal expenditures may be necessary in order to induce districts and states to comply with the increasingly demanding conditions of federal aid. As Rudalevige (2003) writes, "Even if it were willing to use its sticks, the Department of Education has small sticks to brandish." Despite the small magnitude of Title I relative to overall district revenues, no

large district or state has yet been willing to incur the loss of Title I revenue in order to opt out of some of NCLB's requirements.

As schools face real penalties under NCLB, questions inevitably arise about whether all schools are equipped to meet the standards assigned to them and if a greater federal role in financing is needed to ensure that they are. Evans, Murray, and Schwab (1998) decompose the variation in 1992 levels of local spending per-pupil and estimate that 65 percent of the total variance comes from across the states. This suggests that state-level redistributive policies (i.e. school finance equalization) alone will be insufficient in moving towards greater equalization of resources.

If the federal government is to assume a greater role in redistributing resources to districts, it could do so either through a new general, foundation-type program or by expanding its revenue to districts through categorical programs. Though the federal government historically has not distributed aid through a program as general as a foundation aid system, such as the one Rothstein (2001) proposes, there have long been unsuccessful movements for one (Kaestle, 2001). The existence of many federal funding streams, each with their own devoted constituencies, may limit the ability of the federal government to move to a more streamlined and flexible approach to funding education and necessitate continued reliance on categorical programs. Ladd and Hansen (1999) review these two possible approaches in detail, while Kaestle (2001) cautions against viewing them as distinct when implementation may render categorical spending general in practice, particularly over time.[14]

The Federal Role in Flux

Through NCLB, the federal government is affecting educational practice at every level—state, district, school, and, perhaps most notably, inside the classroom. The full effects of NCLB will not be known until details of implementation are resolved through regulatory guidance and the courts. Key issues to watch for include the definition of AYP and sanctions associated with failure to meet it, the possibility of national curricular standards and tests (as proposed in America 2000 and supported by the American Federation of Teachers but insufficiently popular for inclusion in NCLB), and the level and distribution of federal funds. We can be sure, however, that the federal role in elementary and secondary education at this time is greater than ever before in our history, and that it has the potential to grow greater still.

NOTES

1. McDermott and Jensen (2005) provide several examples of policies outside of the education realm which were struck down by the courts when implemented in a regulatory framework, but then ultimately prevailed when instituted as conditions for the receipt of grants, suggesting that this strategy increases the power of federal agencies over the states more broadly.
2. Education exhibits more private good qualities than public good ones, but the general argument of the Tiebout model holds.
3. Kaestle (2001) provides a useful discussion of how this historical evolution is often framed as "episodic" in its responsiveness to other social issues, but also reveals how in many cases episodic shifts have followed periods in which support for the agenda at hand grew incrementally, as well as examples of crises that did not ultimately change education policy and policies that changed without any precipitating external event. Kaestle refers the reader to Nelson Polsby's (1984) work on "acute" versus "incubated" policies.
4. The first major federal education legislation was the Morrill Land Grant Act of 1862, in which Congress gave federal land to the states (those remaining in the Union during the Civil War) in proportion

to their populations for the establishment of agricultural and technical colleges. The Second Morrill Land Grant Act, in 1890, appropriated land to the Southern states, and also appropriated federal funds from sales of public lands to the states for land grant colleges. New conditions were added with the new funds: the states could not use them to support colleges "where a distinction of race or color is made in the admission of students", but did allow this if the state maintained separate colleges for different races and divided the federal funds equitably among those colleges. This condition prompted the establishment of what are now known as "historically black colleges" (Goldin, 2006), and provides an early example of conditional grants, which emerge as a favored mode of federal education policymaking. The Morrill Land Grant Acts have had a lasting legacy on the geographic landscape of American higher education. Their impact is so significant that Moretti (2004) is able to use the original grants as an instrument for the city-level distribution of educational attainment in 1990. He finds that having a land-grant college in a city is associated with a 20 percent increase in the share of college-educated adults. The Smith-Hughes Act of 1917, however, was the most significant federal legislation applicable to elementary or secondary education at that time.

5. The Bush administration proposed zero funding for one politically popular federal funding stream, through the Perkins Act, in its 2005 and 2006 budgets. Ultimately President Bush did sign a version of the reauthorized act (Cavanagh, 2006), but the prolonged process is reflective of No Child Left Behind's focus on academic achievement and the corresponding decline in support for vocational programs.
6. Career academies are public high schools with academic and vocational content organized around particular professions, and linked to relevant local employers. The findings therefore should be interpreted as relevant to career academies but not necessarily to other types of vocational education.
7. In the case of the Civil Rights Act, however, significant new funds were made available the next year through Title I of the Elementary and Secondary Education Act, and districts would be ineligible if not in compliance with the Civil Rights Act.
8. See, for example, Washington Research Project (1969).
9. These changes in Title I grants, however, are much smaller than the full grant amount received by any district, so it is not possible to extrapolate from these estimates to predict district spending levels in the complete absence of the program.
10. See Nelson (2007) for discussion of the tension between the Supreme Court's resistance to mandating redistribution in *Rodriguez* and willingness to require that states redistribute to particular categories of students in *Lau v. Nichols* and *Milliken v. Bradley* (both in 1974).
11. Beginning in 2007-08, all states must test students in science as well.
12. The suit was filed in April, 2005, and dismissed by a federal court in November, 2005. The plaintiffs have since appealed the decision.
13. Given the large size and important education policy and finance roles of many states, it should be noted that a small federal role in the United States is not equivalent to a highly decentralized system, as states themselves play a centralized role with local districts.
14. For example, Title I funds under ESEA are nominally categorical funds in that they are based on district-level child poverty and are to be spent on a particular program, "compensatory education." Over time, Title I has turned into a program present in over half of public schools; with high poverty schools now allowed to use Title I funds for schoolwide programs, including class size reduction, Title I funds are essentially general revenue for many schools.

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