Federal Aid to Elementary and Secondary Education:

Premises, Effects, and Major Lessons Learned

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Summary

This paper aims to inform federal education policy by examining Title I of the Elementary and Secondary Education Act (ESEA), the Individuals with Disabilities Education Act (IDEA), and two federal efforts to improve teacher quality, the Eisenhower Professional Development Program and the highly qualified teacher provisions of the No Child Left Behind Act (NCLB). Three research questions drive the analysis: What are the major premises and intended effects of these programs? According to rigorous research and analysis, what have been the actual effects of these programs? Based on the federal government's track record in these areas, what can one conclude about Washington's ability to effectively provide aid for elementary and secondary education?

Reviewing the evaluation literature on these federal policies suggests the following four observations about the federal government's performance in education over the last five decades:

1. Federal education policies have made positive contributions, but usually they fall short of reaching their ambitiously stated goals.

2. More federal involvement in elementary and secondary education has provided students and teachers with important opportunities or guarantees while simultaneously contributing to a complex and fragmented regulatory environment that federal, state, and local officials struggle to manage.

3. Federal education policies have attempted to help state and local governments to leverage their own activities, a situation that has moved some reforms forward but has also made it difficult to assess the specific impacts of federal contributions.

4. The success of federal education policies is intimately linked to the success of the systems and initiatives developed by state and local governments.

Given these observations, how should federal officials proceed? Consider these general operating principles that federal policymakers, including legislators and staff members on Capitol Hill and agency and White House staff, should embrace as they adapt their initiatives for the future:

1. Federal policymakers should harmonize their many initiatives to minimize the complexity that arises when multiple program silos operate simultaneously.

2. Whenever possible, federal policies should make education data and practices transparent to observers inside and outside government.

3. The federal government should invest heavily in research and development to identify educational practices and interventions that have proven effectiveness.

4. Federal leaders should relentlessly use the bully pulpit to highlight the nation's educational progress and to troubleshoot the challenges that confront governments at all levels as they try to improve America's system of elementary and secondary education.

Generally speaking, when federal policymakers act in education they have been good at defining broad aspirational goals, forcing or redirecting activity at lower levels of government, redistributing resources, and gathering or forcing into the open information about pressing needs, important trends, and promising educational practices. Given the political incentives to which federal leaders respond and their lack of power over curriculum and teaching practices, they are not as good at passing focused, coherent, and mutually reinforcing policies that produce educationally substantive results instead of primarily procedural ones. Getting states and localities to do things is relatively easy: offer money and condition its use on engaging in certain activities. But crafting national policy to cover 50 states and nearly 15,000 school districts that will improve the substantive results that everyone cares about—having high-quality teachers and students who are learning rigorous content, for example—is much harder for policymakers in Washington to achieve. That is primarily because federal policy, even in demanding quality or rigor, by and large defers to lower levels of government on the particulars of what quality and rigor should mean.

Their distance from the ground level gives federal leaders a fantastic bird's-eye view of the system, which can help them find important leverage points to promote reforms. Using that leverage effectively—for example, by forcing open school doors for children with disabilities or requiring that student achievement data be reported in disaggregated form—can spur action to help students in need. It can also help to embolden state and local reformers who can play off or build on federal arguments and efforts to launch promising changes. Simultaneously, though, federal distance from the ground and deference to lower levels of government on curricular and personnel matters can frustrate federal efforts, especially those that rely on particular mechanisms applied nationwide, to achieve otherwise desirable goals. Recognizing the strengths and weaknesses of their position can help federal policymakers make the most of their capabilities and, in the process, help states and localities make the most of theirs.

Introduction

Federal education programs have grown in size and number during the last five decades. Accounts of how this happened are numerous, as are diverse commentaries about what the federal role in American schools should be. Especially since the Elementary and Secondary Education Act of 1965 became law, Uncle Sam has expanded his reach into the nation's schools. Those forays frequently have been motivated by concerns over educational equity and a growing interest in promoting excellence in the classroom. An overall working assumption has been that federal prodding and assistance could help encourage states and localities to better meet these two overarching needs. But how has this growing federal involvement affected American education?

Mustering a complete answer to that question is difficult because federal efforts are scattered across many relatively limited programs and a handful of large ones. Even though numerous K-12 initiatives exist, the U.S. Department of Education commands relatively few resources

compared with the federal budget as a whole.[1] That makes most federal education programs small, in terms of dollars spent and students reached, and very few programs are subject to systematic evaluations to assess their effects.

Still, it is imperative to ask "what has worked?" about federal education policy given the absolute number of dollars at stake, the impacts that federal priorities have on state and local policy, and, above all, the potential implications for students. The pending reauthorization of the No Child Left Behind Act, the latest amendments to the ESEA, provides an opportunity to pause, reflect, and adjust current policies based on their track records. While it would be naïve to suggest that a dispassionate examination of the evidence, rather than political considerations, primarily drive reauthorization processes on Capitol Hill, recent work does show that policy research can positively influence the choices that public officials make (or at least the menu of choices that they consider) when they rewrite major education legislation (Hess, 2008).

To help inform the future work of education policymakers in the executive and legislative branches of the federal government, this paper examines a small number of major elementary and secondary education programs that address disadvantaged students, students with disabilities, and the nation's desire to improve teacher quality. Three research questions drive the analysis: What are the major premises and intended effects of these programs? According to rigorous research and analysis, what have been the actual effects of these programs? Based on the federal government's track record in these areas, what can one conclude about Washington's ability to effectively provide aid for elementary and secondary education?

The next section introduces the programs under study and the evidence used to evaluate their effects. Ensuing sections examine these programs in detail, using the first two research questions as a guide. A final section reflects on the third question by discussing the overall implications for the federal role that this accumulated body of evidence suggests.

Organizing Frames

This paper focuses on federal efforts in elementary and secondary education that address the needs of disadvantaged students, the needs of students with disabilities, and the need to enhance the quality of America's teachers. Although many policies address these topics either directly or tangentially, this paper examines the following: for disadvantaged students, Title I of the Elementary and Secondary Education Act; for students with disabilities, the Individuals with Disabilities Education Act and its predecessor the Education for All Handicapped Children Act (EAHCA); and for teacher quality, the Eisenhower Professional Development Program and NCLB's highly qualified teacher requirements.

Settling on this brief list omits several other federal activities and programs sometimes considered major or even historic. The National Defense Education Act of 1958, for example,

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[1] According to the Historical Tables in the president's fiscal year 2009 budget, the Department of Education administered 2.4 percent of all outlays in fiscal year 2007, the last year for which complete data are available. See Table 4.2 in http://www.gpoaccess.gov/usbudget/fy09/pdf/hist.pdf. Last accessed September 19, 2008.

represented a notable increase in federal efforts to influence instruction in math and science. Rulings from the U.S. Supreme Court and other federal courts on topics such as racial segregation, free speech rights in schools, and the treatment of language minorities (which helped prompt laws addressing bilingual education) also have had major impacts on the nation's classrooms. The establishment of formal institutions, such as the U.S. Department of Education, and the maturation of the National Assessment of Educational Progress (NAEP) have also influenced how federal officials and others have administered and discussed education. This paper sets these and other important efforts aside.

The programs in this paper were identified after applying several criteria to the large menu of federal education initiatives since World War II. These criteria include (a) programs that primarily address elementary and secondary education; (b) the significance of those programs, in terms of the resources invested and number of students served; (c) the length of time the programs have existed; (d) the availability of rigorous evaluation studies of the programs; and (e) the programs' overall relevance to contemporary debate about the federal role, especially debate over NCLB's reauthorization. In short, focusing on large, highly relevant programs with long track records and numerous evaluations provides a useful way to inform current conversations about the appropriate direction for future federal policy.

Each major section that follows—focusing in turn on disadvantaged students, students with disabilities, and teacher quality—is organized around the premises and the intended and actual effects of federal programs. Distinguishing between intended and actual effects is important because it shows the sometimes changing working assumptions and mechanisms that drive programs over time. It also reveals disconnects between what legislators and other public officials intend to happen and how policy actually performs. As the voluminous literature on implementation in education and other areas has shown, the explicit or usually implicit theories that drive public policy can be marginally or even wildly incorrect when the rubber of legislation hits the road of the nation's states and communities (Pressman & Wildavsky, 1984). Recognizing that disconnect can help federal officials make policy with more realistic understandings of what their efforts might actually accomplish.

Before proceeding, it is worth discussing the sources for subsequent claims about the "actual" effects of policy. Much debate exists over the benefits and costs of major federal education programs. Sometimes disagreements fall along ideological or partisan lines and are based on anecdotal impressions, compelling cases, or even raw emotion. In this paper, I have tried hard to sidestep those sources in favor of others that, when available, draw conclusions based on rigorous and transparent research designs. The ERIC, Lexis-Nexis Congressional, and JSTOR databases were the primary sources for most of the studies of these actual effects.[2] Archived reports from the Government Accountability Office (GAO) and the U.S. Department of Education also proved useful. Others came directly from think tanks or other research institutes.

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[2] ERIC is the Education Resources Information Center, a clearinghouse of education-related documents maintained by the federal government (http://www.eric.ed.gov/). Lexis-Nexis Congressional is a collection of congressional hearings, publications, committee prints, reports, and other documents, including reports from the Congressional Research Service (http://academic.lexisnexis.com/online-services/congressional-overview.aspx). JSTOR is an archive of scholarly articles published in peer-reviewed journals (http://www.jstor.org/). All Web sites were last accessed in July 2008.

Because this review considers many different studies that examine several policy indicators and their effects, the focus is on major findings. As in any brief review, one cannot do justice to the nuanced conclusions that the subsequent authors report. Still, for readers interested in pursuing individual studies in more depth, a concise annotated summary of all major sources considered is available in an electronic appendix to this paper. Readers can find that appendix at the Center on Education Policy's Web site (http://www.cep-dc.org).

Disadvantaged Students

Federal education programs frequently try to promote equity by helping to remedy conditions that prevent disadvantaged children from thriving academically. Lawmakers have crafted many small or targeted programs to serve that end. Over the last half-century, Title I of the ESEA has been the main federal program designed to meet these students' needs. Title I grants to local school districts are the largest federal expenditure on K-12 education, amounting to almost $13 billion for fiscal year 2007, nearly 35 percent of the federal budget for elementary and secondary education.[3]

Premises and Intended Effects of Title I

Like any large program that has undergone several reauthorizations and expansions, some of the premises and intended effects of Title I have changed over time. Throughout its history, though, Title I has rested on the premise that educational inequities exist in the United States and that federal funding can provide assistance to communities that serve economically disadvantaged and educationally deprived children (Independent Review Panel, 1999; Kaestle, 2001; Puma et al., 1997). Title I has always embraced the general view that students from impoverished backgrounds who perform poorly in school require additional assistance, and that states and localities have not always done enough to help meet these students' needs. Targeting funds to school districts and schools with large numbers of these students has been a long-standing goal of Title I.

More specific assumptions have also driven Title I's development (U.S. Department of Education, 1993b). In particular, policymakers have relied on state and local judgments about how to meet the particular needs of disadvantaged students. That means Title I has been less of a coherent program and more of a funding stream, which local communities have been allowed to use in many ways, as long as program audits could show that monies were targeted to the program's intended recipients (U.S. Department of Education, 1987). Those auditing requirements created conditions, especially from 1965 when the ESEA became law until the late 1980s, in which the most important intended effects of the program were to guarantee equitable distribution of funds and to hold states and school districts accountable for following required processes governing the use of those funds. The law did require local communities to monitor, through testing, the academic progress of Title I students. However, it left that condition quite

[3] Budget data for Title I are from the U.S. Department of Education Budget History tables, located at http://www.ed.gov/about/overview/budget/history/index.html. Last accessed on September 17, 2008.

vague, which meant that localities were free to develop multiple ways to document these students' performance. Perhaps most important, during this same period the law also lacked any mechanism to promote educational accountability. In short, states, local school districts, schools, or students themselves felt no consequences if academic gains did not occur.

Title I's operating assumptions and mechanisms began to change quite dramatically beginning with its 1988 and especially its 1994 reauthorization (Jennings, 2001; Manna, 2006). Equity and the need to serve disadvantaged communities remained crucial. But lawmakers added mechanisms to enhance academic excellence, rather than just provide additional funds to promote equitable opportunities. The law remained primarily a funding stream, not a coherent, uniform program; and it still aimed to target resources to the neediest students to provide them with better educational experiences. But now the law also began to stress accountability for academic performance as well as process. It did so by incorporating a more liberal mechanism for the use of Title I funds. That mechanism dramatically expanded the concept of "schoolwide" programs in which local districts could use Title I money to serve entire school populations as long as the number of high-poverty students met a certain threshold. Also, beginning in 1994, for the first time the law maintained that students served by Title I should be held to the same rigorous state standards as other students. The theory was that by demanding greater rigor, not only would disadvantaged students improve their performance, they would also begin to gain ground on their more advantaged peers, thus narrowing and hopefully eliminating academic achievement gaps. Title I's reauthorization in 2001 by the No Child Left Behind Act (NCLB) extended that logic by adopting the goal that all students would be proficient in reading and math by 2014. It also incorporated a prescriptive set of accountability mechanisms for schools that failed to make required yearly progress. NCLB's working assumption was that these consequences and the 2014 deadline would create a needed sense of urgency that prior reauthorizations of Title I lacked (U.S. Department of Education, 2007c).

This brief synopsis suggests that through the years Title I's authors have intended the program to have at least four main effects. Those intended effects have been to:

- target federal dollars to poor and educationally disadvantaged students;
- meet the particular academic needs of disadvantaged students while eliminating academic achievement gaps between disadvantaged students and their peers;
- foster the development of state standards, testing, and accountability systems; and
- hold schools and school districts accountable for the academic performance of disadvantaged students.

The first two points have been persistent goals of Title I's authors, while the latter two began receiving emphasis during and since the 1990s. The rest of this section examines research in these four areas.

Distribution of Title I Funds

Complex formulas determine the distribution of Title I funds. In general, and since the law's founding, these formulas have moved money from the federal government to state education agencies, which pass along dollars to local school districts. States have no discretion over how much money each district receives, but, with some restrictions (discussed momentarily), district

officials determine how to allocate Title I money among their schools. Considering the development of the program's granting mechanism, the evidence suggests that the law has come up short in meeting its overall goal of distributing funds to disadvantaged students. Title I's targeting mechanism has helped funds reach many, but not all disadvantaged students; at the same time, it has served other students who may not need the law's assistance. Despite changes to the law to improve targeting of funds—and targeting has improved—studies of the last three decades have consistently reached this conclusion (General Accounting Office, 2000b; U.S. Department of Education, 1987, 1993a, 1999c, 2007b).

Early studies of Title I revealed widespread misuse of funds and violations of the law's requirements, which prompted more prescriptive program rules in the 1970s (Borman & D'Agostino, 1996; McClure, 1985). Even with those reforms, which curtailed blatant violations, data from the early 1990s, when the law was called "Chapter 1," still showed that "14 percent of high-poverty elementary schools receive no Chapter 1 funding, and one-third of the low-achieving children (who score at the 35th percentile or below on reading tests) in elementary schools with poverty rates over 75 percent do not receive Chapter 1 services" (U.S. Department of Education, 1993a, p. 48). More recent data show how efforts to improve targeting have had limited effectiveness (U.S. Department of Education, 2007b). In 2004-05, 52 percent of Title I funds went to the most impoverished districts, an amount that had changed very little since the 1997-98 school year, when the total was 50 percent; this occurred even though NCLB included additional targeting reforms. Parallel results emerged at the school level: in 2004-05, "the share of Title I funding for the highest-poverty schools also remained virtually unchanged since 1997-98, and those schools continued to receive smaller Title I allocations per low-income student than did low-poverty schools" (U.S. Department of Education, 2007b, p. 7). These findings were similar to those of another study that examined differences between school years 1994-95 and 1996-97 (U.S. Department of Education, 2001a).

These same studies have identified two key reasons, tied to the law's mechanisms, for these distributional patterns: legislative provisions and local choices. First, despite the law's stated goal of targeting disadvantaged students, since its adoption in 1965 the formulas governing Title I funds have spread federal dollars to nearly all school districts in the nation. Even when formulas change, as they did in 1994 and 2001, legislative "hold harmless" requirements, which prevent current districts from losing money, can attenuate the effects of revamped targeting provisions (Independent Review Panel, 1999, p. 12). There are powerful political reasons for this widespread distribution of federal dollars. When essentially all members of Congress can count on funds flowing to their congressional districts or states, it makes it easier for advocates inside and outside government to maintain overall support for the program. Thus, the political issues associated with changing allocation formulas can be immense, given that even seemingly minor adjustments can lead some of these congressional districts or states to lose several millions of dollars in federal aid.

Second, even though some limits exist, local school districts have much discretion in identifying students whom Title I will serve (General Accounting Office, 2000b; U.S. Department of Education, 1993a). One consistent effect of this discretion is that high school students have received very little assistance from Title I during the program's history; most districts direct Title I money to the elementary grades. Because the program's dollars do not follow individual

students, a student would not benefit from the program if he or she did not attend a school that receives Title I funds. Further, because districts tend to use test score data to pinpoint these students, in a relatively well-performing district, students who score below local norms may end up benefiting from Title I, even though they may be scoring far better than students in other districts who do not benefit. Such a pattern led members of one national assessment panel to call it "unconscionable" that Title I would serve "children who are achieving above the national average while other children in the lowest achievement group get no assistance at all" (U.S. Department of Education, 1993b, p. 32).

Despite these problems in the targeting of Title I funds, studies have noted some improvements, which have helped to serve the law's goal of reaching the most disadvantaged students. Even though nearly all school districts benefit financially from Title I, which is evidence of limited targeting, changes to the law in 1994 have improved targeting within school districts. For example, districts are required to serve the highest-poverty schools, those with low-income enrollments of at least 75 percent, before serving others with Title I money (General Accounting Office, 2000b). The evidence also suggests that federal Title I dollars do a better job of targeting high-poverty districts than do funds flowing from state or local sources (U.S. Department of Education, 2001a). Still, the federal contribution is so small and spread so thinly across many districts and schools that these targeted federal dollars are essentially unable to create more equitable patterns of per pupil expenditures across district lines.

One other notable factor influencing the local administration of Title I funds is also worth mentioning. Changes in Title I funding provisions initially adopted in 1978 but made more flexible in the 1980s and 1990s were intended to encourage expenditure of funds in schoolwide programs that would better integrate Title I services with other school operations. In other words, schools that had a high number of disadvantaged students could design programs that would benefit all students in the school and not just the disadvantaged. That would help schools realize potential efficiencies and simplify administration of program funds. The law initially required a school to enroll at least 75 percent low-income students before it could adopt such an approach. Lawmakers reduced that threshold to 50 percent in 1994.

The goal of encouraging more schoolwide approaches has become quite successful, with rapid expansion in the 1990s. In 1991-92, for example, studies showed that at most approximately 3,000 of the 9,000 eligible schools had adopted the schoolwide approach (U.S. Department of Education, 1993a, p. 106). Later that decade, the General Accounting Office (GAO, 2000b) found that approximately 82 percent of eligible schools were using schoolwide programs. In terms of student numbers, a more recent evaluation found that the number of students served in schoolwide programs increased from 6.7 million in 1994-95 to 20.0 million in 2004-05, which meant that in the latter school year, 87 percent of Title I students attended schools with schoolwide programs (U.S. Department of Education, 2007b). The limited evidence available, however, does not suggest that such programs have necessarily spurred innovations or sparked dramatic gains in student achievement (General Accounting Office, 2000b). At a minimum, the schoolwide approach has helped to simplify local program administration and planning.

The expansion of schoolwide programs also appears to be in tension with Title I's stated goal of making sure that funds are targeted to students with the greatest needs. Except in schools where

all children qualify for Title I services, any schoolwide program would by definition be serving additional students, beyond the most needy. So while there may be administrative and organizational advantages for the schoolwide approach, it also runs the risk of undercutting the targeting goal. The GAO (2000b, p. 31) recognized this potential in noting that "schools that adopt the schoolwide approach need to be careful to make sure that low-performing students receive the extra help they need to improve their academic performance and not be lost in the overall program. For several district and state officials, this concern was especially important for schools with relatively lower poverty rates and fewer disadvantaged children."

Development of State Standards, Testing, and Accountability Systems

It may surprise some readers to realize that student testing has nearly always been a part of Title I implementation. Only recently, however, have those examinations been part of more coherent systems of state standards, testing, and accountability. Before the state standards movement gained momentum and subsequent Title I reforms occurred, testing associated with Title I suffered from numerous problems (Carter, 1984; Cross, 1979; U.S. Department of Education, 1993a). Tests served many purposes, in particular to identify students eligible for Title I services and then track their progress. But because these tests were so varied across local communities and served so many functions, they were not valid accountability instruments. To economize, school districts would frequently use the same test in many ways, including those that were inconsistent with test designs. Further, districts and states would miss reporting deadlines or report inaccurate information with no consequences from federal officials. Finally, and perhaps most important, Title I evaluators often commented on the low academic expectations to which Title I students were held. Testing for these students typically focused on the lowest level skills and did not provide evidence that students were learning advanced academic content.

In 1994, major changes to Title I required states to develop systems to monitor progress of Title I students based on what all students were expected to learn. The law said that Title I students should not be held to their own typically low standards (U.S. Department of Education, 1987), but to the high standards expected of all students (U.S. Department of Education, 1993a). It is important to remember that these federal policy changes did not initiate the standards movement in the states; rather, the changes were designed to accelerate and redirect trends already in motion (Manna, 2006). A major premise of the reforms of 1994, which NCLB continued in 2002, was that by tying Title I funding to the development of state work on standards, testing, and accountability, state policymakers would more rapidly complete this work and in the process better serve Title I students with more challenging material. Focusing on the period from 1994 to the present, studies of Title I show that progress toward those ends has been uneven but noticeable and likely accelerated due to federal efforts. Two overall findings stand out from the research.

First, it has taken states several years to meet Title I requirements for their standards, testing, and accountability systems. Progress exists, but some requirements remain unmet over a decade after this federal effort began. The 1994 reauthorization required states to develop content and performance standards by 1997-98, but it also allowed the U.S. Secretary of Education to extend that deadline to 2000-01, which Secretary Richard Riley did. By the end of the 1990s, much work remained to develop criteria to evaluate school performance based on disaggregated

student data. At that time, data tended to be based "solely on the performance of the student population as a whole, without reference to the achievement of specific subgroups of children, such as students from low-income families or students with limited English proficiency. Consequently, states [were] not yet in a position to ensure accountability for the educational outcomes of disadvantaged students, the children that remain central to the mission of the Title I program" (General Accounting Office, 2000b, p. 8). By January 2001, as the next reauthorization of Title I was underway, all states had developed content standards in reading and math, a notable accomplishment that federal encouragement helped to facilitate. But even at that point, the Department of Education had completed reviews of only 34 states' assessment systems. Of those states, 11 had received full approval. The others were either partially or conditionally approved, received a timeline waiver, or entered into a compliance agreement (U.S. Department of Education, 2001a).

Signed into law in January 2002, NCLB built on the 1994 reauthorization and added new requirements to Title I, which states have also found challenging to adopt. Among the key changes were for states to test all students in grades 3 through 8 in reading and math by the 2005-06 school year. The evidence shows that all states were administering those tests by that time. But still, as of September 2007, the Department of Education had fully approved only 24 states' testing systems. Those remaining had approvals expected (8 states) or pending (20 states) (U.S. Department of Education, 2007b).

A second general set of findings center on the standards that states have adopted. Even though delays have occurred in meeting Title I's requirements, it is a notable accomplishment that all states had content standards for reading and math in place before NCLB became law. The fact lingers, however, that the quality and rigor of these standards vary tremendously across the states. In part, that is by design. Title I allows the federal government to "approve the process by which states have developed their standards, not the standards themselves" (Independent Review Panel, 1999, p. 14). It is no wonder, then, that independent evaluations have found much variation in the standards that states have produced (U.S. Department of Education, 2001a). That variation exists in state standards is not necessarily problematic. What is potentially troublesome, however, is that in some states content and performance standards may lack rigor and undercut Title I's goal of academic accountability that all students, including the disadvantaged, would be held to high expectations. Allowing states to define expectations has created the unintended (but easily foreseeable) consequence that many Title I studies have mentioned—namely, that the law's framework makes it impossible to compare school and student performance results across state lines because content and expectations vary so much (U.S. Department of Education, 2007c).

Implementation of Accountability Mechanisms

Holding states, school districts, and schools accountable for student performance is a relatively new part of Title I. Even though the 1994 law began emphasizing high standards for all students, the consequences for schools not showing progress were ill-defined and open-ended. That changed with NCLB when lawmakers adopted a very prescriptive set of consequences for schools not making yearly progress. Those consequences fall loosely into two categories: student-centered options (public school choice and supplemental educational services), and

school-improvement related requirements (corrective actions or school restructuring). In adding these requirements to Title I, lawmakers adopted the premise that clear consequences for poor school performance would create increased urgency and needed improvements. How have these mechanisms worked on the ground? Research suggests three broad findings.

First, states have faced challenges processing and reporting test results in a timely manner, which makes it difficult to activate NCLB's consequences for schools not making required gains (U.S. Department of Education, 2007b, 2007c). An ideal scenario would be for local communities to learn in the early or mid-summer at the latest if their schools have made adequate yearly progress (AYP). That way parents planning for the fall can take advantage of public school choice or supplemental services and schools can determine how to incorporate corrective actions and potential restructuring. Unfortunately, delays in score reports have undermined that important planning. Based on data from 2004-05, a survey of local school district officials found that one of the top challenges officials cited was "identifying schools for improvement prior to the start of the school year" (Center on Education Policy, 2006, pp. 126-7). Those problems persisted into the following year; the evidence for the spring 2006 testing cycle indicated that only five states announced final AYP determinations before the end of July (Manna, 2007).

Second, students in schools not making AYP have not tended to take advantage of the law's public school choice option but have used supplemental educational services more frequently. Data from 2005-06 show that only 1.6 percent of eligible students exercised choice, a number that has remained steady since 2002-03 (Center on Education Policy, 2006). Researchers have offered several reasons for this low take-up rate, including the potential reluctance of local schools to vigorously promote choice, the oversubscription of schools to which students might transfer, and the availability of other choice options that some local districts offer (Center on Education Policy, 2006; Hannaway & Cohodes, 2007; Manna, 2007). Supplemental services, which provide extra academic help or tutoring, have been much more popular but still have somewhat low participation. In 2005-06, approximately 20 percent of eligible students took advantage of this option (Center on Education Policy, 2006). As with state standards and tests, states vary significantly in their ability to monitor the performance of supplemental services providers, the amount of information they make available about those providers, and the number of providers available within a particular state (Center on Education Policy, 2006; Manna, 2007).

Third, schools that persistently fail to make AYP have tended to select less dramatic changes at the corrective action and restructuring phases (Mead, 2007; National Association of State Boards of Education, 2007). At both of these stages, Title I allows schools to adopt measures including reforming school governance and operations, replacing selected personnel and curriculum, and even closing down schools and reopening them with entirely new staffs or as public charter schools. To date, most schools have taken less radical measures, such as hiring coaches to facilitate the work of teachers and administrators or establishing new leadership teams within schools. These less dramatic changes have resulted, in part, from an open-ended feature of Title I, Section 1116(b)(8)(B). Beyond the prescriptive reform options the law contains, that section allows schools reaching restructuring to adopt "any other major restructuring of the school's governance arrangement that makes fundamental reforms." Although comprehensive and systematic national data are not available to confirm this point, in-depth case studies of Michigan, California, and Maryland reveal that policymakers have made much use of this open-

ended restructuring option (Center on Education Policy, 2007b, 2007d, 2007e). A recent study of restructuring in five states (California, Georgia, Maryland, Michigan, and Ohio) found similar results, but also noted that staff replacement has become a more popular, albeit still small, part of restructuring efforts. For example, in 2006-07, among schools in restructuring, 13 percent in California and 12 percent in Maryland replaced large numbers of staff as part of their restructuring plan (Center on Education Policy, 2008, p. 10).

Student Achievement

Clearly, Title I has prompted much policy activity at the federal, state, and local levels since 1965. A key question, which goes to the heart of all this effort, is: Have disadvantaged students improved their academic performance and closed the gap with their more advantaged peers? While that is a powerfully important question, Title I evaluators across the years have identified at least four reasons why it is difficult to assess Title I's impact on student achievement (Borman & D'Agostino, 1996; Carter, 1984; Center on Education Policy, 2007a; Puma et al., 1997; U.S. Department of Education, 1987, 1993a, 1999c, 2007b). First, the law is a funding stream, not a specific program, so it varies tremendously in how it serves students. Second, Title I activities do not operate in a vacuum; rather, they supplement state and local actions, which complicates isolating their effect absent these other commingling activities. That challenge has become even more significant since Title I has allowed for schoolwide programs and linked its efforts to the state standards movement. Third, members of Congress have been inconsistent in committing the resources or program authority necessary to evaluate its effects. Beyond limited funding for evaluation (relative to overall program costs), the law itself prevents the running of a true Title I policy experiment because legal provisions prevent denying services to students, something that would be necessary to separate control and treatment groups. Fourth, even with NCLB's emphasis on academic performance, because states have the freedom to define content standards and set passing scores on their exams, one cannot validly compare state achievement results. Sometimes it is even difficult to compare results across years within the same state because standards and cut scores can change periodically.

Nevertheless, Title I evaluators have attempted to work within those constraints to assess the law's effects on achievement. Over time, researchers have tended to reach two main conclusions about Title I and students' academic performance: Title I has likely helped some disadvantaged students make academic gains, but even with that progress these students perform at relatively low levels and achievement gaps between those students and their more advantaged peers still remain. Consider the following studies that support those general conclusions.

Despite Title I's long history, there have only been two large-scale national evaluations of its direct impact on student achievement.[4] The Sustaining Effects study was based on student achievement from 1976-1979 and the Prospects study examined achievement from 1991-1994, during which time the program operated as Chapter 1. Both studies relied upon nationally

[4] The Longitudinal Evaluation of School Change and Performance in Title I Schools (LESCP) is another large-scale study, but it is not based on a representative sample of schools (U.S. Department of Education, 2001b). Rather, it focuses on instructional practices in 71 purposefully selected high-poverty schools. Given disagreements over its purpose, it is difficult to assess its relevance for evaluating Title I's overall effectiveness (General Accounting Office, 2000a).

representative samples of students, 120,000 in the former and 40,000 in the latter. The Sustaining Effects authors found that Title I students did benefit in reading and math in relation to a comparable group of students not served. However, the most disadvantaged students did not benefit, because improvement was "selective, depending on the level of achievement of the students entering the program" (Carter, 1984, p. 11). Those on the cusp of average scores received noticeable benefits, but those most behind did not. Despite these improvements, none were great enough to close the gap with their more advantaged peers, and the effects did not appear to persist once the students reached junior high school. The Prospects authors found that the program did not increase achievement scores of students served, even when controlling for several relevant background factors (Puma et al., 1997). Further, achievement gaps remained, leading the authors to conclude, "Where children start out compared to their classmates largely explains their relative academic standing in later grades" (Puma et al., 1997, p. 41). In concluding, both studies noted an important problem that their authors faced. Given the data available, and absent a true policy experiment, there was no way to know whether students would have done worse had they not received Title I services.

In contrast to these two large scale studies, work by Borman and D'Agostino (1996) took a different approach in evaluating Title I's effectiveness. They conducted a statistical meta-analysis of several individual studies that had been conducted from 1966 to 1993 and had examined some aspects of the program's effect on student achievement. Based on this synthesis, the authors concluded that the program had a modest positive effect on math and reading achievement, and that it appeared to have a greater impact over time. (They did not analyze achievement gaps.) In their words, "Contrary to widely held beliefs regarding the historical stability of programmatic impact, the results suggest a positive trend for the educational effectiveness of Title I across the years of its operation" (Borman & D'Agostino, 1996, p. 324). In conjectures, they attributed that result to the growing familiarity of policy implementers with the program, and to changes in Title I implementation that made school-level programs more substantively rigorous, especially since the late 1980s.

Other evaluations have attempted to infer Title I's effects more indirectly by examining trends in National Assessment of Educational Progress scores and student performance on state assessments. The links between Title I and results on NAEP or state tests are necessarily indirect given the commingling of multiple policies and programs that serve disadvantaged and other students. At best, studies have noted the association of achievement trends and Title I requirements. Still, while consistently recognizing these caveats, evaluators have reached four main conclusions, which in many respects mirror the large Title I evaluations cited earlier (Carter, 1984; Puma et al., 1997).

First, authors have attributed some credit to Title I for improving achievement of disadvantaged students and for narrowing achievement gaps on NAEP during the 1970s and 1980s (Puma et al., 1997; U.S. Department of Education, 1993b). These studies also have noted that those gains began to stall in the late 1980s and 1990s, and subsequent work has identified widening achievement gaps between low-poverty and high-poverty schools between the late 1980s and the late 1990s (Independent Review Panel, 1999; U.S. Department of Education, 2001a). Current work has found improvements since NCLB became law (Center on Education Policy, 2008a; U.S. Department of Education, 2007b). A recent comprehensive examination of state-level

NAEP trends since 2001 found narrower achievement gaps across multiple groups, subjects, and grade levels. In one study, among the 289 possible achievement gaps examined, "gaps narrowed on NAEP 62 percent of the time," a pattern that held for most student subgroups and subjects, with the exception of 8th grade math (Center on Education Policy, 2008a, p. 115).

Second, reports on state assessments, which have also raised caveats about the potential dangers of drawing broad conclusions from annual state-level tests, have shown upward trends since NCLB became law. One evaluation that reported on three-year trends, during which tests remained consistent and therefore comparable within each state, found that low-income students improved their performance in elementary school reading in 27 of 35 states, a finding that paralleled mathematics achievement for middle school students (U.S. Department of Education, 2007b). Subsequent work that examined math and reading performance trends found narrowing achievement gaps by race and income in some subjects and grades: "the African American-white gap [in elementary reading] narrowed in 13 states according to both percentages proficient and effect sizes and widened on both indicators in only 1 state. Gaps between low-income and non-low-income students narrowed in 10 states on both indicators, and in no state did this gap widen. At the middle and high school levels, there were also more cases of gaps narrowing than widening for the African American and low-income subgroups" (Center on Education Policy, 2008a, p. 4).

Third, systematic evidence is beginning to reveal potential academic impacts of one specific NCLB remedy—supplemental educational services—for Title I students. So far, the limited evidence has been mixed. Two published studies from Tennessee (Muñoz, Potter, & Ross, 2008; Ross et al., 2008) and recent evaluations from other states (Glod, 2008) have found limited or no evidence that these services improve student achievement. Yet in another study that examined nine large urban school districts, researchers found statistically significant gains for African American students, Hispanic students, and those with disabilities. Further, gains appeared to snowball given that "[s]tudents participating for multiple years experienced gains twice as large as those of students participating for one year" (U.S. Department of Education, 2007e, p. xiii). In general, the limited evidence is mixed, and authors of these studies have called for additional research.

Finally, one fact has loomed large since Title I became law in 1965. Despite some measurable, absolute academic improvements among disadvantaged students and despite narrowing gaps between disadvantaged students and their peers, all of the accumulated evidence generally indicates that disadvantaged youngsters tend to perform at basic levels or below, and that achievement gaps that remain are still quite large. Regardless of the measures of academic performance used and the subject or grade level analyzed, the achievement gaps between disadvantaged and advantaged students have persisted since consistent measures of achievement, through NAEP, became available in the 1970s. Thus, despite apparent progress, a fundamental goal of Title I, which unites equality and academic excellence, remains to be realized.

Students with Disabilities

The federal government's primary law to assist students with disabilities is the Individuals with Disabilities Education Act, originally enacted in 1975 as the Education for All Handicapped Children Act. IDEA is another large program in the Department of Education. For fiscal year 2007, federal funding for special education was the second largest budget item for elementary and secondary education, right behind Title I grants to local school districts. Special education spending amounted to almost $12 billion, or just over 32 percent of the elementary and secondary education budget.[5]

Premises and Intended Effects of IDEA

The IDEA has been reauthorized multiple times since its original passage, and those revisions have brought important substantive changes to the law. But with few exceptions, its core premises and intended effects, and the mechanisms it relies upon, have remained fairly stable during the last four decades. These features of IDEA emerged originally for several reasons, but fundamentally center on the blatant disregard for the needs of students with disabilities that persisted for decades before the law's enactment.

In a hearing on the 20th anniversary of IDEA's passage, one witness summarized those dark days this way: "In the decades up to 1975, in every State in the Union, parents of a handicapped child could expect to receive at any time during the day, often enough in the night, a phone call from the school saying, your retarded child is uneducable and untrainable; come take him home. Do not put your child on the bus tomorrow morning. Your child is disrupting the class; come take him out of school. Your child can no longer profit from an education" (Gilhool, 1995, p. 25). Estimates have suggested that prior to IDEA, over 1 million of these students were denied admission to school, and several thousand others who did attend were commonly kept apart from their peers or received limited assistance (American Youth Policy Forum & Center on Education Policy, 2002).

In addition to being motivated by the track record of exclusion, the IDEA's passage was spurred by three other factors: a growing number of court decisions, the challenges that states and localities had in paying to educate students with disabilities, and the realization that ignoring these students' educational needs would prevent them from becoming productive members of society (Jones, 1995). Those ideas, and a more recent recognition that these students can and should be held to high academic standards (President's Commission on Excellence in Special Education, 2002), have informed IDEA.

Four major premises underpin the law. First, access to education is a fundamental right for all children, including those with disabilities. Second, if students with disabilities have their particular needs appropriately addressed, they can have successful educational experiences in school, just like their non-disabled peers. Third, because children with disabilities have been mistreated in the past, procedural safeguards must exist to prevent future abuses. Fourth, paying to serve students with disabilities in school can be a major challenge for states and local school districts, but it is no excuse for ignoring those students' needs.

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[5] Budget data for special education are from the U.S. Department of Education Budget History tables, located at http://www.ed.gov/about/overview/budget/history/index.html. Last accessed on September 17, 2008.

Lawmakers have created several mechanisms within IDEA based on these assumptions. In practice, IDEA is both a civil rights statute, which establishes key rights and mechanisms to defend them, and a granting device, which provides money to states and local school districts to help offset the costs of educating students with disabilities (Apling & Jones, 2007). The law establishes a fundamental right to a "free and appropriate public education" (FAPE) that should meet the needs of students with disabilities but also, whenever possible, enable them to participate at school in the "least restrictive environment." Ideally, students with disabilities would receive their instruction while mainstreamed into regular classrooms. These students are also entitled to individualized education programs (IEPs) that identify the students' disabilities and a plan for addressing them. Parents participate in the development of IEPs and are guaranteed several due process rights that allow them to challenge the "identification, evaluation or educational placement of a child with a disability, or the provision of FAPE to the child" (Zirkel & Gischlar, 2008, p. 22). The law also creates a federal granting mechanism to supply funds to state and local school districts to help pay for educating children with disabilities. During various reauthorizations, lawmakers have adjusted the details of these elements, but overall they have been bedrock features of the law since its original passage.

Reauthorizations in 1997 and 2004 added substantively important changes centering on the academic performance of students with disabilities (Apling & Jones, 2007, 2008a, 2008b). These academic expectations parallel changes in ESEA Title I, which sought to hold disadvantaged students to high standards. The 1997 and 2004 IDEA reauthorizations began to harmonize these two laws by focusing more on the academic performance of students with disabilities. These changes, along with ESEA and IDEA regulations, defined important exceptions to those new rules. Fundamentally, though, adding mechanisms to track the academic performance of these students, as measured against standards that all students were expected to meet, marked a major change in the IDEA's mechanisms.

What ends are these policies supposed to serve? At least four major intended effects seem clear. The IDEA has sought to:

- guarantee students with disabilities access to free and appropriate public education;
- enable parents to participate in educational decisions affecting their children and provide parents with due process rights so they can challenge school or district practices;
- through financial and technical assistance, help states and local districts address the challenges of serving students with disabilities; and
- help students with disabilities strive academically by requiring states to hold them to the same high standards to which other children are held.

The remainder of this section examines each intended effect in turn. Readers should recognize that many overlapping factors since the IDEA's passage have influenced the experiences of students with disabilities (American Youth Policy Forum & Center on Education Policy, 2002). As with Title I, it is not always easy to discern the specific effects of the law. That caveat is most relevant for the first and last intended effect noted above, given that state and local efforts, independent of IDEA, also can affect student access and academic achievement.

Access to Free and Appropriate Public Education

Opening the doors to public education has been a major accomplishment of the IDEA and its precursor law, the EAHCA. On this measure of success, the original law helped to foster great improvements almost immediately. A 1981 GAO review of several studies and two national databases found that by the 1980-81 school year almost 4 million students were receiving services under IDEA. The number of "unserved" children, meaning those lacking access to schools, was likely quite low, but the report noted that improvements were needed to better address "underserved" students, those presently in school but not receiving services. Perhaps most positive from this early analysis was the conclusion that "the congressional objective that those most in need of services [the unserved and the most severely disabled children] . . . has largely been accomplished" (p. v).

Over time, these gains, in terms of services received and the ability of students with disabilities to learn in traditional classroom environments, have been sustained. As the new century began, the IDEA served over 6 million students, which represented a 65 percent increase from the 1976-77 school year (Horn & Tynan, 2001). The most recent figures from 2006 show that 6.6 million students were served under IDEA that year. Among students with disabilities aged 6-21, over half spent at least 80 percent of their time in regular classroom settings, and over three-fourths were learning in regular classrooms at least 40 percent of the time. Further, within the 6- to 21-year-old category, nearly 95 percent of all students served by IDEA received their education in traditional public schools.[6]

Helping students with disabilities gain access to free public education has been a major IDEA accomplishment, but research has raised cautions about whether the education these children receive is "appropriate," another key part of the FAPE concept. These issues arise from how children who receive special education services are identified and the consequences of that identification. Consider these three dimensions of the identification issue.

First, IDEA's success in guaranteeing appropriate educational interventions depends on the difficult initial task of identifying students for services. Proper identification is crucial, but during the initial years of the IDEA and its predecessor law, much of it was done "informally by parents, schoolteachers, and others not specially trained to recognize handicaps" (Brewer & Kakalik, 1979, p. 155). Proper identification was a problem that early IDEA evaluations noted (General Accounting Office, 1981), and the problem appears to have persisted, according to more recent work (President's Commission on Excellence in Special Education, 2002).

An increasing number of disability categories has intensified the challenge of properly identifying students. Parents report, however, that the vast majority of initial identifications, the on-ramp that lead to more formal evaluation and eventual provision of services, are done by individuals without specific training in identification, namely, classroom teachers (40 percent) or

[6] Current data from 2006 come from https://www.ideadata.org/arc_toc8.asp#partbLRE, tables 2.1 and 2.2. Last accessed on September 19, 2008.

parents themselves (33 percent) (Public Agenda, 2002).[7] Relying on teachers to first spot students in need of services appears to make some sense because teachers have so much daily contact with students. But that may be problematic because teachers themselves often admit to feeling unprepared to work with students who have disabilities (President's Commission on Excellence in Special Education, 2002). The lack of proper tests and the still limited use of early identification strategies, especially for those with specific learning disabilities, compound the identification problem (Lyon et al., 2001).

Second, these gaps in proper identification have real consequences for students who are served or not served by IDEA. Perhaps most notable is the consistent finding that minority students, in particular African Americans, are much more likely than others to be identified for special education services and labeled mentally retarded or emotionally disturbed relative to their percentage of the school-age population (American Youth Policy Forum & Center on Education Policy, 2002; Donovan & Cross, 2002; General Accounting Office, 1981; President's Commission on Excellence in Special Education, 2002). While those classifications may be shortchanging minority students and not appropriately addressing their true academic needs, evidence suggests that more affluent suburban parents have also used special education identifications to provide their children with advantages that other students, typically those in urban or rural areas, may lack. For example, one study found that "while children from families with more than $100,000 in annual income account for just 13 percent of the SAT test-taking population, they make up 27 percent of those who receive special accommodations when taking the SAT" (Horn & Tynan, 2001, p. 31).

Third, the dramatic expansion of children identified in the "learning disabled" category has raised concerns. The primary problem is that this category is imprecisely defined, and it is difficult to accurately identify students needing these services. Early evaluations of IDEA recognized this growing problem only five years after the initial law was enacted (General Accounting Office, 1981). In terms of raw numbers, between 1976-77 and 1997-98, the number of students in this category grew by 233 percent, compared with an increase of only 13 percent in all other disability categories (Horn & Tynan, 2001). The most recent data available show that of students aged 6-21 participating in special education during 2006, 45 percent were in the "specific learning disabilities" category. That is the largest group, followed by students with speech or language impairments (19 percent) and those with other health impairments (10 percent).[8] A major explanation for the expansion of the specific learning disabilities category, as two authors noted, is that "there are no universally accepted validated tests or diagnostic criteria to determine the presence or absence of learning disabilities, nor is there a clear line of demarcation between students who have milder forms of SLDs [specific learning disabilities] and those who do not have SLDs" (Horn & Tynan, 2001, pp. 28-9). A recent synthesis of research and professional opinion noted that "statistical and other interpretive problems" plague typical identification of children placed in the learning disabled category (President's Commission on Excellence in Special Education, 2002, p. 25). Given that roughly 80 percent of

[7] Students whom teachers or parents suspect may have disabilities are evaluated by a team of experts to determine whether special education placement is needed. But that initial referral, which then leads to a more rigorous evaluation, is still primarily in the hands of teachers and parents.

[8] Percentages for 2006 were computed from data available at https://www.ideadata.org/arc_toc8.asp#partbCC, table 1-11. Last accessed on September 15, 2008.

students with learning disabilities have difficulties in reading, some studies note that better reading instruction and screening at early ages could prevent many students from receiving this classification as they move through subsequent grade levels (Lyon et al., 2001).

Parent Involvement and Due Process

Like the FAPE guarantees discussed previously, the provisions of the IDEA addressing parents' involvement and their due process rights have produced some impressive accomplishments but also some unintended negative consequences. Without question, not only have more students with disabilities received public education, but their parents have also become more involved partners with local schools. Given the history of exclusion that many of these students experienced prior to the IDEA and the burden parents faced in initiating lawsuits to guarantee services, it is easy to see why the IDEA's original authors built parental involvement and due process provisions into the law (Jones, 1995). What those authors did not anticipate, though, was how some of these provisions would affect the relationships between parents and school officials. Consider three broad findings from the research.

First, large numbers of parents are taking advantage of opportunities to actively participate in the development of their children's academic programs. One report found that over 85 percent of parents with children in the early elementary school grades had high levels of involvement in IEPs and other matters, while that same study noted that 70 percent of parents reported that their schools provided them with information about their child's progress, tips for how to build on school progress at home, and clarifications about their legal rights (American Youth Policy Forum & Center on Education Policy, 2002, p. 13). The Public Agenda (2002, p. 13) survey cited earlier found similar results in noting that 77 percent of parents strongly or somewhat agreed that their child's "special education team treats me like I'm part of the team"; 69 percent similarly agreed that their child's team "offers me real choices and options for my child."

Second, despite these positive feelings, parents do express some dissatisfaction. They still report that they experience frustrations in gaining services for their children (53 percent of parents). They also say they must remain vigilant fighters to make sure their school provides their children needed services (43 percent of parents) (Public Agenda, 2002). One reason for these frustrations has been the very compliance-heavy nature of IEP development that can pit parents and their advocates against school district officials. When these disagreements arise, parent involvement in helping schools design and administer a child's IEP can transition into more formal exchanges between parties that lead to due process proceedings.

Through its research, the President's Commission on Excellence in Special Education (2002, p. 16) was surprised at the large numbers of parents and school officials who described IEPs as less designed for "individualized education" and more focused on "legal protection and compliance with regulatory processes." That potential dynamic is what led one school administrator to tell the Commission that an IEP essentially is a "litigation document rather than an instrument outlining an effective instructional program for students with disabilities" (President's Commission on Excellence in Special Education, 2002, p. 16). In the process, student academic success can become a secondary concern (American Youth Policy Forum & Center on Education Policy, 2002).

Despite the Commission's findings, the limited systematic data available on formal disputes between parents and schools reveal nuances that paint a complex picture. The nationally representative survey from Public Agenda (2002, p. 24) found that overall, relatively small numbers of parents of children with disabilities (16 percent) said "yes" when asked whether they had ever considered or threatened to sue a school district "because of an issue related to your child's special needs or IEP." The proclivity to sue also varied by disability: 31 percent of parents whose children had severe disabilities answered yes, compared with only 13 percent of parents whose children had mild disabilities. Perhaps this distinction is due to the greater history of exclusion of children with severe disabilities and the greater expenses that school districts face in serving them. These factors could foster heightened tensions on both sides.

Added nuance emerges when one examines the actual numbers of conflicts and due process proceedings. Relative to the overall numbers of students participating in special education, these numbers are low according to a GAO (2003) synthesis of four national studies and additional fieldwork in four states. One study in the GAO synthesis (2003, p. 16), based on data from the 1998-99 school year, found that "62 percent of districts reported having no cases involving complaints, due process hearings requested or held, or mediations during the school year." Further, the authors found that nationwide, only about 5 due process hearings were held for every 10,000 students with disabilities. More than 75 percent of those hearings occurred in five states (California, Maryland, New Jersey, New York, and Pennsylvania) and the District of Columbia. The GAO also considered national data on mediation hearings, a potentially more collaborative mechanism for resolving disputes that the 1997 IDEA amendments encouraged parents and local districts to pursue. These proceedings occurred at a rate of approximately 10 complaints per 10,000 students. Based on its case study work in four states, the GAO found that these states appeared to be taking much advantage of the mediation option, in addition to other state-developed early dispute resolution techniques. The authors concluded that these approaches, if more widely adopted, "may hold promise for reducing contentious and expensive forms of dispute resolution, such as due process hearings" (General Accounting Office, 2003, p. 22), a conclusion that other authors have tended to support (American Youth Policy Forum & Center on Education Policy, 2002; President's Commission on Excellence in Special Education, 2002).

In a study that updated the GAO analysis and extended it with additional data, Zirkel and Gischlar (2008) found a similar concentration of due process hearings, with New York and New Jersey accounting for 56 percent of them from 1991 to 2005. Looking across that entire period, the evidence revealed growth in the number of hearings from 1991 to 1997, and then a leveling off, what they called a "rather uneven plateau from 1997 to 2005" (Zirkel & Gischlar, 2008, p. 25). That finding held when using either raw totals or per capita figures. The authors also remarked that the leveling may have been attributable to parties settling their disputes using mediation, a process that the 1997 IDEA amendments supported. Further, the 2004 amendments to IDEA required preliminary meetings, known as a "resolution session," to occur prior to due process hearings (Apling & Jones, 2007). Evaluations of this new requirement do not yet exist, but it will be interesting to see if it has an effect on the number of due process hearings.

Support for States and Localities

Federal support for state and local IDEA implementation comes in two general forms: funding to support IDEA, and technical assistance and oversight to help implementers in the field carry out the law. In these two areas, federal policy has struggled to meet state and local needs. Consider the funding issue first.

Although debates exist about the appropriate level of federal funding needed to make IDEA effective, studies frequently raise a few key facts that are not in dispute. First, the cost of educating students with disabilities is high and increasing. One estimate, based on data from the 1999-2000 school year suggested that the total cost of providing assistance to these students was approximately 21.4 percent of the roughly $360 billion spent on K-12 education each year (President's Commission on Excellence in Special Education, 2002). Second, special education for students with the most severe disabilities can cost local districts upwards of tens of thousands of dollars annually, which, in a small district, can be incredibly taxing on local school budgets. Third, court decisions and federal law have stated that the cost of special education is not a valid reason for denying services.

The financing of special education reflects the decentralized system of education governance in the United States, which vests considerable responsibility at the state and local levels. States and localities pay approximately 88 percent of the costs of special education (on average, 56 and 32 percent respectively), and the federal government contributes the additional 12 percent (Horn & Tynan, 2001). That 12 percent figure is far below the federal government's stated ambition that it would provide 40 percent of the extra costs of educating students with disabilities. Despite that promise, which has existed since 1975, federal coverage of those extra costs has seldom exceeded much more than 12 percent (Horn & Tynan, 2001, p. 32). With recent increases, federal expenditures have covered between 17 and 18 percent of excess costs since fiscal year 2003; the amount for fiscal year 2007 was 17.1 percent (Lordeman, 2008, p. 7). Despite those increases that still leaves state and local governments to bear the vast majority of the financial burden.

Debates about full funding of special education are contentious, and the 40 percent figure has assumed symbolic importance, even though researchers admit it may be impracticable given the massive increases required (Center on Education Policy, 2002). The number itself grew out of a political compromise and an estimated calculation during the 1970s that assumed it costs twice as much to educate a student with disabilities as it does for a student in the regular education program only. To date, no study has identified empirically the actual excess cost of educating students with disabilities based on prevailing costs, the particular expenses associated with educating students with different types of disabilities, and available techniques or interventions to help individual students (Jones, 2002; President's Commission on Excellence in Special Education, 2002). In short, much additional research is needed to determine both the optimal levels of expenditure to serve students with disabilities and the appropriate amounts that federal, state, and local governments should contribute.

Technical assistance and oversight is a second area where the federal government executes many functions to help state and local governments implement IDEA. Much research has examined

federal performance in these areas, and common themes have emerged. First, the regulatory burden of IDEA is immense and hinders administrators at all levels of government. Monitoring, for example, is one tool federal officials use to hold states and localities accountable. If done well, it can also help identify and remedy problems before they intensify. But federal monitoring during IDEA's history has struggled to provide the substantively useful and timely feedback that state and local officials need as they try to implement IDEA (General Accounting Office, 1989, 1991). For example, monitoring visits with states that are typically supposed to produce federal feedback within four to six months frequently take over one year to generate (Government Accountability Office, 2004; President's Commission on Excellence in Special Education, 2002).

Second, regulations and reporting requirements associated with IDEA have expanded since the law's original passage, but federal efforts to keep up with, harmonize, or streamline these various requirements have not kept pace. Only since the 2004 IDEA reauthorization, for example, have these needs received sustained attention. As the Department noted in a recent report, "Under *IDEA*, states are responsible for ensuring compliance with the statute and providing general supervision of all programs providing . . . services. However, prior to *IDEA* 2004, the law did not define or explain monitoring practices and provided little guidance for enforcement" (U.S. Department of Education, 2007a, p. 1).

The results of this complicated regulatory environment, and the strained federal effort to provide feedback and support, have manifested themselves on the ground in state agencies, district offices, and classrooms across the country. Surveys of special education teachers have found that these teachers spend upwards of five hours each week completing required paperwork, which takes valuable time away from other tasks such as grading student work, meeting with parents, and providing direct instruction to students (President's Commission on Excellence in Special Education, 2002). The regulatory burden is frequently cited as a common reason why special education teachers leave the profession; one federal survey of special education personnel, for example, found that 76 percent of those who planned to quit maintained that paperwork was a major interference in their work (American Youth Policy Forum & Center on Education Policy, 2002). Limited monitoring and support, which can contribute to state and local violations of IDEA's provisions, have the compounding effect of potentially disrupting parent and school relations. As one expert noted in the 1990s, "there are serious problems with the type and frequency of current Federal monitoring activities [of IDEA]. These problems essentially condone noncompliance with the Act and increase parental use of the due process provisions of the Act, placing serious financial hardships on families and creating adversarial relationships between school districts and families" (Bristo, 1995, p. 87).

The 2004 amendments to the IDEA have initiated substantial changes in program monitoring and reporting requirements. The major goals of these changes are to reduce the focus on compliance-oriented activities and instead focus on "improving educational results and functional outcomes for children with disabilities" (Apling & Jones, 2007, p. 34). Systematic data are not yet available on how these changes have influenced IDEA implementation.

Student Success and Academic Accountability

Even though IDEA and its predecessor have existed since 1975, only recently has the law incorporated mechanisms to address academic achievement. As a result, for essentially the program's entire history, systematic data do not exist to track IDEA's impact on the academic performance of students with disabilities. As just noted, until the 1997 and especially the 2004 IDEA reauthorizations, essentially all of the law's reporting and compliance requirements have focused on process indicators, not academic performance or improvement (President's Commission on Excellence in Special Education, 2002). Studies from the early and mid-1990s have noted that most states could not even indicate how many students with disabilities were participating in state tests (Bristo, 1995; Erikson, Thurlow, & Ysseldyke, 1996; National Center on Educational Outcomes, 1992). In fact, as one report noted for during 1997, "only *six* states currently require Individualized Education Programs (IEPs) to document the linkage between a student's individual goals and objectives, and the state's content or curriculum standards" (National Center on Educational Outcomes, 1997, p. v.). More states are presently engaged in linking IEPs and state grade-level academic standards, but that shift has not been easy or universally accepted by all states (Ahearn, 2006).

That lack of attention to classroom performance means that limited data exist to document the academic achievements of students with disabilities. The passage of NCLB and the requirement that all students participate in state testing have begun to change that, but results as presently reported provide limited utility. Even though some studies have begun to synthesize results and report on state-level achievement trends for students with disabilities (National Center on Educational Outcomes, 2006; National Council on Disability, 2008) or state officials' perceptions of these students' performance (National Center on Educational Outcomes, 2005), other work cautions against inferring too much from these current results (Center on Education Policy, 2007a, 2008a). The reason is that federal regulations and state policies governing participation of students with disabilities in state tests have been revised several times since NCLB became law, which in turn has affected the nature of the exams and the types of students appearing in test calculations. So while sources can reliably report that these students have dramatically increased their participation in state-level testing, a crucial positive step toward monitoring achievement, the data are not yet reliable or consistent enough to draw broad conclusions.

Still, three large-scale studies do provide some insights into the potential relationship between IDEA and student achievement. As with Title I, though, IDEA requirements are just one of many factors that contribute to the academic fortunes of students with disabilities. The law deserves neither full credit for their successes nor complete blame for their failures to make more progress.

Hanushek, Kain, and Rivkin (2002) examined the mathematics performance of students with disabilities in Texas from 1994 to 1997. Using advanced statistical methods and panel data that enabled them to track individual students, the authors reported two promising findings. First, exposure to special education services increased student achievement by 0.1 standard deviation, which meant that a year in special education "closes over one-tenth of the average achievement gap between those identified with learning disabilities or emotional problems and regular-education students" (Hanushek et al., 2002, p. 592). By comparison, the authors note, that effect parallels the gains one would expect from efforts to reduce the typical 4th or 5th grade class size

by 10 students. Second, they find that the gains by students with disabilities did not come at the expense of students in the regular education program. In fact, these students also appeared to benefit.

Two other studies investigating academic achievement of students with disabilities are the Special Education Elementary Longitudinal Study (SEELS) (SRI International, 2007), which considered elementary students from 2000 to 2006, and the second round of the National Longitudinal Transition Study (NLTS-2), presently underway, which is tracking students who received special education services in 7th grade or higher from 2001 to 2009 (Wagner et al., 2006). Both studies are based on nationally representative samples of students. The reported findings from SEELS and the present interim results of NLTS-2 suggest a few conclusions.

First, and perhaps not surprising, both studies find that students with disabilities score far below their non-disabled peers. Second, the scores of students with disabilities have varied quite a bit, as has the growth in student achievement over time. The SEELS results, for example, showed on reading that "students with disabilities as a whole include those who struggle significantly to understand what they read and those who are quite competent in gaining meaning from written text" (SRI International, 2007, p. 9-2). The NLTS-2 data also show variation, with initial reports indicating between 12 and 23 percent of students with disabilities scoring at or above the mean of non-disabled students across tests in several subjects (Wagner et al., 2006, p. 17). Both studies also find that performance varies by type of disability. Third, the studies diverged in their findings about the school program factors that are associated with student performance. The SEELS data indicate that "schools can influence the level and trajectory of students' learning through decisions regarding instructional settings and activities" (SRI International, 2007, p. 9-6). Specifically, and controlling for other factors including type of disability, the most consistently positive effect on achievement occurred when students with disabilities took more classes in general education settings. These results contrast with the initial NLTS-2 findings that individual student attributes and family characteristics are the dominant factors associated with achievement outcomes, while school experiences "show relatively few significant relationships with youth's academic achievement" (Wagner et al., 2006, p. 38).

It will be interesting to revisit those contrasting findings on student achievement once the NLTS-2 study is complete and more data are available. Recall, too, that the NLTS-2 covers the years 2001 through 2009. This time frame may make it a potentially valuable resource for examining relationships between achievement and the amendments to IDEA from 2004 that put added emphasis on student academic achievement.

Teacher Quality

Compared with Title I and IDEA, federal efforts to promote teacher quality have taken place on a much smaller scale and have received less intense attention.[9] Still, given the mounting evidence that links outstanding teaching to student success and the more recent considerations of teacher

[9] It is worth mentioning that the IDEA itself contains provisions in Part D regarding the preparation of special education teachers.

quality that have animated national debates, federal policy in this area has received more attention.

Since the 1950s, several dozen federal initiatives have supported teacher quality in one form or another. In the late 1990s, the GAO found 13 different federal agencies operating a total of 87 programs for teacher preparation (Shaul, 1999). Those diverse agencies included the National Science Foundation, the Department of Health and Human Services, and the National Endowment for the Humanities, among others. The two major programs considered here are the Eisenhower Professional Development Program and the highly qualified teacher provisions of NCLB. During fiscal year 2007, federal grants to states to support teacher quality, authorized by Title II of NCLB, were the third largest budget item for elementary and secondary education, amounting to almost $3 billion. In its last year of existence, fiscal year 2001, the Eisenhower program was funded at $549 million.[10]

Premises and Intended Effects of Federal Teacher Quality Efforts

The Eisenhower program operated from 1984 to 2002. Originally adopted as Title II of the Education for Economic Security Act of 1984, it was absorbed into Title II of the ESEA during that law's 1988 reauthorization and eventually repealed when NCLB became law. While it existed, in terms of dollars invested and teachers reached, the program was the largest federal program to develop the nation's teachers. The program essentially existed in two forms. From 1984 to 1994 its primary purpose was to fund professional development activities for math and science teachers. During this time, school districts had much flexibility in how they used the funds. In 1994, lawmakers made two important substantive changes to the program (U.S. Department of Education, 1998). First, even though it retained a math and science emphasis, funds could also support professional development in other core academic subjects. Second, grant recipients lost a measure of flexibility due to new accountability provisions requiring districts and states to show how program activities were linked to measurable indicators of performance and how they would help enable teachers to teach state academic standards. Consistent across all years was an emphasis on targeting program funds on schools and districts that served large numbers of disadvantaged students.

In 2001, the NCLB reauthorization approached the teacher quality issue from several angles, which simultaneously extended and recast the logic of the Eisenhower program. First, it replaced Eisenhower (and a major class size reduction program) with a new Title II, providing funds for teacher and principal training and recruitment. Second, and more significantly, in Title I, NCLB required schools to staff all core academic subjects with what the law defined as highly qualified teachers by the 2005-06 school year. The Title II funds could help serve the new requirements that Title I articulated. NCLB defined highly qualified classroom teachers as those who possessed a bachelor's degree and full state certification, and who had demonstrated content knowledge of the subjects they teach. Many pathways existed to demonstrate this last requirement, and the options varied depending on a teacher's career status (new or veteran),

[10] Budget data for NCLB teacher quality are from the U.S. Department of Education Budget History tables, located at http://www.ed.gov/about/overview/budget/history/index.html. Eisenhower funding data are from the U.S. Department of Education FY 2002 Budget Summary, located at http://www.ed.gov/offices/OUS/Budget02/Summary/chapt1.html. Both last accessed on September 17, 2008.

grade levels of employment, and, as defined by regulations, other particular teaching circumstances such as whether the person taught in a rural area (Kuenzi, 2008; U.S. Department of Education, 2007d). Finally, in addition to requiring highly qualified teachers, NCLB also required schools not making adequate yearly progress to spend a portion of their Title I funds on professional development.

Despite the differences between the Eisenhower program and NCLB's teacher quality components, both are grounded in similar assumptions about teaching and learning (U.S. Department of Education, 1999b, 2007d). First, the authors of both laws recognized that teacher quality is a major school-related factor influencing students' academic success. Second, teachers, much like doctors, require frequent and relevant professional development opportunities to maintain and sharpen their skills and knowledge. This is especially true in a world where technology and research on student learning are expanding rapidly. Finally, disadvantaged students tend to have lower quality teachers than their more advantaged peers. Helping to rectify that imbalance, an impulse consistent with the equity missions of Title I and the IDEA, has been a key reason for federal action to promote teacher quality.

Taken collectively, the granting mechanisms in the Eisenhower program and NCLB and the latter's more prescriptive conditions for hiring highly qualified teachers have sought to produce three general effects. Federal policy has aimed to:

- provide more teachers with standards-driven, high-quality professional development opportunities;
- ensure that all teachers possess proper credentials and are prepared to teach their subjects; and
- remedy the inequitable distribution of high-quality teachers in the nation's schools.

The rest of this section examines these three intended effects. Of course, these three points actually are only intermediate effects. The overarching goal of federal policy has been to support these measures so that students will succeed academically and later in life. However, while there is much general research on the relationships among students' academic success, professional development, and teacher quality, no studies have examined those explicit links in the context of the Eisenhower program or the teacher quality provisions of NCLB. In part, evaluators have noted, that is because identifying a direct link between these federal interventions and eventual student outcomes is so challenging given the many other intervening factors that are difficult or impossible to measure (U.S. Department of Education, 1991, 1999a, 1999b, 2000). Recently, one study has reported on state and local officials' impressions of the link between NCLB's teacher quality provisions and student achievement. A majority of these officials responded that they believed the law has had at best no effect or a small effect on student achievement (Center on Education Policy, 2007c). This finding reflected the policymakers' opinions, however, and not a systematic look at student achievement data and teacher quality.

High-Quality Professional Development Linked to Standards

Tens of thousands of teachers have participated in Eisenhower- or NCLB-funded professional development opportunities. However, using research-based criteria that define effective development experiences, program evaluations have found that these activities are generally not

of high quality (U.S. Department of Education, 1999a, 1999b, 2007d). Further, during the Eisenhower period, the linkage of professional development activities to consistent or coherent performance objectives and standards was frequently lacking. Two consistent points seem most relevant from past evaluations.

First, federally supported professional development opportunities have tended to be low-intensity, fleeting events that research suggests are unlikely to make fundamental changes in teaching practice. Early evaluations of the Eisenhower program, for example, found that the majority of activities the program financed amounted to only 6 hours of training per teacher each year (U.S. Department of Education, 1991). Data from 1988-89 revealed that in 31 percent of districts, training sessions were at most one day, but sometimes less (General Accounting Office, 1992). Despite efforts to improve the depth and intensity of the Eisenhower-supported activities in the 1994 reauthorization, the program's last systematic evaluation found on average more time devoted to training but still not enough to enable teachers to internalize lessons and use them to alter their teaching practice (U.S. Department of Education, 1999a, 1999b). The most recent study of NCLB-sponsored professional development reached similar conclusions: "Even though 90 percent of elementary teachers reported that they participated in at least one hour of professional development focused on instructional strategies for teaching reading, only 20 percent participated for more than 24 hours over the 2003–04 school year and summer" (U.S. Department of Education, 2007d, p. xxviii).

Second, for most years, these professional development activities have also been quite fragmented and highly variable, making it difficult for them to contribute systematically to classroom teaching. Initial evaluations of the Eisenhower program found that training sponsored by school districts was quite varied, with some being focused and well-designed and others being more *ad hoc* events (SRI International, 1992; U.S. Department of Education, 1991). That variability, existing from year to year and even within the same school, persisted into the later years of the program. Its last evaluation concluded that typical experiences were of low quality. Still, given this variation, the data did suggest that "at least some teachers participate in high-quality activities, at least some of the time" (U.S. Department of Education, 2000, p. 8). These results from the Eisenhower evaluations are perhaps not surprising given the generally flexible granting mechanism and the federal approach to implementation that left local districts with much autonomy over program design and content. Also, the program allotted districts relatively small amounts money per teacher, especially in its early years, which made it difficult for districts to offer more intense development opportunities (General Accounting Office, 1992; U.S. Department of Education, 1991).

One bright spot that the latter evaluation of Eisenhower and a recent study of NCLB has revealed is that professional development activities have become more directly linked to and driven by state and local standards. This suggests these opportunities are becoming more focused and coherent, even though they may still lack intensity. For example, most districts reported that development activities supported by the Eisenhower program were aligned with state standards and assessments, especially in math (U.S. Department of Education, 1999a, 1999b). More recently, an evaluation of NCLB-sponsored professional development found greater emphasis on math and reading, as almost "all teachers at all levels reported that they participated in content-focused professional development focused on instructional strategies for teaching reading or

mathematics" (U.S. Department of Education, 2007d, p. xxviii). Another study found that 60 percent of school districts reported providing content-driven professional development that would meet the law's requirements; 56 percent of districts also identified NCLB's Title II as a source of funds to support these activities (Center on Education Policy, 2007c).

Teacher Credentials and Preparation to Teach in Assigned Subjects

The Eisenhower program and NCLB's teacher quality provisions have attempted to enhance teachers' subject knowledge and their pedagogical skills. The evidence reveals that the professional development dimension of these initiatives has had limited direct or systematic impacts on teachers. Further, because states have such varied expectations and NCLB enforcement of the law's teacher quality provisions has been quite lax, it is difficult to say if federal teacher quality requirements have had real substantive impacts. Even today, now that NCLB's revised deadline for teachers to be highly qualified has passed, many states are struggling to meet the law's definitional and reporting requirements. It is difficult to say the extent to which this second intended effect has been realized, at least when measured against a consistent standard of what it means for teachers to be highly qualified. Consider the evidence on professional development first, and then NCLB's requirements second.

Assessments of the Eisenhower program suggest somewhat mixed impacts on teacher preparation and skills. Teacher self-reports from 1998 indicate that the program's professional development opportunities provided by school districts did enhance teachers' knowledge and skills in several areas (U.S. Department of Education, 1999a, 1999b). Most notable are the areas of instructional methods, curriculum, in-depth knowledge of mathematics, and approaches to assessment, where 63, 56, 48, and 46 percent of teachers, respectively, indicated their knowledge or skills in these areas had been enhanced substantially due to the program. In contrast to those self-reports, an examination of teacher reports and training experiences over a three-year period from 1996 to 1999 found little change in teaching practice as a result of Eisenhower-sponsored professional development (Desimone, Porter, Garet, Yoon, & Birman, 2002; U.S. Department of Education, 2000). NCLB-sponsored professional development has not been systematically evaluated for its impact on teacher skills and knowledge. The earlier findings noting the recent links between teacher preparation and math and reading instruction could bode well for the long run, though. Data are still needed to assess the impact of those connections and more general teacher professional development opportunities supported by NCLB funds.

Much recent work has assessed NCLB's highly qualified teacher requirements. Three major studies, which gathered original data and synthesized research from other key sources, suggest two broad conclusions. First, the pace of implementation has been quite slow. And second, state implementation has revealed substantial variation and frequently low expectations in what teachers must know and be able to do in order to meet the highly qualified standard. Those two broad findings, along with a few substantively important successes, suggest that on balance NCLB is far from fulfilling its promise to guarantee that all teachers are adequately trained and knowledgeable in their subjects.

The first finding is that states have been slow to implement the law's highly qualified teacher requirements. In part, this is due to states focusing more attention on NCLB's student testing and

accountability provisions and, importantly, on the U.S. Department of Education's enforcement practices, at least during NCLB's first few years. As one comprehensive study concluded, "It was clear from the beginning that the Department's oversight would be pivotal in determining the extent to which States would achieve the goal of highly qualified teachers. Yet, it wasn't until mid-2004 that the Department began to actively oversee State compliance" (Loeb & Miller, 2006, p. 12). The deadline of having all teachers be highly qualified was extended from 2005-06 to 2006-07, and still many states were short of reaching that goal. A recent study found that only approximately one third of states reported they would be fully complying with the law's requirements by the end of the 2006-07 school year. In fact, 28 percent of states said they would likely never be fully compliant (Center on Education Policy, 2007c). Given those implementation problems, which in some states even amounted to establishing clear definitions of what it means to be a highly qualified teacher (Loeb & Miller, 2006), it is not surprising that only 34 percent of states and 20 percent of school districts report that the law's requirements have increased teacher effectiveness either moderately or to a great extent (Center on Education Policy, 2007c).

Second, even though nearly 75 percent of teachers report that they are highly qualified and 33 states indicate that highly qualified teachers teach 90 percent or more of the state's classes (U.S. Department of Education, 2007d), states vary quite a bit in what they expect highly qualified teachers to know and be able to do. More (but not complete) consistency exists with the law's other two components—that teachers possess a bachelor's degree and have full state certification. But for new and veteran teachers, the latter of whom can meet the law's subject-matter knowledge requirements in many ways, there is little uniformity across the country. Studies have revealed several sources of this variation, including differences in threshold scores that teachers must achieve on state licensing exams and the degree to which prior years of experience can count for determining veteran teachers' highly qualified status, which is part of the law's HOUSSE provisions that enable veteran teachers to demonstrate their content knowledge without having to take an exam (Loeb & Miller, 2006; U.S. Department of Education, 2007d).[11] The HOUSSE provisions have prompted criticism because some studies consider them to be major loopholes that have watered down the law's requirement for all teachers, veterans and novices alike, to demonstrate their subject matter expertise (Loeb & Miller, 2006; Walsh & Snyder, 2004). In light of these cross-state differences, a recent and comprehensive analysis of NCLB concluded that variation in highly qualified teacher policies "raises questions about whether some states have set high enough standards for teacher qualifications under *NCLB* to ensure that teachers have a solid understanding of the subjects they teach" (U.S. Department of Education, 2007d, p. xxx).

Equitable Distribution of High-quality Teachers

The Eisenhower program and NCLB have attempted to improve teacher quality in general terms, but both initiatives also have tried to eliminate the inequitable distribution of quality teachers. Disadvantaged students, frequently racial minorities and the poor, typically attend schools with teachers who are of lower quality than their more advantaged peers. The Eisenhower grants included targeting provisions that would provide added professional development opportunities

[11] HOUSSE stands for High Objective Uniform State Standard of Evaluation.

to teachers of disadvantaged students. In demanding that all teachers be highly qualified, NCLB intended to provide a blanket guarantee that disadvantaged students would have instructors on par with other students. And further, in a specific effort aimed at improving disadvantaged students' experiences, NCLB required paraprofessionals teaching in Title I programs to meet their own set of high-quality standards. Despite these intended effects and some recent bright signs worth mentioning, the bulk of the evidence suggests both laws have fallen short of achieving their equity goals.

The Eisenhower program's targeting mechanisms did not reach teachers of disadvantaged students in the high numbers that the law's authors intended. An early evaluation found that meeting the needs of disadvantaged students did not appear to be a high priority of districts receiving Eisenhower funds; only 13 percent of local districts in 1988-89 indicated an emphasis on teachers of these students (U.S. Department of Education, 1991). Later evaluations that included district case studies found little effort to target teachers of disadvantaged populations or coherent planning to leverage Eisenhower and ESEA Title I funds (U.S. Department of Education, 1998). An expanded more nationally representative part of that evaluation found that districts reported "strong emphasis on recruiting teachers from high-poverty, low-achieving schools" (U.S. Department of Education, 1999b, p. 16) even though the effects seemed relatively minor. Among Eisenhower participants, 23 percent were from such schools, which at the time was only slightly higher than the 21 percent of teachers who worked in these schools across the nation.

More positively, targeting of NCLB's professional development has been more successful, especially in Title I schools not making adequate yearly progress (U.S. Department of Education, 2007d). Data from school year 2003-04 and the summer of 2004 show that teachers in these schools averaged 87 hours of professional development, while teachers in schools making AYP had 64 hours. Further, in schools not making AYP, teachers were much more likely to receive intensive professional development focused on reading and math instruction. Other recent data reveal that 25 states have reported targeting high-need schools with extra professional development funds to help their teachers become highly qualified (Center on Education Policy, 2007c).

NCLB appears to have had less of an impact on eliminating the imbalance of high-quality teachers between disadvantaged schools and others (U.S. Department of Education, 2007d). Leave aside for a moment the implementation problems and varying expectations across states that were noted earlier, which compound the difficulty of guaranteeing more equitable teacher distribution. As of May 2006, the original deadline for completing the law's highly qualified teacher requirements, no state had developed a fully approved plan to guarantee an equitable distribution of high-quality teachers, and revised plans submitted later that year were still lacking. Remaining problems included many states that could not provide data to illustrate where inequities in teacher distribution existed (Loeb & Miller, 2006). This situation appears at odds with state self-assessments in which 24 percent of states report making progress on equitable distribution to a "great extent," and another 43 percent saying progress has been "somewhat" noticeable (Center on Education Policy, 2007c). It is hard to know on what basis state leaders are making these statements given the lack of state attention to their equity plans. Whether the weak state efforts in developing equity plans are because "states did not understand their obligations or

were unprepared to meet them," as one analysis of the plans said (Peske, Crawford, & Pick, 2006), the result is that NCLB's goal of guaranteeing high-quality teachers to all students, including those who are economically disadvantaged or racial minorities, remains unrealized.

Concluding Observations and Recommendations

Persistent national conditions and pressing challenges have motivated federal officials to deepen their interest and involvement in elementary and secondary education during the last several decades. Historically, if state and local governments as the primary stewards of the nation's schools had eliminated achievement gaps, guaranteed students with disabilities access to public education, and ensured that all teachers were highly qualified, then the federal role would probably look much different than it does today. But because states and localities have sometimes lacked the capacity or political will (or both) to address these concerns, federal officials have decided to act. At times, state and local officials have even teamed with their federal counterparts to encourage greater activism from Washington. One of the best examples is the famous 1989 Charlottesville education summit between the first President Bush and the nation's governors, after which national education goals were adopted. In short, federal officials typically have adopted or reformed the large programs considered in this paper either to respond to concerns or to accelerate what appear to be promising trends already in motion.

In light of this larger context, consider the third research question that motivated this paper: Based on the federal government's record in assisting disadvantaged students, assisting students with disabilities, and promoting teacher quality, what can one conclude about Washington's ability to effectively provide aid for elementary and secondary education? At least four broad observations and four recommendations seem reasonable given the evidence assembled here.

Observation #1: Federal education policies have made positive contributions, but usually they fall short of reaching their ambitiously stated goals. Through Title I and IDEA, disadvantaged students and students with disabilities have received more attention than they previously enjoyed. Those laws and federal teacher quality efforts have also helped influence development of state-level academic standards, testing systems, and teacher preparation strategies. Still, achievement gaps remain, disadvantaged students tend to perform at very low levels, and the quality of standards, tests, and teaching are highly variable across the country. So, overall goals have not been met. Perhaps that says as much about the nation's politics as it does about the effectiveness of federal efforts. In order to sell their policies to one another and the public, elected officials frequently offer lofty and arguably unattainable goals, such as making the nation the best in the world in math and science or guaranteeing that all children will be proficient in reading and math by a certain date. Given the incentives to which politicians respond, these sorts of promises are likely to persist. Few would enthusiastically endorse a platform to make the nation "sixth in the world" in math and science or a promise that "85 percent of children" will not be left behind.

Observation #2: More federal involvement in elementary and secondary education has provided students and teachers with important opportunities or guarantees while contributing to a complex and fragmented regulatory environment that federal, state, and local officials struggle to manage.

Helping students with disabilities gain access to regular public schools has been a major accomplishment of IDEA. Title I funding has provided states, school districts, and schools with important supplemental dollars to help assist disadvantaged students. Those positives have been accompanied by greater complexity and often by individual program silos that are not well integrated with each other or with state and local programs, which also can be administratively complex. In using federal policy to leverage strengths of state and local governments, national policymakers have not always fully considered the complicated and at times conflicting web of existing requirements. Put differently, the intentions and some of the results of federal policy have been positive, but the policy instruments used to achieve those results also have fostered administrative frustrations.

Observation #3: Federal education policies have attempted to help state and local governments to leverage their own activities, which has moved some reforms forward but also made it difficult to assess the specific impacts of federal contributions. Despite the complaints about federal policy that state and local officials register, they gladly continue to receive federal dollars each year. No state, for example, has turned down NCLB funding in order to avoid the law's requirements. Typically, though, federal assistance comes in the form of many different funding streams rather than well-defined program activities. And because these streams coexist with each other and with state and local activities, it is hard to see their direct effects on student outcomes.[12] The reality, then, is that it is quite difficult to assess how well federal policy has worked and how much better or worse conditions might have been absent any federal efforts. This fact has intensified now that federal policy has become increasingly interested in student academic performance, which many factors can influence, rather than just in state or local adherence to federal process requirements.

Observation #4: The success of federal education policies is intimately linked to the success of the systems and initiatives developed by state and local governments. Claims about the relative success or failure of federal education policy can gloss over this important fact. Sometimes federal officials are to blame as when they overpromise what their initiatives can deliver absent a commensurate level of effort from themselves and policymakers in other levels of government. Federal initiatives can spark needed action, especially in promoting equity concerns, or help move promising initiatives forward, such as the state standards movement. But most of the policy development, implementation decisions, financing, and teaching that will ultimately help students learn must come from state and local governments. That is the nature of educational governance in the United States. As frustrating as it may be to some federal officials, the United States, unlike many of our economic competitors, does not possess a national education ministry with great power to dictate what children will learn and how schools will teach. As the studies cited in this paper have shown, this decentralization means that the effects of federal initiatives will tend to vary across the country, depending on how federal designs meld with conditions on the ground in state capitals and local school districts.

In light of those observations, how should federal officials proceed? Nearly all of the major evaluation studies cited in this paper have offered specific ideas about how to improve Title I,

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[12] This challenge of assessing specific impacts is not limited to federal initiatives. State policies and systems of aid, which operate simultaneously in local school districts, also suffer from this same challenge.

IDEA, and federal teacher quality efforts. This conclusion will not reiterate or prioritize from that long list of detailed suggestions. Readers interested in those particulars should further investigate the annotated source appendix to this paper, available on the Center on Education Policy's Web site (http://www.cep-dc.org), to probe in more detail the studies and recommendations that interest them. Rather, consider these general operating principles that federal policymakers, including legislators and staff members on Capitol Hill and agency and White House staff, should embrace as they adapt their initiatives for the future.

Recommendation #1: Federal policymakers should harmonize their many initiatives to minimize the complexity that arises when multiple program silos operate simultaneously. Even though this paper organized the discussion around individual programs, that was done for analytical convenience and not to encourage the maintenance of rigid divisions between federal initiatives. One way to improve program integration would be to center federal efforts on the overarching goal of increasing students' academic success, in particular for the nation's most needy or disadvantaged students. Without sacrificing federal efforts to promote equality of opportunity, future choices should always foster, as directly as possible, academic excellence in the classroom. That would require better leveraging of and alignment with promising state and local efforts. By harmonizing federal policy around student academic needs and by reaffirming the federal goal to promote educational equity, officials could better anticipate policy or regulatory conflicts that can overburden federal, state, and local administrators and classroom teachers.

The good news is that federal policy during the last five decades has begun, albeit imperfectly, to move in this direction. Title I's focus on high standards for all students, the IDEA's reframing in recent years to make academic success an integral part of special education, and the shift in teacher professional development to more closely align it with state standards and with efforts to help students learn fundamental skills have all been moves in the right direction. It has taken policymakers a while to get to this point, and much work remains to iron out some of the tensions and contradictions, but those positive trends should continue.

Recommendation #2: Whenever possible, federal policies should make education data and practices transparent to observers inside and outside government. That includes information and activities at the federal, state, and local levels. One great success of recent reauthorizations of the ESEA is that it has helped force into the open information on how students of different races, ethnicities, and economic backgrounds are performing academically. The expansion of NAEP to include all fifty states and the developing urban NAEP assessment, which focuses on performance in an increasing number of very large districts, are providing a consistent measure of achievement that facilitates cross-jurisdictional comparisons, unlike state tests that are not comparable yet drive NCLB's accountability scheme. Federal policy should go farther and also make transparent federal policy choices, such as decisions on state and local waiver requests, so impartial observers can better assess whether federal regulatory choices or enforcement actions are consistent with the government's stated goals.

Recommendation #3: The federal government should invest heavily in research and development to identify educational practices and interventions that have proven effectiveness. Evaluators across time and the spectrum of policies covered in this paper have consistently called for more research and better data to help the country make wise policy choices for schools and children.

This is one area where the federal government has a massive comparative advantage over its state and local counterparts. Federal license to sponsor such research is high, and federal capacity is strong, both internally through the Institute for Education Sciences (and other federal agencies such as the National Institutes of Health) and externally through evaluation contracts and research grants.

Certainly, state and local governments may be more attuned to conditions on the ground than distant federal officials. But that does not mean that teachers, school principals, or state officials are necessarily more knowledgeable about the interventions that might be most appropriate to meet their students' needs. By analogy, doctors rely on medical researchers to identify proven approaches that can remedy their patients' ailments. Individual patients are different, so the combination of treatments that physicians prescribe must still be sensitive to those particular needs. Similarly, federally sponsored research and program evaluations, which are then disseminated widely to state and local agencies and institutions that prepare teachers, can help by creating a corpus of promising possibilities that state and local districts could employ. Conceptually, the U.S. Department of Education's fledgling What Works Clearinghouse has begun to disseminate such research findings. Whether the present clearinghouse is the right model for these activities is unclear, but in general that sort of federal effort to collate and distribute research findings should continue.

Recommendation #4: Federal leaders should relentlessly use the bully pulpit to highlight the nation's educational progress and to troubleshoot the challenges that confront governments at all levels as they try to improve America's system of elementary and secondary education. In theory, this is perhaps an easy recommendation to implement, but it still requires federal leaders to commit valuable yet scarce agenda space to education. One issue especially worthy of future attention is educational governance, which includes the appropriate role that federal, state, and local governments should play in educating the nation's children. During the five decades of policy considered in this paper, intergovernmental relationships have undergone important transitions. A serious national discussion coinciding with the next ESEA reauthorization could help to identify crucial tensions within the nation's federalist system that are relevant to future federal policy choices. A common theme in the studies cited earlier, for example, is that federal law leaves states and localities with much room to define standards of quality and excellence. Definitions of student proficiency in reading and math or required teacher knowledge to be highly qualified vary greatly depending on where students happen to live or where teachers happen to teach. How much variation should the nation tolerate? Would minimizing it require a more heavy-handed federal presence? Or are other strategies possible to increase the public's confidence that quality in education means more or less the same thing across the country? In using their powerful microphones, federal officials could help push the country to search for answers to these and other challenging, and increasingly relevant, questions.

Federal policy that embraced these recommendations would help foster positive changes in the nation's elementary and secondary schools. But would working from these principles substantially reduce educational inequity and close achievement gaps across the country? By themselves, probably not, given the federal government's ability to promote educational improvements in a system where states and localities are responsible for most of the policy production and on-the-ground work that affect schools and classrooms across the country. Still,

federal policy, properly conceived and implemented, can help foster the conditions that will make success possible.

Generally speaking, when federal policymakers act in education they have been good at defining broad aspirational goals, forcing or redirecting activity at lower levels of government, redistributing resources, and gathering or forcing into the open information about pressing needs, important trends, and promising educational practices. Given the political incentives to which federal leaders respond and their lack of power over curriculum and teaching practices, they are not as good at passing focused, coherent, and mutually reinforcing policies that produce educationally substantive results instead of primarily procedural ones. Getting states and localities to do things is relatively easy: offer money and condition its use on engaging in certain activities. But crafting national policy to cover 50 states and nearly 15,000 school districts that will improve the substantive results that everyone cares about—having high-quality teachers and students who are learning rigorous content, for example—is much harder for policymakers in Washington to achieve. That is primarily because federal policy, even in demanding quality or rigor, by and large defers to lower levels of government on the particulars of what quality and rigor should mean.

Their distance from the ground level gives federal leaders a fantastic bird's-eye view of the system, which can help them find important leverage points to promote reforms. Using that leverage effectively—for example, by forcing open school doors for children with disabilities or requiring that student achievement data be reported in disaggregated form—can help spur action to help students in need. It can also help to embolden state and local reformers who can play off or build on federal arguments and efforts to launch promising changes of their own. Simultaneously, federal distance from the ground and deference to lower levels of government on curricular and personnel matters can frustrate federal efforts, especially those that rely on particular mechanisms applied nationwide, to achieve otherwise desirable goals. Recognizing the strengths and weaknesses of their position can help federal policymakers make the most of their capabilities and, in the process, help states and localities make the most of theirs.

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Appendix of Evaluation Studies Cited in

Federal Aid to Elementary and Secondary Education:

Premises, Effects, and Major Lessons Learned

Paper commissioned by the Center on Education Policy, Washington, D.C.
For its project on Rethinking the Federal Role in Education

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This appendix annotates the research studies considered in the working paper, *Federal Aid to Elementary and Secondary Education: Premises, Effects, and Major Lessons Learned.* The paper's reference section contains the full citations of these sources, while this appendix highlights key information from each one. The appendix is designed to assist readers who may want to pursue particular topics that cut across multiple studies. Each study is annotated with respect to nine separate fields, defined in **table A1**. The annotated list of studies appears in **table A2**.

Table A1. Fields used to annotate individual studies

Field	Description
Author and year	Provides the names of authors or organizations completing the study and the year of publication.
Source type	Source types are books, book chapters, journal articles, or reports (government or non-governmental).
Mode of analysis	Indicates the primary way in which the authors have analyzed and presented their information. Modes of analysis include: • Narrative summary – Described in prose, with few or no backing statistics, figures, or tables • Quantitative – Tables, figures, and numerical information discussed frequently • Case study – Tending to be qualitative assessments of particular cases, even though some quantitative content may appear
Unit of analysis	Primary units of analysis about which the study allows readers to draw conclusions. Units include: • Nation – Captures information about the country as a whole, or federal-level activities such as the content of major federal laws or the operation of federal agencies • State – Individual states • District – Individual school districts • School – Individual schools • Parent – Parents of children in school • Student – Student-level results, in particular achievement results that control for individual student characteristics.
Policy output	Does the study devote noticeable attention to how officials have implemented a policy, which may include the expenditure of funds, adoption of rules and regulations, number of recipients served by a policy, or other activities? (X = yes; blank = no.)
Student outcome	Does the study devote noticeable attention to the academic performance of students, or some other student results such as matriculation to college or accomplishments in the workplace? (X = yes; blank = no.) Program participation is not considered a student outcome, but rather a policy output.
Title I	Does the study devote noticeable attention to Title I's (sometimes called Chapter 1) efforts to assist disadvantaged students? (X = yes; blank = no.)
IDEA	Does the study devote noticeable attention to IDEA or students with disabilities? (X = yes; blank = no.)
Teacher quality	Does the study devote noticeable attention to teacher quality issues? (X = yes; blank = no.) Studies primarily discussing the teacher quality portions of Title I are coded here, not in the Title I field.

Table A2. Summary of studies

Author and year	Source type	Mode of analysis	Unit of analysis	Policy output	Student outcome	Title I	IDEA	Teacher quality
Ahearn (2006)	Report	Narrative summary	State	X			X	
American Youth Policy Forum & Center on Education Policy (2002)	Report	Narrative summary & quantitative	Nation	X	X		X	
Borman & D'Agostino (1996)	Journal article	Quantitative	Student		X	X		
Brewer & Kakalik (1979)	Book	Narrative summary	Nation & state	X			X	
Carter (1984)	Journal article	Quantitative	Student	X	X	X		
Center on Education Policy (2006)	Report	Quantitative & case study	State & district	X	X	X		X
Center on Education Policy (2007a)	Report	Quantitative	State		X	X		
Center on Education Policy (2007b)	Report	Case study	State	X		X		
Center on Education Policy (2007c)	Report	Quantitative & case study	State & district	X				X
Center on Education Policy (2007d)	Report	Case study	State	X		X		
Center on Education Policy (2007e)	Report	Case study	State	X		X		
Center on Education Policy (2008a)	Report	Quantitative	State		X	X		
Center on Education Policy (2008b)	Report	Quantitative & case study	State, district, & school	X		X		
Desimone et al. (2002)	Journal article	Quantitative	Teacher	X				X
Donovan (2002)	Book	Narrative summary & quantitative	Nation	X	X		X	
Erikson, Thurlow, & Ysseldyke (1996)	Report	Quantitative	State	X			X	
General Accounting Office (1981)	Report	Narrative summary & quantitative	Nation	X			X	
General Accounting Office (1989)	Report	Quantitative	Nation & state	X			X	
General Accounting Office (1991)	Report	Quantitative	Nation & state	X			X	
General Accounting Office (1992)	Report	Case study, narrative summary, & quantitative	State & district	X				X
General Accounting Office (2000a)	Report	Narrative summary	Nation	X		X		
General Accounting Office (2000b)	Report	Quantitative & case study	Nation, state, district & school	X	X	X		

Author and year	Source type	Mode of analysis	Unit of analysis	Policy output	Student outcome	Title I	IDEA	Teacher quality
General Accounting Office (2003)	Report	Quantitative & case study	Nation, state & district	X			X	
Government Accountability Office (2004)	Report	Quantitative & case study	State	X			X	
Hannaway & Cohodes (2007)	Book chapter	Quantitative	District	X		X		
Hanushek, Kain, & Rivkin (2002)	Journal article	Quantitative	Student		X		X	
Horn & Tynan (2001)	Book chapter	Narrative summary & quantitative	Nation	X			X	
Independent Review Panel (1999)	Report	Narrative summary	Nation	X	X	X		
Loeb & Miller (2006)	Report	Quantitative & narrative summary	State	X				X
Lordeman (2008)	Report	Quantitative	Nation & state	X			X	
Lyon et al. (2001)	Book chapter	Narrative summary	Nation & student	X	X		X	
Manna (2006)	Book	Narrative summary & quantitative	Nation & state	X		X		
Manna (2007)	Book chapter	Quantitative & narrative summary	State	X		X		
Mead (2007)	Journal article	Narrative summary	State	X		X		
Muñoz et al. (2008)	Journal article	Quantitative	Student		X	X		
National Association of State Boards of Education (2007)	Report	Narrative summary, case study & quantitative	State, district & school	X		X		
National Center on Educational Outcomes (1992)	Report	Quantitative	State	X			X	
National Center on Educational Outcomes (1997)	Report	Quantitative	State	X			X	
National Center on Educational Outcomes (2005)	Report	Quantitative	State	X	X		X	
National Center on Educational Outcomes (2006)	Report	Quantitative	State	X	X		X	
National Council on Disability (2008)	Report	Narrative summary & quantitative	State	X	X	X	X	
Peske, Crawford, & Pick (2006)	Report	Narrative summary, quantitative, & case study	State	X				X

Author and year	Source type	Mode of analysis	Unit of analysis	Policy output	Student outcome	Title I	IDEA	Teacher quality
President's Commission on Excellence in Special Education (2002)	Report	Narrative summary & quantitative	Nation	X	X		X	
Public Agenda (2002)	Report	Quantitative	Parent	X			X	
Puma et al. (1997)	Report	Quantitative	Student & school		X	X		
Ross et al. (2008)	Journal article	Quantitative	Student		X	X		
SRI International (1992)	Report	Narrative summary & quantitative	State	X				X
SRI International (2007)	Report	Quantitative	Student		X		X	
U.S. Department of Education (1987)	Report	Quantitative	Nation, state, district, school & student	X		X		
U.S. Department of Education (1991)	Report	Narrative summary & quantitative	Nation, district & teacher	X				X
U.S. Department of Education (1993a)	Report	Quantitative & case study	Nation, state, district, school & student	X	X	X		
U.S. Department of Education (1993b)	Report	Narrative summary	Nation	X		X		
U.S. Department of Education (1998)	Report	Case study	District & teacher	X				X
U.S. Department of Education (1999a)	Report	Quantitative & case study	Nation, state, district & teacher	X				X
U.S. Department of Education (1999b)	Report	Narrative summary & quantitative	Nation, state, district & teacher	X				X
U.S. Department of Education (1999c)	Report	Quantitative & case study	Nation, state, district & school	X	X	X		
U.S. Department of Education (2000)	Report	Narrative summary & quantitative	Teacher	X				X
U.S. Department of Education (2001a)	Report	Quantitative & narrative summary	Nation, state, district & school	X	X	X		
U.S. Department of Education (2001b)	Report	Quantitative	Student		X	X		
U.S. Department of Education (2007a)	Report	Quantitative	State	X			X	
U.S. Department of Education (2007b)	Report	Quantitative	Nation, state, school & student	X	X	X		X

Author and year	Source type	Mode of analysis	Unit of analysis	Policy output	Student outcome	Title I	IDEA	Teacher quality
U.S. Department of Education (2007c)	Report	Quantitative	State, district & school	X	X	X		
U.S. Department of Education (2007d)	Report	Quantitative	Nation, state, district & school	X				X
U.S. Department of Education (2007e)	Report	Quantitative	District, school & student	X	X	X		
Wagner et al, (2006)	Report	Quantitative	Student		X		X	
Walsh & Snyder (2004)	Report	Quantitative & analytical summary	State	X				X
Zirkel & Gischlar (2008)	Journal article	Quantitative	State	X			X	