

Running Head: STUDENTS WITH DISABILITIES

Closing the Achievement Gap and Students with Disabilities: The New Meaning of a
“Free and Appropriate Public Education”

Margaret J. McLaughlin

University of Maryland

Funding for this research work was provided by the U.S. Department of Education, Office of Special Education Programs (Grant #H324P000004). Opinions expressed in this paper are those of the author, and do not necessarily reflect the views of the U.S. Department of Education or the Office of Special Education Programs.

The education of students with disabilities in today's schools is shaped by two very powerful laws: the *Individuals with Disabilities Education Improvement Act* ("IDEA," PL 108-446) and the *No Child Left Behind Act* ("NCLB," PL 107-110). While neither law is new, recent changes to both are signaling a new vision for special education and creating unique demands on schools. The basic provisions of the IDEA have been in federal law since 1975 and guarantee each eligible child with a disability a *Free and Appropriate Public Education* (FAPE) in the *Least Restrictive Environment* (LRE). A number of significant changes were made to the IDEA in 1997 which recognized the larger standards-driven reforms underway in the US. These changes were solidified in the 2004 IDEA amendments which specifically aligned major aspects of the legislation with the NCLB, the 2001 reauthorization of the 1965 *Elementary and Secondary Education Act* (ESEA). This law has been a major presence in schools for over 40 years, but recent changes have drastically reshaped federal and state education policies including the IDEA.

The core purpose of the ESEA has been to close the achievement gap between students disadvantaged through poverty and their wealthier peers. This paper will address what it means to "close the achievement gap" for students with disabilities, specifically those who are served under the Individuals with Disabilities Education Act (IDEA). The paper will first address how federal special education policies and practices interact with educational policies as defined by NCLB and will present an overview and analysis of the IDEA statutory framework including a discussion of FAPE (Free and Appropriate Public Education) which is the central entitlement of the IDEA. In particular, this discussion will highlight how the IDEA has focused on the individual child and classroom as the unit of

improvement and accountability and how this focus has often resulted in special education becoming detached from the curriculum and teaching and learning in schools.

Next, the paper will discuss issues related to who receives special education in the schools and the overlap with other low achieving and/or behaviorally disordered students in schools. Implications of classification issues for “closing the achievement gap” will also be addressed.

A second part of the paper will describe how students with disabilities are addressed under the NCLB regulations and what we are learning about how these students are participating and performing. This discussion will draw on findings from several recent national studies and data sets and my own work that has examined the impact of NCLB on special education programs in schools and school systems. This will include a synthesis of findings from a series of cases studies of schools and school systems that were conducted over about a 15-year period.

The findings from these and other studies include data on the performance of students with disabilities as well as perceptions of teachers and administrators about the impact of NCLB on special education programs and students with disabilities. Particular attention will be given to challenges associated with NCLB and the subgroup of students who receive special education. These include technical issues such as universal standards, fair and valid student assessments, statistically reliable subgroup size and the mobility and heterogeneity of the students in the subgroup.

The summary section will discuss the implications and challenges associated with fully including students with disabilities into the NCLB educational model. These issues

make it difficult to fit students with disabilities into the NCLB model and distort whatever inferences we make about the sub group's performance.

The Rise of Standards-based Education in US Schools

Educational policy in today's schools is dominated by a model referred to as standards-driven education. The foundations of this model, enacted by a number of individual states in the late 1980's and early 90's is characterized by universal challenging content and achievement standards, statewide assessments that determine how well all students are meeting the prescribed achievement standards and an accountability system that focuses on the school as the unit of improvement and includes consequences for schools in which students fail to attain specific levels of performance. The theory of action underlying this educational model assumes that uniform standards which are assessed at least annually and used for school level accountability will force schools and school districts to provide universal access to the same challenging curriculum which in turn will close the achievement gap between poor and minority students and their more advantaged peers. The federal government endorsed this model of education in the Goals 2000 Educate America Act and subsequently the 1994 reauthorization of Title 1 of the ESEA, the "Improving America's Schools Act" ("IASA," 1994). The IASA required that in order for states to receive Title I funds, they were to develop challenging content and performance standards in reading and math and adopt yearly assessments to determine how well all students were meeting the states' performance standards. However, unlike previous mandates that allowed states to use a variety of assessments and required no real accountability for results, the IASA required states to develop and implement one state-wide assessment and accountability system

that covered all students and schools. The Act additionally stipulated that *all* students should participate in the state assessments, and that the results for all students must be publicly reported. In defining “all” the IASA specifically referred to students with disabilities as well as students with limited English proficiency [34 C.F.R § 111(b) (3) (F)].

In 2001 Congress again made changes to the ESEA. Building on the 1994 requirements, Congress mandated new accountability requirements and renamed the law the “No Child Left Behind Act”. Under NCLB, states are to establish challenging standards, implement assessments that measure students' performance against those standards and hold schools and school systems accountable for the achievement of all students within the public education system. This emphasis on educational accountability is a continuation of ESEA’s original goal to close the achievement gap between disadvantaged students and their peers, but has an end goal for all students to reach grade level proficiency in reading and mathematics by 2014.

The NCLB mandates that states hold individual schools accountable for ensuring that all students reach proficiency on state standards in reading, math and science by 2014. In order to do that, states must administer assessments annually in reading/language arts, math and science to students in grades 3-8, and at least once in grades 10-12. States must establish three levels of performance, “Basic”, “Proficient”, and “Advanced” on their assessments. The key accountability tool that is used in NCLB is Adequate Yearly Progress (AYP). For a school to make AYP requires that student performance be calculated separately by grade and subgroups in mathematics, reading/LA and science. AYP combines the percent of students who score at “Proficient”

and "Advanced" levels and requires that 95 percent of the students be assessed. High schools must also meet their state's graduation standard. The NCLB requires states to use one other measure in addition to assessment results (i.e., attendance, graduation rates) to measure a school's performance, however, accountability is based primarily on assessment results. The primary purpose of AYP is to determine annually the progress of students and hold schools, districts and states accountable for helping all students master the universal content standards.

Among the new provisions in NCLB is that schools be held accountable for the performance of all of their students as well as for the performance of specific subgroups including students who receive special education services. The focus on subgroups of students is one of the more important provisions of the Act as it permits an unprecedented level of scrutiny on how well diverse groups of students are performing. The goal of AYP is to insure that 100% of each subgroup of students reaches the state standard of proficient by 2014. This requires that states set annual goals for the proportion of students in each of five subgroups that must reach "Proficient" or "Advanced." Obviously the percentage increases each year and schools are required to meet each year's goals. Schools that do not make AYP for any year or for any subgroup are subject to a mandatory sequence of increasingly serious consequences.

NCLB and students with disabilities. The regulations accompanying NCLB define how students with disabilities are expected to participate in the provisions of the Act. The regulations specify that these students are entitled to receive assessment accommodations and students with disabilities who cannot participate in their state's general assessment must be provided an alternate assessment. However, alternate assessments are intended

only for students with the most significant cognitive disabilities. On December 9, 2003 the U.S. Department of Education issued final regulations for the inclusion of students with “the most significant cognitive disabilities” in the NCLB Title I assessments (Title I Improving the Academic Achievement of the Disadvantaged, 2003, pg 68702). Under these regulations states were granted the flexibility to measure the achievement of students with the most significant cognitive disabilities against alternate achievement standards [34 C.F.R. §200.1(d)] and to count at the local and state levels the “Proficient” or “Advanced” scores of these students in the calculation of AYP [34 C.F.R. §200.13(c)(1)(i)]. The number of proficient and advanced scores must not exceed 1% of the tested population. Because the concept of alternate achievements standards was new to educational practice, the Department of Education defined an alternate achievement standard as, “an expectation of performance that differs in complexity from a grade-level achievement standard” (Department of Education, 2005, p.20). Of importance is that only the achievement standards were permitted to be altered. All students with disabilities were to be taught *grade-level* content regardless of the student’s cognitive functioning and whether they were assessed using an alternate (Kohl, McLaughlin & Nagle, 2006).

In December, 2005 a Notice of Proposed Rulemaking (NPRM) was published that extended the percent of students that could be held to other than the general achievement standard (Title I-Improving the Academic Achievement of the Disadvantaged, 2005, p. 74624). The “2 percent flexibility” rule covers students with disabilities who can make significant progress but may not reach grade-level achievement standards within the same time frame as other students and may be held to modified achievement standards and

assessed using an alternate assessment. The assessments based on modified as well as alternate achievement standards must be valid and reliable and of high technical quality. The assessments must also be linked to academic content standards for the grade in which the student is enrolled. Students held to modified achievement standards must receive grade-level instruction in grade-level curriculum and the student's IEP team must use objective evidence (e.g., from state assessments), based on multiple measures, and collected over a period of time to identify these students. Compared with grade-level achievement standards, modified achievement standards may reflect reduced breadth or depth of grade-level content. The "Proficient" and "Advanced" scores of students held to modified achievement standards may be as such in AYP calculations as long as they do not exceed 2% of the tested population.

The US Department of Education expects that the majority of students with disabilities will take the regular assessment with or without accommodations but students with disabilities may participate in the NCLB required assessments in one of the following ways:

- Regular assessment;
- Regular assessment with accommodations;
- Alternate assessment based on grade-level achievement standards;
- Alternate assessment based on alternate achievement standards;
- Assessment based on modified achievement standards (under a proposed rule).

Students with Disabilities, the IDEA and Accountability

In order to align federal special education policies with the IASA and individual state standards-based reforms, several new provisions were added to the IDEA in the 1997 amendments. Language was incorporated requiring students with disabilities to have access to the general education curriculum and participate in the state and local assessment systems with accommodations and/or alternate assessments if needed. The concept of alternate assessment was introduced in the 1997 IDEA amendments. Although the 1997 IDEA implied that students with disabilities should participate in accountability by requiring their participation in assessments and reporting of scores, the IDEA did not specifically mandate their inclusion in state or district accountability systems (Thurlow, 2004). In fact, as states implemented their assessment and accountability systems throughout the latter part of the 1990's, students with disabilities were erratically and inconsistently included. For example, in some states the scores of students with disabilities who received an assessment accommodation were not reported at all or were not included in the accountability formula. Few states reported the assessment results of all of their students with disabilities and even fewer states had implemented and reported student performance on alternate assessments (Thurlow).

In December, 2004 Congress again reauthorized the IDEA and clearly aligned the educational provisions of this special education law with the requirements of NCLB. Among the changes made were those that pertain to the IEP provisions which must now include:

- A statement of the child's present levels of academic achievement and functional performance, *including how the disability affects the child's involvement and progress in the general education curriculum;*

- Measurable annual goals including academic and functional goals designed to enable the child to be involved and progress in the general education curriculum as well as meet each of the child's other unique educational needs;
- For students who will take an alternate assessment aligned to alternate achievement standards, the IEP must include short-term objectives or benchmarks;
- A description of how a child's progress toward meeting the IEP goals will be measured and reported both annually as well as during specific periods within the year;
- A statement of the special education and related services, supplementary aids and services, based on peer-reviewed research to the extent practical, or program modifications that are to be provided that will allow the child to meet IEP goals and make progress in the general education curriculum and participate in extracurricular and other nonacademic activities. Also, there must be an explanation of the extent to which a child will not participate in the regular class or other nonacademic activities; and
- A statement of any individual accommodations that will be necessary to measure the academic achievement and functional performance of the child on state and district wide assessments. If the IEP team determines that the child will take an alternate assessment on a specific state or district assessment, the IEP must include a statement that explains why the child cannot participate in the regular assessment and indicate why the particular alternate assessment selected is appropriate for the child.

Additional requirements within the IDEA include changes in how State Education Agencies (SEAs) are to be held accountable for implementing the IDEA. These include mandatory reporting of specific performance goals and indicators including student achievement.

In summary, current federal education policy that specifically addresses students with disabilities requires that these students be fully included in the provisions of Title I of NCLB and thus endorses the notion of “closing the achievement gap” between students with disabilities and other student groups. However, the merging of NCLB and IDEA policies is not without challenges. Notably, the foundation of special education policy is the entitlement to an “appropriate” education defined as individually referenced. Thus, the concept of universal standards which all students should achieve is quite foreign within special education.

Standard-based Education and FAPE

...the public mandate that all handicapped children are entitled to an education appropriate to their unique needs is undoubtedly the most significant [among all policy development]. This had been a goal long dreamed of and often seriously discussed respecting the education of all American children, but a goal that has seldom been implemented on any notable scale (Ballard, Ramirez, & Weintraub, 1982, p. 20).

The cornerstone of federal special education law is the entitlement to a “free and appropriate public education” (FAPE) for each eligible student with a disability. As defined through regulation, FAPE means special education and related services that are provided at public expense, under public supervision, and according to an IEP.

The IEP traditionally has served as the tool for monitoring individual child progress and for system-level accountability (Heubert & Hauser, 1999; McDonnell, McLaughlin, & Morison, 1997; McLaughlin & Thurlow, 2003). However, several problems have been noted with the IEP (McDonnell et al.; McLaughlin & Thurlow; Shriner & DeStefano, 2001; Smith, 1990), including the fact that IEPs were not standards based and as a result student goals were often set too low nor often did not align with state or district content standards. Also, aggregate performance data are impossible to obtain and privacy provisions prevent open scrutiny of student progress or whether they have attained their individual goals. In addition, no consequences are attached to a student's failure to attain individual IEP goals. This lack of accountability was cited as a significant problem by a National Academy of Sciences committee (McDonnell, et al.) which noted that the IEP was a form of "private" (p. 151) accountability and inconsistent with the move toward public reporting of student achievement and of holding schools and/or individual students accountable for that achievement.

At the time of passage of the 1975 federal special education legislation (P.L. 94-142), Congress clearly indicated that the requirement for written individualized educational programs was essential to achieving the ambitious goals of the special education legislation (Zettle & Ballard, 1977; Levine & Wexler, 1981). Advocates lobbied strenuously for the IEP provisions in the initial legislation under the belief that a formal written document was necessary to hold states and local districts accountable for providing what was appropriate for an individual child. The IEP mandate prevailed in part because its development was to be a team process involving parents and local school representatives, who presumably would not agree to something that schools could not

provide. Also, while the district was legally responsible for providing the services specified on the IEP, it was not legally responsible for failure in performance of a child with a disability (Levine & Wexler, 1981).

Because the IEP was the only written documentation of a child's needs and the specific special education and related services that were to be delivered by the educational agency, the IEP became the primary legal accountability tool for ensuring that students receive their entitlement to FAPE. The IEP quickly became a bureaucratic and time-consuming endeavor for schools and parents. The instructional focus was sometimes lost as parents and districts began to use the document as a contract that documented that a child was not denied his or her due process under the law (National Council on Disability, 1993; Wright, Cooperstein, Renneker & Padilla, 1982; U.S. Department of Education, 1982). Over the years, as the courts increasingly became involved in defining the meaning of a student's entitlement to FAPE, they reinforced the use of the IEP as the manifestation of what constituted an "appropriate" education. In *Board of Education of Hendrick Hudson Central School District v. Rowley* (458 US 176, 1982), the Supreme Court held that in order to be "appropriate", the special education and related services provided a child with a disability must be designed in conformity with mandated procedures and timelines and must be reasonably calculated to confer educational benefit. Lower courts, in applying the Rowley standard, have had no difficulty in judging procedural integrity but tend to defer to educators' opinions about what constitutes educational benefit for any given child (McDonnell et al., 1997). Thus, accountability for students receiving special education has focused on whether the

education system has complied with legal procedural standards as opposed to whether a student has achieved specified goals.

Accordingly, federal oversight of state and district special education programs has been focused on whether or not educational agencies are implementing and conforming to the various mandated timelines and procedures in the law. Until recently, compliance monitoring has been the primary accountability mechanism used in special education. As noted earlier, recent changes to the IDEA now include a major focus on student outcomes, including performance on state assessments and graduation and dropout rates. State monitoring procedures now target state improvement on certain indicators ranking states on the basis of these indicators. Furthermore, under NCLB the concept of IEPs are taking on new meaning as all students are to be held to grade-level content standards and all but 3% are to be held to the same achievement standards as their non-disabled peers. As a result, the policy goal for students with disabilities has shifted from individual determinations of “reasonable educational benefit” to attainment of universal standards. Before further considering the implications of these changes and whether the goal of closing the achievement gap between students with disabilities and other student groups is reasonable or attainable, it is necessary to consider the characteristics of students included in the subgroup of those with disabilities.

Who Are the Students with Disabilities in the Schools?

Students who are identified as having disabilities in US schools are covered by one or both of two federal laws. The broader class includes students who are covered under Sec. 504 of the Rehabilitation Act and most typically includes students who meet the rather broad definition of having a physical or mental impairment which substantially

limits one of more major life activities¹. Not all students who are covered under Sec 504 meet the eligibility requirements of the IDEA. The IDEA is an education law that provides supplemental funds for special education and related services to students who are determined to have one or more of the 13 disabling conditions specified in the law which are found to have an adverse educational impact on the student. Students covered under Sec 504 are entitled to reasonable accommodations to educational services and the physical environment as well as to assessments. The goal is to enable these students to access the same education as is provided to non-disabled peers. Under Sec 504, eligible students have individual accommodation plans that are designed to provide access to and benefit from public education (CASE, 2006). Students found to be eligible under IDEA are entitled to an individually tailored education that includes specially designed instruction and related services in accordance with an IEP. The IEP requirements within IDEA, as noted earlier, are quite prescriptive and can encompass any level of specialized or unique service or support that an individual student may require to obtain FAPE.

Data on students with disabilities. The Department of Education is required to report annually to Congress on the implementation of the IDEA. Included in these reports are a variety of data such as the numbers of students served under the Act as well as the settings in which the students are being educated. As of 2004, the most recent date for which data are available, a total of 6,033,425 students with disabilities in the 6 through 21 age group were served under IDEA (O'Reilly, Fafard, Wagner, & Brown, 2006). This number represented about 9% of the general 6- through 21-year-old population living in the United States at the time and about 12% of public school enrollment. Students with

¹ The Americans with Disabilities Act (ADA) reinforce Sec 504 and the Office of Civil Rights interprets ADA as incorporating all Sec 504 protections (Case, 2006).

learning disabilities account for 46% of the students with disabilities, down from 51% in 1997. However, overall the numbers of students identified as having disabilities has been increasing since 1997, with particularly large increases in the categories that include attention deficit/hyperactivity disorder and autism, although the latter category represents only 3% of all students receiving special education. It is important to note that national data such as those presented above mask the significant variation in identification rates across school districts (O'Reilly, et. al.).

According to the same data reported to the US Department of Education (2003), males account for almost two-thirds of the students ages 6 through 17 served under IDEA. In students ages 6 through 12, males represent 80% of students with emotional disturbance and 83 % of students with autism. In ages 13 through 17, they represent 77% of students with emotional disturbance and 85% of students with autism. In terms of racial and ethnic composition, Black students are 2.99 times more likely to be classified as having mental retardation and 2.21 times more likely to be classified as having emotional disturbance than all other groups combined, while Asian/Pacific Islander students are less than half as likely to be identified as having specific learning disabilities, mental retardation, emotional disturbance, or other health impairments than all other groups combined.

Thirty-six% of elementary and secondary students who are identified as having a disability and who are receiving special education services live in households with less than a \$25,000 income. This compares to about 24% of general education students (O'Reilly, et. al, 2006; US Department of Education, 2003). About 19% of elementary age students with disabilities and a third of secondary age students have been suspended

or expelled from school. Finally, almost half of all students with disabilities are educated in general education classrooms for 80% or more of the school day. Obviously these percentages differ moderately by disability as those with more significant cognitive disabilities and emotional disturbance spending more time in special classes.

Cross-sectional data such as those presented above provide a snapshot of the composition of the subgroup. Complicating this picture is the reality that students move in and out of special education. For example, Carlson and Parshall (1996) found that about 7% of students who received special education in Michigan discontinued those services over a 12-year period and an additional 4% left and returned to special education over a four-year period. Two groups of researchers who examined Texas data (Hanushek, Kain, & Rivkin, 1998; Ysseldyke & Bielinski, 2002) found exit rates from special education to be about 10%. They also found that over a four-year period, about 16% of those who were declassified were subsequently reclassified. The most recent data obtained from several nationally representative studies sponsored by the US Department of Education found that, overall, 17% of elementary and middle-school aged students with disabilities were declassified over a two-year period (O'Reilly, et.al., 2006). Most of these were students with speech and language impairments. Further, while the likelihood of leaving special education services does not appear to be associated with students' grade level, gender, or race/ethnicity, it does appear that students living in households with annual incomes greater than \$50,000 are more likely to be declassified (21%) than those in the lowest income bracket of below \$25,000 (13%) (O'Reilly, et.al.).

The group of students served under IDEA is extremely heterogeneous representing an enormous range of abilities as well as educational needs. Indeed, the

extreme variability among these students was the impetus for the policy of individualized education embodied in the IEP. The assumption is that each student brings such a unique array of abilities and educational needs to the educational setting that an individualized educational planning process including individually tailored goals and instruction is necessary for the child to achieve any benefit. In reality, however, there is substantial overlap between the group of students who receive special education and other subgroups of low achieving students, including low income and African-American and Hispanic students. There are basically three groups of students served under the IDEA at any one time: a large group of mostly young students with speech and language delays; a larger group consisting of middle elementary through high school students with “socially constructed” (Donovan & Cross, 2002) disabilities, such as learning disabilities, emotional disturbance, “mild” mental retardation and attention deficit disorders; and a much smaller group of students composed of those with clear and marked medically defined disabilities such as autism, significant mental retardation, sensory deficits, etc.

By far the largest group of students receiving special education services in the schools is comprised of those identified as having learning disabilities and accounts for about 46% of all students with IEPs. This number increased by 38% over the ten year period of 1990/91 to 2000/01 and over 300% since the passage of the original federal special education legislation in 1975 (US Department of Education, 2003). Following this group are the students with speech and language impairments (19%), mental retardation (9%), emotional disturbance (8%) and Other Health Impaired (8%) which includes students identified as having attention deficit hyperactivity disorder. All other categories account for about 9% of all students with IEPs.

The racial and ethnic composition of these categories has remained relatively stable over time including the fact that African-American males have consistently been over-represented in special education in the categories of mild mental retardation and emotional disturbance. Notably, the percentage of Hispanic students identified has increased from 15% in 1997 to 18% in 2004 (O'Reilly, et. al., 2006).

Over time, a number of individuals in special education have come to consider the disproportionate representation in the above disability categories to be a result of the failure of educational systems to adequately support individual differences; hence the "disability" is a constructed or created category and does not reside in the child (Donovan & Cross, 2002; McDonnell, et. al., 1997). According to this perspective, disability is considered to be the result of disabling barriers imposed by curriculum policies and inadequate human and other resources and not deficits existing within the child. Other factors contributing to the large numbers of students in the above categories are the ambiguous or broad definitional criteria and longstanding issues with the psychometric assessment tools used in diagnosis, including but not limited to IQ tests. Collectively, these issues result in too many students being identified as eligible for special education and the disproportionate representation of children from certain minority groups (Donovan & Cross).

The issues surrounding disproportionate representation are not new to special education. Two National Research Council committees have examined the issues surrounding disproportionate representation (Donovan & Cross, 2002; Heller, Holtzman & Messick, 1982). In addition, a Presidential Commission (President's Commission on Excellence in Special Education July 1, 2002) cited the need to reduce the numbers of

students identified as having learning disabilities. Central to the recommendations developed by these groups, which are supported by other researchers, is the need for improved practices in general education classrooms including early screening to identify students at risk of failure and the provision of intense evidence-based instruction and behavioral supports. For example, the vast majority of students identified as having learning disabilities are identified due to significant reading problems. A group of researchers who have studied learning disabilities and reading disorders estimate that schools could reduce the number of the students receiving special or compensatory education by 70% if they instituted early screening and identification procedures and provided intense literacy programs (Lyon, Fletcher, Shaywitz, Shaywitz, Torgesen, Wood, Schulte & Olson, 2001).

An accumulation of research and concerns among policymakers about the inaccurate and/or unnecessary identification of students led to several changes in the 2004 IDEA amendments. These include the option for local school districts to use a new procedure for identifying a learning disability that determines if the child responds to scientific, research-based intervention as a part of the evaluation procedures [614(b)(6)]. The basic model is referred to as “response to intervention” (Fuchs & Fuchs, 1998) and requires the implementation of a tiered set of increasingly intensive academic interventions, including small group and one-on-one instruction, to be provided in general education classrooms by general education teachers with careful monitoring of progress. Only students who fail to progress after receiving the controlled interventions in general education classrooms would be referred for special education evaluation. An additional new provision in the amendments is the option for local school districts to use

up to 15% of their federal special education funds for “early intervening services” for students who have not been identified as needing special education or related services but who need additional academic and behavioral support to succeed in a general education environment [613(f)(1)].

In summary, there is increasing acknowledgement in federal policy that the majority of students who receive special education may in fact be products of inadequate general education instead of qualitatively different learners with unique or idiosyncratic needs that require vastly different or highly specialized curriculum and instruction. These students differ, for the most part, only in the degree of underachievement and/or behavior problems they exhibit compared to other students in the school. Where districts or schools choose to draw the line between a student who becomes eligible for special education and one who does not is often highly subjective and frequently lacks instructional validity (Donovan & Cross, 2001). Understanding who the students receiving special education are as well as the how they are identified puts a new perspective on the NCLB goal of closing the achievement gap.

The Performance of Students with Disabilities

Whether or not current accountability policies are “closing the achievement gap” between students with disabilities and all other students depends on how one interprets what it means to “close the gap” as well as how one measures the gap. Current accountability policy for all students is predicated on the following assumptions:

- Common content and achievement standards are essential for achieving educational equality.

- “Closing the achievement gap” between specific student subgroups is a central goal of educational reform.
- Achievement can be reliably measured.
- The school is the unit of accountability and improvement.
- Consequences (e.g., rewards and sanctions) are necessary to prompt schools to act on performance data.

Students with disabilities pose a number of unique challenges to at least the first four of these assumptions, particularly the notion of closing the achievement gap. The fundamental policy goal of “closing the achievement gap” is grounded in the assumption that there are external factors that hold back the achievement of certain students (e.g., minority or those living in poverty) that rest within schools and are alterable. Thus, better teachers, more resources, a more rigorous curriculum and greater accountability will result in all student groups reaching the same level of achievement.

This core assumption creates some dissonance when applied to students receiving special education. Eligibility for special education requires that a student be determined to have a disability, defined as a condition that exists within the child and which adversely impacts learning. Thus, all students who receive special education and/or related services are expected to have lowered achievement. However, it is not as simple as this given the characteristics of the population. Further, evaluation standards for determining eligibility for special education require that issues such as child’s primary language and lack of prior exposure to evidenced based instruction be ruled out. For some students, e.g. those with sensory impairments, may require extensive supports including specialized technology and instruction, in order to fully access general

education curriculum. However, one might very well expect these students to achieve at the “Proficient” and “Advance” levels. Other students, such as those with specific reading disabilities or the autism spectrum disorder known as Asperger’s, may exhibit extremely high levels of achievement in certain curricula areas such as math while performing substantially below grade level in reading and writing. As these examples illustrate, the goal of closing the achievement gap, at least in certain subject matter domains, may be both a reasonable and attainable goal for an individual student with a disability. These realities explain why special education policy is grounded in the assumption that a child with a disability will require *individualized* education that is tailored to his/her disability and educational goals. The unit of improvement is the child and improvement is individually referenced. Thus, special education policy does not assume that providing specialized education and other services will move a child to some absolute standard nor alter the disability, which is viewed as a fixed condition. Finally, the IDEA has been interpreted by the courts as intended to “provide a floor of opportunity” for students and to not guarantee a specific level of achievement. Thus, the notion that there should be a universal standard for achievement, defined in terms of a uniform level of performance for every student with a disability is counter to the entitlement to an individualized education and is inherently misguided.

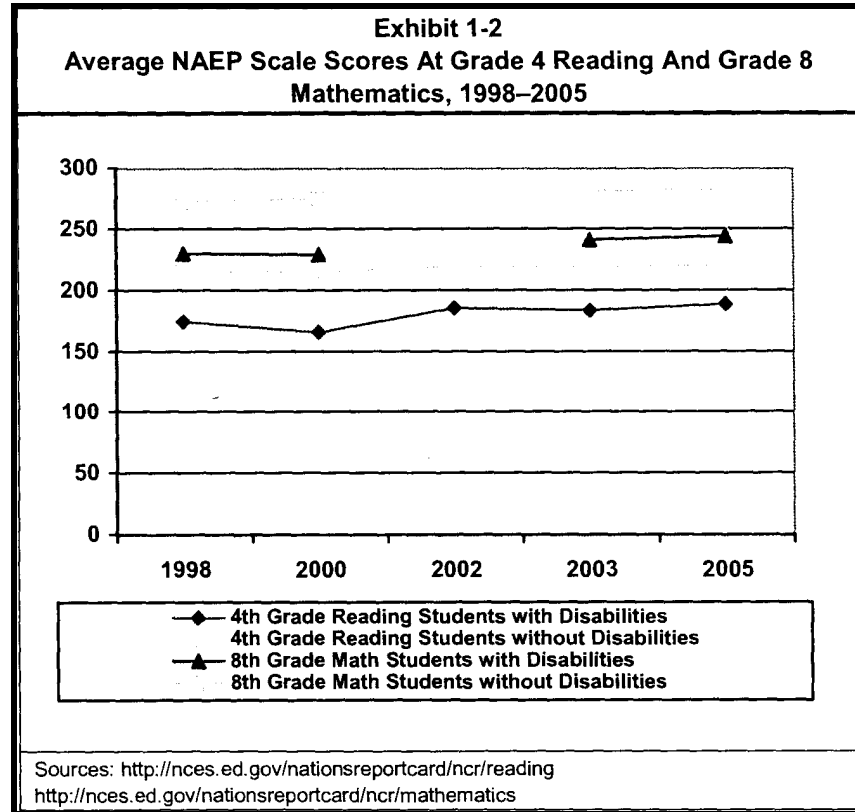
At the same time, many others recognize the promise of a policy that demands accountability for closing the gap in performance between students receiving special education and other student groups and for holding schools accountable for increasing the performance of all students. This focus on providing access to the same high quality education to all students is important on two levels. First, it may result in reducing

inappropriate and unnecessary referrals to special education. As schools focus attention on improving achievement for every student, those low achieving students who may in the past have been referred to and placed in special education will have their achievement problems addressed in general education. At a second level, demands that schools set high expectations for the students with disabilities provides them with the same opportunity to access the same challenging curriculum as their peers without disabilities. Special education services are still individualized but they support the goal of improving student performance on universal content standards. To date those that endorse this latter concept have prevailed in the policy debates. Nonetheless, when one examines the aggregate performance data for the subgroups of students with disabilities it is not clear that the achievement gap is being reduced or that this goal is attainable.

The performance data for students with disabilities. Until recently, there were few available data pertaining to aggregate educational outcomes of students with disabilities. That began to change with the 1997 IDEA amendments with the requirement that students with disabilities participate in large scale state assessments and that their performance be publicly reported. Of course, provisions in NCLB further solidified the requirements and today much more is known about the performance of this student subgroup. Results of mandatory state-reported data as well as from several nationally representative studies indicate that graduation rates and performance on standardized assessments are improving. For instance, in 2004, 54% of the students in special education left school with a regular diploma compared to 42% in 1996. Dropping out decreased from 47% to 31% during the same time period (O'Reilly, et.al., 2006). Reading and math achievement data collected as part of two nationally representative longitudinal

studies (the Special Education Elementary Longitudinal Study and the National Longitudinal Transition Study 2) indicate that almost two-thirds of the students with disabilities score at or below the 25th percentile on standardized tests of reading and math (O'Reilly, et al., 2006). Among the various groups of disabilities, 73% of students with learning disabilities score below the 25th percentile as do 85% of the students classified as having mental retardation or multiple disabilities. In contrast, 25% of the students with speech or visual impairments score above the 50th percentile. In fact, 10% of the students with visual impairments score in the top quartile on the reading assessments and 24% score in the top quartile of a standardized math assessment (O'Reilly, et al.). Data such as these illustrate the difficulty in making a definitive statement regarding whether or not students with disabilities, as a subgroup, are in fact closing the achievement gap on state assessments. Nevertheless, there have been some encouraging performance trends for students with disabilities on the National Assessment of Education Progress (NAEP) scores. As indicated in Figure 1, those students who could be assessed on NAEP slightly closed the gap on 4th grade reading scores and showed a small increase in performance on the 8th grade math assessment in 2005.

Figure 1:



At the state level, the problem has been the lack of consistent achievement data. A recent national report (Klein, Wiley & Thurlow, March, 2006) indicates that only 70% of the states were reporting disaggregated assessment participation and performance rates for students with disabilities as late as 2003/04. Similar findings were obtained from a large research project conducted by the author that tracked the implementation of accountability reforms in two districts in each of the following states CA, MD, TX and NY across the school years 2000/01 to 2004/05 (McLaughlin, Malmgren, & Nolet, 2006). The study involved analyses of extant data as well as intensive interviewing and observation at the school, district and state levels. The results of the research in the four states illustrated how difficult it has been to establish state, district or school-level performance of students with disabilities, let alone compare across states. For example,

the state assessment and accountability policies concerning students with disabilities were in almost constant flux and data were not always publicly reported for a number of reasons, including issues such as the statistically significant sub-group size and rules regarding confidentiality in reporting. This resulted in the lack of trend data a finding supported by Thompson, Johnstone, Thurlow, & Altman (2005) who reported that in 2005, 44 states had at least three years of state assessment data for students with disabilities. They further report that 42 of these states reported an upward trend in percent of students achieving proficiency. However, these improvements did not necessarily close the achievement gap between subgroups.

Among the numerous findings of the author's multiple year study was that participation of students with disabilities in statewide assessments substantially increased subsequent to the passage of NCLB. Prior to 2001 there were still large number of students with disabilities either did not participate in their state's assessment and/or their scores were excluded from the accountability system. In Maryland in 1998-99, for example, the overall participation rate for 3rd grade students with disabilities in the MSPAP reading test was 52.5%. In comparison, New York reported a very high rate of 81% participation in the grade 4 English language arts portion of the state assessment in 1998-1999. These differences appeared to be due primarily to accommodation and reporting policies.

Performance on the general state assessments as well as the achievement gap between students with disabilities and the general education population varied across grade levels, years and school districts within the four states. For instance, in CA the gap between the percent of students in the general population meeting or exceeding proficient

on the third grade state reading assessment versus those students in special education was 21% in 2005/05, an increase of 3% from the 1999/00 school year. In math the percentage ranged from 27 at eighth grade to 31 at fourth. In MD and NY the achievement gap also increased over the time of the study. In 2004/05 the gap in reading in NY was almost 50% while in MD, the gap was almost 40 percentage points. Only TX showed a marked decrease in the achievement gap such that in 2000/01; 90% of all fifth grade general education students and 81% of all students with disabilities in the same grade met or exceeded proficiency in reading. However, TX at that time had a state alternate assessment which was used for about half of all students with disabilities and which had performance standards determined by IEP teams. One must be very cautious when examining these or any performance data because of the numerous changes that state assessment and accountability programs have undergone in recent years. For instance, the almost continuous changes in assessment policies that were occurring in all four of the aforementioned states complicated the interpretation of performance and participation data making it very difficult to compare student achievement from year to year. However, similar achievement gaps in elementary and middle grades math and reading scores were reported nationally by Klein, et al. (2006). In general, there is some improvement in performance of students with disabilities, particularly at the lower grades but this varies across states. Moreover every state reported a substantial achievement gap between students with disabilities and general education students.

A number of researchers have noted that both the characteristics of students with disabilities and assessment policies (i.e., accommodation policies) can significantly impact interpretations of performance (Almond, Lehr, Thurlow & Quenemoen, 2002;

Embler, 2006; McLaughlin & Thurlow, 2003). Ysseldyke and Nelson (2002) identified twenty factors critical to an accurate understanding of assessment data for students with disabilities. Among these are heterogeneity and size of the subgroup, the movement of students in and out of special education and assessment accommodation policies. All of these factors create problems for measuring achievement growth and both cross-sectional and quasi-longitudinal approaches to measuring subgroup growth and examining the achievement gap may lead to erroneous conclusions.

Despite NCLB requirements, many schools will still not be held accountable for their students with disabilities regardless of NCLB because of the state-determined minimum sub group size. For example, the Center for Education Policy (2005) found that 92% of schools in California were not held accountable for students with disabilities in 20058 because the subgroup did contain at least 100 students. Additionally, an analysis of five states indicated that 80% of schools that made AYP did so without being accountable for students with disabilities (Center for Education Policy).

Changing federal policies. A number of changes in state assessment policies have been made in response to changes in federal laws as well as state factors. One notable change pertaining to students with disabilities concerns the alternate assessment requirements. The 1997 IDEA required states to have in place by July, 2000, alternate assessments for students with disabilities who could not participate in the general assessment even with accommodations. States responded to these policies in different ways (Browder, et al, 2003; Thompson & Thurlow, 2003). States used more than one type of alternate assessment and a number of these assessments were based on an alternate curriculum or set of standards that were essentially non-academic (e.g.

functional and vocational skills). The guidelines for who should participate in alternate assessments also differed substantially across the states. In 2003, the NCLB regulations clarified some requirements regarding the alternate assessments but also stated that they were to assess grade level content standards. The assessments had to be technically adequate, “off-level” assessments was not permitted and states were required to have clear participation guidelines. As a result, a number of states were forced to change their alternate assessments (Kohl, et al. 2006).

Test accommodation policies have also been subject to changes as new assessments were developed and the number and types of allowable accommodations have increased. Nevertheless, the research base regarding the impact of accommodations on the validity of scores remains inconclusive (Koenig & Bachman, 2003; Thompson, Johnstone, Thurlow, & Altman, 2006) and there is enormous variation across states in terms of which accommodations are permitted for which types of assessments (Lazarus, Thurlow, Eisenbraun, Lail, Matchett, & Quenemoen, 2006). Also, because the IEP team has the right to determine which accommodations an individual student may require, some students may be afforded accommodations that invalidate a specific test score. Thus, in some states at certain grades and for certain subtests (e.g. reading decoding, math computation, etc.) a large number of scores belonging to students with disabilities are counted as “Basic” simply because the score is invalid.

The above examples illustrate the high signal to noise ratio that exists in the current system of accountability making it difficult to assess the absolute performance of students with disabilities and compare their performance to other students. However, there are other ways, beyond test scores, test participation and measuring the achievement

gap to gauge the benefits of current accountability policy for students with disabilities. There are in how students with disabilities are being educated in schools today.

Changing Expectations for Students with Disabilities and Special Education

From the beginning of the standards movement, advocates and many special educators have pushed for students with disabilities to be included in all aspects of the emerging educational policies. The primary impetus for wanting this inclusion has been to change the historically low expectations and lack of any real accountability for achievement for these students (McDonnell, et al, 2001; McLaughlin & Thurlow, 2003). Despite the numerous challenges discussed above, there is evidence that the standards movement is changing the historic separation of special education from mainstream education and providing students with disabilities opportunities to have access to high quality curriculum. Qualitative case studies conducted as part of the four-state study noted earlier documented that teachers and administrators perceive that, as a result of increased accountability, many more students with disabilities are benefiting from being instructed in challenging *grade level* subject matter and some are making impressive achievement gains.

Despite the promise of increased expectations, it is clear that many or most practitioners and administrators are realistic about the impossibility of having all students with disabilities meet the proficient standard by 2014 as specified in NCLB. This is due both to the academic needs of the students who receive special education and the real possibility that the students with IEPs who make certain levels of progress to either function at grade level or reach “Proficient” may be declassified. Thus, only the most intractable learning or achievement problems are left behind in special education. Given

the existing enormous gaps in achievement, even the increased flexibility offered by the pending NCLB regulations that will permit modified achievement standards for an additional 2% of the students with disabilities will not result in 100% of this subgroup reaching proficiency by 2014.

Yet, the case studies clearly suggest that special education is becoming less isolated within schools and increasingly special education services and resources are supporting general education school wide improvement efforts. Moreover, general educators are not able to ignore accountability for these students under the assumption that the IEP team will be responsible for meeting their needs. Implicit in these new policies is that an “appropriate” education is one that is based on the general education standards and which closes the achievement gap between students with disabilities and other subgroups (McLaughlin, Embler, & Nagle, 2004; Nolet & McLaughlin, 2005). As evidence that the standards are changing how special education is being defined, a recent survey of state education agency representatives (Ahearn, 2006) indicated that a number of states are moving toward establishing standards-based IEPs. While varied in approach, these IEPs define individual student goals in terms of specific state content standards.

An interesting study supporting the notion of whole-school improvement was conducted by Malmgren, McLaughlin and Nolet (2005) based on data obtained from one of the local districts involved in the four-state study described earlier examined school-level variables which predict aggregate performance of students with disabilities. Assessment results in reading and math in 3rd, 5th, and 8th grades across two grade levels were analyzed using a series of hierarchical linear regressions. Of the variables

considered, only the school-level performance of general education students added any predictive value to the model, after accounting for race and poverty.

As roles and responsibilities of special educators evolve, an issue of concern that emerged from the case study research was the limited knowledge of subject matter content among special education teachers. This was the chief challenge voiced by administrators who were interviewed and is substantiated by national data showing that fewer than three-quarters of all beginning special education teachers report being certified for their main teaching assignment. Schools and school districts are responding in several ways. For one, more students with disabilities are taking courses in academic subjects in general education classrooms taught by general education teachers (O'Reilly, et. al., 2006). General and special education teachers also report using a variety of strategies, including co-teaching and differentiating instruction to support the inclusion of students with disabilities in these classrooms (O'Reilly, et al., 2006). Observations in individual schools conducted as part of the case study research revealed that elementary schools in particular are increasingly blurring the line between special and general education through shared teaching models and common professional development.

An interesting and perhaps related development identified through the case study research is the emergence of a new classification system for students with disabilities that references the "type" of assessment a student will be take as part of the NCLB accountability: grade level; modified; or alternate (Nagle & Thurlow, 2006). In the case study schools, it was not uncommon for special and general education teachers and administrators to refer to students with disabilities as "an alternate assessment" or "a regular assessment" student. Moreover, those students who were expected to be held to

alternate achievement standards and assessed using an alternate became the responsibility of special education while other students were considered within the broader school population.

Summary

Collectively, these findings suggest that the federal and state policies promoting a standards-driven accountability may not be closing the achievement gap for students with disabilities but they are creating opportunities for students as well as for the field of special education. For instance the concept of “individualized education” is less and less clear as is the role and function of special education in the schools. As the line between what is “general” and what is “special” education blurs, special education teachers must improvise roles and responsibilities (McLaughlin & Hoffman, submitted for publication; McLaughlin & Rhim, in press). Special education teachers must confront the need to have subject matter content knowledge, not just specialized pedagogical skills. Perhaps a larger issue that is looming is the identity of “special” education. If more and more of the students who traditionally have been served in special education are supported in general education, then presumably only those students with more considerable educational needs, including the 3% of a tested population that can be held to alternate or modified achievement standards, will remain in special education.

In some ways this type of “educational triage” would alter the current construct of “disability” under the IDEA and take special education policy back to its roots as an educational law that pertains only to students with clear and evident disabilities. This could focus the resources on those students most in need of specialized long term education and related services as opposed to having special education programs provide

compensatory services for students whose only “disability” has been poor or insufficient general education. Recent changes to IDEA support this movement and, in my view, so does NCLB as the educational provisions of both laws increasingly are merged. This is only the beginning of what is bound to result in an evolution of special education from a separate policy structure and set of programs and resources to a school support system focused on providing access to one curriculum and one set of standards to all students.

This new “vision” for special education might have arisen independent of NCLB. Certainly, the move to educate students with disabilities in general education classrooms was reducing the separation of general and special education. However, , based on my own extensive research related to students with disabilities in standards-based reform systems (see McLaughlin & Rhim, in press) the mandatory public accountability required by NCLB clearly accelerated changes in how special education operates in schools and school districts. In this respect, the theory of action underlying NCLB, that accountability for student performance motivates or propels teachers and administrators to work harder to educate children, seems to be borne out when considering students with disabilities. Both general and special education teachers are working very hard to provide opportunities that were not always available to students with disabilities prior to NCLB. Nevertheless, there are significant challenges that will need to be addressed as we move forward with standards-driven accountability for students with disabilities.

Among the more significant conceptual and perhaps technical issues is how to apply universal content and achievement standards to a heterogeneous group of students, at least some of whom are *expected* not to attain the standards. With respect to *content* standards, new IEPs are forcing all students into general education (i.e. academic content)

curricula. It is too early to say whether in fact this is a policy that will have the desired effect of improving educational outcomes (e.g., employment, post-secondary education, and independence) for all students with disabilities. Universal *achievement* standards pose a more immediate and critical challenge to schools and school systems that fail to meet increasingly ambitious performance targets for the subgroup of students with disabilities. Some have argued that in order to accurately judge schools, both the absolute level of performance and changes in performance need to be considered (Chief State School Officers, 2005). Growth models (e.g., Doran & Izumi, 2004; McCall, Kingsbury & Olsen, 2004) may offer better options for measuring improvement of students with disabilities. In fact, Embler (2006) compared the results of five commonly used approaches to measuring school-level performance including three status approaches and two value added approaches. Using reading and math achievement gains for students with disabilities in grades 2, 4 and 6, she found that none of the approaches reliably rated school-level performance of the subgroup and were complicated by year-to-year changes in subgroup size as well as by test accommodation policies that resulted in large numbers of scores being considered invalid. At the school level, the comparatively small numbers of students with disabilities and changes in size of the special education cohorts from year to year made annual comparisons extremely problematic due to the statistically significant subgroup size.

Assessment design also remains a challenge and the need for better tools that consider the broadest possible users and incorporate accommodations into the actual instrument. Making better assessments not only removes issues surrounding the

administration of test accommodations but also holds the promise of making the assessments more instructionally relevant.

Finally, one must consider the impact of the accountability demands on special and general education teachers as well as their capacity to engage in the kind of pedagogy that is demanded. All teachers will require extensive professional development and support. However, there is a real possibility that the knowledge base is not sufficient and that we do not even have the techniques to teach some of the more demanding and complex subject matter content to extremely low achieving students. We may well be asking teachers to accomplish something while not being able to give them the necessary tools. The demands and resulting frustrations may exacerbate longstanding personnel shortages in special education as these teachers leave the profession. Nonetheless, despite the enormous challenges, the changes that are occurring in schools with respect to students with disabilities argue against abandoning the NCLB standards-drive accountability model. Instead of trying to avoid accountability for this group of students, we should commit to addressing the challenges in the current system.

References

- Ahearn, E. (2006). *Standards-based IEPs: Implementation in selected states*. Alexandria, VA: National Association of State Directors of Special Educaiton.
- Almond, P. J., Lehr, C., Thurlow, M. L., & Quenemoen, R. (2002). Participation in large-scale state assessment and accountability systems. In T. M. Haladyna (Ed.), *Large-scale assessment programs for all students: Validity, technical adequacy, and implementation* (pp. 341-370). Mahwah, NJ: Lawrence Erlbaum and Associates.
- Ballard, J., Ramirez, B. A., & Weintraug, F. J. (Eds.). (1982). *Special education in America: Its legal and governmental foundations*. Reston, VA: Council for Exceptional Children.
- Board of Education of the Hendrick Hudson Central School District v. Rowley*, 458 U.S. 176 (1982).
- Browder, D., Spooner, F., Ahlgrim-Delzell, L., Flowers, C., & Karvonen, M. (2003). What we know and need to know about alternate assessment. *Exceptional Children*, 70(1), 45-61.
- Carlson, D.E. & Parshall, L. (1996). Academic, social, and behavioral adjustments for students classified from special education. *Exceptional Children*, 63, 89-100.
- Center for Education Policy. (2005). *From the capitol to the classroom: Year 3 of the No Child Left Behind Act*. Retrieved March 19, 2005 from http://www.ctredpol.org/pubs/nclby3/press/cep-nclby3_21March2005.pdf

- Chief State School Officers. (2005). *Memorandum to Chief State School Officers*.
CCSSO. Retrieved May 28, 2005 from
<http://www.ccsso.org/content/pdfs/Growthmemo.pdf>
- Council of Administrators of Special Educators. (2006). *Section 504 and ADA: Promoting student access. A resource guide for educators, 3rd edition*. Fort Valley, GA: Author.
- Donovan, M. S., & Cross, C. T. (Eds.). (2002). *Minority students in special education and gifted education*. Washington, DC: National Academy of Sciences.
- Doran, H.C., & Izumi, L.T. (2004). *Putting education to the test: A value-added model for California*. Pacific Research Institute. Retrieved June 8, from
http://www.pacificresearch.org/pub/sab/educat/2004/Value_Added.pdf
- Embler, S.D. (2006). *Evaluating schools based on the performance of students with disabilities: A comparison of status and value-added approaches*. Unpublished Doctoral Dissertation, University of Maryland, College Park.
- Fuchs, L. S., & Fuchs, D. (1998). Treatment validity: A unifying concept for reconceptualizing the identification of learning disabilities. *Learning Disabilities Research and Practice, 13*, 204-219.
- Hanushek, E.A., Kain, J.F., & Rivkin, S.G. (1998). *Does special education raise academic achievement for students with disabilities?* National Bureau of Economic Research. Retrieved February 20, 2002, from
<http://www.nber.org/papers/w6690>
- Heller, K. A., Holtzman, W. H., & Messick, S. (Eds.). (1982). *Placing children in special education: A strategy for equity*. Washington, DC: National Academy Press.

- Heubert, J. P., & Hauser, R. M. (Eds.). (1999). *High-stakes: Testing for tracking, promotion and graduation*. Washington, DC: National Academy Press.
- Improving America's Schools Act*, (1994) 34 C.F.R § 111(b) (3) (F)
- Individuals with Disabilities Education Act of 1997*, 105-17, 611 et seq.
- Klein, J.A., Wiley H.I., & Thurlow, M.L. (March, 2006). *Uneven transparency: NCLB tests take precedence in public assessment reporting for students with disabilities* (Technical Report 43). Minneapolis: University of Minnesota, National Center on Educational Outcomes.
- Koenig, J.A., & Bachman, L.F. (Eds.). (2003). *Keeping score for all: The effects of inclusion and accommodation policies on large-scale educational assessments*. Washington, DC: National Academy Press.
- Kohl, F.L., McLaughlin, M.J., & Nagle, K.M. (2006). Alternate achievement standards and assessments: A descriptive investigation of 16 states. *Exceptional Children*.
- Lazarus, S.S., Thurlow, M.L., Eisenbraun, K.D., Lail, K.E., Matchett, D.L., & M. Quenemoen. (2006). *State accommodations policies: Implications for the assessment of reading*. Minneapolis: University of Minnesota, Partnership for Accessible Reading Assessment.
- Levine, E. L., & Wexler, E. M. (1981). *PL 94-142: An act of Congress*. New York: McMillan.
- Lyon, S. R., Fletcher, J. F., Shaywitz, S. E., Shaywitz, B. A., Wood, F. B., Schulte, A., et al. (2001). Rethinking learning disabilities. In C. E. Finn, R. J. Rotheram & C. R. Hokanson (Eds.), *Rethinking special education for a new century*. Washington, DC: Thomas B. Fordham Foundation and Progressive Policy Institute.

- Malmgren, K., McLaughlin, M.J., & Nolet, V. (2005). Accounting for the performance of students with disabilities on statewide assessments. *Journal of Special Education*, 39(2), pp. 86-96.
- McCall, M., Kingsbury, G.G., & Olsen, A. (2004). *Individual growth and school success*. Northwest Evaluation Association. Retrieved December 28, 2004, from <http://www.nwea.org/assets/research/nationa/individual%20growth%20and%20school%20success%20-%20complete%20report.pdf>
- McDonnell, L. M., McLaughlin, M. J., & Morison, P. (Eds.). (1997). *Educating one and all: Students with disabilities and standards-based reform*. Washington, DC: National Academy Press.
- McLaughlin, M.J., Malmgren, K.M., & Nolet, V. (2006). *Accountability for students with disabilities who receive special education: Characteristics of the subgroup of students with disabilities. A summary of quantitative findings from the Educational Policy Research Reform Institute (EPRRI)*. College Park: University of Maryland, Institute for the Study of Exceptional Children and Youth.
- McLaughlin, M. J., Emblar, S., & Nagle, K. (2004). *Students with disabilities and accountability: The promise and the realities: Should there be alternatives?* Washington, DC: Center on Education Policy
- McLaughlin, M.J., & Hoffman, A.V. (submitted for publication). *Highly qualified special educator: Changing roles and responsibilities for special educators*.
- McLaughlin, M.J., & Rhim, L.M. (in press). Accountability Frameworks and Children with Disabilities: A test of assumptions about improving public education for all students. *International Journal of Disability Development and Education*.

- McLaughlin, M. J., & Thurlow, M. (2003). Educational accountability and students with disabilities: Issues and challenges. *Journal of Educational Policy*, 17(4), 431-451.
- Nagle, K., & Thurlow, M.L. (June, 2006). *Issues in the classification of students with disabilities revisited: Perspectives and purposes of disability classification systems*. Paper presented at the 4th Anglo-American Conference, Cambridge University, UK.
- National Council on Disabilities. (1993). *Serving the nation's students with disabilities: Progress and prospects*. Washington, DC: Author.
- No Child Left Behind Act of 2001*, 107-110, § 1001 et seq
- Nolet, V., & McLaughlin, M. J. (2005). *Accessing the general curriculum: Including students with disabilities in standards-based reform* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- O'Reilly, F., Fafard, M., Wagner, M., Brown, S.C., Fritts, J., Luallen, J., Carlson, E., Blackorby, J., Hebbeler, K., & Chambers, J. (2006). *Improving results for students with disabilities: Key findings from the 1997 national assessment studies*. Bethesda, MD: Abt Associates, Inc.
- President's Commission on Excellence in Special Education. (2002). *A new era: Revitalizing special education for children and their families*. Retrieved from <http://www.ed.gov/inits/commissionsboards/whspecialeducation/>
- Shriner, J. G., & DeStefano, L. (2001). *Curriculum access and state assessment for students with disabilities: A research update*. Paper presented at the annual conference of the Council for Exceptional Children, Kansas City, MO.

- Smith, S. W. (1990). Individualized Education Programs (IEPs) in special education: From intent to acquiescence. *Exceptional Children, 57*, 6-14.
- Thompson, S., & Thurlow, M. (2003). *2003 State special education outcomes: Marching on*. Minneapolis: University of Minnesota, National Center on Educational Outcomes. <http://education.umn.edu/NCEO/OnlinePubs/2003StateReport.htm/>
- Thompson, S. J., Johnstone, C. J., Thurlow, M. L., & Altman, J. R. (2005). *2005 State special education outcomes: Steps forward in a decade of change*. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.
- Thurlow, M. L. (2004). Biting the bullet: Including special-needs students in accountability systems. In S. Fuhrman & R. Elmore (Eds.), *Redesigning accountability systems for education*. New York: Columbia Teacher's College Press.
- Title I-Improving the Academic Achievement of the Disadvantaged: Final Rule, 68 Fed. Reg. 68,698, 34 CFR Part 200.*
- U.S. Department of Education. (2005). *US Department of Education's fiscal year 2005 Performance and Accountability Report*. Washington, DC: Author.
- US Department of Education (2003). *Twenty-Fifth Annual Report to Congress on the implementation of the Individuals with Disabilities Education Act*. Washington, DC: Office of Special Education and Rehabilitative Services.
- U.S. Department of Education. (1982). *Fourth annual report to Congress on the implementation of Public Law 94-142: The Education for All Handicapped Children Act*. Washington, DC: Author

- Wright, A.R., Cooperstein, R.A., Renneker, E.G., & Padilla, C. (1982). *Local implementation of PL 94-142: Final report of a longitudinal study*. Menlo Park, CA: SRI International.
- Ysseldyke, J., & Bielinski, J. (2002). Effect of different methods of reporting and reclassification on trends in test scores for students with disabilities. *Exceptional Children*, 68(2), 189-200.
- Ysseldyke, J. E. & Nelson, J. R. (2002). Reporting results of student performance on large-scale assessments. In G. Tindal & T. Haladyna (Eds.), *Large-scale assessment programs for all students: Development, implementation, and analysis*. New York: Lawrence Erlbaum.
- Zettel, J., & Ballard, J. (1977). The Education for All Handicapped Children Act of 1975 (P.L. 94-142): It's history, origins, and concepts. In J. Ballard, B. A. Ramirez & F. J. Weintraug (Eds.), *Special education in America: It's legal and governmental foundations* (pp. 11-22). Reston, VA: Council for Exceptional Children.