# The Impact of the 1998 Abbott v. Burke Decision on Educational Progress in New Jersey High Poverty Districts:

## What have we learned?

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## Abstract

Increasingly courts are being relied upon to adjudicate issues that have significant bearing upon the quality of educational experiences in the nation's public schools. School finance reform is one aspect of public schooling, which has been vigorously pursued in the courts by advocates seeking to ensure that students receive a constitutionally appropriate education. This article provides a comprehensive examination of the impact of New Jersey's Supreme Court 1998 decision in the *Abbott v. Burke* case. Using longitudinal data, the article describes the impact of the decision on key educational markers in the 31 special needs districts. The Abbott districts are compared to the wealthiest communities in the state, as well as to Non- Abbott districts with similar socio-economic characteristics. The findings suggest that overall progress has been made in meeting the equity and adequacy outcomes envisioned by the Court when it authored the decision. The tenacity of the Court, the continual legal mobilization around safeguarding the rights of Abbott pupils, as well as the Court's enlargement of its capacities are all factors that have contributed to some of the positive effects that have been detected.

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Introduction

New Jersey's State Supreme Court is renowned for its activist tenor. In 1972, it rendered one of the first decisions invalidating a state's funding mechanism based on the constitutional requirements in the state's education clause. Since then, it has penned several decisions that have affirmed its 1972 position regarding the unconstitutionality of the way in which the state finances public education. The 1998 decision represented a landmark posture by the Court, as for the first time, it linked issues of equity with a comprehensive set of remedies that in their formulation called for significant educational reform in the state's 31 poorest districts (*Abbott v. Burke* 188 NJ. 578.8332 A.2d 891). Whether or not, the 1998 decision has resulted in substantial educational progress in these districts is the subject of this article. A vast body of work produced by judicial impact scholars underscores the tenuousness in the relationship that exists between judicial decisions on the one hand, and the breadth of institutional change, particularly in the public sector, that is directly engendered by these decisions on the other (Hertogh & Halliday, 2005; Cannon & Johnson, 1999; Rosenberg, 1991). Moreover, impact studies of court decisions in the realm of school finance have produced mixed findings (Walker, 2005). In some cases, for example in the state of Kentucky, the court's decision was profound in its effect on the state's system of public education. In other states, such as Alabama, in-spite of favorable rulings, meaningful implementation of these decisions failed to materialize, and in 2002 the case was dismissed by Alabama's Supreme Court.[1]

[1] Supreme Court of Alabama, 1950030, 1950031, 1950240, 1950241, 1950408, 1950409, May 2002.

This article proceeds in three parts. Part A draws a broad landscape of judicial impact studies and public policy analysis, the two theoretic lenses through which the 1998 decision is viewed. Part B, examines the impact of the decision in three areas: parity funding, measures of educational progress as evidenced by expansion of educational services and student progress. Part C discusses the implication of the Court's decision and its educational impact for similarly crafted decisions in other states.

## PART A: JUDICIAL IMPACT AND PUBLIC POLICY ANALYSIS

State judiciaries are frequently called on to rule upon issues that have significant public policy ramifications, and as such, studies of their impact fall within the general theoretic purview of public policy analysis. One may define public policy analysis as involving the production of knowledge of and in the policy-making process (Dunn, 1994). This knowledge has important consequences for informing and shaping both the types of decisions as well as the scope of actions taken by the executive, legislative, and judicial branches. The analysis of any given set of policies involves the raising of at least four questions; 1) what is the nature of the problem that the policy purports to address; 2) what actions have been taken to address the problem; 3) what are the outcomes associated with these actions; and 4) what policy alternatives, if any, are suggested consequential to these outcomes.

Judicial impact scholars are usually concerned to some degree with all four questions in their assessments of the significance of court decisions in effectuating social, institutional and political change. Recent scholarship has identified two intellectual traditions: One that has a long history; the other that has emerged as a new field of inquiry (Hertogh & Halliday, 2004). The first line of inquiry focuses on the macro - political processes that influence the impact of judicially crafted decisions on social and political change, while the second line concerns itself more narrowly with the effects of

these decisions on bureaucracies (Hertogh & Halliday, 2004). Although there is strong complimentarity between the two, each represents a different point of emphasis in the study of courts' policy choices.

The effects of judicial decisions on social structures garnered close intellectual scrutiny in the political sciences largely as a consequence of the resistance in southern states to the *Brown v. Board* of *Education* decision (Cannon, 2004). This intensified during the 1970s with political scientists postulating a number of theoretical propositions to explain judicial impact.[2] Many of these theories grew primarily out of earlier studies of Supreme Court decisions. In addition to the Brown decision, decisions such as *Roe v. Wade (1973)* and *Miranda v. Arizona (1966)* formed part of the corpus of earlier impact studies. Subsequent theorizing in the field enlarged its focus by including for analysis decisions linked to state constitutional law.

Conflicting and oftentimes sharp polemical viewpoints are evident in these writings. Rosenberg for example, identified a number of constraining forces acting on the agency of courts.[3] Drawing on findings from impact research conducted in the wake of the Brown decision, Rosenberg (1991) identified three limiting factors on judicial efficacy in the policy arena: 1) The bounded nature of constitutional rights; 2) the lack of judicial independence from the other branches of government, and 3) the inherent inadequacies of judicial tools as leverages for ensuring and enforcing the implementation of courts' policy preferences. Rejoinder studies such as Reed's (2001) recent investigation into the relationship between constitutional politics and the results of litigation directed at securing equal educational opportunity, as well as McCann's (1994) earlier juxtaposed arguments to Rosenberg's, have painted a more optimistic picture of the judiciary's influence on social reform than Rosenberg did.

[2] Stephen Wasby identified over 135 hypotheses in the impact literature.
[3] Rosenberg's pessimism echoed earlier work in public law inquiry in writings such as Stuart Scheingold's "The Politics of Rights."

An important tenor to these studies is a decidedly more nuanced understanding of how courts' policy preferences are translated into social change than that evident in Rosenberg's work. Canon and Johnson's (1999) study of responses to judicial policies identified processes that mediate between the original formulation of a court's decision and the ensuing changes that result from the implementation of that decision. These mediating processes are linked to how a court's formulation of a decision is interpreted and by whom, who assumes responsibilities for implementing the decision, who benefits directly from the decision, and which secondary groups are impacted by it.

According to Canon and Johnson (1999), variation in responses to a court's ruling results from a complex structure of factors that have been explained by theories of organizational and individual behavior, cost-benefit analysis, and models of ecological functioning. For example, impact studies drawing on organizational theories have found that the manner in which an organization construes a court's decision, the resources it has to thwart a court's ruling, the level of commitment toward its own policies, and its perception of the severity of threat from the court for compliance influence whether or not that organization yields to a court's policy preference or maintains the status quo (Cannon & Johnson, 1999). Compliance with a court's policy choice is hypothesized to be minimal in instances where a) the policy preference of the agency is different from that espoused by a judicial ruling, b) where the agency has the resources to challenge the court's policy choice, and c) where the risk of court sanction is low.

While the study of judicial impact has largely concerned political scientists and scholars interested in the intersection between law and society, over the past four decades school finance litigation has proven to be fertile ground for educational researchers and other social scientists focusing on the impact of state courts' equity and adequacy decisions on reforming a major policy area of state government.[4] These studies have tended to fall within the positivistic tradition,

[4] See for example the volume published by the National Research Council in 1999on Equity and Adequacy.

adopting a 'court-centered' or 'top-down' approach.[5] The predominant focus in these works has been to determine the effects of state courts' jurisprudence on education resource equalization. Scrutiny of the extant works in this area reveals a fair amount of tension. For example, while some impact scholars have relied on national data to draw inferences on changes in equity and overall spending on education, as well as student performance ( Evans et al., 1997; Husted & Kenny, 2000; Murray et al, 1998; Silva & Sonstelie, 1995 ); others have raised concerns about the methodological challenges, as well as the obfuscation of differences in individual court remedies, rights claimed, and political context that bedevil the use of such data (Downes, 2002; Rebell, 2002; Reed 1998).[6]

An equally important concern is the congruence between measures of impact and the provisions in the decisions. Most studies have tended to focus on resource allocation in the form of per-pupil expenditures and to a limited extent on changes in student achievement. However, courts have crafted decisions that reflect a more expansive notion of adequacy. For example, both the Kentucky decision and the 1998 Abbott decision, the subject of this article, contained a comprehensive set of policies that purported to remedy not only fiscal inequities but other prejudicial sources of disadvantages for poor students, such as: inadequate early childhood education, large class sizes, social services shortfalls, and the poor quality of curricular and instructional offerings in non-affluent districts. Given these concerns, strong arguments have been made to complement the use of national data with case study information when seeking to measure the policy impact of adequacy decisions (Rebell, 2002; Reed, 2001). Arguably, data collection in case studies can be onerous, particularly, if one is interested in delineating the impact of individual remedies within the judicial, political, and implementing contexts in which they are lodged. But as Rebell and others have noted, these types of studies are preferable to large scale ones, in which outcomes are averaged over several decisions and contexts (Rebell, 2002, p. 178).

[5] Bottom-up studies are viewed as more interpretive in orientation.
[6]Downes identifies conflicting results and prediction errors in several of these studies.

Since the 1960s, almost every state has had its system of financing public education challenged on constitutional grounds. While the litigation strategy has shifted over time, the fundamental constitutional concern has remained unchanged: States' primary statutory mechanism for funding public education by relying on local property taxes has deprived certain groups of pupils of their right to an education that would ensure their full participation in civil society.[7] Since the early 1970s, more than twenty-five school finance cases have been decided in favor of plaintiffs. The legal rights claims argued in these cases were based on the constitutional guarantees in the states' education clauses. However, success in the courts has not necessarily translated into tangible outcomes in the classrooms. Several factors have conspired to frustrate the efforts of those seeking to realize the gains secured from the courts. Political context, symbolic politics, racial politics, implementation challenges, and even the attributes of the decisions themselves, are among the many factors that have lessened the full impact of favorable decisions.[8]

Not-with-standing the difficulties plaintiffs have experienced in securing the full educational benefits that favorable court decisions have conferred on them, the continual study of these decisions is important for several reasons. First, in spite of the optimism expressed by some judicial impact scholars, the evidence regarding the agency of courts as social actors in producing substantial changes still remains controvertible. Second, development in the field has been slow, and earlier concerns about the 'relationship between power and impact, spurious correlations, and the problem of causal relationships' still persist (Hertogh & Halliday, 2004, p.270). Third, the study of state courts' influence on education policy heeds the call made by some impact scholars for studies that

[7] In 1973 in *San Antonio Independent School District v. Rodriquez* a group of Hispanic parents took their claim for a right to education based on the fourteenth amendment to the U.S. Supreme Court. While the court ruled that the right to an education was not protected by the U.S. constitution it did not forestall the raising of this claim in state courts.

[8] For example, both Texas and New Jersey's school finance struggles have been marred by racial politics. In Alabama interest group politics figured prominently in that state's battle over school funding. Religious organizations, The Alabama Farmers Association and even the Alabama Teachers Association have all at various stages opposed proposals for reforming the state's method of funding education.

are multidisciplinary in both content and methods. Fourth, almost five decades after *Brown v. Board of Education* and four decades after *San Antonio Independent School District v. Rodriquez* there are still lingering empirical questions as to whether the right to a quality education has been protected for all citizens.

## PART B: IMPACT OF ABBOTT v. BURKE 1998 DECISION

### Background

In 1998, the New Jersey Supreme Court rendered a landmark decision that signaled a turning point in its jurisprudence. After a long history of struggle between itself and the other branches of government over state constitutional law and politics, the Court crafted a comprehensive set of remedies that conjoin concerns of fiscal parity with questions regarding the elements of a constitutionally quality education. The decision upheld previous rulings dating back to 1972 when the Court held that the state's mechanism for funding pubic education denied students in property-poor districts a right to a thorough and efficient education (*Robinson v. Cahill* 1972). In the decades following the first *Robinson v. Cahill* decision, the Court functioned as an important adjudicator in the protracted litigation over the state's policy development in the areas of school finance and educational programming in the poorest communities. Since Robinson I, plaintiffs have successfully mounted more than a dozen legal challenges against the state.[9] These challenges have resulted in the Court striking down in part or in entirety acts passed by the legislature in response to Court-issued directives. For example, in its third Abbott decision (*Abbott v. Burke*, 136 N.J.44, 643 A.2d 575 9(1994)) the Court found the Quality Education Act passed by the legislature to be unconstitutional, and in 1997 the Comprehensive Educational Improvement and Financial Act

[9] The following represent some of the major Court decisions after the 1973 decision: *Abbott v. Burke III,*, 136 N.J.44, 643 A.2d 575 9(1994), *Abbott v. Burke* IV 149 N.J. 145, 693 A.2d 417 (1997), *Abbott v. Burke* V 153 N.J. 480 710A.2d450 (1998), *Abbott v. Burke* VI, 163 N.J. 95, 748A.2d (2000), *Abbott v. Burke* VII 164 N.J. 84 751 A2d.1032(2001), *Abbott v. Burke* VIII, 170 N.J.537, 790 A.2d 842 (2001), *Abbott v. Burke* IX, 172 N.J.294,198 A.2d 602 (2002), *Abbott v. Burke* X (Mediation Agreement Order) 177 N.J.578,832,A.2d 891 2003, *Abbott v. Burke* X (Budget Maintenance) 177.N.J. 596.832 A.2d 900 (2003).

(CEIFA) of 1993 was also rejected by the Court for failing to meet the constitutional threshold of providing all students with a thorough and efficient education *(Abbott v. Burke* 149 N.J. 145, 693 A.2d 417 (1997)).

In rejecting CEIFA, the Court remanded the case to a lower court for fact finding and for recommendations to remedy the educational disadvantages existing in the special-needs districts. This decision, in effect, meant that the Court assumed administrative responsibility for establishing policies for overhauling educational programming in the districts (Reed, 2002). A Special Master was appointed, and in 1998, after hearings conducted over a six week period with national experts on school reform, state and local officials, and lawyers for the plaintiffs, the lower court forwarded to the state's Supreme Court a comprehensive reform package that contained the remedies subsequently adopted and delineated in the Court's 1998 *Abbott v. Burke* decision. The decision set forth the following required reform provisions: Implementation of high quality pre-school programs for all eligible three-and four-year-olds residing in the Abbott communities; adoption of full-day kindergarten for all eligible students; class size limits of no more than 15 pupils in pre-kindergarten, 21 in kindergarten through grade three, 23 in grades four and five, and 24 in grades six and above; implementation of research-based whole school reform models; the establishment of school-based governance; creation of a technology-rich educational environment; establishment of new school-based titles in all schools to meet the needs of pupils, for example, dropout counselor, technology counselor, parent liaison, and social worker; parity funding; comprehensive facilities improvement; and adequate funding of the remedies. In addition to the required programs, the following add-ons based on particularized needs were recommended: Enhanced services for special education and bilingual students; establishment of needs-based social and health services; and the

implementation of other needs-based supplemental programs, such as after-school and academic summer programs.[10]

The implementation process under both Republican and Democratic administrations has been fraught with difficulties. Interpretation of the remedies has differed between these administrations. The policy focus with respect to which set of remedies is emphasized during implementation has also differed, and so has the varying interpretations of the role of the state department of education in assisting districts with implementation. Indeed, between 1998 and 2005 the implementation process was punctuated with plaintiffs, as well as the New Jersey Department of Education (NJDOE) petitioning the Court for additional judicial relief.[11] For example, in 2002 the Court granted a motion filed by the Attorney General on behalf of the NJDOE for a relaxation of the remedies for K-12 programs for the 2002-2003 school year; but denied the NJDOE's request to limit supplemental funding based on the expenditures in the 2001-2002 approved budget (*Abbott v. Burke* 172 N.J. 294,798 A.2d 602 (2002). The NJDOE's argument for a one-year relaxation of the remedies (with the exception of the early childhood remedies) was made on two grounds: Concerns about implementation and the state's budget crisis at the time.

Given the tortuous history of school finance reform in the state[12], the obstinacy and reluctance of the legislature to comply with previous Court decisions[13], the general framing of some of the remedies,[14] and what is known in the literature about implementation difficulties,[15] the early implementation stages under Republican leadership were the most difficult. Codification of the

[10] The final remedies represent recommendations made to the lower court by the Educational Law Center (ELC) and the Department of Education. According to Reed, the Court sided more with the Department of Education's recommendations than with those suggested by the ELC.
[11] Since the 1998 decision, five additional decisions have been penned by the Court.
[12] In 1975, the Court threatened to close down the entire public school system; and in 1990 protests were staged against the Quality Education Act.
[13] Ibid footnote 12
[14] Although the courts were very specific with some remedies, for example, the early childhood provisions, others, such as supplemental programs were to be designed based on particularized needs.
[15] There is a widely respected body of literature on implementation. Walker's 2005 article in Educational Policy investigates the relevance of the literature within the context of the Abbott reforms.

remedies was challenged on the grounds that the regulations lacked specificity and in some instances misinterpreted the Court's intent[16]; the state requirements for the preschool component were successfully litigated for their lack of educational soundness and their seemingly discrepancy with the Court's judgment [17]; the NJDOE's handling of the implementation process was found by numerous studies to be inadequate [18]; and the presumptive model on which the Court had advocated its reform of the elementary schools was found to be at odds with the very curriculum and instructional standards on which the Court based its evidence of an adequate education.[19] In addition, the implementing focus of the NJDOE was on securing individual schools'- as subsystems within the districts- compliance with its regulations. Hence, for the most part, the districts' central office personnel were bypassed during these early years resulting in a splintering of instructional and curricular coherence, as well as a breakdown in communication between schools, district central offices, and the NJDOE.[20]

In 2002, major policy shifts occurred when Democratic Jim McGreevy was elected governor. The Division of Abbott Implementation was established in the department of education; districts as larger entities replaced individual schools as the primary implementing actors, and the emphasis was placed on instruction and its link with the state's core content standards as opposed to the specific programmatic requirements that were embodied in Abbott V. In writing about the policy differences with the previous administration, the Assistant Commissioner for Abbott Implementation in the McGreevy administration highlighted the following: " 1) there was a de-

[16] See Block's dissertation on the evolution of the 1998 New Jersey's regulations.
[17] In Abbot VI the court addressed this issue. While the Court found no deliberate intent on the part of the Commissioner to circumvent its judgment, it nevertheless raised concerns about the qualifications of the preschool teachers, particularly those in private daycare centers and the curriculum frameworks.
[18] Early implementation studies conducted by Erlichson, Walker, and Walker & Gutmore describe many of the missteps of the Department of Education.
[19] Interview with Department of NJDOE in December 2005 and published documents by the Department of Education delineating the differences between the current implementation strategies and that of the previous administration.
[20] See Walker and Gutmore, 2000.

emphasis on schools selecting and implementing specific remedies and programs to an emphasis on district-led standards-based instruction and student achievement; 2) the previous implementing tools of compliance and monitoring were replaced by ones that focused on establishing collaboration between DOE staff and districts on instructional issues; 3) as opposed to a focus on 454 school-level budgeting and programs, there was a shift to 31 budgets and their instructional priorities; 4) instead of radical decentralization of authority, decision-making, and budgeting at the school level, the governance model was based on shared responsibilities between schools, districts and the DOE; 5) in contrast to the previous accountability model that stressed compliance with the mandates and regulations the new accountability system was based on instructional outcomes and efficiency and 6) an unrelenting focus on literacy and math as the priorities" (MacInnes, 2005a, p. 4). (The early childhood remedies were the only programmatic requirements under Abbott V which remained consistently at the top of the policy agenda under both administrations).

Unquestionably, many of these changes represented an improvement over the first four years of implementation. But such stark differences in the interpretation of the policy implications of the 1998 decision raise an interesting dilemma in attempting to determine the impact of the Abbott remedies from a temporal perspective. Clearly, one could reasonably argue that the shifting policy landscape has fractured the implementation process, creating two distinct periods. The first, immediately following the 1998 ruling; the second starting in 2002 and continuing to the present. Statements made by NJDOE officials to the Senate Education Committee suggest that the stringent accountability requirements of the No Child Left Behind (NCLB) federal legislation became the prisms through which several of the whole school reform (WSR) models were evaluated, which consequently resulted in the policy shift away from the whole school reform model approach that characterized the first implementation period (MacInnes, 2005b). According to these statements, the implementation thrust under Republican leadership overlooked the needs of special education

and limited English proficient students, and emphasized compliance at the expense of quality instruction (MacInnes, 2005b). While the current emphasis on instruction does not represent a refraction of the court's policy recommendations- since implicit in several of the remedies is the assumption that students will be exposed to high quality teaching-, it does signal a significant reinterpretation as to what the Abbott V decision means in terms of NJDOE policy, and expected behaviors at the district and school levels in complying with the decision.

**Data Sources**

The data presented in this article are derived from a variety of sources. Unfortunately there is no systematic collection of data as they relate to the various remedies, and there is no single repository of Abbott implementation data. Compounding these challenges are changes that the NJDOE has made to the reporting of data. This stymies the ability to make year-to-year comparisons for some data that are annually collected by the Department. In addition to these data collection difficulties, since 1998 the state has made changes to its assessment program at the elementary and secondary levels. At the fourth grade in 2001, new standards were established in language arts and modifications were also made to its content. No equating of the new assessment with the previous instrument was done. At the secondary level, the graduation test the -High School Proficiency Test- was changed substantially. The new test, the HSPA, first administered in the 2001- 2002 school year, is a more rigorous test than its predecessor. The only assessment that has remained unchanged since 1998 is the Grade Eight Proficiency Assessment. In spite of these data collection challenges we were able to amass a body of information that permits the drawing of conservative inferences regarding the decision's impact. The information for this chapter was gathered from various offices in NJDOE, the Education Law Center, the National Institute for Early Education Research, and published works.

Most analyses reported are based on statistics that compare the Abbott districts to the wealthier communities on which the Court based its parity remedy. In these analyses, enrollment numbers are used to calculate weighted averages. Data on academic outcomes are analyzed through the use of hierarchical linear modeling, as elaborated upon later in the paper. Comparative districts are based on district factor group (DFG) status. New Jersey classifies its school districts into demographically similar groups based on the decennial census data. The classification system was first created in 1975 for the purpose of comparing student performance on statewide assessments; and figured prominently in the designation of Abbott status. The classification schema was also used to identify the districts on which the parity remedy in Abbott IV was based. The district factor group classification represents a proxy measure of a community's socio-economic status and is derived statistically (using principal component analysis) from the following six variables: percent of adults with no high school diploma, percent of adults with some college education, occupational status, unemployment rate, percent of individuals in poverty, and median family income.

**Demographic Characteristic of the Student Population in the Abbott Districts**

Student characteristics are important factors influencing educational content and services in the Abbott districts. Moreover, demographic changes in the student population have the potential to create additional challenges for these districts. There are a number of demographic variables that are indicative of populations that are likely to be educationally disadvantaged. Several of these are considered in Table 1.

The table provides descriptive information for the student population attending schools in the Abbott districts, the wealthiest communities and statewide. As can be seen, students in the Abbott districts are disproportionately of African- American and Hispanic backgrounds and come from impoverished families, as compared to students in the wealthiest communities and statewide. In 2004 and 2005, approximately 84% of the Abbott student population was of African American

and Hispanic origins, while in the wealthiest suburban districts less than 10% of the student population came from similar backgrounds. Although not shown in Table 1, since the 1998 decision, most of the poorest urban districts have seen an increase in the number of students for whom English is not their first language.[21] Between 2004 and 2005 the two years for which data is reported in Table 1, there was a 2.8% increase in the overall number of limited English proficient students in these districts. While the percent of students eligible for free and reduced lunch has remained unchanged statewide and in the wealthiest districts, this has not been the case for the poor districts. In these districts, the percent of students eligible for free and reduced lunch increased by about three percent in 2005 over the 2004 figure (66.8% in 2004, 69.6% in 2005). Table 1 also shows that the student mobility rate in the Abbott districts continues to be twice as high as the statewide average, and four times as high as the rate in the state's wealthiest suburban communities.

Table 1:
Characteristics of Students in Abbott, Wealthiest Districts, and Statewide

**Student Characteristics**

| | 2003-04 | | | 2004-05 | | |
|---|---|---|---|---|---|---|
| | **Abbott Districts** | **I and J Districts** | **New Jersey** | **Abbott Districts** | **I and J Districts** | **New Jersey** |
| Total Enrollment | 285,220 | 262,334 | 1,337,040 | 281,407 | 282,481 | 1,344,304 |
| Eligible for Free & Reduced-Priced Lunch | 66.8% | 3.3% | 26.2% | 69.6% | 3.4% | 26.8% |
| *Race / Ethnicity* | | | | | | |
| Black | 41.6% | 4.4% | 17.1% | 41.3% | 4.5% | 17.1% |
| Latino/a | 42.4% | 3.6% | 17.1% | 43.1% | 3.8% | 17.6% |
| White | 12.9% | 80.3% | 58.5% | 12.5% | 79.6% | 57.8% |
| Asian | 2.9% | 11.5% | 7.1% | 2.8% | 12.0% | 7.3% |
| Native American | 0.2% | 0.1% | 0.2% | 0.3% | 0.1% | 0.2% |
| Limited English Proficiency (LEP) | 11.0% | 1.5% | 4.3% | 13.8% | 2.3% | 5.4% |
| Students with Disabilities (IEP) | 13.1% | 12.2% | 13.5% | 13.4% | 12.1% | 12.6% |
| Student Mobility Rate | 24.3% | 5.4% | 12.3% | 21.3% | 4.9% | 11.6% |

SOURCE | New Jersey Department of Education, Fall Survey, 2003-04 to 2004-05; School Report Card, 2003-04 to 2004-05.

[21] See MacInnes 2005b

**Changes in Per-Pupil General Education Aid: Moving Toward Parity**

Courts have been asked in adequacy cases to determine on constitutional grounds the appropriate funding requirements for public education. Various courts have ruled differently on this question. In New Jersey, the Court has determined that an adequate level of funding in the state's poorest communities is one that should reflect parity with the levels evident in the state's most affluent (I and J) districts. In responding to the Court's requirement that funding levels in the poorest districts achieve parity with those in the state's wealthiest communities, the state has increased its share of funding to these districts through application of Abbott Parity Aid. This has resulted in a significant decrease in the funding gap between property-rich and property-poor districts that existed prior to the Abbott III and IV decisions. Indeed, available data on per-pupil aid suggest that the state has equalized funding levels for the poorest districts with that of the wealthiest communities. We draw on two sources of data to illustrate the point.

Recently published figures by the Education Trust, indicate that in 1997 the funding gap between the poorest and wealthiest communities in cost adjusted dollars was $787 per student. In 2002 the state had achieved an improvement of $1,352 per student making it one of only six states (Connecticut, Georgia, Minnesota, New Mexico, and Ohio) in which an improvement in education funding in the high needs districts has occurred. States such as Texas and Illinois on the other hand, witnessed a growth in funding disparities between affluent and poor school districts (Carey, 2004).

The actual average per pupil general education aid for the years 2003, 2004, and 2005 presented in Table 2 also reflects the parity in funding that has been achieved between the neediest and wealthiest school communities in the state. The average per pupil general education aid for the Abbott districts has increased for each year reported in the Table, with the level of funding to support the general education program equal to that in the wealthiest suburbs. For example, in 2005 funding for the general education program in the Abbott districts was $10, 909, and in the wealthiest

suburbs, $10, 975. In the preceding year, 2004 per pupil general aid was $10,377 for the Abbott schools, and $10,535 for the I and J districts.

Similar to the previous decisions of 1990 and 1994, the 1998 decision underscored the state's constitutional obligation to address the unique needs and challenges of Abbott students, by ensuring that they are provided with an education that is constitutionally both thorough and efficient. To this end, the Abbott decisions require districts to implement a host of supplemental programs to address the identified needs of pupils and for the state to provide adequate funding to support these programs. Funding for these supplemental programs comes from three sources: The Demonstrably Effective Program Aid (DEPA), additional Abbott Aid, and Title 1. DEPA is calculated on a per pupil basis, and provides extra funds to all districts (both Abbott and non-Abbott alike) that serve poor students. In addition, Abbott districts are eligible to receive further support over and beyond their DEPA allotment to fund their supplemental programs. This aid request is vetted through an application process by state officials. However, districts are statutorily provided with legal recourse for appealing unfavorable state decisions.

Total supplemental aid calculated on a per-pupil basis across all the Abbott districts averaged around $2,300 for the three years under consideration. In 2004 there was a decrease in total supplemental aid. The average allotment went from $2,272 in 2003 to $1,974 in 2004 (See Table 2). This drop in overall supplemental funding was due primarily to reductions in both the Additional Abbott and DEPA Aid. However, in 2005 total supplemental aid increased to $2,819, which was slightly higher than the 2003 figures. Unfortunately, we have not explored in the paper, the full impact at the district level, of the state's decision to place in the supplemental funding category, programs that prior to Abbott V were part of general education funding. This issue is important and provides an added dimension to the impact of state-level funding decisions on changing patterns in resource allocation at the district level.

Table 2:
Mean Per Pupil General Aid 2003-2005

Per Pupil Total General Education Aid
2002-03 to 2004-05

| | 2002-03 | 2003-04 | 2004-05 |
|---|---|---|---|
| Abbott Districts | $9,831 | $10,377 | $10,909 |
| I and J Districts | $9,973 | $10,535 | $10,975 |
| New Jersey | $9,218 | $9,729 | $10,303 |

Per Pupil Supplemental Programs Aid by Source
Abbott Districts, 2002-03 to 2004-05

| | 2002-03 | 2003-04 | 2004-05 |
|---|---|---|---|
| Total Supplemental Funding | $2,272 | $1,974 | $2,819 |
| Additional Abbott Aid | $1,366 | $1,058 | $1,905 |
| DEPA | $488 | $416 | $421 |
| Title I | $418 | $501 | $494 |

SOURCE | New Jersey Department of Education: Office of Finance, 2002-2005

**Improving the Quality of Instructional and Support Staff**

The 1998 decision specifically identified a number of new certificated and non-certificated staff positions that the Court felt were critical to ensuring that the varied needs of the Abbott student population were adequately met at all levels of the education system. These positions included among others, instructional facilitators, dropout counselors, and technology coordinators. Table 3 presents data on the percent of elementary, middle and high schools that have filled all the required Abbott staff positions for the past three years. Table 4 provides additional information on the percent of teachers who are highly qualified under NCLB. Scrutiny of the data on staffing in Table 3 reveals that there has been little stability in the filling of some positions for the three years under consideration. Turning first to the elementary schools, three positions that are required by the 1998 decision are: Instructional facilitator, social worker, and teacher tutors. In 2003, almost all elementary schools had a designated instructional facilitator, 71% had social workers, but only 25% had hired tutors. For the past two years, there has been a decline in the number of elementary

schools filling these positions. Moreover, only a small fraction of the elementary schools have filled all three positions for each of the years reported in Table 3. Speculatively, one may argue that the decrease evident in the staffing of some of these positions, particularly the instructional facilitator position, is linked to the de-emphasis on the whole school reform model approach adopted by the current administration.[22]

With respect to the middle and secondary schools, roughly 50% have hired attendance/ dropout officers. This number has remained fairly constant for the past three years. However, far fewer have filled the health /social service coordinator's position. In contrast, most positions required in **all** schools (See bottom panel of data in Table 3) have a high level of compliance with respect to being filled. Many of these positions, however, were established, as opposed to new staff titles, which may help explain the relatively larger number of schools that have filled these positions as compared to the newer positions required by Abbott V .

An increase in the number of instructional personnel is not by itself a sufficient indicator that instruction will improve. Of equal importance is the quality of the staff being hired and the extent to which existing staff have engaged in significant retooling of their skills. In spite of the numerous problems that bedevil the implementation of the highly qualified teacher provisions of NCLB, changes in the number of teachers meeting the NCLB requirement can serve as useful barometers of the progress being made to ensure that students in the Abbott districts are taught by experienced and properly certified staff. Table 4 delineates the progress that has been made by the Abbott districts over the past two years towards meeting the highly qualified staff requirement.

Abbott secondary schools have made progress relative to the wealthiest communities and the state in the percent of the core academic subjects taught by highly qualified staff. In 2004, 87.8% of the core subjects at the secondary level were taught by highly qualified staff, compared to

[22] Most WSR models required schools to have an instructional facilitator. In some instances, this did not necessarily represent new hires, but a change in title and responsibilities for existing staff.

98.6% in the wealthiest districts and 94.9% statewide. In 2005, the comparable figures were 88.9%, 96.8% and 94.8% for the Abbott, I and J districts and state respectively. However, at the elementary and middle grades a different trend is evident. The data in Table 4 reflect a widening of the disparity between the Abbott districts, the state and wealthiest communities in the number of core subjects taught by highly qualified teachers. We do not have additional information at hand that could shed light on this finding. However, there are a number of plausible explanations. For one, the state has changed the way it gathers information on the core academic classes. In 2004, the state relied upon self-reporting. In 2005, the state itself made the determination based upon the certificated staff report that districts are required to file. Because certification in the core subjects prior to NCLB was not an important issue at the elementary and middle grades, there could have been some error in earlier reporting. Secondly, prior to NCLB, special education teachers in the state were not required to be certified in the content areas they taught. This has subsequently changed; and the state now requires special education teachers to pass the state licensing examination in the content areas taught. Fewer special education students in the Abbott districts are in an inclusion setting as compared to the suburbs and the state, as will be discussed later. Thus, the full import of the new requirements is likely to be more strongly felt in Abbott districts than elsewhere, and particularly at the elementary and middle grades which serve proportionately more special education students than do the high schools.

Table 3:
Required Abbott Staffing Positions: 2003-2005

**Elementary Schools with Required Abbott Staff Positions**
**Abbott Districts, 2002-03 to 2004-05**

| | 2002-03 | 2003-04 | 2004-05 |
|---|---|---|---|
| Instructional Facilitator | 97.8% | 95.4% | 76.7% |
| Social Worker | 70.8% | 69.6% | 62.6% |
| Teacher Tutors | 24.6% | 40.8% | 34.7% |
| **All positions** | **20.6%** | **34.4%** | **13.2%** |

**Middle and High Schools with Required Abbott Staff Positions**
**Abbott Districts, 2002-03 to 2004-05**

| | 2002-03 | 2003-04 | 2004-05 |
|---|---|---|---|
| Attendance/Dropout Prevention Officer | 50.7% | 50.5% | 50.7% |
| Health-Social Service Coordinator | 34.4% | 32.3% | 28.3% |
| **All positions** | **25.1%** | **22.3%** | **16.9%** |

**All Schools with Required Abbott Staff Positions**
**Abbott Districts, 2002-03 to 2004-05**

| | 2002-03 | 2003-04 | 2004-05 |
|---|---|---|---|
| Family Liaison (parent-community coordinator) | 68.2% | 70.7% | 68.9% |
| Guidance Counselor | 93.4% | 93.2% | 93.6% |
| Librarian/Media Specialist | 89.1% | 90.7% | 91.8% |
| Nurse/Health Specialist | 96.8% | 96.6% | 97.0% |
| Security Officer | 87.7% | 88.6% | 86.1% |
| Tech Coordinator | 82.0% | 79.8% | 80.0% |
| **All positions** | **57.0%** | **54.3%** | **55.0%** |

*Source: DOENET Abbott School-Based Budget Staffing Tables, 2002-03 to 2004-05*

Table 4:
Percent of Highly Qualified Teachers in the Abbott , Wealthiest Districts and Statewide: 2004 & 2005

**Percent of Highly Qualified Teachers, 2003-04 and 2004-05**

| | **Elementary and Middle Schools** | | | | | |
|---|---|---|---|---|---|---|
| | **2003-04** | | | **2004-05** | | |
| | Highly Qualified in at Least ONE Subject | Highly Qualified in ALL Subjects | Core Academic Classes in School Taught by Highly Qualified Teachers | Highly Qualified in at Least ONE Subject | Highly Qualified in ALL Subjects | Core Academic Classes in School Taught by Highly Qualified Teachers |
| Abbott Districts | 90.5% | 85.4% | 87.5% | 90.9% | 90.2% | 85.9% |
| I and J Districts | 98.2% | 97.0% | 97.2% | 97.3% | 97.2% | 97.0% |
| New Jersey | 96.3% | 94.0% | 94.6% | 96.0% | 95.6% | 94.3% |
| | | | | | | |
| | **High Schools** | | | | | |
| | **2003-04** | | | **2004-05** | | |
| | Highly Qualified in at Least ONE Subject | Highly Qualified in ALL Subjects | Core Academic Classes in School Taught by Highly Qualified Teachers | Highly Qualified in at Least ONE Subject | Highly Qualified in ALL Subjects | Core Academic Classes in School Taught by Highly Qualified Teachers |
| Abbott Districts | 92.2% | 85.8% | 87.8% | 89.1% | 88.9% | 88.9% |
| I and J Districts | 98.0% | 96.7% | 98.6% | 96.9% | 96.9% | 96.8% |
| New Jersey | 95.6% | 93.5% | 94.9% | 95.0% | 94.8% | 94.8% |

SOURCE | New Jersey Department of Education, Highly Qualified Teacher Survey, 2003-04 and 2004-05

**Changing the Quality of the Education Environment for Teaching and Learning**

The body of scholarly work that has accumulated over the years on the effects of small class size has demonstrated that smaller classes have significant benefits for the teaching and learning process by maximizing students' opportunities to learn, and teachers' opportunities to teach. Class size policies have been found to favorably impact teachers' abilities to cover content in greater depth, lessen the depersonalization found in larger classes, reduce disciplinary problems and promote student achievement both in the short and long-term ( Hertling et al., 2000; Thompson & Cunningham, 2001). Some courts in wrestling with the educational fallout of unconstitutional funding practices have endorsed class - size reduction as one way of remedying the deleterious impact of inadequate funding on the educational process in high poverty districts.

The New Jersey Court in the 1998 decision established upper limits on the number of pupils who could be assigned to a class based on that class's grade level. These standards are reported in Table 5, as well as the average class size since 2003 for the Abbott districts, the state and the wealthiest suburbs. The data demonstrate that the Abbott districts have met the class size limits established by the Court for each year reported in the Table. This has been achieved at all grade levels. Moreover, class sizes in the Abbott districts are comparable to those in both affluent settings and statewide. We must interject at this point however, some reservations with the way class size is measured by the NJDOE. The state relies upon a classroom– to- enrollment ratio to arrive at an estimate of the average class size. Many would argue that these ratios are imprecise and misleading indicators of actual class size. Rather, a more accurate measure would be the actual number of students enrolled in a given class.

The needs of special education students were singled out in the 1998 decision for consideration for supplemental support. Thus, there is some interest in understanding how this population has fared since 1998. We elected to examine one indicator, the changes in educational

settings in which these students are taught. This seemed highly pertinent to us given the requirements under the Individual Disabilities Education Act (IDEA) that all students experience the right to a full and free public education in the least restrictive environment. We examined placement for two consecutive years: 2004 and 2005. When the educational setting in which special education pupils are educated in Abbott schools is examined, it becomes evident that this setting differs markedly from what exists in the state as a whole and in more affluent districts.

The proportion of special needs students who are instructed in inclusion settings more than 80% of the time is decidedly lower in Abbott schools than in the wealthy suburbs or statewide. More than twice the percentage of special education students in wealthy communities are likely to be in full or close to fully inclusionary settings as there are in Abbott schools in both the 2004 and 2005 school years respectively. Abbott special needs students are also more apt to be instructed in restrictive educational settings than are their counterparts either statewide or in wealthier communities. For example, in both 2004 and 2005 about a third of special needs pupils in Abbott schools received their instruction in the regular classroom setting less than 40% of the time, as compared to only eight percent of students in the I &J districts, and 17% statewide. Furthermore, almost twice the percentage of Abbott special needs pupils is likely to be educated in separate schools as there are in wealthy communities.

Table 5:
Average Class Size by Grade, 2002-03 to 2004-05

Average Class Size by Grade, 2002-03 to 2004-05

| Grade | Abbott Standard | 2002-03 | | | 2003-04 | | | 2004-05 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Abbott Districts | I and J Districts | New Jersey | Abbott Districts | I and J Districts | New Jersey | Abbott Districts | I and J Districts | New Jersey |
| **1st** | 21 | 19.9 | 20.1 | 20.0 | 20.5 | 20.0 | 20.1 | 20.2 | 19.9 | 20.0 |
| **2nd** | 21 | 20.3 | 20.5 | 20.5 | 20.0 | 20.5 | 20.4 | 20.1 | 20.5 | 20.5 |
| **3rd** | 21 | 20.9 | 21.1 | 21.0 | 20.5 | 21.2 | 20.9 | 19.9 | 21.1 | 20.8 |
| **4th** | 23 | 20.9 | 21.3 | 21.4 | 20.2 | 21.5 | 21.3 | 20.0 | 21.7 | 21.3 |
| **5th** | 23 | 22.6 | 21.7 | 22.4 | 22.1 | 22.2 | 22.4 | 21.4 | 22.0 | 22.0 |
| **6th** | 24 | 22.8 | 22.8 | 23.0 | 22.4 | 23.0 | 23.0 | 21.4 | 22.3 | 22.7 |
| **7th** | 24 | 23.3 | 22.7 | 23.0 | 22.9 | 22.7 | 22.9 | 22.1 | 22.0 | 22.4 |
| **8th** | 24 | 22.1 | 22.8 | 22.7 | 22.2 | 22.6 | 22.6 | 21.8 | 22.5 | 22.5 |
| **9th** | 24 | 22.3 | 21.4 | 22.0 | 22.8 | 21.3 | 22.0 | 22.4 | 21.5 | 22.1 |
| **10th** | 24 | 22.7 | 21.3 | 21.9 | 22.8 | 21.7 | 21.9 | 22.4 | 21.5 | 22.0 |
| **11th** | 24 | 20.2 | 21.0 | 21.0 | 20.5 | 20.6 | 20.9 | 20.8 | 21.4 | 21.3 |
| **12th** | 24 | 21.6 | 20.6 | 21.2 | 21.8 | 20.4 | 21.1 | 20.8 | 22.6 | 21.2 |

SOURCE | New Jersey Department of Education: School Report Card, 2002-03 to 2004-05

Table 6:
Education Environments for NJ Students with Disabilities in Abbott, Wealthiest Districts and Statewide: 2004-2005

**Education Environments of Students with Disabilities**

**2003-04 and 2004-05**

| | 2003-04 | | | 2004-05 | | |
|---|---|---|---|---|---|---|
| | Abbott Districts | I and J Districts | New Jersey | Abbott Districts | I and J Districts | New Jersey |
| Total Placements | 44,404 | 35,370 | 201,707 | 45,035 | 39,413 | 206,215 |
| 80-100% Inclusion | 27.4% | 56.1% | 42.3% | 25.6% | 55.8% | 42.0% |
| 40-79% Inclusion | 26.2% | 28.1% | 30.4% | 26.5% | 28.1% | 29.5% |
| 0-40% Inclusion | 32.0% | 8.0% | 17.2% | 33.8% | 7.8% | 17.5% |
| Separate School | 13.4% | 7.2% | 9.3% | 13.4% | 7.2% | 9.7% |
| Residential School | 0.1% | 0.2% | 0.1% | 0.0% | 0.2% | 0.3% |
| | | | | | | |
| | | | | | | |

SOURCE | New Jersey Department of Education, Office of Special Education Programs, 2003-04 to 2004-05

### Early Childhood Impact

The ameliorative and compensatory benefits of early childhood education were highly valued by the Court in the 1998 decision. The Court expressly required the state to implement preschool

programs that were high - quality and well-planned. With respect to high-quality, the Abbott Orders (Abbot V, Abbott VI and Abbott VIII) mandated the following: Universal eligibility for all three and four-year old youngsters; district-led collaboration with community and Head Start programs; qualified teachers; small classes (15 children per class); developmentally appropriate preschool curriculum; adequate facilities and funding; related services that address social and health issues, transportation needs, the special needs of students with disabilities and with limited English; and district support and accountability.[23] The Court stipulated the following elements as constituting the hallmarks of a well-planned program: Outreach and recruitment; based on students' needs; ongoing professional development for district and community-based staff; and continuous planning to improve facilities as well as program content and structure.

There are roughly 53,000 students of preschool age residing in the Abbott districts, which represents about 25% of all three and four-year-olds living in the state. Since 1998 the number of three and four-year olds who have directly benefited from the implementation of the preschool remedy has increased dramatically. In the 1998-1999 school year, slightly more than 5,800 students attended preschool. One year after the decision, the number of students served increased almost fourfold (19, 179). In 2005, the most recent year for which actual enrollment figures are available, just over 38,000 students were served by Abbott preschool programs. This represents a 553% increase in enrollment over the 1998-1999 school year. For 2006, it is projected that almost 80% of the total population of three- and –four-year olds residing in the Abbott districts will be attending preschool (Lamy et al., 2005). In 2005, the budget for the Abbott pre-school program reached $444 million with an average cost of $10,800 per pupil. Approximately half of the students (56%) were served by private providers contracted by the districts. Seven percent were in Head Start classrooms and 37% in district classrooms.

[23] See the Education Law Center's website for a fuller discussion of the preschool remedies www.edlawcenter.org.

Table 7:
Changes in Preschool Enrollment: 1999-2005

| Academic Year | Number of Three and Four-Year Olds Enrolled in Preschool |
|---|---|
| 1998-1999 | 5,879 |
| 1999-00 | 19,179 |
| 2000-01 | 22,020 |
| 2001-02 | 29,824 |
| 2002-2003 | 36,465 |
| 2003-2004 | 38,000 |
| 2004-2005 | 38,437 |
| 2005-2006 | 43,000 * |

*projected enrollment

Measures of the overall quality of Abbott preschool classrooms reveal significant improvement over a five-year period. In 2000, the environment of Abbott preschool classrooms received the following ratings on a scale from one to seven: Space and furnishings (3.73), personal care (3.98), language and reasoning (3.74), activities (3.19), interactions (4.47), program structure (3.81), parents and staff (4.59).[24] In 2005, the ratings in all seven areas improved: Space and furnishings (4.55), personal care (4.45), language and reasoning (4.93), activities (4.13), interactions (5.97), program structure (4.94), and parents and staff (5.12).[25] Data indicate that the classroom supports for early literacy development have also improved in areas such as: Literate environment, language development, books, phonological awareness, letters and words, parent involvement and bilingual support.[26] The emerging data on kindergarten performance, although limited, is suggesting that children (both English and Spanish speaking) who have attended Abbott preschool programs perform better in language and literacy skills than youngsters without preschool experience (no differences in math performance have been found).[27]

[24] Source: Lamy et al., "Giant Steps for the Littlest Children: Progress in the Sixth Year of the Abbott Preschool Program''. Released in May 2005 by the Early Learning Improvement Consortium.
[25] Ibid
[26] Ibid
[27] In the Lamy study it was found that students who attended Abbott preschool gained about 4 months in vocabulary development over their peers who did not have a preschool experience.

An important requirement under Abbott is the establishment of a highly qualified preschool teaching workforce. In Abbott VI, the Court was forced to clarify the education requirements for preschool teachers. In that decision, the Court gave preschool teachers until September 2004 to obtain a Bachelor's degree leading to early childhood certification. Prior to the full implementation of Abbott, the position of early childhood workers outside of the public schools in the state's labor market had begun to worsen (Herzenberg, Price, & Bradley, 2005). Wages of center-based educators were below those of all New Jersey workers (approximately 60% of all workers); only 20% received health insurance through their jobs compared to 61% of all other workers; and roughly 24% lived below 200% of the poverty line compared to 13% of all New Jersey workers (Herzenberg, Price & Bradley, 2005).

Implementation of the Abbott preschool teacher certification requirements has helped to change the nature and quality of the preschool workforce in the Abbott communities (Ryan & Ackerman, 2004). According to published figures by the NJDOE, 92% of preschool teachers in all sectors have met the Abbott certification requirements (Office of Early Childhood Education, 2004). Prior to the 1998 decision, only 35% of preschool educators in the Abbott communities possessed a bachelor's degree (Sadowski, 2006). In Head Start and private community-based centers where prior to Abbott, the teaching requirement was a Child Development Associate certificate issued by the Division of Youth and Family Services, the new requirements have meant a significant upgrade in the education levels of their workers.

In addition, Regulations adopted by the DOE pursuant to the Court directive issued in Abbott VI, have helped to equalize the salaries of early childhood educators in the public schools and those in community-based and Head Start centers (Herzenberg, Price & Bradley, 2005; Office of early Childhood Education, 2004). In the 2004-2005 school year, the averaged approved salary for certified teachers for Abbott private preschool providers was $41,213; and the average approved

salary for teachers in district-run preschool classes was $48, 140. In 2005-2006, the new salaries are $43,227 for private providers and $50,725 for district teachers.[28] When benchmarked against national trends these figures augur positively for the 1998 decision. In 2003, the average Head Start teacher salary was about $21,000 compared to $43,000 for public school teachers (National Institute for Early Education, 2003). The progress being made in the Abbott districts is unmatched in the state overall, where trend data have shown that between 1983 and 2004, the percent of center-based early childhood educators with a high school degree or less increased (Herzenberg, Price & Bradley, 2005).[29]

**Academic Outcomes: Abbott Students' Performance on New Jersey's State Assessments**

New Jersey administers statewide assessments in grades 3, 4, 8, and 11. These assessments are linked to the core curriculum content standards first adopted in 1996. In examining the impact of the 1998 decision on performance on the state assessments, a two-level hierarchical linear growth model was estimated to examine the differences in the initial performance and performance growth rate between Abbott schools and non-Abbott schools at the fourth and eighth grades. The non-Abbott schools included in the analysis are drawn from the primary district factor groups (DFG) to which the Abbott schools belong (DFG A & B). The basic structure of the two- level growth model used to compare the performance of the Abbott schools with schools with similar DFG designations of A & B is set out below.

Level-1 Model

$$Y = B0 + B1*(TIME) + R$$

Level-2 Model

$$B0 = G00 + G01*(ABBOTT) + U0$$
$$B1 = G10 + G11*(ABBOTT) + U1$$

[28] Salaries were obtained from the Office of Early Childhood Education in the State Department of Education.
[29] Between 1983 and 1987 the percent was 33%, which increase to 42% in 1988-1997 and to 47% in 2000-2004.

Where Y is school performance indicators of passing rates in language arts at grades 4 & 8 (LAPASS), math for both grades (MPASS), and science at grade 8 (SPASS).

Table 8:
Descriptive Statistics for Samples in Grade 4 (LPass and MPass)

| Year | Abbott Status | | LAPASS | MPASS |
|---|---|---|---|---|
| 2002 | non-Abbott | Mean | 70.7037 | 60.9338 |
| | | N | 136 | 136 |
| | | Std. Deviation | 18.1025 | 18.1344 |
| | Abbott | Mean | 59.7625 | 41.9140 |
| | | N | 299 | 299 |
| | | Std. Deviation | 18.4046 | 19.9981 |
| | Total | Mean | 63.1832 | 47.8605 |
| | | N | 435 | 435 |
| | | Std. Deviation | 18.9816 | 21.3264 |
| 2003 | non-Abbott | Mean | 70.7953 | 61.3961 |
| | | N | 128 | 128 |
| | | Std. Deviation | 15.0817 | 15.4374 |
| | Abbott | Mean | 56.5488 | 45.9053 |
| | | N | 285 | 285 |
| | | Std. Deviation | 15.9137 | 19.2615 |
| | Total | Mean | 60.9642 | 50.7063 |
| | | N | 413 | 413 |
| | | Std. Deviation | 16.9763 | 19.5102 |
| 2004 | non-Abbott | Mean | 76.5190 | 64.8802 |
| | | N | 126 | 126 |
| | | Std. Deviation | 12.3181 | 16.0000 |
| | Abbott | Mean | 64.5300 | 54.4531 |
| | | N | 290 | 290 |
| | | Std. Deviation | 15.4477 | 20.2287 |
| | Total | Mean | 68.1613 | 57.6113 |
| | | N | 416 | 416 |
| | | Std. Deviation | 15.5662 | 19.6235 |
| 2005 | non-Abbott | Mean | 76.8377 | 78.1679 |
| | | N | 106 | 106 |
| | | Std. Deviation | 11.4004 | 12.2403 |
| | Abbott | Mean | 65.6684 | 65.6237 |
| | | N | 291 | 291 |
| | | Std. Deviation | 14.6180 | 16.3711 |
| | Total | Mean | 68.6506 | 68.9730 |
| | | N | 397 | 397 |
| | | Std. Deviation | 14.6774 | 16.3362 |
| Total | non-Abbott | Mean | 73.5155 | 65.7387 |
| | | N | 496 | 496 |
| | | Std. Deviation | 14.9118 | 17.0806 |
| | Abbott | Mean | 61.6383 | 51.9341 |
| | | N | 1165 | 1165 |
| | | Std. Deviation | 16.5645 | 21.0807 |
| | Total | Mean | 65.1850 | 56.0564 |
| | | N | 1661 | 1661 |
| | | Std. Deviation | 16.9785 | 20.9415 |

Table 9:
Results from HLM Analysis for Fourth Grade Language Arts Performance

Final estimation of fixed effects
(with robust standard errors)

| Fixed Effect | Coefficient | Standard Error | Approx. T-ratio | d.f. | P-value |
|---|---|---|---|---|---|
| For INTRCPT1, B0 | | | | | |
| INTRCPT2, G00 | 69.645235 | 1.498044 | 46.491 | 476 | 0.000 |
| ABBOTT, G01 | 11.958880 | 1.833221 | -6.523 | 476 | 0.000 |
| For TIME slope, B1 | | | | | |
| INTRCPT2, G10 | 2.341327 | 0.470691 | 4.974 | 476 | 0.000 |
| ABBOTT, G11 | 0.030943 | 0.564635 | 0.055 | 476 | 0.957 |

Final estimation of variance components:

| Random Effect | | Standard Deviation | Variance Component | d.f | Chi-square | P-value |
|---|---|---|---|---|---|---|
| INTRCPT1, | U0 | 16.04764 | 257.52689 | 422 | 1692.39635 | 0.000 |
| TIME slope, | U1 | 3.19305 | 10.19556 | 422 | 592.19287 | 0.000 |
| level-1, | R | 9.17928 | 84.25921 | | | |

The data presented in Table 8 describe fourth grade passing rates in language arts for the Abbott and non-Abbott schools. For Abbott schools, the percent of students passing the state's fourth grade assessment was 59.76, 56.55, 64.53 and 65.67 for the years 2002, 2003, 2004 and 2005 respectively. For the non-Abbott schools, the passing rates for the same years were: 70.70, 70.80, 76.52 and 76.84 respectively. Table 9 summarizes the results of the HLM analysis. The first two rows in the top half of the Table report the results for differences in initial passing rates; while the second set of rows describe differences in the time/slope coefficient. The results reported in the Table indicate that in 2002, the initial year, the overall passing rate on the state's fourth grade assessment was significantly lower (11.96 %) for the Abbott schools as compared to non-Abbott schools (Refer to Table 9). Between 2002 and 2005, the annual growth rate in language arts

performance did not differ significantly between the Abbott schools and their counterparts as evidenced by the data furnished in Table 9 for the time/slope coefficient (0.03) and the trend lines depicted in Figure 1 below.

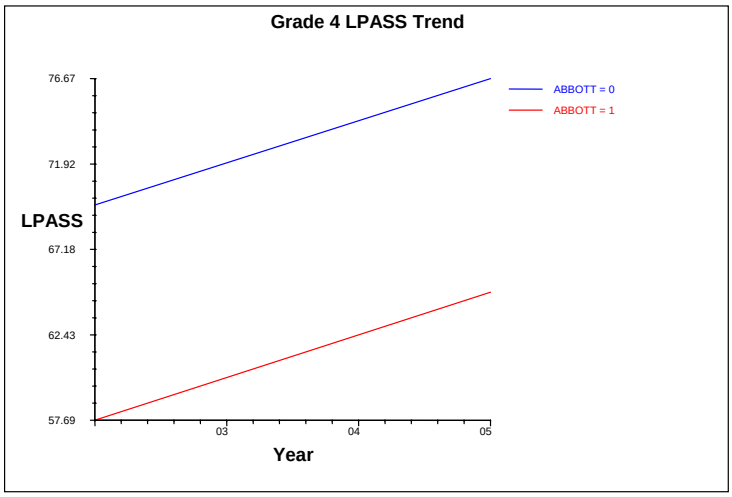



Figure 1:
Trend in Grade 4 Language Arts' Passing Rates (RPASS) For Abbott and Non-Abbott Schools: 2002 to 2005

On the other hand, an examination of the results for mathematics suggests a different trend in performance outcomes than that previously noted in language arts. The passing rate in mathematics for the years 2002, 2003, 2004, and 2005 for the Abbott schools was: 41.90, 45.91, 54.45, and 65.62 respectively. The rates for the non-Abbott schools were: 60.93, 61.40, 64.88 and 78.17 for 2002, 2003, 2004 and 2005 respectively. While in 2002, the passing rate in mathematics was significantly lower for Abbott elementary schools (18.7%) than that of the non-Abbott schools (Table 10); as can be seen in Figure 2 and from Table 10 (ABBOTT, G11), between 2002 and 2005, the Abbott schools' annual growth rate of 3.0% was significantly higher than that for the non-Abbott schools with similar socio-economic classification.

Table 10:
Results from HLM Analysis for Fourth Grade Mathematics Performance

Final estimation of fixed effects
(with robust standard errors)

| Fixed Effect | Coefficient | Standard Error | Approx. T-ratio | d.f. | P-value |
|---|---|---|---|---|---|
| For INTRCPT1, B0 | | | | | |
| INTRCPT2, G00 | 58.628631 | 1.480040 | 39.613 | 476 | 0.000 |
| ABBOTT, G01 | -18.697729 | 1.906121 | -9.809 | 476 | 0.000 |
| For TIME slope, B1 | | | | | |
| INTRCPT2, G10 | 4.870625 | 0.486656 | 10.008 | 476 | 0.000 |
| ABBOTT, G11 | 3.063090 | 0.614923 | 4.981 | 476 | 0.000 |

Final estimation of variance components:

| Random Effect | | Standard Deviation | Variance Component | df | Chi-square | P-value |
|---|---|---|---|---|---|---|
| INTRCPT1, | U0 | 17.19820 | 295.77804 | 422 | 1696.73817 | 0.000 |
| TIME slope, | U1 | 3.55426 | 12.63277 | 422 | 607.92971 | 0.000 |
| level-1, | R | 10.96304 | 120.18816 | | | |

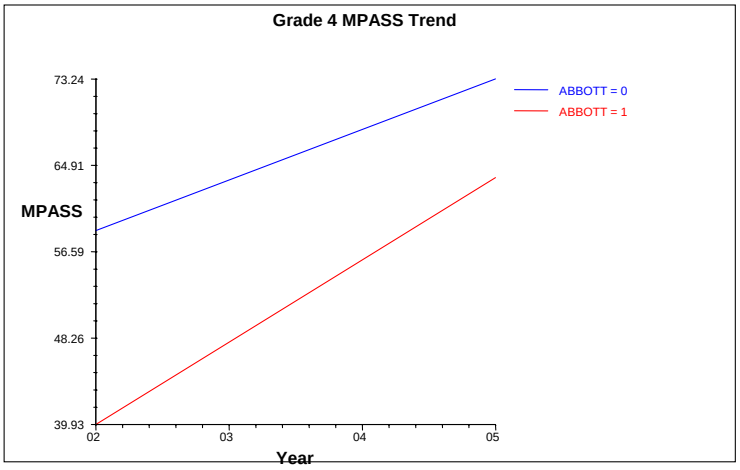



Figure 2:
Trend in Grade 4 Mathematics' Passing Rates For Abbott and Non-Abbott Schools: 2002 to 2005

Similar analysis to that conducted at the fourth grade was also pursued at the eighth grade. The basic structure of the model remained the same, with the outcome variables passing rates on the language arts and mathematics section of the Grade Eighth Proficiency Assessment (GEPA). In addition, performance outcomes in science were also studied for this grade level. The mean passing rates for all three content areas are presented in Table 11 for the years 2001, 2002, 2003, and 2004. As can be seen from the data provided in the Table, for the Abbott schools, the mean passing rates in language arts for the four years were 58.24, 57.75, 64.38, and 61.47 respectively. For the non-Abbott schools, the passing rates were 78.30, 79.13, 81.14 and 76.07 for the years 2001, 2002, 2003 and 2004 respectively. Evident from the results for the ABBOTT, G01 coefficient in the HLM summary table, is the significantly lower passing rate for the Abbott schools in 2001 (21.5%). Between 2001 and 2004, however, the time/slope coefficient reported in Table 12 (ABBOTT, G11) indicate that the Abbott schools' rate of passing the language arts test was significantly higher (1.9% annually) than the non-Abbott schools that shared the same district factor group classification (Table 12 and Figure 3).

Table 11:
Descriptive Statistics for Samples in Grade 8

| School Year | Abbott Status | | LAPASS | MPASS | SPASS |
|---|---|---|---|---|---|
| 2001 | non-Abbott | Mean | 78.3038 | 62.0494 | 79.0316 |
| | | N | 79 | 79 | 79 |
| | | Std. Deviation | 15.1890 | 19.4486 | 14.6862 |
| | Abbott | Mean | 58.2413 | 43.3906 | 48.6850 |
| | | N | 160 | 160 | 160 |
| | | Std. Deviation | 22.9043 | 26.5275 | 21.6623 |
| | Total | Mean | 64.8728 | 49.5582 | 58.7159 |
| | | N | 239 | 239 | 239 |
| | | Std. Deviation | 22.7052 | 25.9124 | 24.2657 |
| 2002 | non-Abbott | Mean | 79.1301 | 59.8867 | 80.6253 |
| | | N | 83 | 83 | 83 |
| | | Std. Deviation | 15.6023 | 19.8520 | 13.4535 |
| | Abbott | Mean | 57.7519 | 41.0975 | 51.1550 |
| | | N | 160 | 160 | 160 |
| | | Std. Deviation | 23.7260 | 25.8651 | 23.8897 |
| | Total | Mean | 65.0539 | 47.5152 | 61.2210 |
| | | N | 243 | 243 | 243 |
| | | Std. Deviation | 23.5701 | 25.5502 | 25.1483 |
| 2003 | non-Abbott | Mean | 81.1354 | 60.2829 | 79.4439 |
| | | N | 82 | 82 | 82 |
| | | Std. Deviation | 14.2234 | 17.3481 | 12.5224 |
| | Abbott | Mean | 64.3758 | 42.7938 | 51.9491 |
| | | N | 161 | 161 | 161 |
| | | Std. Deviation | 22.6681 | 24.6527 | 21.2074 |
| | Total | Mean | 70.0313 | 48.6955 | 61.2272 |
| | | N | 243 | 243 | 243 |
| | | Std. Deviation | 21.6911 | 23.9003 | 22.7938 |
| 2004 | non-Abbott | Mean | 76.0687 | 63.3145 | 78.6422 |
| | | N | 83 | 83 | 83 |
| | | Std. Deviation | 15.5390 | 18.6574 | 14.0226 |
| | Abbott | Mean | 61.4736 | 49.1233 | 57.8107 |
| | | N | 159 | 159 | 159 |
| | | Std. Deviation | 22.2345 | 24.1145 | 20.8220 |
| | Total | Mean | 66.4793 | 53.9905 | 64.9554 |
| | | N | 242 | 242 | 242 |
| | | Std. Deviation | 21.3183 | 23.3506 | 21.1976 |
| Total | non-Abbott | Mean | 78.6563 | 61.3786 | 79.4407 |
| | | N | 327 | 327 | 327 |
| | | Std. Deviation | 15.1911 | 18.8122 | 13.6424 |
| | Abbott | Mean | 60.4652 | 44.0914 | 52.3908 |
| | | N | 640 | 640 | 640 |
| | | Std. Deviation | 22.9934 | 25.4287 | 22.1307 |
| | Total | Mean | 66.6166 | 49.9372 | 61.5380 |
| | | N | 967 | 967 | 967 |
| | | Std. Deviation | 22.3997 | 24.7814 | 23.4673 |

Table 12:
Results from HLM Analysis for Grade 8 Language Arts Performance

Final estimation of fixed effects
(with robust standard errors)

| Fixed Effect | Coefficient | Standard Error | Approx. T-ratio | d.f. | P-value |
|---|---|---|---|---|---|
| For INTRCPT1, B0 | | | | | |
| INTRCPT2, G00 | 78.947718 | 1.673126 | 47.186 | 253 | 0.000 |
| ABBOTT, G01 | -21.508850 | 2.462677 | -8.734 | 253 | 0.000 |
| For TIME slope, B1 | | | | | |
| INTRCPT2, G10 | -0.305999 | 0.434709 | -0.704 | 253 | 0.482 |
| ABBOTT, G11 | 1.928336 | 0.566922 | 3.401 | 253 | 0.001 |

Final estimation of variance components:

| Random Effect | | Standard Deviation | Variance Component | df | Chi-square | P-value |
|---|---|---|---|---|---|---|
| INTRCPT1, | U0 | 19.83032 | 393.24148 | 244 | 1806.95659 | 0.000 |
| TIME slope, | U1 | 1.87701 | 3.52318 | 244 | 301.18297 | 0.007 |
| level-1, | R | 8.78599 | 77.19359 | | | |

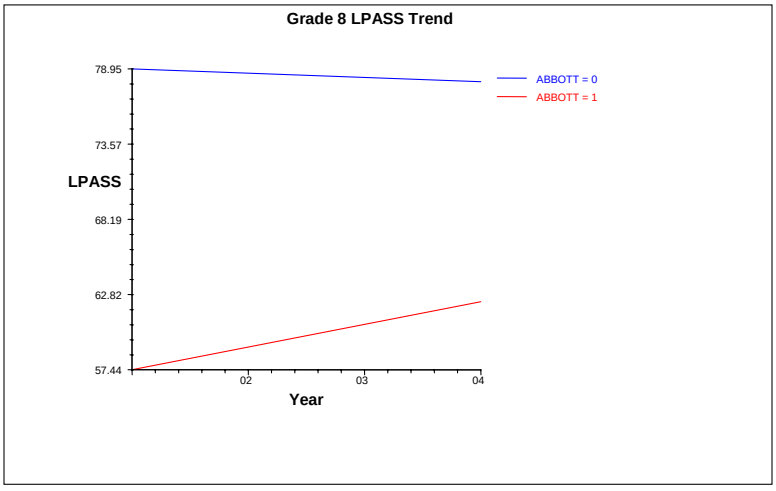



Figure 3:
Trend in Grade 8 Language Arts' Passing Rates For Abbott and Non-Abbott Schools: 2001 to 2004

With respect to mathematics, the time/slope coefficient ( ABBOTT, G11) for passing rates in this content area on the state's grade eight assessment indicate that the increase in passing rates was higher for the Abbott schools than the non-Abbott schools with similar socio-economic status (about 1.1% annually). However this higher growth rate was not statistically significant. Similar to our previous findings for the fourth grade and the eighth grade in language arts, the initial passing rate was significantly lower among the Abbott schools.

Table 13:
Results from HLM Analysis for Eighth Grade Mathematics Performance

Final estimation of fixed effects
(with robust standard errors)

| Fixed Effect | Coefficient | Standard Error | T-ratio | Approx. d.f. | P-value |
|---|---|---|---|---|---|
| For INTRCPT1, B0 | | | | | |
| INTRCPT2, G00 | 59.572096 | 2.215417 | 26.890 | 253 | 0.000 |
| ABBOTT, G01 | -18.692541 | 3.008884 | -6.212 | 253 | 0.000 |
| For TIME slope, B1 | | | | | |
| INTRCPT2, G10 | 0.743083 | 0.642743 | 1.156 | 253 | 0.249 |
| ABBOTT, G11 | 1.122839 | 0.772781 | 1.453 | 253 | 0.147 |

Final estimation of variance components:

| Random Effect | | Standard Deviation | Variance Component | df | Chi-square | P-value |
|---|---|---|---|---|---|---|
| INTRCPT1, | U0 | 23.27448 | 541.70161 | 244 | 2134.04730 | 0.000 |
| TIME slope, | U1 | 3.53164 | 12.47245 | 244 | 397.10507 | 0.000 |
| level-1, | R | 9.46495 | 89.58520 | | | |

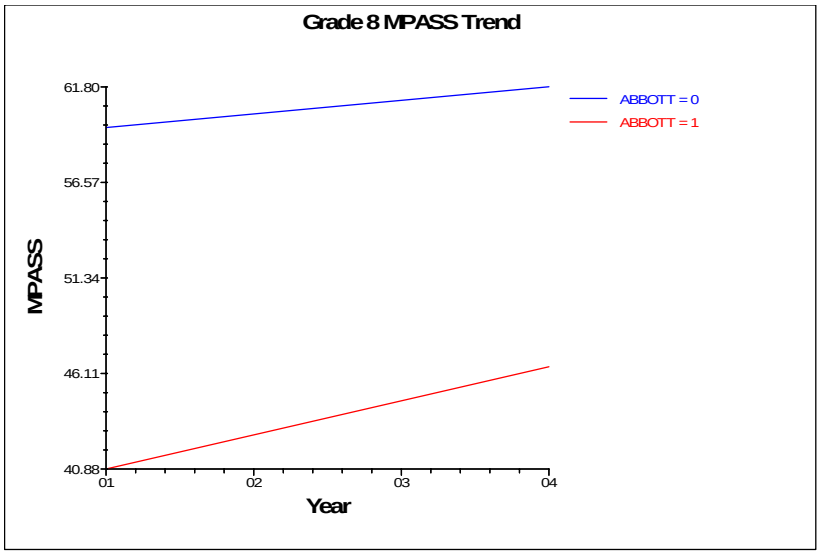



Figure 4:
Trend in Grade 8 Mathematics' Passing Rates For Abbott and Non-Abbott Schools: 2001 to 2004

The findings in science parallel our previous findings. In spite of the fact that the Abbott schools start out below schools that are similarly situated economically, their rate of improvement outpaces that of these schools. For example, the results in Table 14 show that the passing rate in science for the Abbott schools in 2001 was significantly lower than the passing rate for schools that were not Abbott (31.31%). When we examine the rate of improvement over the four years, we see that the Abbott schools' annual rate of growth of 2.9% was significantly higher than the rate of growth in non-Abbott schools (Table 14). This trend is further evident when we examine the trend lines for the Abbott schools and the non-Abbott schools depicted in Figure 5.

Table 14:
Results from HLM Analysis for Eighth Grade Science Performance

Final estimation of fixed effects
(with robust standard errors)

| Fixed Effect | Coefficient | Standard Error | Approx. T-ratio | d.f. | P-value |
|---|---|---|---|---|---|
| For INTRCPT1, B0 | | | | | |
| ITRCPT2, G00 | 9.228631 | 1.618348 | 48.956 | 253 | 0.000 |
| ABBOTT, G01 | 1.312278 | 2.401109 | -13.041 | 253 | 0.000 |
| For TIME slope, B1 | | | | | |
| INTRCPT2, G10 | 0.092167 | 0.362878 | -0.254 | 253 | 0.800 |
| ABBOTT, G11 | 2.900802 | 0.528448 | 5.489 | 253 | 0.000 |

Final estimation of variance components:

| Random Effect | | Standard Deviation | Variance Component | df | Chi-square | P-value |
|---|---|---|---|---|---|---|
| INTRCPT1, | U0 | 19.71339 | 388.61780 | 244 | 2352.85832 | 0.000 |
| TIME slope, | U1 | 2.75219 | 7.57453 | 244 | 390.73401 | 0.000 |
| level-1, | R | 7.59118 | 57.62603 | | | |

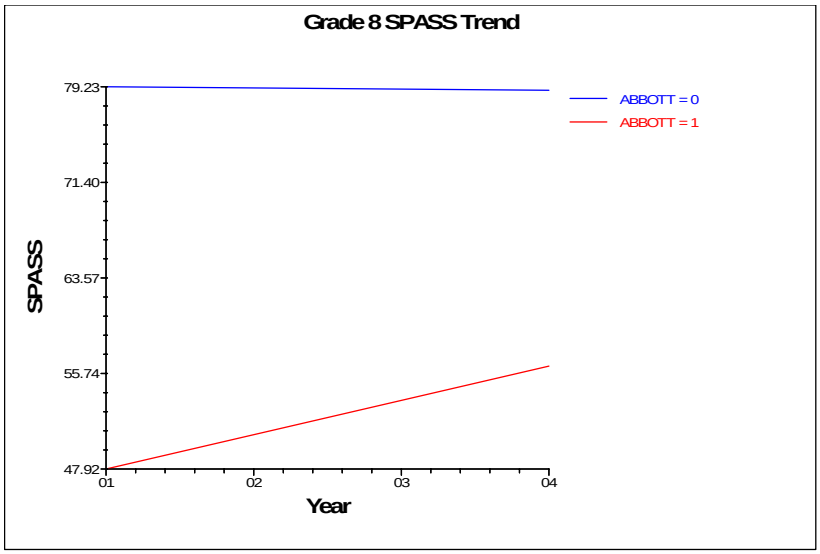



Figure 5:
Trend in Grade 8 Science Passing Rates for Abbott and Non-Abbott Schools: 2001 to 2004

**Other Indicators of Student Outcomes: Attendance and Vandalism Behaviors**

Over the decades, student attendance has been broadly examined for its impact on achievement and as a major indicator of student alienation, disengagement, and motivation (Lan & Lanthier, 2003; Lee & Burkam, 2003). Indeed, the long-term consequences of chronic absenteeism have been found to be dire for some students. Furnished evidence suggests that students who are chronically absent from school are at great risk for engaging in substance abuse and criminal behaviors (Baker, Sigmon & Nugent, 2001). Explanations for poor student attendance have focused on a number of factors that are associated with family and personal characteristics, as well as school culture, organization and structure (Gleason & Dynarsky, 2002; Lee & Burkam, 2003). The implications of poor student attendance for student achievement have not been lost on policy makers, as attested by the importance that is given to student attendance in both federal and state accountability systems. For example, under NCLB, attendance is an 'additional indicator' of schools meeting adequate yearly progress at the elementary and middle grades; while in New Jersey,

the average daily attendance is one of the monitoring elements that is statutorily required. Figures 6 and 7 depict attendance trends over a ten-year period for the Abbott districts. The figures also portray trends for the wealthiest suburbs and the state. Attendance rates at the elementary and middle grades in the Abbott districts, as is apparent in Figure 6, continue to lag behind rates in the wealthiest communities and statewide. However, there has been a slight improvement in the Abbott districts' attendance rates since 1995. Average attendance in 1994-1995 for all Abbott districts was 92.6%; but has remained relatively stable, as can be seen in Figure 6, since 1996-1997 at about 93 or 94 percent.

Overall, attendance rates are lower in secondary schools than in the elementary and middle schools throughout the state. Among Abbott high schools, the attendance rates have hovered around 88%. Figure 7 shows that the highest attendance rates for the ten-year period have occurred within the last five years, with the 2004-2005 academic year having the highest recorded rate (89.4%). The greatest disparity in attendance between the Abbott schools and the I and J districts, as well as the state as a whole exists at the secondary level. On average there tends to be a six to seven percent difference in secondary schools' attendance rates between the Abbott districts and their wealthier counterparts. At the elementary and middle grades, the average difference is around two percent.

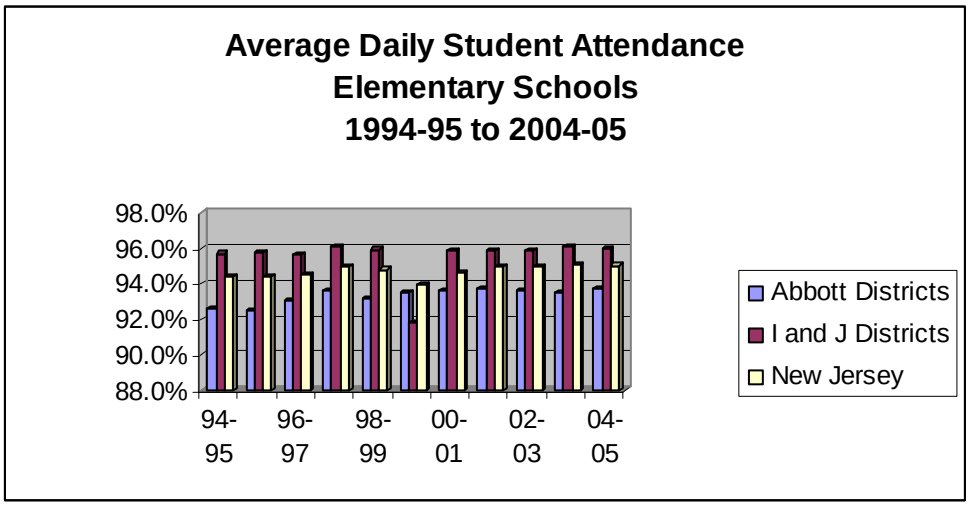
The Abbott remedies were designed to create educational environments that are facilitative of student learning in all respects to include safety. Indeed, the 1998 decision called for a security guard to be assigned to all Abbott schools. Federal and state laws underscore the perceived importance of creating a safe environment in which teaching and learning can take place. In the case of New Jersey, Department of Education regulations provide for imposing penalties against school employees who knowingly fail to report incidences of violence and vandalism, or who falsify a report of an incident; and the No Child Left Behind federal law contains provision that allows

parents to transfer their children from persistently dangerous schools to ones that are safer. The extent to which Abbott schools have become safer for pupils is reflected in Figures 9 and 10. Before interpreting the data a number of caveats have to be made.

First, the Department of Education has raised concerns regarding inter and intra-district variability in the interpretation and application of the definitions of offenses. Second, and related to the first issue, local standards influence whether an incident of misconduct gets reported to the Department of Education. The Department of Education requires all districts to report major student infractions that result in the application of disciplinary action. However, because of differences in reporting standards, the number of infractions does not always coincide with the number of disciplinary actions taken, resulting in under-reporting in some cases and over-reporting in others. Third, given the substantive concerns that the Department of Education, the legislature and local districts have voiced with respect to reporting accuracies, there is some criticism levied against the use of the persistently dangerous classification.

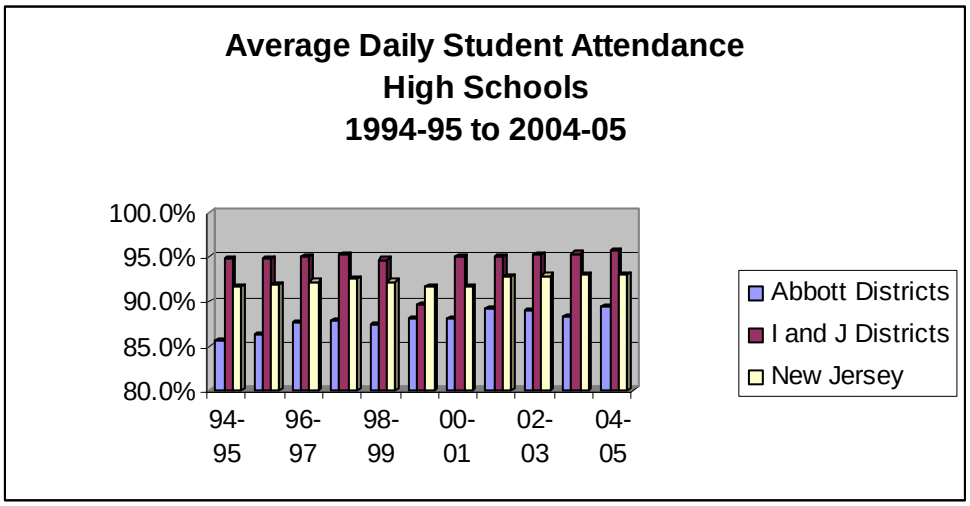
Not-with-standing the legitimacy of these issues, there is merit to examining the safety of the Abbott schools over time. In fact, testimony by the Commissioner of Education to the State Board of Education indicates that reporting accuracy has improved with the strengthening of local and state reporting.[30] The data graphed in the figures break out offenses into two categories: Category A offenses represent infractions that involve firearm offenses; aggravated assaults on another student; assaults with a weapon on another students; and assaults on a school district staff member. Category B Offenses include simple assault; weapons possession or sales other than a firearm; gang fight; robbery or extortion; sex offense; terroristic threat; arson; sales or distribution of drugs; and harassment and bullying.

[30] New Jersey law requires the Commissioner to present an annual report on violence and vandalism. In 2002, the law was amended to require districts to hold a public hearing in the third week of October. Transcripts of the proceedings must be submitted to the DOE.




SOURCE | New Jersey Department of Education: School Report Card, 1994-95 to 2004-05

Figure 6:
Average Daily Attendance from 1994-95 to 2004-05: Elementary Schools

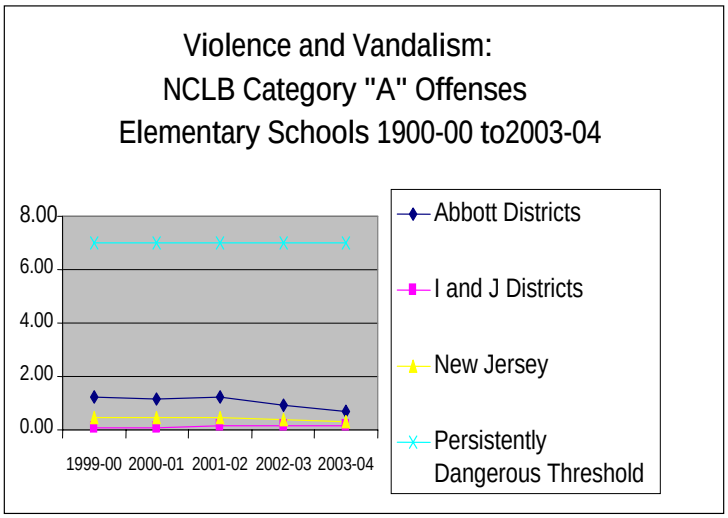


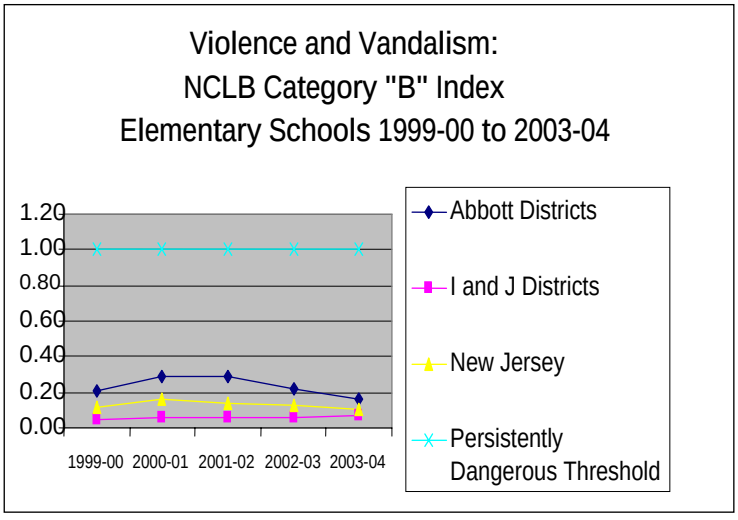

SOURCE | New Jersey Department of Education: School Report Card, 1994-95 to 2004-05

Figure 7:
Average Daily Attendance from 1994-95 to 2004-05: High Schools

Most incidents occur at the secondary levels as is clear from the data provided in the figures. At the elementary and middle schools there is a trending down in both categories for the 2003 and 2004 school years for the Abbott districts. In fact, the rate of incidences for the more serious offenses that are associated with Category A for the Abbott districts came closer to matching the

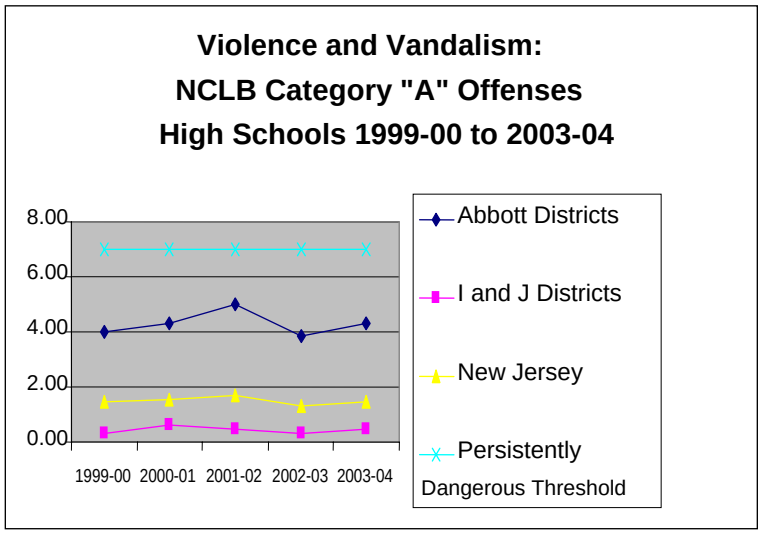
rates in both the I & J districts, as well as statewide than in previous years. In spite of some detectable improvement in Category A offenses at the secondary level in the 2002-2003 school year, the rate of infractions committed by students in the Abbott communities remain high relative to elsewhere in the state and in the affluent suburbs. On the other hand, there has been steady reduction in the incidences of Category B offenses in the Abbott high schools since the 2001-2002 school year.

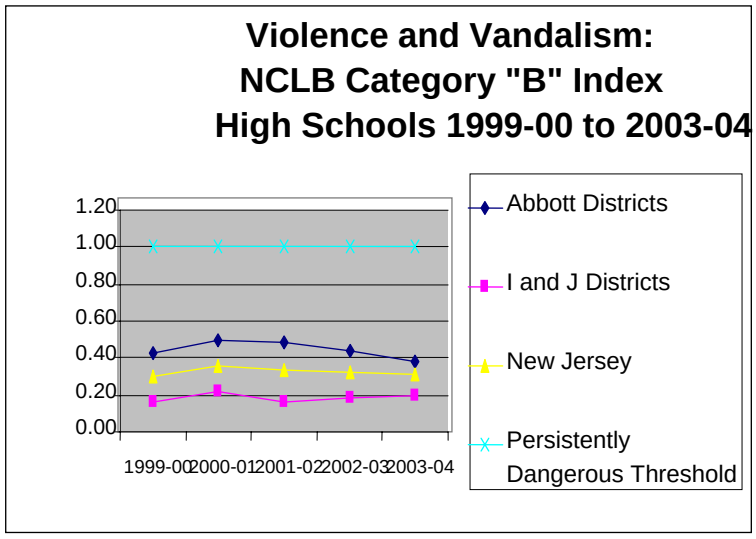



SOURCE New Jersey Department of Education: Office of Program Support Services, Division of Student Services, 1999-2004.

Figure 8: Violence and Vandalism: Categories "A" and Category "B" Offenses 1900-00 to 2003-04 Elementary Schools




SOURCE New Jersey Department of Education: Office of Program Support Services, Division of Student Services, 1999-2004

Figure 9:
Violence and Vandalism: Categories "A" and Category "B" Offenses 1900-00 to 2003-04
High Schools

Since the 1970s, adequacy advocates have relied on the courts to remedy the inequitable distribution of educational resources in the state. A careful read of the history of the impact of judicial decisions from 1972-1998 indicates a less than enduring effect on educational change in the state, and particularly in the poorest communities. The unfavorable institutional and political

contexts in which the enactment of several of these previous decisions was pursued posed insurmountable obstacles to meaningful implementation. However, in spite of methodological and even definitional difficulties, the findings unearthed by our present examination of the impact of the 1998 decision are encouraging. Progress is being made in meeting the equity and adequacy outcomes envisioned by the Court when it authored the decision.

Absent the tenacity of the Court, it is doubtful whether or not this progress would have occurred. The Court has maintained a steady presence in the state's education policy arena influencing several key statutes that have been adopted. Inarguably, that presence could not have been maintained without the Education Law Center's continual mobilizing efforts around the asserted rights of students in the Abbott districts; and the Court's willingness based on fact finding and the evidence to affirm these rights. Unlike Kentucky, and to a lesser extent New Hampshire, New Jersey has not experienced within the past 10 years the same level of political mobilization (extra judicial political activities) that these states garnered after significant and favorable adequacy court decisions. Yet, in spite of weak levels of political mobilization, strong legal mobilization efforts have kept continuous pressure on the state's legislature, which have helped to secure compliance with the remedies.

However, court remedies are not self-executing. New Jersey's experience starkly indicates that even when courts have been right, the uncertainties that tend to inhere in the implementation process, lack of political will, as well as bureaucratic norms, culture and behaviors can all potentially negate the benefits of favorable decisions. Moreover, compliance does not always signify an attempt by the legislature to be faithful to the expressed intent of the courts. This was clearly the case with the preschool reforms in the years immediately preceding the 1998 decision. Nevertheless, the evidence furnished in this paper paint an encouraging albeit cautious picture of the ability of judicial policy-making to effectuate educational change. Beyond the factors already mentioned, the Court's

expansion of its capacities through the appointment of a Special Master was instrumental in bringing both parties into the policy-design stages. This lessened although it did not obviate, the tension and chasm that oftentimes exists between courts in their exercise of policy-making functions, and those actors and entities charged with implementing court policies.

The lessons from Abbott are instructive. In the concluding section of this paper we take a broad view of the implications of the findings from the current research, as well as previous challenges in the implementation of other court decisions, in unpacking some of the yet unresolved issues that prevent each child from receiving an adequate education. We illustrate some of the issues by looking at the implementation of one remedy that courts have embraced, class size reduction policies.

## PART C: QUALITY, EQUALITY AND EQUITY IN EDUCATION: THE COURTS MAY GET IT RIGHT, BUT…

## (THE DEVIL IS IN THE DETAILS)

> ….what it would mean to make education a fundamental right today that is, a right belonging to all children protected by an enforceable guarantee of "adequacy" or "equality" or both. (call for papers proposals, nd p 1. Emphasis in original). [31]

A right belonging to all children, protected by an enforceable guarantee of "adequacy" or "equality" or both is a noble goal and a socially just position to take in support of future generations

[31] Earl Warren Institute on Race, Ethnicity, and Diversity. (n.d.) Rethinking Rodriquez: Education as a Fundamental Right. A Call for Paper Proposals. Berkeley, CA: University of California, Boalt Hall School of Law. (Author). This purpose statement in the call for papers has been extended into a future-view challenge… Instead, we are interested in how to specify the content of a fundamental right to education, and how this concept can serve as an organizing principle for novel constitutional, legislative and policy initiatives". (Emphasis added). I find this forward looking statement optimistic and challenging, especially in the context of what education research, theory and best practices have shown, 1973-2006.

of America's citizenry. However, the twists and turns of various implementations of court decisions at different periods, for example the implementation of the Abbott decisions, have not provided a clean or clear path to the noble goal. The *Brown v. Board of Education* (1954) decision (Brown I) had the goal "to end state-mandated separate schools for black and white children" (Lindseth, 2002, p.4) but Brown I provided no enforcement teeth nor plans for action, leaving the processes to the states to remedy a violation of the Equal Protection clause of the Fourteenth Amendment (separate but equal was replaced by separate is not equal). Education is usually considered a state function as it is not mentioned in the U.S. Constitution and it is mentioned prominently in many state constitutions. De jure segregation may not be banned, but housing patterns, income-related decisions for school attendance, and uneven distribution of racial groups often provide school settings that approach de facto separate schools for various groups. To remedy this contingency, one approach would be legislated "adequacy" so that, at least, various school districts serving diverse students would have funding to access and support equal education opportunities. Yet, funding by itself does not assure that the best education opportunities will be implemented. That task will fall to the educators to implement appropriately what the courts decreed.

The Brown II (1955) decision left the desegregation process to the states and suggested that it be done "with all deliberate speed". Still no enforcement, no specific guidance, still respecting the states' rights to determine how to achieve the goals, and incorporating Justice Warren's opinion about "deliberate" as acting cautiously. According to Anderson (2006) two legal scholars (J. Ogletree and D. Bell) both argued in 2004 books that Brown II "undermined the potential impact of Brown by ruling that enforcement should proceed with 'all deliberate speed" (p. 31), and that the "'unfulfilled promises of Brown"' rest "largely on a 'critical compromise"' that "emerged in Brown II, when the Supreme Court removed much of the power of its decision by allowing states and local districts to proceed with 'all deliberate speed.' Thus, the important goal of full equality was

compromised from the beginning…" Wraqa (2006) noted that "One year after the Brown decision, the Court issued an implementation directive that left the logistical details to the states. Given the vagueness of the court's directive, states and localities enjoyed wide latitude… which they exploited and which led… to flagrant noncompliance." (p. 425).

So, even before Rodriquez (1973), the Supreme Court seemed to have retreated some from the lofty goals of Brown I. But that does not detract from the Earl Warren Institute 's quest for "how to give meaningful content to the concept of education as a fundamental right and how the concept can serve as an organizing principle for novel constitutional, legislative and policy initiatives and as a goal for research and advocacy at the national level, state level, or both." (Earl Warren Institute, n.d. p. 1). The quest for this goal , like the Argonauts' quest for the Golden Fleece, or Hercules's twelve labors, etc. certainly will have difficult hurdles. In a world where the past is debated, consider the challenges in the future for consensus, let alone agreement, on the lofty goal of education as a fundamental right. What about a less lofty goal that is highly pragmatic and subject to fairly easy assessment: To provide the best education opportunities to poor children regardless of the location of their schooling.

Bollinger (2003) pointed out that a major contribution of the Supreme Court in Brown (1954) was that it "dramatically affected the quality and character of education in this country. It defined what 'equal educational opportunity' means in a racial context , and clearly articulated, with inspirational power, the importance of education—to individuals and to the nation as a whole" (p.1). As much as this concept sounds like a fundamental right, with both Brown II (1955) and Rodriquez (1973) the court reaffirmed the pivotal role of the states in education unless education violated equal protection, and later, would strengthen our national defense, a role that was not far-fetched considering that education once was part of the National Security Agency and later an office within

the massive Department of Health Education and Welfare (HEW) as it has slowly evolved from simply a statistics gathering and reporting function to federal Department- level visibility.

With no clear strategies and little power of enforcement, from 1954 until about 1973, the courts struggled with cases that resulted in various remedies. However, the Green vs. Board of Education of New Kent County (1968) decision provided the "Green Factors" that in Lindseth's (2002, p.61) opinion offered some tools and criteria for enforcing the Brown decision. The Green Factors were quantifiable, visible and structural elements that could be assessed with some degree of confidence (student assignments; faculty and staff assignments; facilities; transportation; counseling and discipline; extracurricular offerings). Yet, the Green Factors were not explicitly about high quality education and student achievement even if they were observable and measurable.

Desegregation of schools moved slowly "with all deliberate speed" using a variety of support including the Civil Rights Act; plans such as magnet schools, forced busing, pairing of schools, freedom of choice; some funding support for desegregation work through the Emergency School Assistance Act; Race (and later Gender and National Origin) Desegregation Assistance Centers. Although race (Brown) and gender (Title IX) have been highly visible efforts, educators have struggled with ethnic/diversity issues beyond African American ones, and more recently have been challenged mightily because poverty is, like gravity, a condition (Bracey, e.g. 1999) and has been likened to a 600 pound Gorilla at the schoolhouse door (Berliner, 2005). Poverty is arguably the most serious barrier to education achieving its full potential for our democratic society (e.g., "performance of our most basic public responsibilities, even service in the armed forces. It is the very foundation of good citizenship" (Bollinger 2003, p.l. citing the Brown I decision authored by Chief Justice Warren. Brown. Id. at 493) Chief Justice Earl Warren, in Brown I explained the crucial role of public education: [347 U.S. 483,493 (1954)]

> [E]ducation is perhaps the most important function of state and local governments. … Such an opportunity, where the state has undertaken it, is a right, which must be made available to all on equal terms (Emphasis added).

This eloquent statement seems to presage the Court's decision in Rodriquez (1973)[32], leaving operational decisions about education to states and ultimately, to implementation in local districts.

Bollinger (2003, p.3) pointed to the May 16, 1968 walkout and demonstration at Edgewood High School in San Antonio (90% Hispanic, 6% African American). That year (1968) apparently was a time of student and parent voices: Walkouts in East Los Angeles (Spring, 1968) and November, 14 at Edcouch-Elsa High School in South Texas (mostly Hispanic) as reported in Guajardo and Guajardo (2004).

When the Texas legislature "failed to act in its 1971 Regular Session" the District Court rendered a decision, setting the stage for the appeal (Rodriquez) which the Supreme Court rejected on a 5-4 vote while reaffirming its support for Brown and the principles about the importance of education and equality of education opportunity. The Courts' majority seemed concerned about two issues (as cited by Bollinger p. 5): Creating substantive Constitutional rights and States Rights:

"It is not the province of this court to create substantive constitutional rights in the name of guaranteeing equal protection of the laws"

"Rather, the answer lies in assessing whether there is a right to education explicitly or implicitly guaranteed by the Constitution."

"… activities should not be pursued by such 'judicial intrusion into otherwise legitimate state activites." ….would potentially 'abrogate systems of financing public education presently in existence in virtually every state' ".

[32] Material in this section incorporates ideas expressed by Bollinger, L.V. (2003), November). Educational Equity and Quality: Brown and Rodriquez and their Aftermath. The College Board Forum, 2003. http://www.columbia.edu/cu/president/communications%20files/collegeboard.htm 12/8/05

Rodriquez directly put the onus for operationalizing and implementing education remedies on individual states. According to Bollinger (p.6), "Unlike the federal constitution, which has no explicit protection for education, at least 48—if not all—state constitutions contain clauses that explicitly protect education." (…all the rights and powers which the Constitution neither grants to the Federal government nor denies to the various state governments…). Perhaps something as important and personal as education when described in qualitative terms such as quality, equality, and equity requires the flexibility of being adjudicated in local and state courts with potential for extensive reviews that may help shape the enterprise for better or worse given the social contexts of education.[34]

Lindseth (2002) traced his view of the evolution of desegregation in education. The section titles of his chapter (pp. 44-48) provide a quick tour: "The 1950s: Massive Resistance"; "The 1960s: A Short Period of Accomodation";"The 1970s: Forced Busing and Expansion of Desegregation to the North; "The 1980s: Voluntary Desegregation/State Funding"; "The 1990s: The Ending of Court Supervision/Concurrent Emphasis on Quality Education." And here is the challenge for today's educators, legislators and courts, 2006 and Beyond: Quality Education for All, with Adequate Funding to Provide Equal Protection, Quality Education Processes and Outcomes, and Equity because it is "impossible for racially segregated education to be equal…" (Bollinger, p.2)

Now in the state-by-state search for funding adequacy and for equal protection of a state's citizenry , the issue of quality education is framed within certain guidelines: Equal Protection, Separate is not Equal, The "Green Factors", Treating Unequals as Equals is Inherently Unequal, States Rights.

[34] As society changes, so will the arguments about what is an adequate education for a citizenry in a free nation. What is adequate? Does adequate public education mean addressing a students' aspirations so the student is not blocked from advancing? Consider Jefferson's dictum that if a nation wishes to be ignorant and free…

In a normative sense, governments, state administrative agencies, educators, and citizens should approach a quality education as if it were a fundamental right. There has been some court guidance for present-day progress. Guidance can be extracted from the expert testimony at trials, from advances in education and other related research (such as human growth and development, influence of home factors on a child's development, etc.), and as that research is refined in the crucible of peer review and changing definitions of scientific based research or SBR.[35] [e.g., as presented in the reauthorization of the 1965 Elementary and Secondary Education Act, PL 89-10 signed on 1/8/02 as the No Child Left Behind (NCLB) Act (PL 107-110, Sec. 9101 (37), pp 126-127); or by the National Research Council or NRC (Feuer, Towne, & Shavelson, 2002, p.7)]

The Rodriquez decision may have provided an important challenge for the education community to take part not just in "education" things, but to consider educators' roles in acting as if education is a fundamental right. This will require educators to understand clearly some things that they may not have consciously attended to consistently in the past.

Ancheta (2006) noted that "education research has long played a major role in advocacy designed to secure basic constitutional and civil rights" (p.26), and pointed directly to the Brown decision. Because statistical evidence is frequently admitted at trial, often in expert testimony[36], educators need to agree upon the guidelines for "top tier" research (SBR, in the present time) and be assiduous in conducting such research both for new knowledge and in evaluating the efficacy of various court-required remedies for ending segregation or for addressing inadequate funding for education. However, it may be easier to discuss the challenge for researchers and practitioners to do and to use research than it will be to get research (SBR) results into policy, judicial decisions and

[35]In essence, SBR would meet six criteria: Pose significant questions that can be investigated empirically by accepted research methods; Link research to relevant theory: Use methods that permit direct investigation of the questions. Provide a coherent and explicit chain of reasoning; Yield findings that replicate and generalize across studies, disclose research data and methods to enable and encourage professional scrutiny and critique.

[36]If there are several arguments around a particular research-supported point, the choice of the expert and the lines of research are as important as the decision of judges on what expert or which research is compelling and should be followed.

practices. Ancheta (2006, p.26) illuminated this issue that given changes in society, it is likely that a particular line of research popular at one time may be in disfavor later (for a variety of reasons). What counts is the research that a majority of the court accepts.

> [T]he prominence of the psychological and sociological evidence in the Brown opinion has led civil rights advocates to routinely invoke scientific evidence to help prove violations of the Constitution and civil rights' statutes. Advocates frequently employ statistical evidence in desegregation litigation to demonstrate racial and ethnic disparities in education….
>
> Yet the use or scientific evidence in civil rights litigation has a checkered and often controversial history… For instance, despite the near-universal approval of Brown's desegregation mandate, critics have attacked the Court's heavy reliance on contemporaneous psychological findings to support its ruling because psychological findings might be subject to revision or repudiation. Soon after the decision, law professor Edmund Cahn (1955, p. 167) argued:
>
> Today the social psychologists… are liberal and egalitarian in [their] basic approach. Suppose a generation hence, some of their successors were to revert to the ethnic mysticism of the very recent past; suppose they were to present us with a collection of racist notions and label them "science". What then would be the state of our constitutional rights? (Ancheta, 2006, p.26)

**Implementation Issues: The Devil is in the Details**

Table 15 provides a sample of court-ordered education-equity remedies. Consider the implementation decisions and questions involved in several of the frequently ordered remedies (e.g. class size, high quality and publicly funded pre-kindergarten [Pre-k], kindergarten, teacher quality), especially in light of a) Ancheta's (2006) discussion of the role of the "Civil Rights, Education Research, and the Courts", b) definitions of Scientific Based Research (e.g. Feuer et al., 2002) and c) the court issues of equality and equity (and educators' concerns for quality education)[37]. Understanding the operational steps in applying judicial remedies is important for several reasons because the implementation should advance the civil rights, equal protection, and adequacy (etc.) issues at the heart of the court decisions.

[37] The idea of Quality education that also addresses equality and equity was addressed by Achilles (1999) as Education Improvement (EI) equals Quality x Equality x Equity, or $EI = QE^2$ (p. 159).

1. If implementation and use of best-practice decisions (known at the time) do not occur, the defendant could be in contempt.

2. If implementation occurs but does not follow the court's mandates in reasonable agreement with the testimony or if the testimony and/or the implementation steps were based on one particular line of research over another, the projected costs and outcomes of the remedies may be substantially influenced.

Thus, even when implementation does occur, the court might request (and the implementing agency should desire) evidence of degrees of success or relief from continuous monitoring and evaluations of the remedies. An example may be instructive. For purposes of illustration the remedy of class size is used, for similar to several "Green Factors" class size is measurable and its relevance to learning has a long and robust research history. The example used is from CFE in NY City as the CFE implementation in many ways reflects Abbott choices and experiences around the issue of class size.

The New York courts heard considerable testimony on class size and included class size (as a concept) in CFE remedies. However, the court gave little consideration to what has become known about appropriate class-size implementation and long-term outcomes of early grades (K-3) small-class experiences. By the date of CFE, the major SBR on class size, a large (12,000 students, 1300 teachers, etc.) longitudinal (grades K-3, 1985- 1990) randomized experiment had been disseminated, including the positive long-term benefits from small K-3 classes that have endured into high school and beyond. (E.g., Krueger & Whitmore, 2001; Finn & Achilles, 1999; Finn et al., 2005)

Other class-size efforts such as SAGE in Wisconsin, North Carolina's statewide plan for class-size reduction (CSR), California's politically motivated (and incorrect) implementation that was similar to Nevada's, were available to provide direction for CFE, as were Abbott procedures. Testimony that small classes would be expensive and not particularly effective relied on evidence from pupil-teacher ratio (PTR) computations and estimates, not on actual class-size data and research outcomes. The two concepts, class size and PTR are not synonyms and indeed are about

n=10 different in US elementary schools. In a PTR and class-size analysis, Boozer and Rouse (1995) found that typically the larger the school, the more variance and thus, the larger are differences between PTR and class size. "The correlation between the pupil teacher ratio and the average class size is relatively low at 0.13 in the New Jersey Survey and 0.26 in the NELS" (p.5, Note 8). In U.S. elementary schools, the approximate differences between class sizes and PTR in grades K-3 are n=10, or n=15 in some urban areas. That is, a K-3 teacher in an elementary school with the PTR of 15:1 will likely have 25-30 pupils in a class. (See also Achilles, 1999, pp.31-33; Achilles & Finn, 2005; Achilles & Sharp, 2002; Sharp, 2003).

Because class-size data are not routinely available or collected, and because enrollment and staffing data are routinely collected, PTR (easy to compute) is often substituted for, or used as a proxy for actual or even average class size (see Table 16 for one example from an Abbott v. Burke district in 2005-2006 and Table 17 for a general case example). The following excerpt from CFE v. State of New York: An Analytical Overview of the Court of Appeals Decision (nd) is instructive, as to the problem, implementation of remedies, and the need to monitor the processes.

**Essential Resources**

In addition to defining the extent of the opportunity for a "sound basic education" guaranteed by the state constitution, the Court of Appeals held that "The State must assure that some essential [resources] are provided." CFE I, 86 N.Y. 2d at 317; CFE II, at 11-13. The Court reviewed the extensive evidence adduced at trial regarding key resource inputs such as teacher quality, class size, overcrowded facilities, libraries, computers, and laboratories and concluded that "tens of thousands of students are placed in overcrowded classrooms, taught by unqualified teachers, and provided with inadequate facilities and equipment." CFE III at 22.

The Court specifically credited expert testimony that "teacher certification, test performance, experience and other factors measure quality of teaching; that quality of teaching correlates with student performance." (CFE II at 17), that "smaller class sizes in the earliest grades correlate with better test results during those years and afterwards" (id. at 19), and that "some exposure to [computers] has become essential"(id. at 21). Arguments put forth by Dr. Eric Hanushek, the state's expert who claimed that additional resources in many of these areas would not result in improved student performance, were rejected. Id. at 19. (Emphasis added).

To determine whether children are, in fact, receiving the opportunity for a sound basic education, the Court held that both resource inputs and "resulting 'outputs', such as test results and graduation and dropout rates" must be considered. CFE II at 12. The Court undertook an extensive review of the poor performance of New York City students on a variety of state standardized tests, as well as the city's high dropout rates.

Abbott v. Burke had previously provided a "standard" for class sizes by grade ranges of 1-3, 4-5, 6-12. (See Table 5 for years 2002-2003 to 2004-2005). This idea of a range as standard from Abbott v. Burke appears in CFE as a "caps" (New York City Council, 2005, p.55) for grades K-3, 4-5, 6-12. This arrangement had not been carefully researched in Abbott districts, and in fact, it is not aligned with the long-term, SBR research on class-size. Relevant footnotes and references in the CFE plan Fulfilling the Promise [New York City Council, 2005, pp.52-56 and pp. 84-90] suggest that the CFE implementation plan relied only marginally on the class-size research and quite heavily on PTR ideas (and perhaps on the Abbott v. Burke unresearched and unevaluated implementation) in developing the CFE plan.

Given what has been learned about how to use class-size effectively and efficiently in K-3 or so (even Pre-K), the conclusion seems to suggest that the courts get it right with the suggested remedy, but that the implementations plans and educators apply proxy strategies that have not provided SBR evidence of effectiveness.

So, the ideas of quality, equality, and equity in education as part of the fundamental right of all children, as protected by an enforceable guarantee of adequacy or equality or both, and framed within equal protection, states rights (and local control) must be negotiated in implementations of the court guidelines followed by careful and thorough evaluation/ monitoring. Perhaps the courts should require periodic evaluation summaries to show that remedies have actually been implemented based upon the best research evidence available at the time to make the schooling experiences of poor students of all ethnicities as equitable as possible.

So, questions remain. Although Abbott v. Burke has provided some sound equity remedies such as high quality pre-K and full-day Kindergarten and achieved some generally sound and measurable outcomes in some areas (e.g., better trained pre-K personnel), other SBR implementation steps remain to be taken. If these remedies had been addressed in Abbott v. Burke according to the substantive research available at the time, there still would be no guarantee that future decisions would follow suit. The issue still may be that the courts get it right, but the policy makers, legislators, and educators need to work at implementation adequacy to assure that education, although not declared a fundamental right in Rodriguez, nevertheless is addressed as if it were a fundamental right of all children at each state level.

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**Court Cases**

Abbott v. Burke, 149 N.J. 145 (1997) (Abbott *IV*)

Brown v. Board of Education. (Brown *I*), 347 U.S. 483 (1954)

Brown *II*, 349 U.S. 294 300-301 (1955)

Campaign for Fiscal Equity, Inc. (CFE) v. State of New York, 86 N.Y. 2d 307 (1995), (CFE *I*)

CFE v. State, Slip Op. 15615 (2003), (CFE *II*)

Green v. School Board of New Kent County, 391 U.S. 430 (1968)
(This provided some tools for enforcing Brown)

Hancock v. Driscoll, 2004 WL 877984 (April 26, 2004)

San Antonio School District v. Rodriguez, 411 U.S. 1 (1973)

Table 15:
Sample of court-ordered and legislative quality education equity remedies

| | A | B | C | D | | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cases/ Laws | State (a) | Class Size | Hi Qual. Pre-K | Full-day Kinder | Implement SBR WSR Models (b) | Sch.-Based Management [SBM] | New Personnel Titles | Comp Facilities Improv. | Parity Adequate Funding | Teacher Quality | "Others" (c) |
| Abbott v. Burke [A v. B] | NJ | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | | Yes |
| Campaign (d) for Fiscal Equity [CFE v. State] | NY | Yes | Yes | | | | Yes [with I] | Yes [with A] | Yes | Yes | Yes/ Leadership Social Services |
| Hancock v. Driscoll [H v. D] | MA | Yes | Yes | Yes | | | | Yes | Yes | Yes | Yes |
| HB 72 (e) (1984) A Law | TX | Yes | Yes | Yes | | | | | | | |

**(a)** Other states have addressed some of the remedies that are offered here as examples.
**(b)** SBR- Scientific Based Research; WSR- Whole- School Reform models.
**(c)** Some "other" remedies include "resources necessary" for a sound basic education and a "system of accountability" to measure whether the reforms actually provide the opportunity for a sound basic education (emphasis added). CFE Index No. 11107093. Supreme Ct. of State of NY, p.1.
**(d)** Less specific than Abbott v. Burke: Sound curriculum, safe and orderly environments, suitable curriculum, texts, labs, etc. are under "others" (J).
**(e)** HB 72 defined both enrollment, (class-size) limits and pupil- teacher ratio(PTR), two distinct concepts.

Table 15 (Continued). Notes

I. Excerpts from CFE v. State of NY: An Analytical Overview of the Court of Appeals Decision.

CFE required a "meaningful high school education, as the minimum of an adequate education". In NJ and NY an adequate education must be at least a high school education (p.3).

Justice DeGrasse developed the template outline of constitutionally- required essential resources set forth in CFE *I* in terms of the following seven categories which were implicitly affirmed by the Court of Appeals in CFE *II*:

1.) Sufficient number of qualified teachers, principals and other personnel; 2). Appropriate class size.
3.) Adequate and accessible school buildings with sufficient space to ensure appropriate class size and implementation of a sound curriculum.
4.) Sufficient and up to date books, supplies, libraries, educational technology and laboratories.
5.) Suitable curricula, including an expanded platform of programs to help at risk students by given them "more time on task". 6.) Adequate resources for students with extraordinary needs. 7.) A safe orderly environment.[38]

II. Various Remedies from Abbott v. Burke Decisions.

A. Comprehensive set of individual remedies, Abbott v. Burke (1998)
1. High quality preschool for all eligible 3 and 4 year olds; 2.) All-day kindergarten for 5 year olds;
3.) Classize reduction (CSR); 4.) Implementation of whole school reform (WSR);
5.) Supplemental programs; 6.) Cogent facilities construction policy;
7.) Devolution of decision-making at each school site as School- Based Management (SBM);
8.) Achievement of fiscal parity.

B. A 2003 Mediation Order required NJ DOE to develop an evaluation design to provide evidence of the impact of the 1998 decision and remedies. This was not developed because of funding issues.

C. Prior Abbott Decisions (IV, V, VI) had also prescribed remedies.

[38] 187 Misc. 2d at 114-15. See also, CFE v. State, 295 A.D. 2d at 9-10 (affirming that the trial court's categorization essentially falls within the areas of essential resources set forth by the Court of Appeals). p. 3

Table 16:
Class Size Data by Classrooms, 2004-2005 and School PTR

(One "Abbott" Elementary School) [Underline= Bilingual][38]

| Grade | Actual Class Size | | | | | | AVE[39] | AIDES |
|---|---|---|---|---|---|---|---|---|
| K | 20 | 27 | 23 | 27 | 27 | | 25 | n=4 |
| 1 | 25 | 17 | 22 | 18 | 18 | 19 | 20 | |
| 2 | 22 | 17 | 21 | 21 | 15 | 14 | 18 | |
| 3 | 20 | 16 | 20 | 21 | | | 19 | |
| Ave (K-3) | | | | | | | 20.5 or 21 students | |

[38] Some data are not tabled, but are explained here:
Average class size (K-3)=21
School Total Enrollment (N=439)
School Reported PTR (8 to 1)
Special Teachers (e.g., Art, music, gym) (n=5)
Special Education (n=7) with n=4 assigned rooms
Paraprofessionals (K) (n=4)
"Pull-out" for Basic Skills Instruction or BSI (n=4)
"Literary Coaches" (n=3)

[39] Averages are rounded to whole students.

Table 17:
Examples of Class- Size and Pupil- Teacher Ratio (PTR) Difference

| Grade and Classes | (n) | Computation* | |
|---|---|---|---|
| Kindergarten N= 86 (STAR) | | Total Students N=529 | |
| Small | 16 | | |
| Small | 16 | Other Educators | |
| Regular | 27 | Title | N |
| Regular-Aide | 27 | Principal | 1 |
| Grade 1 N=88 | | Counselor | 1 |
| A | 29 | Media Specialist | 1 |
| B | 30 | Special Education | 2 |
| C | 29 | Title I | 3 |
| Grade 2 N=87 | | Art | .5 |
| A | 29 | Music | .5 |
| B | 29 | Physical Education | .5 |
| C | 29 | Gifted | .5 |
| Total (K-2) | | Total "Other" | 10 |
| Students | 261 | Total Regular | 19 |
| Teachers | 10 | Total Educators | 29 |
| Totals (3-5) | | | |
| Students | 268 | PTR= 529÷29 or 18.2 | |
| Teachers | 9 | | |

*This excludes aides (n=4), secretary (n=1) and nurse (n=.5) whose salaries could add the equivalent of 3 more professional positions, providing a PTR of 529 ÷ 32 or 16.5. Widget Elementary, a STAR School has 261 students in grades K-2, and 529 students, K-5. From Achilles (1999), p.33