RACE-CONSCIOUS FUNDING STRATEGIES AND SCHOOL FINANCE LITIGATION

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This article examines the policy and legal issues surrounding the use of race-conscious school funding policies designed to close racial achievement gaps. The first section examines research finding a correlation between funding and educational outcomes for minority students. The second section identifies possible reasons why many states have racial funding gaps. The third section discusses why most adequacy studies do not include race variables. The fourth section explains how the No Child Left Behind Act ("NCLB") may induce states to adopt race-conscious funding strategies and discusses whether such an approach is permissible under the Equal Protection Clause. The final section examines how NCLB may encourage courts to hold that failure to include race variables violates state education clauses and the Due Process Clause.

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INTRODUCTION

Despite controlling for school inputs, such as student-teacher ratios and a variety of other student background characteristics, racial differences in student achievement persist.[1] There is a growing consensus among social scientists that targeting funding to minority students might reduce the racial achievement gap;[2] however, no state school finance formula currently employs race-conscious funding approaches. In fact, a number of states have statistically significant negative correlations between nominal per pupil funding and their school districts' percentage of black students.[3] Additionally, educational adequacy studies, which attempt to determine the costs that different types of school districts may need to achieve educational outcomes, rarely include race variables.[4] The No Child Left Behind Act ("NCLB"), which compels states to address racial achievement gaps, may finally encourage state legislatures to adopt race-conscious school funding policies and order adequacy studies that explicitly examine the costs of closing racial achievement gaps. NCLB may also induce courts to find that the failure of school finance formulas to include race variables violates state education clauses and the Due Process Clause.

This article examines the policy and legal issues surrounding the use of race-conscious school funding policies designed to close racial achievement gaps. The first section examines the research demonstrating a correlation between funding and educational outcomes for minority students. The second section identifies possible reasons why many states have gaps in racial funding. The third section outlines reasons why most adequacy studies do not include race variables. The fourth section explains how NCLB may finally induce states to adopt race-conscious funding strategies and whether such approaches are permissible under the Equal Protection Clause. The final section examines how NCLB may encourage courts to hold that the failure to include race variables violates state

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[1] *See* Bruce D. Baker et al., *Two Steps Forward, One Step Back: Race/Ethnicity and Student Achievement in Education Policy Research*, 14 EDUC. POL'Y 511 (2000); Roland G. Fryer, Jr. & Steven D. Levitt, *Understanding the Black-White Test Score Gap in the First Two Years of School*, 86 REV. ECON. & STAT. 447, 447 (2004); Walter I. Garms & Mark C. Smith, *Educational Need and Its Application to State School Finance*, 5 J. HUM. RESOURCES 304 (1970); Eric A. Hanushek et al., *Does Peer Ability Affect Student Achievement?*, 18 J. APPL. ECON. 527 (2003); RICHARD ROTHSTEIN, CLASS AND SCHOOLS: USING SOCIAL, ECONOMIC, AND EDUCATIONAL REFORM TO CLOSE THE BLACK-WHITE ACHIEVEMENT GAP (Economic Policy Institute 2004). *See also infra* Section I.

[2] See Section I for a discussion of these studies.

[3] See Section II for a discussion of these studies.

[4] See Section III for a discussion of these studies.

education clauses and the Due Process Clause.

I. DOES "MONEY MATTER" WITH RESPECT TO MINORITY STUDENT ACHIEVEMENT?

Until the early 1990s, the consensus among social scientists was that increases in educational spending did not correlate to increases in student achievement.[5] The foundation of this view is the landmark study by James S. Coleman, et al., *Equality of Educational Opportunity* ("Coleman Report"), which found "that schools bring little influence to bear on a child's achievement that is independent of his background and general social context."[6] In reaching this conclusion, the Coleman Report employed education production analysis, a statistical method used to identify the "maximum level of outcome possible from alternative combinations of inputs" and summarize "technical relationships between and among inputs and outcomes."[7] Since the publication of the Coleman Report, researchers have conducted hundreds of education production studies seeking to prove or reject its findings.[8] In several reviews of these studies, Eric Hanushek found no systematic relationship between educational resources and outcomes.[9] Hanushek's reviews have also been instrumental in convincing social scientists that no correlation exists between increases in educational spending and increases in educational outcomes.[10]

Since the early 1990s, the emerging picture arising from the empirical data is that additional resources may lead to increases in minority academic achievement.[11] Larry Hedges and colleagues found serious methodological flaws in Hanushek's vote counting methodology, which involves "examining the regression coefficients for the same resource from different studies; categorizing each result according to

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[5] David Grissmer et al., *Does Money Matter for Minority and Disadvantaged Students? Assessing the New Empirical Evidence*, *in* DEVELOPMENTS IN SCHOOL FINANCE, 1997 at 15 (William J. Fowler, Jr. ed., National Center for Education Statistics 1998).

[6] JAMES S. COLEMAN ET AL., EQUALITY OF EDUCATIONAL OPPORTUNITY 325 (National Center for Education Statistics 1966).

[7] David H. Monk, *The Education Production Function: Its Evolving Role in Policy Analysis*, 11 EDUC. EVALUATION & POL'Y ANALYSIS 31, 31 (1989).

[8] COMMITTEE ON EDUCATION FINANCE, NATIONAL RESEARCH COUNCIL, MAKING MONEY MATTER: FINANCING AMERICA'S SCHOOLS, 141 (Helen F. Ladd & Janet S. Hansen eds., National Academy Press 1999) [hereinafter MAKING MONEY MATTER].

[9] *See, e.g.*, Eric A. Hanushek, *School Resources and Student Performance*, *in* DOES MONEY MATTER? THE EFFECT OF SCHOOL RESOURCES ON STUDENT ACHIEVEMENT AND ADULT SUCCESS 43 (Gary Burtless ed., 1996); ERIC A. HANUSHEK ET AL., MAKING SCHOOLS WORK: IMPROVING PERFORMANCE AND CONTROLLING COSTS 4 (The Brookings Institution 1994); Eric A. Hanushek, *The Impact of Differential Expenditures on School Performance*, 18 EDUC. RESEARCHER 45 (1989).

[10] Grissmer et al., *supra* note 5, at 15. While making this general claim about the input-outcome relationship in education, Hanushek acknowledges that fiscal resources likely do matter more for poor, minority children, but suggests that racial integration might prove more effective and cost less. Eric A. Hanushek, *Black-White Achievement Differences and Government Interventions*, 91 AM. ECON. REV. 24, 27-28 (2001).

[11] Grissmer et al., *supra* note 5, at 15.

whether it indicated a positive or negative or zero effect on academic achievement; and tabulating the results to summarize the overall conclusion about the effect of the resource based on all the studies that examined it."[12] For instance, they noted that "[e]ven when an effect is present in every study, vote counting typically has very low power to detect effects."[13] Moreover, Hedges and colleagues observe that "when effects are relatively small, which is quite common in social science research, and the individual study sample sizes are small to moderate, vote counting has a paradoxical property: The probability that a vote count will correctly detect an effect that is present in every study tends to zero as the number of studies increases."[14] When Hedges and his colleagues reanalyzed the studies using an approach called meta-analysis, which combined the statistical data from the available studies, they found a positive, systematic relationship between resource inputs and educational outcomes.[15] David Grissmer and his colleagues found that scores on the National Assessment of Education Progress Tests ("NAEP") support the conclusion that money targeted at minority students improved educational outcomes, while money targeted at more advantaged students might have had "a much smaller or negligible effect."[16]

Moreover, experimental research suggests that educational spending designed to decrease class size and improve the quality of teachers might reduce the racial achievement gap. The Tennessee legislature conducted a study to determine the short- and long-term effects of small class sizes in the early grades.[17] The first phase of the study, Project STAR (Student/Teacher Achievement Ratio), was a four-year study conducted from 1985 to 1989 that limited kindergarten, first, second, and third grade class sizes to between thirteen and seventeen students.[18] The second phase, the Lasting Benefits Study, was an observation of the consequences of Project STAR once the children returned to regular-sized class rooms.[19] The third phase, Project Challenge, was a policy intervention in which the seventeen poorest school districts in the state received additional funding to reduce class sizes in kindergarten to third grade.[20]

In Project STAR, students in the small-sized classes demonstrated significant gains in their academic performance. The academic gains of black students were particularly substantial. At the end of the second year, the effect size for black students was twice that of white students.[21] The Lasting Benefits Study found that

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[12] MAKING MONEY MATTER, *supra* note 8, at 142.

[13] Larry V. Hedges et al., *Does Money Matter? A Meta-Analysis of Studies of the Effects of Differential School Inputs on Student Outcomes*, 23 EDUC. RESEARCHER 5, 6 (1994).

[14] *Id.*

[15] *Id.* at 7-8, 13.

[16] Grissmer et al., *supra* note 5, at 28.

[17] Frederick Mosteller, *The Tennessee Study of Class Size in the Early School Grades*, 5 THE FUTURE OF CHILD.: CRITICAL ISSUES FOR CHILD. & YOUTHS 113, 113 (1995).

[18] *Id.*

[19] *Id.*

[20] *Id.*

[21] *Id.* at 119.

children enrolled in smaller classes continued to outperform those students educated in regular-sized classes, even after they returned to regular-sized classrooms.[22] With respect to Project Challenge, researchers found that student performance in the seventeen school districts improved significantly in reading and mathematics.[23] In reading, the academic performance of second graders on standardized tests improved from an average ranking of ninety-ninth place out of 139 districts in 1990 to seventy-eigth place in 1993.[24] In math, the academic ranking of the seventeen districts improved from eighty-fifth place in 1990 to fifty-sixth place in 1993.[25]

In recent years, numerous researchers have emphasized that teacher quality is as equally important as, (if not more important than), class size reduction in improving student outcomes.[26] Yet, recent research on teacher labor markets suggests that teachers with stronger academic backgrounds are likely to avoid teaching in schools with higher percentages of black children.[27] Further, research indicates that compensating differentials can make a difference in offsetting work conditions.[28] As such, it stands to reason that in any given labor market, it will cost

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[22] *Id.* at 121.

[23] *Id.* at 122.

[24] *Id.* at 122-23.

[25] *Id.* at 123.

[26] Steven G. Rivkin et al., *Teachers, Schools and Academic Achievement*, 73 ECONOMETRICA 417, 417 (2005).

[27] Charles Clotfelter et al., *Teacher Quality and Minority Achievement Gaps* 12-15 (Duke Univ. Terry Sanford Inst. of Pub. Pol'y, Working Paper Series, Paper No. San04-04, 2004), *available at* http://www.pubpol.duke.edu/people/faculty/clotfelter/SAN04-04.pdf; Eric A. Hanushek et al., *Why Public Schools Lose Teachers*, 39 J. HUM. RESOURCES 326, 345 (2004). Specifically, Hanushek et al. note that "campus proportion of students who are Hispanic or black still raises the probability of exiting for less experienced nonblack and nonHispanic teachers." *Id.* This finding is especially important because the authors not only find that teachers are disparately distributed across schools by race, but also that teacher exit behavior is influenced by school-level student population race. *Id.*

[28] In a study of Texas public elementary schools, Eric Hanushek and associates find that their analysis "suggests that a school with 10 percent more black students would require about 10 percent higher salaries in order to neutralize the increased probability of [nonminority female teachers] leaving." *Id.* at 350. Additionally, Donald Boyd and associates note: "[The model] also produces estimates of a positive effect of salary and of negative effects of urban status, percent of students in poverty, percent of students of a different race/ethnicity, and distance of school from home on teachers' utility." Donald Boyd et al., *Analyzing the Determinants of the Matching of Public School Teachers to Jobs: Estimating Compensating Differentials in Imperfect Labor Markets* 41 (Nat'l Bureau of Econ. Research, Working Paper No. 9878, 2006), *available at* http://www.teacherpolicyresearch.org/portals/1/pdfs/Matching_of_Public_School_Teachers_to_Jobs.pdf. While Boyd and colleagues do not test specifically the compensating differential associated with higher school-level black populations, they do estimate significant salary differentials required with other student population and location attributes such as poverty and urban location. *Id.*

more dollars per pupil to attract high quality teachers to teach in minority school districts than in low-minority school districts.[29]

II. SCHOOL FINANCE FORMULAS

A major goal of school finance formulas is to promote vertical equity, which refers to the idea that certain types of students or school districts may have vastly different educational needs that may require additional resources.[30] School finance formulas provide supplemental funding to two groups of students: (1) students with disabilities as classified under the Individuals with Disabilities Education Act ("IDEA");[31] and (2) fringe populations, or populations statistically in the minority who have been marginalized by the core curriculum, but who are not consistently protected statutorily across states.[32] These fringe populations include at-risk, Limited English Proficient (LEP), and gifted and talented students.[33] Some school finance formulas also provide additional resources for school- and district-based characteristics.[34] State aid adjustments for school size can occur in several aid programs: basic operating aid, transportation aid, facilities, and categorical aid programs for rural districts.[35] A number of school finance formulas provide supplemental aid for geographic variations in the cost of teachers and other personnel.[36]

Despite evidence that race-conscious vertical equity approaches may improve minority academic achievement, there have been no attempts to institute race-conscious funding.[37] Nonetheless, on average, school districts where at least 60% of the student body is black spend 13.8% more per pupil than districts where less

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[29] We suspect that authors (Hanushek et al. and Boyd et al.) avoid estimating directly the black-school wage differential for reasons similar to the avoidance of race variables by many authors estimating cost functions. As with the relationship between racial gaps in achievement and costs of closing those gaps, the relationship between racial gaps in teaching quality and labor market distortion resulting from student racial composition, specifically percent black—all else equal—implies the necessity for wage premiums based on student racial composition.

[30] Bruce D. Baker, *Living on the Edges of School Finance Policy: The Plight of At Risk, Limited English Proficient and Gifted Children*, 15 EDUC. POL'Y 699, 702 (2001).

[31] THOMAS PARRISH ET AL., CTR. FOR SPECIAL EDUC. FIN., STATE SPECIAL EDUCATION FINANCE SYSTEMS, 1999-2000: PART II: SPECIAL EDUCATION REVENUES AND EXPENDITURES 3-4 (2004), http://www.csef-air.org/publications/csef/state/statepart2.pdf.

[32] Baker, *supra* note 30, at 699.

[33] *Id.*

[34] MAKING MONEY MATTER, *supra* note 8, at 129.

[35] *Id.*

[36] *See* Preston C. Green & Bruce D. Baker, *Circumventing* Rodriguez*: Can Plaintiffs Use the Equal Protection Clause to Challenge School Finance Disparities Caused by Inequitable State Distribution Policies?*, 7 TEX. F. ON C.L. & C.R. 141, 153 (2002).

[37] C. Joy Farmer, Note, *The No Child Left Behind Act: Will It Produce a New Breed of School Financing Litigation?*, 38 COLUM. J.L. & SOC. PROBS. 443, 458 (2005).

than 20% of the student body is black.[38] When adjusting for costs associated with improving student achievement in higher poverty school districts and for regional labor market variation, however, school districts where at least 60% of the student body is black spend approximately 83.5% of what school districts where the student body is less than 20% black spend.[39] National and regional averages mask the significant variation in racial funding gaps across states. For example, Bruce Baker and Preston Green found that fifteen states have statistically significant negative correlations between nominal funding per pupil and the percentage of black students.[40]

The most common assumption is that funding disparities between white and minority school districts may be "primarily a function of the overall level of commitment of state legislators to spend on public schools . . . . [F]or example, that when less aid is allocated, poorer districts that serve more minority children simply fare less well."[41] In some states, representatives of non-urban, lower poverty districts have been politically effective at attaining more funding per pupil than high-poverty, high-minority districts.[42] Bruce Baker and William Duncombe suggest how the balance of cost and need adjustments in state school finance formulas is more likely to represent the balance of state population distribution and political power as much as, if not more than, the balance of actual costs and needs.[43] Among the methods of choice are adjustments for district size and geographic location.[44] Economies of scale adjustments tend to benefit small rural districts, which are most often predominantly white.[45] Geographic adjustments are easily manipulated to benefit suburban school districts.[46] The political clout of

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[38] Robert Bifulco, *District-Level Black-White Funding Disparities in the United States, 1987-2002*, 31 J. EDUC. FIN. 172, 187 (2005).

[39] *Id.*

[40] Bruce D. Baker & Preston C. Green, III, *Tricks of the Trade: State Legislative Actions in School Finance Policy That Perpetuate Racial Disparities in the Post-Brown Era*, 111 AM. J. EDUC. 372, 380 (2005).

[41] *Id.* at 375.

[42] *See id.* at 388-89 (discussing how the Kansas legislature adopted cost adjustments that benefited suburban school districts).

[43] Bruce D. Baker & William D. Duncombe, *Balancing District Needs and Student Needs: The Role of Economies of Scale Adjustments and Pupil Need Weights in School Finance Formulas*, 29 J. EDUC. FIN. 195, 219 (2004). Bruce Baker and William Duncombe observe: "Not surprisingly, the balance of winners and losers that emerge from each state's system of cost adjustments roughly reflects the balance of the distribution of the population presented above in Table 4." *Id.* For related analyses of the influence of political balance on equity in the distribution of funding, see B. Dan Wood & Nick A. Theobald, *Political Responsiveness and Equity in Public Education Finance*, 65 J. POLITICS 718 (2003).

[44] Baker & Duncombe, *supra* note 43, at 219.

[45] *Id.* at 218.

[46] *Id.* at 213. For example, Kansas legislators representing suburban districts successfully advocated for special vertical equity cost adjustments based on (1) the percentage of children attending new school facilities, and (2) the high housing prices in suburban districts. *Id.* at 213 n.32.

suburban districts often allows them to obtain cost adjustments to more than offset the adjustments that advantage poor districts.[47]

In some instances, ostensibly racially neutral funding policies designed to perpetuate racially discriminatory policies that preexisted the ruling in *Brown v. Board of Education* may have caused these racial funding disparities.[48] In the early twentieth century, uniform property taxes primarily funded state aid to southern schools, which those states then distributed to counties according to total school age population.[49] County school boards had complete discretion to distribute state aid, which those boards used inequitably to fund black schools.[50] Additionally, several states created racial funding disparities through pay scales by paying black teachers smaller salaries than white teachers.[51]

Thurgood Marshall, then legal counsel for the National Association for the Advancement of Colored People ("NAACP"), convinced federal courts that race-based, unequal pay scales in Anne Arundel County, Maryland and Norfolk, Virginia violated the U.S. Constitution.[52] In response, southern states replaced their race-based pay scales with salary schedules based on educational attainment and ostensibly neutral standardized tests, such as the National Teachers Examination ("NTE"), in order to maintain salary disparities between black and white teachers.[53] The courts upheld these neutral approaches because the plaintiffs were unable to establish a racially discriminatory intent for their adoption.[54]

The two primary legal strategies for attaining equal educational opportunities for minorities since *Brown*—school desegregation and school finance litigation—failed to address the racial disparities arising from state aid policies designed to maintain pre-*Brown* racial funding disparities.[55] Until *Milliken v. Bradley* ("*Milliken II*"), judicial remedies for school desegregation concentrated on dismantling the official

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[47] *Id.*

[48] Baker & Green, *supra* note 40, at 377.

[49] *Id.* at 376.

[50] *See* HORACE M. BOND, THE EDUCATION OF THE NEGRO IN THE AMERICAN SOCIAL ORDER 92-93 (1934); LOUIS R. HARLAN, SEPARATE AND UNEQUAL 61-62 (1958); ROBERT A. MARGO, DISENFRANCHISEMENT, SCHOOL FINANCE, AND THE ECONOMICS OF SEGREGATED SCHOOLS IN THE UNITED STATES SOUTH, 1890-1910 (1985).

[51] Scott Baker, *Testing Equality: The National Teacher Examination and the NAACP's Legal Campaign to Equalize Teachers' Salaries*, 35 HIST. EDUC. Q. 49, 50 (1995) [hereinafter S. Baker].

[52] Alston v. Sch. Bd. of City of Norfolk, 112 F.2d 992 (4th Cir. 1940); Mills v. Bd. of Educ. of Anne Arundel County, 30 F. Supp. 245 (D. Md 1939).

[53] S. Baker, *supra* note 51, at 50; Baker & Green, *supra* note 40, at 376.

[54] *See, e.g.*, Reynolds v. Bd. of Pub. Instruction for Dade County, Fla., 148 F.2d 754, 757 (5th Cir. 1945) (holding that salary scale that permitted teachers dissatisfied with pay to take tests prepared by the National Committee on Teacher Examinations was constitutional); Thompson v. Gibbes, 60 F. Supp. 872, 876 (D.S.C. 1945) (holding that state system of examination and certification was constitutional); Turner v. Keefe, 50 F. Supp. 647, 649 (D. Fla. 1943) (holding that teacher salary schedule based on "physical health, personality and character; scholarship and attitude; instructional skill and performance" was constitutional).

[55] Baker & Green, *supra* note 40, at 377.

barriers that prevented black students from attending schools with white students.[56] In *Milliken II*, the Supreme Court ruled that courts may require states to provide segregated school districts with supplemental funding for compensatory programs, such as reading, in-service teaching training, and counseling.[57] Districts would lose the aid *Milliken II* would provide once they achieved unitary status.[58] Because *Milliken II* did not require states to change the funding mechanisms that caused high-minority school districts to receive less funding in the first place, this case provided only temporary relief to school districts disadvantaged by racially disparate funding policies.[59]

James Ryan depicts school finance litigation as both "a means of moving beyond race as the salient issue in education reform and as an effective way to achieve educational equity and adequacy for disadvantaged students from all racial and ethnic backgrounds."[60] Because the strategy of school finance was to get beyond disparities in racial funding, plaintiffs and their attorneys might have failed to target school finance disparities which originated from racial animus.[61]

Alabama's school finance formula demonstrates how racial school funding disparities in some states developed in the era of *de jure* segregation. Bruce Baker and Preston Green show that on average, Alabama districts serving higher percentages of black children had systematically lower nominal funding per pupil.[62] Furthermore, Baker and Green show that state aid was actually allocated to county school districts in lower nominal amounts where black population shares were higher, after controlling for fiscal capacity and cost factors.[63] Consequently, Alabama's aid formula provides systematically lower state aid per pupil to districts with higher black shares.[64] This disparity results from the State Minimum Salary Schedule, which distributes teacher units and allocates costs on the basis of the education and experience level of teachers.[65] Alabama's purpose in adopting the present salary schedule may have been to perpetuate racial disparities through racially neutral means. In 1927, the State Board of Education implemented a teacher pay scale that paid black teachers fifty percent of what it paid white teachers.[66] It is unclear when Alabama stopped using an overtly race-based teacher pay policy, but it is possible that the State continued to employ such a policy until the late 1960s when the state legislature removed the authority from the state school boards to set teacher unit costs.[67]

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[56] *See* James Ryan, *Schools, Race, and Money*, 109 YALE L. J. 249, 260-61 (1999).

[57] Milliken v. Bradley, 433 U.S. 267, 286-87 (1977).

[58] Ryan, *supra* note 56, at 271.

[59] Baker & Green, *supra* note 40, at 377.

[60] Ryan, *supra* note 56, at 252.

[61] Baker & Green, *supra* note 40, at 377.

[62] *Id.* at 382.

[63] *Id.* at 379.

[64] *Id.* at 383.

[65] *Id.*

[66] *Id.* at 385.

[67] *Id.* at 410, n.9. Baker and Green provide the following explanation for reaching this

Kansas provides another example of how the use of racially neutral funding in school finance systems can maintain "separate but equal" systems that existed prior to *Brown*. Like Alabama, Baker and Green identify Kansas as a state where (1) districts with higher black shares have lower nominal resources per pupil; and (2) the design of the state aid formula itself leads to lower allocations of aid to districts with higher black shares, after controlling for local fiscal capacity and cost factors.[68] The subject of the *Brown* litigation was a Kansas policy that enabled cities with populations greater than 15,000 to operate racially segregated schools.[69] In 1950, there were eleven such cities in the state.[70] *Brown* negated the legislature's ability to preserve segregated schools within these city boundaries. However, officially segregated housing subdivisions, or "restrictive covenants," persisted in some Kansas suburbs through 1962.[71]

The state legislature subsequently enacted a series of funding and organizational policies that worked in tandem to create racially unequal funding systems. Nine years after *Brown*, the state legislature enacted the School Unification Law of 1963, which was ostensibly designed to reduce the total number of school districts within the state.[72] The statute encouraged rural school districts to consolidate with each other, but not with nearby urban districts with higher percentages of minority students, the center of which, in many cases, were less than twenty linear miles from the center of the rural districts.[73] The state legislature then provided more funding to rural school districts than their urban counterparts through low enrollment cost adjustments.[74] As a result of a substantial infusion of white residents, cost adjustments based solely on size placed predominantly white

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conclusion:

> Other than the reference to the 1927 Equalization Fund program, we have found no reference to Alabama's use of race-based teacher salary schedules. Further, state school finance officials did not respond to our query as to when Alabama stopped this practice. We base our conclusion that the race-based teacher unit policy lasted until the late 1960s on the history of school desegregation in the state. We discussed earlier in this article that Alabama employed a number of organizational practices that were designed to circumvent school desegregation decrees. In 1957, the state legislature also enacted a statute that authorized local boards to close public schools and provide students with tuition grants to be used at private schools. A federal district struck down the tuition statute in *Lee v. Macon County Board of Education* (1967). The fact that Alabama could go so far as to close down public schools and provide tuition grants in order to avoid desegregation suggests that the state department of education would have no problem maintaining its race-based teacher unit cost schedule during this period.

Id.

[68] *Id.* at 386.

[69] *Id.*

[70] *Id.*

[71] *Id.*

[72] *See* KAN. STAT. ANN. § 72-6734 (repealed 2003).

[73] Baker & Green, *supra* note 40, at 386.

[74] *Id.* at 386-88.

suburbs—created by restricted covenants—in the same budgetary position as those districts educating the state's minority students.[75] The state addressed this predicament by implementing policies, such as "extraordinary growth" and "new facilities aid," that were based on district growth.[76]

III. ADEQUACY STUDIES

Although many school finance systems provide additional resources for child-based and district-based differences, there is little connection between school funding and school accountability systems.[77] Indeed, William Duncombe and John Yinger categorized state attempts to compensate school districts for student or district characteristics as "ad hoc corrections" that only partially address child-based and district-based differences that may have an effect on student performance.[78] Researchers and educational policymakers have responded to this problem by developing models to measure the cost of an adequate education.[79]

The two primary methods for determining district level costs are resource cost models ("RCM") and cost function studies.[80] Variations of RCM include professional-judgment-driven RCM and evidence-based RCM.[81] Professional judgment studies convene focus groups of educators and policymakers to determine the "'basket of educational goods and services' required for providing an adequate education."[82] Evidence-based studies derive their resource and staffing needs from Comprehensive School Reform ("CSR") models, such as Robert Slavin's *Roots and Wings/Success for All*, which focus on improving outcomes in high-poverty schools.[83]

Cost function analysis is a statistical method which determines the costs associated with attaining a particular set of outcomes given district and student characteristics.[84] A cost function can predict the costs of achieving a specific set of

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[75] *Id.* at 388.

[76] *Id.* at 388-89.

[77] TIMOTHY J. GRONBERG ET AL., THE TEX. SCH. FIN. PROJECT AT BUSH SCH. OF GOV'T & PUB. SERV., SCHOOL OUTCOMES AND SCHOOL COSTS: THE COST FUNCTION APPROACH 1 (Mar. 2005), *available at* http://bush.tamu.edu/research/faculty_projects/txschoolfinance/papers/SchoolOutcomesAndSchoolCosts.pdf.

[78] William D. Duncombe & John M. Yinger, *Performance Standards and Educational Cost Indexes: You Can't Have One Without the Other*, *in* EQUITY AND ADEQUACY IN EDUCATION FINANCE: ISSUES AND PERSPECTIVES 260, 261 (Commission on Behavioral and Social Sciences and Education, 1999).

[79] *Id.*

[80] Lori L. Taylor et al., *Measuring Educational Adequacy in Public Schools* 5-6 (Bush Sch. of Gov't and Pub. Serv., Working Paper No. 580, 2005), available at http://bush.tamu.edu/research/working_papers/ltaylor/measuring_edu_adequacy_in_public_schools.pdf.

[81] *Id.* at 5.

[82] *Id.* at 3.

[83] *Id.*

[84] *Id.* at 6.

outcomes in a district with average characteristics.[85] A cost function analysis can also create a cost index for each school district that indicates the relative cost of achieving the desired outcomes in each school district.[86] For instance, the developer of a cost index would likely conclude that the per pupil costs of achieving the desired outcomes are higher than average in small, rural communities and that costs are higher in school districts with high percentages of economically disadvantaged students than in districts with high percentages of children from more advantageous backgrounds.[87]

Despite the evidence that a correlation exists between educational funding and the academic achievement of minority students, indicators of race are noticeably absent in the recent literature on estimating district level costs.[88] Lori L. Taylor and her colleagues conducted a review of over thirty recent state-level studies of basic education costs and the ways in which those costs vary across districts by student needs.[89] Twenty-two of the studies addressed how costs vary by percentages of low-income children, nineteen of the studies addressed variations arising from migrant populations, and one of the studies addressed cost variations resulting from migrant populations.[90] None addressed variations that might arise specifically due to racial composition.[91] With respect to RCM, it is difficult to conceive how researchers would define alternative resource configurations and/or delivery models explicitly on the basis of race. Thus, it is not surprising that none of the RCM studies that Taylor and her colleagues reviewed estimated the differential costs of educating minority students.

The exclusion of race variables from cost functions may be the result of the researchers' reticence to address the political and legal ramifications of the likely conclusion that it may cost significantly more money to achieve desired outcomes in districts with a large percentage of black and/or Hispanic students.[92] Several cost function studies try to estimate the cost of educating minority students by using measures such as socio-economic status and district size or location, assumed to

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[85] *Id.*

[86] *Id.*

[87] *Id.*

[88] We have found only three studies in academic journals that use race as a variable in computing district level costs: Thomas A. Downes & Thomas F. Pogue, *Adjusting School Aid Formulas for the Higher Cost of Educating Disadvantaged Students*, 47 NAT'L TAX J. 89 (1994); Walter I. Garms & Mark C. Smith, *Educational Need and Its Application to State School Finance*, 5 J. HUM. RESOURCES 304 (1970); Jennifer Imazeki & Andrew Reschovsky, *Is No Child Left Behind an Un (or Under) Funded Federal Mandate? Evidence from Texas*, 57 NAT'L TAX J. 571 (2004).

[89] *See* Taylor et al., *Measuring Educational Adequacy in Public Schools*, *supra* note 80 at 10, 30-31.

[90] *Id.*

[91] *Id.*

[92] Perhaps more disconcerting is the conclusion that it may cost less to achieve targeted outcomes in districts serving larger share or white and/or "higher performing" ethnic groups.

capture racial differences in student populations.[93] However, these proxies are relatively crude and often capture both far more and far less detail about student population distributions than they intend.[94] Measures of student population race and ethnicity capture important variations in a state's demographic landscape that go well beyond simply classifying the poverty status students or groups of students.[95] For instance, these indicators may assist in sorting out differences in population distributions and resulting education costs between urban and rural poverty and contemporary patterns of rural poverty involving burgeoning immigrant populations.[96]

William Duncombe and Jocelyn Johnston, for example, struggle to find variables in the education cost function that would differentiate the costs between Kansas' small rural districts which appear to have comparable poverty levels with the state's larger, poorer districts with a high percentage of minority students.[97] Duncombe and Johnston attempt to resolve this problem by including in their cost function analysis an interaction term between poverty rates and "large" districts enrolling over 10,000 students.[98] In doing so, the authors find a strong, significant effect whereby large, high-poverty districts (which also happen to have a high concentration of minority students) have much higher predicted costs than models

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[93] Bruce D. Baker, *The Emerging Shape of Educational Adequacy: From Theoretical Assumptions to Empirical Evidence*, 30 J. EDUC. FIN. 259 (2005). *See also* Bruce D. Baker, Evaluating the Reliability, Validity and Usefulness of Education Cost Studies 13-14 (Feb. 7, 2007) (unpublished manuscript, prepared for the O'Leary Endowment Lecture Series (2006) (on file with authors).

[94] Baker, Evaluating the Reliability, *supra* note 93, at 13-14; Bruce D. Baker & Scott L. Thomas, *Review of Hawai'i's Weighted School Formula 2006-07*, http://www.hcps.k12.hi.us/STATE/COMM/DOEPRESS.NSF/a1d7af052e94dd120a2561f7000a037c/f7f4b1bf29a56d010a2571970019dd60/$FILE/WSF-Baker.Thomas-1-06.19.06.pdf.

[95] In recent years, a recurring theme of the Education Trust's *The Funding Gap 2005* and earlier versions of the report has been the differences in funding gaps measured by race versus those measured by poverty. THE EDUCATION TRUST, THE FUNDING GAP 2005: LOW-INCOME AND MINORITY STUDENTS SHORTCHANGED BY MOST STATES (2005), *available at* http://www2.edtrust.org/NR/rdonlyres/31D276EF-72E1-458A-8C71-E3D262A4C91E/0/FundingGap2005.pdf. Race and poverty are often highly correlated, which is why many of the states with the largest poverty gaps also have similar gaps for minority students. However, this is not always the case. In California, for example, high-poverty districts actually spend slightly more per student than low-poverty districts (by $8), but high-minority districts have $317 less per student than low-minority districts. *Id.* at 3.

[96] Jennifer Ng and Bruce Baker discuss the relatively recent trend since approximately 1990 of burgeoning immigrant populations in agricultural large towns in certain regions of the country including western Kansas, Nebraska and eastern Washington. Jennifer C. Ng & Bruce D. Baker, *Big Changes in Small Town America: A Macro Level Analysis of Micropolitan Schooling*, *available at* http://web.ku.edu/~bdbaker/index_files/page0002.htm.

[97] William D. Duncombe & Jocelyn Johnston, *The Impacts of School Finance Reform in Kansas: Equity Is in the Eye of the Beholder*, *in* HELPING CHILDREN LEFT BEHIND: STATE AID AND THE PURSUIT OF EDUCATIONAL EQUITY 147-49 (John Yinger, 2004).

[98] *Id.*

without the interaction term.[99] By choosing the "large district" dummy variable as a blunt differentiator between districts with greater than and fewer than 10,000 students, Duncombe and Johnston are unable to uncover differentiation in costs among smaller districts (2,000 to 10,000 students) with varied minority populations. In subsequent analyses for the Kansas legislature, Duncombe and John Yinger include an interaction between poverty rates and population density to capture the same effect of escalating costs in urban districts with a higher percentage of minority students.[100]

Use of racial composition variables may allow for more refined characterization of Kansas' demographic landscapes, whether the use of race is or is not the critical underlying factor influencing student outcomes and costs. That is, race measures may be statistically significant in the cost function, but may capture more than just the effects of students' racial background on their achievement outcomes. Jennifer Imazeki and Andrew Reschovsky include race variables in their cost function model of Texas school districts and find a positive and statistically significant association of the percentages of black students, Hispanic students, and students qualifying for the Free and Reduced Price Lunch Program with the cost of achieving outcome levels mandated in Texas under NCLB.[101] It is conceivable that racial composition variables capture cost differences in some states but not in others. A plausible explanation for this inconsistency is the history of the role of race in public policies that promoted the establishment and maintenance of racially isolated and impoverished school districts.

IV. NCLB AND VOLUNTARY RACE-CONSCIOUS FUNDING POLICIES

In 2002, Congress enacted NCLB, which requires all states to create accountability systems that apply to public schools.[102] A major goal of NCLB is to close "the achievement gap between high- and low-performing children, especially the achievement gaps between minority and non-minority students, and between disadvantaged children and their more advantaged peers."[103] NCLB requires all states to bring all students to levels of proficiency for academic achievement on state-developed tests by 2014.[104] NCLB also requires all students to make adequate yearly progress ("AYP") on all specified state standards, including economically disadvantaged, racial, and ethnic minorities; students with disabilities; and limited English proficient students.[105]

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[99] *Id.* at 163-65.

[100] WILLIAM DUNCOMBE & JOHN YINGER, KAN. LEG. DIV. OF POST AUDIT, ELEMENTARY AND SECONDARY EDUCATION IN KANSAS: ESTIMATING THE COSTS OF K-12 EDUCATION USING TWO APPROACHES, (2006), *available at* http://www.kslegislature.org/postaudit/audits_perform/05pa19a.pdf.

[101] Imazeki & Reschovsky, *supra* note 88, at 578-79.

[102] No Child Left Behind Act, 20 U.S.C. §§ 6301-6313 (2000).

[103] *Id.* § 6301(3).

[104] *Id.* § 6311(b)(2)(F).

[105] *Id.* § 6311(b)(2)(C).

If a school fails to achieve AYP for two consecutive years, the school will have to develop a plan for improvement and notify parents of the school's failure to comply with AYP.[106] Schools that have failed to achieve AYP for three consecutive years must provide their students with supplemental services, such as tutoring, and must allow transfer of their students to other schools.[107] A fourth consecutive failure to achieve AYP results in the implementation of corrective action to improve the school, such as replacing staff or offering public school choice.[108] After a fifth year of failure, school restructuring, such as conversion to a charter school, state takeover, or staff restructuring, must take place.[109] Such school districts may also lose federal funding.[110]

By requiring states to separate the academic outcomes data of minority students from the aggregate data, NCLB has forced many state accountability systems to attempt to remedy racial achievement gaps for the first time. During the 1999-2000 school year, only six out of thirty-three states with accountability systems used narrowing the achievement gap as at least one criterion for determining AYP.[111] Consequently, many "successful" schools under state accountability systems had substantial racial achievement gaps.[112] The reason for this phenomenon was that many state accountability systems enacted before NCLB were based on average school-wide test scores. Thus, higher-performing white students were able to raise the overall average in a number of schools to acceptable levels.[113]

The enforcement provisions of NCLB are racially neutral and make no explicit reference to the possibility that the poor academic performance of minority students may be the result of intentional or unintentional racial discrimination.[114] Despite the absence of race-conscious interventions in NCLB, the penalties contained in the statute may finally convince state legislatures to adopt voluntarily race-conscious school funding policies and to commission adequacy studies that include race variables.[115]

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[106] *Id.* § 6316(b)(3)(A).

[107] *Id.* § 6316(b)(5).

[108] *Id.* § 6316(b)(7).

[109] *Id.* § 6316(b)(8).

[110] *Id.* § 6311(g)(2).

[111] Margaret E. Goertz et al., *Assessment and Accountability Systems in the 50 States: 1999-2000*, Consortium for Policy Research in Education, http://www.cpre.org/Publications/rr46.pdf (last visited Feb. 28, 2006).

[112] DARIA HALL ET AL., THE EDUCATION TRUST, WHAT NEW "AYP" INFORMATION TELLS US ABOUT SCHOOLS, STATES, AND PUBLIC EDUCATION 17 (2003), *available at* http://www2.edtrust.org/NR/rdonlyres/4B9BF8DE-987A-4063-B750-6D67607E7205/0/NewAYP.pdf; Lance D. Fusarelli, *The Potential Impact of the No Child Left Behind Act on Equity and Diversity in American Education*, 18 EDUC. POL'Y 71, 74-75 (2004).

[113] HALL ET AL., *supra* note 112, at 2-3; Fusarelli, *supra* note 112, at 74-75.

[114] Daniel J. Losen, *Challenging Racial Disparities: The Promise and Pitfalls of The No Child Left Behind Act's Race-Conscious Accountability*, 47 HOWARD L. J. 247, 264 (2004).

[115] Farmer, *supra* note 37, at 444.

If state legislatures were to adopt race-conscious funding approaches to raise the academic performance of high-minority districts, these measures would be subject to Equal Protection Clause challenges from plaintiffs attending low-minority school districts. Courts would apply strict scrutiny analysis, which requires the state to demonstrate that the funding policies are narrowly tailored to satisfy a compelling governmental interest.[116] Strict scrutiny is designed to "smoke out" unacceptable uses of race by making certain that the governmental goal is sufficiently important to justify the use of race-conscious classifications.[117] This article argues that it is possible for race-conscious school funding policies to withstand Equal Protection Clause challenges. The remainder of this section illustrates this assertion with an analysis of the costs associated with racial isolation in majority black districts in the state of Missouri and a hypothetical proposal for race-conscious school finance policy for the state of Missouri.

A. Racial Isolation, Education Costs, and Race-conscious Remedies in Missouri

This section focuses on the state of Missouri for several reasons, including the state's history of sanctioned racial isolation of the black student population and years of largely unsuccessful attempts to remedy racial isolation in Missouri public schools within the constraints of the *Milliken* cases.[118] Further, in the spring of 2006, Missouri legislators introduced Senate Bill 602, which would have unilaterally annexed one of the only remaining predominantly white zip codes within the Kansas City Missouri School District (KCMSD) to a neighboring predominantly white district without the KCMSD's authorization, leaving behind an even more racially segregated KCMSD.[119]

The analysis herein constructs a conventional education cost function using five years of historical data from Missouri school districts on spending, schooling outcomes, student characteristics, and school characteristics. This analysis determines how costs vary across schools (vertical equity) and estimates the specific costs of achieving desired levels of outcomes (adequacy). The goal of cost function analysis is to estimate the statistical relationship between current spending behavior and outcomes, given that student populations and school characteristics are outside the control of local school administrators. The model of this statistical relationship can then forecast the "costs" of achieving desired levels of educational outcomes. However, the data used to estimate the model typically reflect the

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[116] *See* Grutter v. Bollinger, 539 U.S. 306 (2003); Adarand Constructors, Inc. v. Pena, 515 U.S. 200 (1995); City of Richmond v. J.A. Croson, 488 U.S. 469 (1988); Wygant v. Jackson Bd. of Educ., 476 U.S. 267 (1986).

[117] *Grutter*, 539 U.S. at 327.

[118] *See* Preston C. Green & Bruce D. Baker, *Urban Legends, Desegregation and School Finance: Did Kansas City Really Prove That Money Doesn't Matter?*, 12 MICH. J. RACE & L. 57 (2006).

[119] S. 602, 93d Gen. Assem., 2d Reg. Sess. (Mo., 2006). (establishing a procedure for annexation of certain territory of the Kansas City School District to the Independence School District)

current spending behavior of schools or districts, in which there may be at least some inefficiency. The central objective of the education cost function is to isolate the true costs of outcomes, where the costs reflect per-pupil spending minus any inefficiency.

The cost model may specify spending per pupil as a function of outcomes, prices, students, districts, and efficiency. The model uses two alternative measures of spending: (1) state data on current expenditures per student in average daily attendance ("ADA") from 2001 to 2005,[120] and (2) current expenditures per pupil from the U.S. Census Bureau's Fiscal Survey of Local Government–Elementary and Secondary School Finance ("F-33") from 2001 to 2004.[121] These models test a variety of student outcome measures, which include: (1) measures of students proficient or higher in math and reading, (2) median district level Terra Nova scores[122]and (3) percentages of graduates matriculating to two or four year colleges.[123] The models used for predicting costs per pupil set a very conservative outcome standard, applying the state's 2005 standards for communication arts (26.6% proficient or higher) and math (17.5% proficient or higher) assessments.[124] The analysis herein is less concerned with the overall level of funding and costs and more concerned with the extent that racial isolation is associated with higher costs toward whatever outcome level.

The authors control for input price variation across teacher labor markets using the new NCES Comparable Wage Index.[125] For student population characteristics,

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[120] Mo. Dep't of Elementary and Secondary Educ., Annual Reporting of School District Data: FTP Downloading Site, http://www.dese.mo.gov/schooldata/ftp/finance.xls.

[121] To corroborate our models and evaluate their reliability, we estimated multiple versions of the same models using data from different sources—state and federal. The federal data represent an alternative set of similar measures of school district expenditures for Missouri school districts. *See* U.S. Census Bureau, Federal, State, and Local Governments: Public Elementary-Secondary Education Finance Data, http://www.census.gov/govs/www/school.html (last visited March 16, 2007) (providing federal school district expenditure data for 2001-2004).

[122] Terra Nova scores are one component of the Missouri Assessment Program ("MAP"). Missouri's state assessment system is developed by McGraw-Hill. MAP assessments consist of three types of questions or items (selected response, constructed response and performance event items) across math and communication arts (required) and science and social studies (optional). For math and communication arts, several items within the MAP test are taken from McGraw-Hill's national selected response (e.g. multiple choice) assessment called TerraNova. Missouri's Department of Elementary and Secondary Education reports performance on these items separately. MISSOURI ASSESSMENT PROGRAM, GUIDE TO INTERPRETING RESULTS: COMMUNICATION ARTS AND MATHEMATICS 1 (2006), http://www.dese.mo.gov/divimprove/assess/2006_gir.pdf.

[123] Mo. Dep't of Elementary and Secondary Educ., Missouri Assessment Program State Results, 2006, http://dese.mo.gov/divimprove/assess/State_MAP.pdf.

[124] Mo. Dep't of Elementary and Secondary Educ., Div. of Sch. Improvement, Missouri Assessment Program, Missouri Adequate Yearly Progress, http://dese.mo.gov/divimprove/assess/AYP_Grid.pdf.

[125] LORI L. TAYLOR ET AL., NATIONAL CENTER FOR EDUCATIONAL STATISTICS,

the analysis includes a measure of the percent of children in poverty. For district characteristics, the analysis includes categorical indicators of district enrollment size and an indicator for districts serving only grades K-8. To test whether, and to what extent, black population concentration is associated with different costs of outcomes, the analysis estimates two models—one including and one excluding a percent black measure.

Most, if not all, recent cost function analyses have attempted, either via direct or indirect measures, to sort out the extent to which districts presently spend more than the minimum required to achieve a given set of educational outcomes. Direct accommodations for efficiency include use of stochastic frontier cost models[126] and Data Envelopment Analysis frontier cost models.[127] Indirect attempts to account for efficiency differences often use competition density indices, such as a Herfindahl index, to capture the extent that competition density among school districts should lead to greater efficiency[128] or a variety of other fiscal capacity indicators of proximal or otherwise similar (geographically collocated) districts which may lead to inefficient ratcheting of spending.[129]

DOCUMENTATION FOR THE NCES COMPARABLE WAGE INDEX DATA FILE 8-14 (May 2006), *available at* http://nces.ed.gov/pubs2006/2006865.pdf.

[126] GRONBERG ET AL., *supra* note 77, at 5.

[127] MARK HAVEMAN, MINN. CTR. FOR PUB. FIN. RESEARCH, DETERMINING THE COST OF AN ADEQUATE EDUCATION IN MINNESOTA: IMPLICATIONS FOR THE MINNESOTA FINANCE SYSTEM 7 (Feb. 2004), http://www.mntax.org/cpfr/documents/education.pdf. Typical linear regression equations ("ordinary least squares" or "OLS") attempt to find the line of best fit through a series of points. In doing so, the researcher may specify whether the line is a straight one or curved and the nature of that curve (referred to as functional form). In a simple case, the study might measure educational efficiency by evaluating the relationship between spending and outcomes and identifying those districts that spend far more than expected (according to the trendline) to achieve a given set of outcomes. In an OLS regression, "expected" spending would depend on the average efficiency of the districts (regression line through the middle of the points). The shape of line chosen and the assumption that the entire error term (distance from predicted) is inefficiency may dramatically influence the findings. Stochastic frontier analysis fits an equation to the most efficient districts (frontier) rather than the average districts and assumes a portion of the error term to be random. This analysis, however, still suffers from the problem of the researcher having to pre-specify functional form, as well as the assumed random component of the error term. Data Envelopment Analysis more flexibly fits a model to the cost frontier, eliminating the requirement of *a priori* specification of functional form.

[128] Imazeki & Reschovsky, *supra* note 88, at 577.

[129] DUNCOMBE & YINGER, ELEMENTARY AND SECONDARY EDUCATION IN KANSAS, *supra* note 100, at 125-27. Interestingly, the theory behind these two approaches would appear directly in conflict with one another. The competition density approach suggests an incentive for closely clustered districts to improve performance outcomes at lower costs to patrons/local taxpayers. Alternatively, the Duncombe and Yinger approach addressing fiscal capacity measures and public monitoring measures suggests—though does not directly assert—that, when higher fiscal capacity districts are more tightly clustered, they are likely to spend more simply out of competition with one another and because they can, without

Related research on spatial association of teacher salary growth at comparable degree level and experience in Missouri from 1998 to 2005 suggests that indirect measures focused on fiscal capacity are probably most appropriate.[130] In particular, higher fiscal capacity districts appear to be rapidly increasing wages at all experience and degree levels with spatial influence on one another, especially in suburban areas around St. Louis and Kansas City.[131] That is, all else equal, the spending behavior of neighboring districts influences the spending behavior of each district in the neighborhood.[132] As a result, there tends to be a spatial ratcheting pattern in teacher salaries associated with fiscal capacity that may lead to greater inefficiencies, especially among less financially constrained districts.[133] Consequently, the analysis in this article uses a series of local indicators of the demand for education to measure relative inefficiency (setting those indicators to the state mean) when predicting costs in order to remove inefficiencies or overspending that may result from greater fiscal capacity.

The authors take the conventional approach of applying two-stage least squares, instrumental variables estimation, which treat the outcome measures as endogenous.[134] Instruments include labor-market averages of factors influencing

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strong incentive for commensurate return to educational outcomes. Related research on Missouri, focusing on spatial association in teacher wage increases, suggests that this latter scenario is more likely. *See infra* notes 130-33 and accompanying text.

[130] *See* Mike Slagle & Bruce Baker, *A Spatial-Temporal Analysis of Teacher Salaries Using a Local Indicators of Spatial Association (LISA) Model Approach: A Method to Visualize Competition Between School Districts*, (Mar. 24, 2006), http://www.ku.edu/~bdbaker/papers/mowage.mdi.

[131] *Id.* at 18-19.

[132] *Id.* at 3.

[133] *Id.*

[134] Recall that the education production function estimates educational outcomes as a function of schooling inputs and student background characteristics. The education cost function is an algebraic substitution in which we move outcomes to the independent variable list and spending to the dependent variable position (again, trying to separate out the inefficiency in spending). This creates a somewhat circular logic—spending affects outcomes (a preliminary statistical test run, and passed with the data used herein) and simultaneously, desired outcome levels affect how much one needs to spend. Outcomes in this model are conceptually endogenous and therefore contain bias (as a function of the influence of spending). A two-stage least squares approach, or instrumental variables approach, uses a set of "exogenous" instruments to create, in a first stage regression model, predicted values for the outcome measure (conceptually removing the bias). Then those predicted values are used in the cost model. This approach is generally accepted for the education cost function and used by Duncombe and Yinger and by Reschovsky and Imazeki. *See* DUNCOMBE & YINGER, ELEMENTARY AND SECONDARY EDUCATION IN KANSAS, *supra* note 100, at 136, C-17, C-49; Andrew Reschovsky & Jennifer Imazeki, *Let No Child Be Left Behind: Determining the Cost of Improving Student Performance*, 31 PUB. FIN. REV. 263, 270 (2003). However, while this approach is conceptually appropriate (argued by some as conceptually required), common statistical tests of endogeneity often find outcome measures such as those herein not to be statistically endogenous, therefore not statistically requiring a

the demand for educational outcomes, including the ratio of median housing values to assessed valuation per pupil (tax share), median family income and education levels, and the percent of the population 65 or older. The state of Missouri includes twenty separate labor markets as defined in the new NCES Comparable Wage Index.[135]

Appendix A reports the output from the statistical models. Regardless of the outcome measure or expenditure measure applied in these models, the variable indicating percent black, when included, was statistically significant, and the coefficient was slightly larger in magnitude (coefficient = +.007) than that for free/reduced lunch (coefficient = +.003)[136] and associated with increased costs of outcomes.[137] Further, it is important to note that the models confirmed that outcome measures were also associated with increased costs (coefficient = +.492).[138] That is, it costs more to achieve higher outcomes generally, but more so in districts with higher black concentrations. Money matters! Note that it can be difficult to make judgments about the effects of the various coefficients in the model by simply comparing their sizes, standard errors and statistical significance listed in the table. More straightforward comparisons of the effects of the percent black measure in particular may be produced by estimating predicted costs per pupil using the models including and excluding this variable.

Table 1 includes only those districts in the state that are majority black. Table 1 includes (1) current expenditures per student[139] in 2005, (2) estimated costs per pupil for achieving 2005 mandated outcome levels, and (3) estimated costs per pupil for achieving 2005 mandated outcome levels, with the percent black variable removed from the cost model. Notably, the percent black variable in the cost model drives costs per pupil much higher in these racially isolated districts. The most striking example is Wellston, which, ignoring race, would appear to require only about $9,000 per pupil to achieve 2005 outcomes. In 2005, Wellston spent more than $9,000 per pupil and fell well short of state mandated outcomes. However, if we take racial composition into consideration, Wellston's cost estimate rises to over $15,000 per pupil—far above its current resource levels.

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two-stage least squares or instrumental variables approach. Gronberg et al. use this rationale for estimating a single stage model (using actual rather than predicted values of outcomes). *See* GRONBERG ET AL., *supra* note 77, at 2-5.

[135] *See* LORI L. TAYLOR ET AL., DOCUMENTATION FOR THE NCES COMPARABLE WAGE INDEX DATA FILE, *supra* note 125, at 5.

[136] *See* Appendix A.

[137] *See* Appendix A.

[138] *See* Appendix A.

[139] The use of funding per student in Average Daily Attendance ("ADA") specifically inflates funding in higher percent black districts, which have, on average lower student attendance rates. Funding per enrolled or eligible pupil in these districts in particular is lower than funding per ADA. See Green & Baker, *Urban Legends, Desegregation and School Finance*, *supra* note 118, for examples of this effect on KCMSD.

Table 1. Alternative Cost Estimates and Actual Expenditures in Majority Black, Missouri School Districts.

District Name	Region/Labor Market	Total Enrollment	% Black	Current Spending per ADA	Cost with % Black	Cost Excl. % Black	% Loss due to Omitted Variable
Wellston	St. Louis	561	100.00	$11,027	$15,267	$9,060	41%
Hayti	Bootheel	882	72.30	$7,421	$11,840	$7,741	35%
Charleston	Bootheel	1197	53.90	$7,256	$9,504	$7,017	26%
Caruthersville	Bootheel	1515	51.70	$7,114	$9,503	$7,065	26%
Center	Kansas City	2372	63.10	$11,234	$10,819	$7,746	28%
Jennings	St. Louis	3227	97.40	$9,387	$13,701	$8,472	38%
University City	St. Louis	3784	86.20	$9,871	$11,783	$7,812	34%
Grandview	Kansas City	4184	53.80	$8,575	$9,395	$7,354	22%
Normandy	St. Louis	5290	97.90	$9,047	$14,131	$9,153	35%
Hickman Mills	Kansas City	7094	75.60	$9,378	$11,443	$8,161	29%
Riverview Gardens	St. Louis	7981	95.70	$7,549	$13,627	$8,945	34%
Ferguson-Florissant	St. Louis	12220	70.40	$8,495	$10,799	$8,350	23%
Hazelwood	St. Louis	19315	59.70	$7,774	$9,479	$7,840	17%
Kansas City	Kansas City	32668	69.20	$9,993	$11,553	$8,623	25%
St. Louis City	St. Louis	39438	81.30	$10,357	$12,815	$9,272	28%

B. Compelling Governmental Interest

With respect to the compelling interest inquiry, it is important to keep in mind that "[c]ontext matters" because "[n]ot every decision influenced by race is equally objectionable, and strict scrutiny is designed to provide a framework for carefully examining the importance and the sincerity of the reasons advanced by the governmental decision in that particular context."[140] "Whether an asserted interest is truly compelling is revealed only by assessing the objective validity of the goal, its importance to [the governmental entity] and the sincerity of [that entity's] interest."[141]

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[140] Baker & Green, *supra* note 40, at 372.

[141] McFarland v. Jefferson County Pub. Sch, 330 F. Supp. 2d 834, 850 (W.D. Ky. 2004). The Supreme Court has held that eliminating the present effects of a government entity's prior *de jure* discrimination is a compelling government interest. *See* City of Richmond v. J.A. Croson, 488 U.S. 469 (1988); Wygant v. Jackson Bd. of Educ., 476 U.S. 267 (1986). The Court has also stated that universities have "a compelling interest in attaining [the 'educational benefits' of] a diverse student body." Grutter v. Bollinger, 539 U.S. 306, 328

The Missouri legislature could successfully argue that providing race-conscious funding to high-minority school districts satisfies the compelling interest of closing racial achievement gaps. Closing the achievement gap satisfies the established common law criteria of validity and importance. As Christopher Jencks and Meredith Phillips explain: "[I]f racial equality is America's goal, reducing the black-white test score gap would probably do more to promote this goal than any other strategy that could command broad political support."[142] Reducing the achievement gap would substantially reduce racial disparities in earnings and educational attainment.[143] In 1980, the National Longitudinal Survey of Youth ("NLSY") gave the Armed Services Vocational Aptitude Battery to a national sample of young persons. The NLSY provides evidence of the effects of closing the achievement gap on wages. Among employed men between the ages of 31 and 36 in 1993, blacks earned 67.5% of the white average. Among men who scored between the 30th and 49th percentiles on the vocational aptitude battery, blacks earned 84% of the white average. Among men who scored above the 50th percentile, blacks earned 96% of the white average.[144]

Similar evidence of the effects of closing the achievement gap on educational attainment comes from the national "High School and Beyond" survey, which tested twelfth-graders in 1982, and followed them up in 1992. At the time of the follow-up, 13.3% of the blacks had attained a bachelor's degree, while 30% of non-Hispanic whites had achieved this distinction. However, once test scores were equalized, blacks were more likely than whites to complete college.[145]

Further, closing the achievement gap would enable colleges and universities to phase out racial preferences.[146] To obtain a racially diverse student body, some universities admit black and Hispanic students who may not have been admitted if

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(2003). Additionally, four circuit courts of appeals have found that the use of race in elementary and secondary education assignment plans satisfies the compelling interests of attaining a racially diverse student body and ameliorating the effects of racial isolation. Comfort v. Lynn Sch. Comm., 418 F.3d 1 (1st Cir. 2005) (finding that the Massachusetts Racial Imbalance Act and elementary school desegregation plan satisfied the compelling interest of achieving a diverse student body); McFarland v. Jefferson County Pub. Schs., 416 F.3d 513 (6th Cir. 2005) (finding that assignment plan, which used race, satisfied the compelling interests of attaining diversity and ameliorating the effects of racial isolation); Parents Involved in Cmty. Sch. v. Seattle Sch. Dist., No. 1, 426 F.3d 1162 (9th Cir. 2005) (finding that assignment plan, which used race as a tiebreaker, satisfied the compelling interests of attaining diversity and ameliorating the effects of racial isolation); Parent Ass'n of Andrew Jackson High Sch. v. Ambach, 598 F.2d 705 (2d Cir. 1979) (finding that use of race in high school assignment plan satisfied the compelling interest of eliminating *de facto* segregation).

[142] Christopher Jencks & Meredith Phillips, *America's Next Achievement Test: Closing the Black-White Test Score Gap*, THE AMERICAN PROSPECT, Sept. 1998–Oct. 1998, at 45, *available at* http://www.prospect.org/print/V9/40/jencks-c.html.

[143] *Id.*

[144] *Id.*

[145] *Id.*

[146] *Id.*

they were white and had comparable grades and test scores.[147] If selective colleges could make admissions decisions without explicitly making race a factor, then white students might hold fewer feelings of resentment toward minority students and the institutions which currently employ these programs to ensure a diverse student body.[148]

Moreover, NCLB may make closing the racial achievement gap a valid and important government interest. Recall that NCLB includes sanctions, such as corrective action or the withholding of federal funding, for failure to close racial achievement gaps.[149] Thus, "NCLB pushes state governments and educational systems to help low-achieving students in high poverty schools meet the same academic performance standards that apply to all students."[150] The final factor of compelling interest analysis is whether the state legislature sincerely held its race-conscious funding policies or whether it actually intended to disadvantage other races.[151] The production function and cost functions provided above are merely designed to raise Missouri's predominantly black districts to the academic standard delineated herein. Thus, their intention is to equalize the performance of minority and white districts, not to unfairly disadvantage students of a particular race.

C. Narrow Tailoring

The race-conscious programs proposed herein could also satisfy the narrow tailoring requirement. To be narrowly tailored, the state's use of race must "'fit' [the] compelling goal so closely that there is little or no possibility that the motive for the classification was illegitimate racial prejudice or stereotype."[152] A court's narrow tailoring analysis must be "calibrated to fit the distinct issues raised by the use of race" in the specific case.[153] In *United States v. Paradise*, the Supreme Court identified several factors to determine whether racial classifications are narrowly tailored: (1) the efficacy of race-neutral alternatives; (2) the flexibility and duration of the classification; (3) the relationship of the numerical goals to the relevant population; and (4) the impact on third parties.[154]

One race-neutral alternative would rely on estimating education costs, but excluding race variables. This article has shown that this alternative approach fails to capture important, large differences in the costs of achieving desired outcomes.[155] Further, the long history of education production research dating back to the Coleman Report has revealed significant racial achievement gaps

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[147] *Id.*

[148] *Id.*

[149] *See supra* notes 106-10 and accompanying text.

[150] Montoy v. State, 2003 WL 22902963, at *46 (Kan. Dist. Ct. Dec. 2, 2003).

[151] McFarland v. Jefferson County Pub. Schs., 330 F. Supp. 2d 834, 854 (W.D. Ky. 2004).

[152] City of Richmond v. J.A. Croson, 488 U.S. 469, 493 (1988).

[153] Grutter v. Bollinger, 539 U.S. 306, 344 (2003).

[154] United States v. Paradise, 480 U.S. 149, 171 (1987).

[155] *See supra* Table 1.

unexplained by other available demographic indicators.[156]

The state legislature could also consolidate the predominantly black school districts with the white suburbs. If complete racial integration were geographically feasible, this would likely be the best alternative, even better than targeting funding based on race. For example, Eric Hanushek in 2001 argued that schooling resources in particular appear to have "little consistent impact" on black-white achievement gaps specifically, but subsequently noted that: "governmental intervention through integration programs appears potentially more important. The pattern of integration and preliminary estimates of the magnitude of effect suggest that this by itself could explain both the narrowing and the subsequent leveling off of gains."[157] Given the extent of regional racial isolation in some states, however, a full integration solution is not likely feasible. Because racial isolation would remain in these areas, race-based funding would still be necessary to close the achievement gap. Further, the integration policies in question, such as redrafting district boundaries across wide areas, would likely also have to consider race as a factor toward achieving better integration. Therefore, this alternative, if implemented correctly, would not be race-neutral.

A third race-neutral alternative would include school choice models, such as charter schools and inter-district choice programs. Inter-district choice programs do not historically yield full integration and, in fact, may advance re-segregation.[158] Studies of Omaha, Nebraska's option enrollment program have shown that black students were unlikely to transfer out of Omaha to predominantly white districts for fear that they will not be accepted, but that black students currently residing in those predominantly white districts were more likely to transfer into Omaha.[159] Meanwhile, no blacks applied to transfer out of Omaha public schools at disproportionate rates.[160] Race-neutral desegregation remedies in Kansas City that attempted to lure white suburban children to black urban schools also largely failed to integrate the district.[161] Like redistricting, the option-enrollment approach to desegregation may be most effective where choice programs are race-conscious, not race-neutral, because of the extent to which individual choice in housing

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[156] *See supra* Section I.

[157] Hanushek, *Black-White Achievement Differences and Government Interventions, supra* note 10, at 27.

[158] Green & Baker, *Urban Legends, Desegregation and School Finance*, *supra* note 118, at 65; Erica Frankenberg & Chungmei Lee, Harvard Univ. Civil Rights Project, *Charter Schools and Race: A Lost Opportunity for Integrated Education* (July 2003), at 47, *available at* http://www.civilrightsproject.harvard.edu/research/deseg/Charter_Schools03.pdf.

[159] DeWitt S. Sibley, A Study of the Effects of School Choice on Desegregation in the Omaha Public Schools (May 1995) (unpublished Ph.D. dissertation, University of Nebraska) (on file with authors), *available at* http://digitalcommons.unl.edu/dissertations/AAI9528832/.

[160] *Id.*

[161] Green & Baker, *Urban Legends, Desegregation and School Finance*, *supra* note 118, at 64-65.

location and public schooling are made on the basis of race itself.[162] Because this alternative also fails to resolve racial isolation, race-targeted funding remains necessary.

The authors used empirical approaches designed to determine the minimal amount of funding that Missouri's majority black districts would need for its students to meet the performance standard to develop the hypothetical race-conscious proposals; they would therefore satisfy the flexibility criterion. With respect to the duration requirement, "a race-based measure is constitutionally permissible only as long as it is needed to obtain its intended benefit. Such measures should be subject to periodic review to ensure they do not outlast their avowed purpose."[163] The Missouri legislature could satisfy the duration criterion through annual reviews of the race-conscious programs. If the quality of life in majority black districts significantly improves and the achievement gap declines, then the legislature may, over time, reduce the cost differential between those school districts and others in the state. Declining coefficients on race variables in subsequently estimated cost functions may reveal such reductions. The legislature could then reduce the race-conscious funding to reflect this new reality. Finally, the race-conscious funding program would have minimal impact on innocent third parties because funding would never fall below the cost of providing adequate outcomes to low minority school districts.

V. NCLB, STATE EDUCATION CLAUSES, AND THE DUE PROCESS CLAUSE

Section IV noted that NCLB may encourage state legislatures to adopt voluntary race-conscious funding measures to close racial achievement gaps. More likely, states may refuse to accept the possibility that their funding formulas have failed to provide high-minority school districts with resources that adequately address their educational needs.[164] The Alabama Department of Education's response to the results of the 2002 state accountability system provides an illustration.[165] Black students scored in the 39th percentile on the Stanford 9, while white students scored in the 65th percentile.[166] There was also an 18.5% difference in the Grade 5 writing assessment (19.55% to 38.04%), a 22% difference in the Grade 7 writing

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[162] Justine S. Hastings et al., *Parental Preferences and School Composition: Evidence from a Public School Choice Program* (Nov. 2005), at 18, http://www.gsb.stanford.edu/FACSEMINARS/events/applied_microecon/pdfs/2005_11_18_Justine_Hastings.pdf.

[163] Michael K. Fridkin, *The Permissibility of Non-Remedial Justifications for Racial Preferences in Public Contracting*, 24 N. ILL. U. L. REV. 509, 521 (2004).

[164] Christopher Jencks and Meredith Phillips make this point in the following manner: "Even ensuring equal funding for black and white schools is a constant struggle. Creating a system in which black schools get far more money than white schools is politically inconceivable." Jencks & Phillips, *supra* note 142.

[165] Ala. Dep't of Educ., *Alabama Department of Education Released Disaggregated Data: Helping Every Student Achieve Academic Success*, ALA. EDUC. NEWS, Sept. 2002, at 1-3, *available at* http://www.alsde.edu/Archive/September2002_AEN.pdf.

[166] *Id.* at 1.

assessment (24.52% to 45.71%), and a 15% difference for the high school graduation exam requirement (80.2% to 95.5.%).[167] Further, the pass rate of black twelfth graders on the state high school graduation exam was below the 90% graduation rate goal that the state has set for its high schools.[168] However, the state refused to acknowledge that: (1) its racial funding gap might have contributed to this racial achievement gap; or (2) race-conscious funding approaches may lessen racial disparities in academic outcomes. Instead, the state department declared that the poor performance of black students "point[s] closer to the real issues, which are economic indicators",[169] and that "[m]ore and more studies are showing that [student] poverty is a more accurate predictor of performance than race or any other category, other than those students who are in the special education category."[170]

It is doubtful that NCLB creates an implied right of action or a 42 U.S.C. § 1983 action to compel states to adopt race-conscious funding approaches. In *Ass'n of Community Organizations for Reform Now v. New York City Department of Education*, a federal district court held that the text and structure of NCLB did not demonstrate a congressional intent to create individual enforceable rights under the statute.[171] Because the statute did not evince clear congressional intention to create individual rights, the court also ruled that NCLB will not be enforced under § 1983.[172]

Nevertheless, NCLB may still serve as the impetus for courts to hold that school finance formulas that fail to address the educational needs of high-minority districts violate educational clauses in state constitutions and the Due Process Clause in the U.S. Constitution. This section explains how plaintiffs from high-minority school districts may mount education clause and Due Process Clause challenges to obtain increased funding to reduce racial achievement gaps.

A. Education Clauses

Specifically, plaintiffs from high-minority school districts could argue that: (1) the states' duty to provide a constitutionally adequate education requires inclusion of standards of accountability; (2) high-minority districts have additional education costs that may affect their ability to attain the standards of accountability; and (3) state school finance systems have violated education clauses by failing to take into account the additional costs of high-minority school districts. With respect to the first prong, the Supreme Court of New Hampshire has stated, "[i]t is . . . widely accepted that establishing standards of accountability is part of the State's duty to provide a constitutionally adequate education."[173] The court

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[167] *Id.* at 2-3.

[168] *Id.* at 3.

[169] *Id.* at 1.

[170] *Id.* at 2.

[171] Ass'n of Cmty. Orgs. for Reform Now v. N.Y. City Dep't of Educ., 269 F. Supp. 2d 338, 344 (S.D.N.Y. 2003).

[172] *Id.*at 344.

[173] Claremont Sch. Dist. v. Governor, 794 A.2d 744, 752 (N.H. 2002). *See also* Montoy

explained that "[a]ccountability means that the State must provide a definition of a constitutionally adequate education, the definition must have standards, and the standards must be subject to meaningful application so that it is possible to determine whether, in delegating its obligation to provide a constitutionally adequate education, the State has fulfilled its duty."[174] The court went on to emphasize that the standards established within the accountability system are enforceable: "If the state cannot be held accountable for fulfilling its duty, the duty creates no obligation and is no longer a duty."[175]

With respect to the second prong, James Ryan and Thomas Saunders observe that "a handful of courts have displayed a halting but noticeable willingness to interpret state constitutions as mandating vertical equity . . . ."[176] Indeed, four state supreme courts have held that their education clauses require school finance systems to adopt vertical equity principles to meet the educational needs of disadvantaged students.[177] For example, in *Campbell County School District v. State*, the Wyoming Supreme Court observed that the state education clause's mandate for an equal opportunity for an education "necessarily contemplates the playing field will be leveled so each child has an equal chance for educational success."[178] The court also noted that "[c]hildren with an impaired readiness to learn do not have the same equal opportunity for a quality education as do those

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v. State, 102 P.3d 1160, 1164 (Kan. 2005) (finding that the state legislature had failed to satisfy its own definition of adequacy, which was based on state accreditation standards and student academic performance measures); Abbott v. Burke, 693 A.2d 417, 427 (N.J. 1997) ("[C]omprehensive statutory and administrative system for public education founded on standards that define the substantive meaning of education and that provide for measures of educational performance and achievement . . . are consistent with the Constitution's education clause."); DeRolph v. State, 728 N.E.2d 993, 1019 (Ohio 2000) (holding that state's constitutional duty to provide adequate education requires "statewide standards that are fully developed, clearly stated, and understood by educators, students, and parents.").

[174] *Claremont Sch. Dist.*, 794 A.2d at 751.

[175] *Id.*

[176] James E. Ryan & Thomas Saunders, *Foreward to Symposium on School Finance Litigation: Emerging Trends or New Dead Ends?*, 22 YALE L. & POL'Y REV. 463, 465 (2004).

[177] *Montoy*, 102 P.3d at 1164-65 (finding that school finance system was unconstitutional because it was based on political compromise, thus distorting the weighting factors used for low enrollment, special education, vocational, bilingual education, and at-risk students); Abbott v. Burke, 575 A.2d 359, 385 (N.J. 1990) ("*Abbott II*") (finding that the state's education clause requires the legislature to provide special needs districts ("SNDs") with funding that was substantially equal to that of affluent districts, and educational programming that would address their "extreme disadvantages"); Hoke County Bd. of Educ. v. State, 599 S.E.2d 365, 393 (N.C. 2004) (finding that state had failed to meet educational needs of at-risk students in violation of education clause); Campbell County Sch. Dist. v. State, 907 P.2d 1238, 1278 (Wyo. 1995) (finding that education clause's mandate for an equal opportunity for an education "necessarily contemplates the playing field will be leveled so each child has an equal chance for educational success").

[178] *Campbell County Sch. Dist.*, 907 P.2d at 1278.

children not impacted by personal or social ills simply because they do not have the same starting point in learning."[179] Thus, the court invalidated a school finance system which distributed funding without regard for the need to level the playing field because it failed to provide an equal opportunity for a quality education as required by the state education clause.[180]

In *Abbott v. Burke*, the Supreme Court of New Jersey used vertical equity principles to hold that the Comprehensive Educational Improvement and Financing Act of 1996 ("CEIFA") violated the mandate of the state's education clause to provide a thorough and efficient education.[181] The CEIFA defined a thorough and efficient education in terms of core curriculum content standards, set achievement goals for these standards, and developed an improved statewide assessment program for determining whether the state was meeting these standards.[182] CEIFA also developed educational funding standards that were correlated with the content standards.[183] CEIFA established its funding scheme based on a model school district consisting of an elementary school of 500 pupils, a middle school of 675 pupils, a high school of 900 pupils and a central office.[184]

Further, CEIFA provided supplemental aid for the special needs of disadvantaged students through two programs: Demonstrably Effective Program Aid ("DEPA") and Early Childhood Program Aid ("ECPA").[185] DEPA provided aid for "instructional, school governance, and health and social welfare programs to benefit students enrolled in schools in which the concentration of low-income pupils is greater than twenty percent of total enrollment."[186] ECPA provided aid for childhood programs and services, such as full-day kindergarten and preschool.[187]

The New Jersey Supreme Court ruled that CEIFA's adoption of content and performance standards were a facially adequate definition of a thorough and efficient education.[188] However, the court ruled that CEIFA's use of a hypothetical model school district to determine the appropriate level of funding was unconstitutional because it failed to incorporate the needs and characteristics of special needs districts ("SNDs").[189] For instance, the model district did not take into consideration that facilities in SNDs were much older and needed more maintenance than other school districts.[190] Moreover, the model district failed to provide SNDs with the special educational programming that they would need to

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[179] *Id.*
[180] *Id.* at 1278-79.
[181] Abbott v. Burke, 693 A.2d 417, 439 (N.J. 1997).
[182] *Id.* at 425.
[183] *Id.* at 426.
[184] *Id.*
[185] *Id.* at 435.
[186] *Id.* (internal quotations omitted).
[187] *Id.*
[188] *Id.* at 428.
[189] *Id.* at 431.
[190] *Id.*

take advantage of educational opportunity.[191]

Plaintiffs could establish the additional need of high-minority districts through education production and cost function studies, such as the ones employed in Section IV. Because of NCLB's focus on racial achievement gaps, the judiciary may be amenable to race-based vertical equity challenges. *Montoy v. State*, a Kansas school finance case, is illustrative.[192] A trial court held that the School District Finance and Quality Performance Act of 1992 ("SDFQPA") violated the education clause.[193] The court rejected the defendants' argument that the state's high national ranking on a variety of achievement tests proved that the state was providing an adequate education. "When these broad averages are disaggregated," the trial court pointed out, "it becomes clear that many categories of Kansas students (*minorities*, the poor, the disabled, and the limited English) are failing at alarming rates."[194] The court also found that increases in educational funding would enable districts to employ strategies, such as reducing class sizes and hiring better trained teachers, which could raise the academic performance of minority and disadvantaged students.[195] The state supreme court affirmed the trial court decision with respect to the education clause, finding that "the SDFQPA fails to provide adequate funding for a suitable education for students of their and other similarly situated districts, i.e., middle- and large-sized districts with a high proportion of minority and/or at-risk and special education students."[196]

With respect to the third prong, plaintiffs could demonstrate—through an analysis of the legislative history surrounding the school finance formulas—that the legislature did not design the school finance system to provide for their educational needs. In *Montoy*, for example, the Supreme Court of Kansas held that the SDFQPA violated the education clause because it was based on former spending levels and political compromise, rather than the actual costs of achieving a constitutionally adequate education.[197] This failure to determine the actual cost of an education distorted the weighting factors that the SDFQPA used for low enrollment, special education, vocational, bilingual education, and at-risk students.[198]

B. Due Process Clause

Further, plaintiffs from high minority school districts may assert that school finance formulas that fail to provide them with the benefits of their accountability systems violate their substantive due process rights pursuant to the Due Process

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[191] *Id.*

[192] Montoy v. State, No. 99-C-1738, 2003 WL 22902963, at *43 (Kan. Dist. Ct. Dec. 2, 2003).

[193] *Id.*

[194] *Id.* at *42. (emphasis added).

[195] *Id.* at *47-48.

[196] Montoy v. State, 102 P.3d 1160, 1164 (Kan. 2005).

[197] *Id.* at 1164.

[198] *Id.*

Clause of the Fourteenth Amendment. The Due Process Clause provides that no state shall "deprive any person of life, liberty, or property, without due process of law."[199] Due process has two components. Procedural due process requires that, before government deprives a person of a protected interest, it must provide that person with notice and an opportunity to be heard.[200] Substantive due process guards against "certain government actions regardless of the fairness of the procedures used to implement them . . . ."[201]

Plaintiffs from high minority districts may argue that the failure to provide them with funding that meets their educational needs violates their property right to a constitutionally adequate education. There are two required elements of a substantive due process claim: (1) plaintiffs must show that the state has infringed upon a property or liberty interest; and (2) they must show that the state's policy is not rationally related to achieving the governmental interest. With respect to property rights, in *Board of Regents v. Roth*, the Supreme Court held that property interests arise from existing rules, such as state law, that create certain benefits and entitlements to those benefits.[202] Recall that several state supreme courts have found that their state constitutions require states to provide students with vertical equity.[203] These rulings appear to establish a property right, as defined by state law, to an education that meets the additional needs of underprivileged students.

Having established a property interest to vertical equity, plaintiffs from high-minority districts would then argue that a funding system that does not take race into account would not be rationally related to that property interest. This article has shown that racial composition is a significant factor in the estimation of education costs and allocation of aid.[204] This article has also shown that in many circumstances, funding to high minority districts may be based on political concerns or on historical, racial animus.[205] Thus, such funding formulas would not be rationally related to the property interest of enabling students in high-minority districts to achieve an education that satisfies their educational needs.

The major drawback of substantive due process litigation (and education clause litigation for that matter) is that states may set their accountability standards so low as to render them meaningless. In 1976, Arthur Wise presciently identified this possibility, noting:

> From the beginning, some said that school finance lawsuits should not be argued on the basis of equal protection but on the basis of substantive due process. Such an approach implies that the cases would be concerned with minimum levels of protection to be afforded to children in the schools. The

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[199] U.S. CONST. amend. XIV, § 1.

[200] Richard B. Saphire & Paul Moke, *Litigating* Bush v. Gore *in the States: Dual Voting Systems and the Fourteenth Amendment*, 51 VILL. L. REV. 229, 269 (2006).

[201] Daniels v. Williams, 474 U.S. 327, 331 (1986).

[202] Bd. of Regents v. Roth, 408 U.S. 564, 577 (1972).

[203] *See supra* note 176-77 and accompanying text.

[204] *See supra* Section IV.A.

[205] *See supra* notes 41-54 and accompanying text.

> equal protection clause is much more encompassing, creating a demand for the equal treatment of equals. A substantive due process interpretation would mean only that protection needs to be provided up to a certain level.[206]

Indeed, in response to NCLB, several states have lowered the standards of their accountability systems.[207] It is important to note that excessively low standards may be in violation of state education clauses, forcing courts to strike them down.[208]

C. Remedies

If a court were to find that a school finance formula was unconstitutional for failing to meet the needs of high-minority districts, it would probably commission the state to conduct an adequacy study that would explicitly take the needs of high-minority districts into account.[209] Courts may also consider using special masters to aid in the costing out and implementation of remedies.[210]

However, in keeping with separation of powers concerns, courts may not direct the legislature to implement a specific remedy. For example, in *Hoke County Board of Education v. State*,[211] the North Carolina Supreme Court upheld a trial court's ruling that the state had failed to provide at-risk students in the plaintiff school district with an adequate education. There was sufficient support for the trial court's finding that Hoke County had an unusually high number of at-risk students and that such students had special needs which the state needed to address

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[206] Arthur E. Wise, *Minimum Educational Adequacy: Beyond School Finance Reform*, 1 J. EDUC. FIN. 468, 477 (1976) (footnote omitted).

[207] Tico A. Almeida, *Refocusing School Finance Litigation on At-Risk Children:* Leandro v. State of North Carolina, 22 YALE L. & POL'Y REV. 525, 546 (2004).

[208] *Id.* at 546.

[209] Three state supreme courts that have invalidated their school finance formulas on vertical equity grounds have required their state legislatures to conduct adequacy studies that specifically take into account the educational needs of underprivileged students and districts. *See* Abbott v. Burke, 693 A.2d 417, 444 (N.J. 1997); Hoke County Bd. of Educ. v. State, 599 S.E.2d 365, 390 (N.C. 2004); Campbell County Sch. Dist. v. State, 907 P.2d 1238, 1279 (Wyo. 1995). By contrast, in 2005, the Supreme Court of Kansas ordered a cost study and mandated remedies only in terms of aggregate dollars to be added, with no clear emphasis on how those dollars should be distributed in vertical equity terms. Montoy v. State, 112 P.3d 923, 940 (Kan. 2005). In 2006, the court then accepted the legislature's remedies based largely on the aggregate sums of funding added by the legislature, ignoring almost entirely the shortfalls that remained for high poverty, high minority districts, and additional surpluses that had been provided to low poverty districts. Montoy v. State, 138 P.3d 755, 761-66 (Kan. 2006).

[210] The Arkansas and New Jersey courts have adopted the findings of special masters in their adequacy litigation. Lake View Sch. Dist. No. 25 of Phillips County v. Huckabee, No. 01-836, 2005 WL 3436660, at *7-12 (Ark. Dec. 15, 2005); Abbott v. Burke, 710 A.2d 450, 473-74 (N.J. 1998).

[211] *Hoke County Bd. of Educ.*, 599 S.E.2d at 393.

in order to obtain an adequate education.[212] There was also ample support for the trial court's conclusion that the state had failed to identify the district's at-risk students and "address their needs with educational resources that would provide tutoring, extra class sessions, counseling, and other programs that 'at-risk' students in an effort to enable them to compete among their non 'at-risk' counterparts and thus avail themselves of their right to the opportunity to obtain a sound basic education."[213] Moreover, the state supreme court affirmed the trial court's order directing the state to reevaluate its allocation of resources for Hoke County so that the district could provide its students with an adequate education.[214] However, the state supreme court reversed the trial court's remedial order that the state provide pre-kindergarten classes to all at-risk students attending the plaintiff school district because such a remedy violated the doctrine of separation of powers.[215]

CONCLUSIONS

Despite the growing agreement among social scientists that a correlation exists between educational spending and minority student achievement, no school finance formulas use race-conscious funding approaches, and few adequacy studies have tried to compute the additional costs which high minority composition causes in school districts. NCLB may encourage school districts to adopt race-conscious funding policies. As this article has shown, states may withstand Equal Protection Clause challenges to such policies by showing that they are narrowly tailored to satisfy the compelling interest of closing achievement gaps. Also, in certain instances, the failure to address the additional costs of high minority composition may violate state education clauses, as well as the Due Process Clause.

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[212] *Id.* at 389-90.
[213] *Id.* at 390.
[214] *Id.*
[215] *Id.* at 393.

Appendix A.
Models of Math/Communication Arts Index

	Including % Black			Excluding % Black		
	N=368			N=368		
	Coef.	Std. Err.	Sig.	Coef.	Std. Err.	Sig.
Outcomes						
Math/Communication Arts Index	0.492	0.172	*	0.057	0.122	
Students						
Free/Reduced Lunch %	0.003	0.001	*	0.003	0.001	*
Black %	0.007	0.001	*			
District Characteristics						
k-12 District (1=Yes)	0.323	0.061	*	0.257	0.053	*
Enrollment 251 to 500	-0.019	0.063		-0.101	0.059	
Enrollment 501 to 1000	-0.126	0.056	*	-0.157	0.055	*
Enrollment 1001 to 1500	-0.171	0.058	*	-0.199	0.059	*
Enrollment 1501 to 2000	-0.155	0.059	*	-0.190	0.059	*
Enrollment 2001 to 5000	-0.215	0.060	*	-0.222	0.061	*
Enrollment 5001 and over	-0.191	0.065	*	-0.148	0.070	*
Efficiency Controls						
State Aid per Pupil (ln)	0.122	0.043	*	0.086	0.050	
Aggregate Income per Pupil (ln)	0.136	0.055	*	0.273	0.047	*
Resident Tax Ratio	-0.086	0.026	*	-0.076	0.028	*
Percent over 65 yrs	-0.806	0.488		-1.446	0.561	*
Competitive Wage Variation	0.317	0.106	*	0.287	0.109	*
Year						
2002	0.034	0.008	*	0.029	0.006	*
2003	0.064	0.010	*	0.049	0.009	*
2004	0.046	0.013	*	0.033	0.013	*
2005	0.056	0.020	*	0.065	0.019	*
Constant	3.825	0.967	*	4.374	1.053	*
R-squared	0.110			0.450		

*p<.05, indicating statistical significance.