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THE ACADEMIC CONSEQUENCES OF DESEGREGATION AND SEGREGATION: EVIDENCE FROM THE CHARLOTTE-MECKLENBURG SCHOOLS

ROSLYN ARLIN MICKELSON

The Charlotte-Mecklenburg School system ("CMS") was declared unitary in 2002, thirty-one years after the historic Swann v. Charlotte-Mecklenburg decision mandated its desegregation. Using unique data sets collected in 1997, Professor Mickelson examines the effects of exposure to desegregation and first- and second-generation segregation on achievement over the course of middle and high school students' careers in CMS. Because CMS is a strategic case for the study of relationships of desegregation and segregation to racial equality in educational processes and outcomes, the issues addressed in this Article lie at the intersection of several enduring questions in law, public policy, social science research, and educational practice.

Professor Mickelson reaches several conclusions. First, students who have experienced desegregated schools and classrooms benefit academically in significant and substantive ways. Second, racially identifiable black schools and classrooms exert significant

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** Professor, Department of Sociology, The University of North Carolina at Charlotte. Ph.D., 1984, The University of California, Los Angeles. Professor Mickelson has published widely on the social context of ethnic minority students' achievement, in particular, the ways race, class, and gender shape educational processes and outcomes. She has investigated corporate influences on educational policies, focusing on the equity effects of market-inspired reforms on low-income and ethnic minority students. Her book, Children on the Streets of the Americas: Globalization, Homelessness, and Education in the United States, Brazil, and Cuba, was published by Routledge in 2000. She is grateful to Professor Jan de Leeuw for his assistance with the multilevel analyses reported in this Article.
negative effects on both black and white students' academic outcomes. Third, tracking helps to maintain white privilege by placing whites disproportionately into higher tracks than their comparably able black peers. Fourth, CMS's post-unitary status pupil assignment plan implemented in fall 2002 has accelerated the trend toward resegregation.

The findings instruct us about the broader theoretical and methodological questions with which all desegregation research must grapple: how to capture students' varied experiences with different forms and lengths of exposure to segregation and desegregation, and the need to examine how extensively desegregation plans have been implemented before assessing their value as an equity-minded school reform. The prospect of CMS's return to segregated neighborhood schools with their likely educational and social consequences reflects how far this nation still is from fulfilling Brown's and Swann's mandates to provide equal educational opportunities for all young people.

INTRODUCTION

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INTRODUCTION

For over thirty years, the Charlotte-Mecklenburg community1 has grappled with Swann v. Charlotte-Mecklenburg Board of Education's2 mandate to provide equality of educational opportunities to black children—to all children—by ending segregated schooling.3 The legal foundation for that effort collapsed in spring 2002, however, when the U.S. Supreme Court denied certiorari to review the Court of Appeals for the Fourth Circuit's decision affirming a lower court's determination that the Charlotte-Mecklenburg School system ("CMS") is now unitary.4

These are difficult times for those in the Charlotte-Mecklenburg area5 and across the nation who believe that there are still reasons to require public schools to desegregate. Not only has the Supreme Court granted broad discretion to district courts6 to declare other, still-segregated school districts to be unitary,7 but the interracial

1. The Charlotte-Mecklenburg community refers to the citizens and leaders of business, religious, civic, and educational institutions located within the boundaries of Mecklenburg County that is also contiguous with the boundaries of the Charlotte-Mecklenburg School district.
3. Id. at 15.
4. Belk v. Charlotte-Mecklenburg Bd. of Educ., 269 F.3d 305, 335 (4th Cir.) (en banc), reconsideration denied en banc, 274 F.3d 814 (4th Cir. 2001), cert. denied, 535 U.S. 986, and cert. denied, 535 U.S. 986 (2002). A once-segregated school district reaches unitary status when it has eliminated all vestiges of the former dual system to the extent practicable. Although a legal finding of unitary status depends on the interpretation of evidence and case law before a given court, several criteria for unitary status were established by the Supreme Court in Green v. County School Board, 391 U.S. 430 (1968).

According to Professor John C. Boger, "Green required school boards themselves to fashion 'unitary, nonracial system[s] of public education,' paying particular attention to six areas of school life: (1) student body composition; (2) faculty assignments; (3) staff assignments; (4) student transportation; (5) extra-curricular activities; and (6) school plant and physical facilities." John C. Boger, Education's "Perfect Storm"? Racial Resegregation, High-Stakes Testing, and School Resource Inequities: The Case of North Carolina, 81 N.C. L. REV. 1375, 1386 (2003) (quoting Green, 391 U.S. at 435–36).

5. The Charlotte-Mecklenburg area refers to the cities of Charlotte, Davidson, Mint Hill, Matthews, Pineville, Cornelius, and Huntersville and the unincorporated areas within Mecklenburg County that are part of the Charlotte-Mecklenburg School district. This term can also refer to the greater metropolitan area that includes several counties in North and South Carolina contiguous with Mecklenburg County.
6. See, e.g., Freeman v. Pitts, 503 U.S. 467, 468 (1992) (granting discretion to the district court to relinquish control of the desegregation of a school district before full compliance had been achieved); Bd. of Educ. v. Dowell, 498 U.S. 237, 238 (1991) (allowing the district court to determine whether de jure segregation in a school district had been eliminated to the extent practicable).
7. There is considerable variation in both the social science and legal literature in the use of terms to describe the racial composition of districts and schools. See GARY ORFIELD & SUSAN E. EATON, DISMANTLING DESEGREGATION: THE QUIET
coalitions of progressive citizens and their allies among corporate and civic elites, which once supported desegregation, also appear to be disintegrating. In the face of claims that desegregation does little to improve minority students' educational outcomes while it inflicts heavy burdens on the children and communities it is intended to serve, growing numbers of African Americans now embrace neighborhood schools or vouchers as reasonable alternatives for providing equal educational opportunities to black students.

Aside from the philosophical, moral, and legal reasons for desegregation, its central educational rationale rests largely on claims that desegregated schooling improves minority youths' access to the

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REVERSAL OF BROWN V. BOARD OF EDUCATION 19 (1996). My observation about recent Supreme Court decisions is grounded in social science, not legal standards. In this Article, I use the terms "racially isolated" and "racially balanced" to describe the racial composition of the districts, schools, and classrooms I analyze. I use the concepts "segregation" and "desegregation" when describing and discussing the historical and contemporary social and educational significance of differences in schools' racial compositions or when I interpret the results of my statistical analysis.


higher quality education more often provided to whites.\textsuperscript{11} Until recently, the empirical evidence that desegregation actually improves minority students' academic outcomes\textsuperscript{12} has been largely ambiguous.\textsuperscript{13} Opponents label desegregation a failed social experiment.\textsuperscript{14} Although the racial gap in achievement has narrowed somewhat, disparities persist despite decades of desegregation.\textsuperscript{15} According to critics, the narrowing of this gap is easily explained by black Americans' upward social mobility during the past fifty years, not by their greater exposure to desegregated schooling.\textsuperscript{16}

In this Article, I introduce new evidence demonstrating that desegregated schooling, in fact, improves the academic outcomes of those who experience it. Using survey data from CMS collected in 1997, I examine the academic consequences of attending segregated and desegregated schools. CMS is an especially interesting district in which to study the effects of desegregation on academic outcomes because of its pivotal role in school desegregation history. The historical significance of CMS rests upon its legacy as the first district where cross-town mandatory busing, express racial goals for student

\begin{enumerate}
\item Academic outcomes refer to grades, test scores, graduation and drop out rates, years of education attained, and certificates and degrees earned.
\end{enumerate}
populations and for faculty and staff ratios at each school, and pairing of schools in different neighborhoods were permitted as remedies to segregation.\textsuperscript{17} The bright side of CMS's legacy extends beyond the distinction of being the first district to utilize mandatory busing for desegregation. For a short period during the 1980s, the district actually achieved racial balance in its schools, and it accomplished this feat peacefully through the efforts of a broad coalition of black and white citizens in cooperation with the leaders in business, education, and the civic community. The widely shared local perspective that Charlotte exemplifies the New South led to exchanges of students between CMS and the Boston School district so that the former could show the latter the possibilities of interracial harmony and educational integration.\textsuperscript{18} CMS also stands as the symbol of how desegregation not only improves the schools and racial attitudes within a community, but how the end of Jim Crow education was instrumental in the city's economic growth during the last three decades.\textsuperscript{19}

CMS's legacy also casts a shadow on the history of desegregation. When desegregation was no longer deemed necessary or desirable for the area's economic growth, the corporate and civic leadership abandoned their support for the policy and joined those who championed its end. As Professor Stephen Smith demonstrates, desegregation did more to benefit the Charlotte-Mecklenburg area's political and corporate elites through development and economic prosperity than it did to help black Charlottean's economic, social, and educational advancement.\textsuperscript{20}

From roughly 1974 to 1992, CMS used mandatory busing to achieve a racial balance that approximated the ratio of white to black students in Mecklenburg County. During this time frame, most schools were, on average, between thirty and forty percent black.\textsuperscript{21} This pupil assignment plan relied heavily upon a system of paired elementary schools. Secondary schools were desegregated by

\begin{footnotesize}
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\item[17.] Swann v. Charlotte-Mecklenburg Bd. of Educ., 402 U.S. 1, 22–31 (1971); Boger, \textit{supra} note 4, at 1387.
\item[18.] \textsc{Davison M. Douglas}, \textit{Reading, Writing, \& Race: The Desegregation of the Charlotte Schools} 251–52 (1995).
\item[20.] \textit{Id.} at 267.
\item[21.] \textit{See Douglas, supra} note 18, at 141; \textsc{Charlotte-Mecklenburg Sch.}, \textit{Monthly Reports} (1974–1992) (on file with author).
\end{enumerate}
\end{footnotesize}
designing attendance zones that drew from both black and white neighborhoods. Under this system, almost all students were bused to schools outside their neighborhoods for at least some part of their educational careers. Blacks typically rode the buses for more years and for greater distances than did whites. As a result of the mandatory busing, however, the majority of students in CMS attended a racially desegregated school during some portion of their academic careers in the Charlotte-Mecklenburg area.\(^{22}\) This was possible because CMS remained a majority white school district until 2001, when the proportion of white students declined to 49.9%.\(^{23}\)

The city of Charlotte's\(^{24}\) burgeoning financial sector has fueled Mecklenburg County's rapid growth and development since the early 1980s.\(^{25}\) From 1974 through 1992 the countywide Charlotte-Mecklenburg School district served roughly 78,000 students. By 1996, the student population grew to 89,000, and by 1999 the district served 99,000 students.\(^{26}\) Today, with 109,645 students in 140 schools, CMS is the twenty-fifth largest school district in the nation.\(^{27}\) As in many other southern school systems, CMS is struggling to transform itself to meet the needs of students destined for an economy built on the high-tech, information-age jobs that are replacing the area's traditional textile manufacturing, poultry-processing, and agricultural occupations. At the time of the original Swann order, only a handful of CMS students were neither white nor black.\(^{28}\) For this reason, the federal district court orders in Swann categorized children as either black or non-black (collapsing whites, Asians, Hispanics, American Indians, and students from other ethnic backgrounds into the single category of "white/other").\(^{29}\) As of fall 2002, the CMS student


\(^{24}\) The city of Charlotte refers to the incorporated municipality by that name within Mecklenburg County.

\(^{25}\) SMITH, supra note 19, at 300; Mickelosn & Ray, Falling from Grace, supra note 8, at 222; Ray & Mickelson, Political Economy of Education, supra note 8, at 180.


\(^{27}\) CHARLOTTE-MECKLENBURG SCH., DEMOGRAPHICS (2002) (on file with author) [hereinafter CMS, DEMOGRAPHICS].


population was 42% Black, 47.7% White, and 10.3% Hispanic, Asian, and American Indian.\(^{30}\)

Although the city's desegregated schools were once a source of civic pride,\(^{31}\) the broad social and political coalition supporting desegregation began to crumble in the late 1980s. As I have described elsewhere,\(^{32}\) a successful Chamber of Commerce campaign to lure relocating firms to Charlotte resulted in thousands of middle-class white families moving into the county's sprawling suburban housing developments. The newcomers, familiar with their former homogeneously white, middle-class, high-quality schools, were dissatisfied with the generally less rigorous and underfinanced southern education they found in CMS.\(^{33}\) A former school official observed that when he arrived in the early 1990s, he found a system geared more for "educating future mill workers and poultry processors than for educating future computer scientists."\(^{34}\) In addition to the less rigorous curricula, newcomers found that their children were sent to schools desegregated by race and social class. As one mother told me, "If I wanted my children to attend school with students who live in trailer parks or projects, I'd have moved next to one."\(^{35}\) On a mounting wave of discontent among suburban newcomers, relocated firms pressured the Chamber of Commerce to "do something" about the "educational crisis."\(^{36}\) In response to this increasing vocal discontent, civic and business leaders began to pressure the schools to end busing for desegregation.\(^{37}\)

In the early 1990s, much of the mandatory busing plan was replaced by other desegregation strategies.\(^{38}\) Most notable was a program of controlled choice among magnet schools whereby each magnet school sought an enrollment that was forty percent black and sixty percent white and other ethnic groups.\(^{39}\) This policy shift

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30. CMS, DEMOGRAPHICS, supra note 27.
31. GAILLARD, supra note 14, at 13-14, 203.
32. Mickelson & Ray, Falling from Grace, supra note 8, at 210-12.
33. Id. at 180-81.
35. Interview with an anonymous parent, in Charlotte, N.C. (Jan. 1991). The identity of this parent remains confidential per her request at the time of our interview.
37. Mickelson & Ray, Falling from Grace, supra note 8, at 209; Ray & Mickelson, Political Economy of Education, supra note 8, at 179.
occurred largely in response to the social and political pressures arising from business and civic elites, who complained that the mandatory busing plan hindered economic development.\textsuperscript{40}

The use of racial guidelines for magnet school admissions was challenged by white parents who sued the district.\textsuperscript{41} This lawsuit led to a reactivation of the \textit{Swann} case. In September 1997, William Capacchione sued the Charlotte-Mecklenburg School system, claiming his daughter had been unconstitutionally denied admission into one of the magnet schools on account of her race.\textsuperscript{42} Several

CMS, COMMITTEE OF 25]. The 1992 magnet-based pupil assignment plan involved three desegregation strategies: (1) strengthening and utilizing schools in integrated neighborhoods; (2) creation of new schools midpoint between black and white communities; and (3) the creation of magnet schools in racially identifiable black schools. The plan called for the implementation of these strategies and the progressive dismantling of most of CMS’s system of mandatory busing over a five-year period. The plan did not envision the end of all mandatory busing for desegregation, however. For example, busing was necessary to maintain the midpoint schools. Designed as a voluntary desegregation strategy, magnet schools were organized around curricular and instructional themes, such as communications, science, the arts, traditional, open, and Montessori. Students who applied to magnets were selected by lottery, with forty percent of seats targeted at blacks and sixty percent of seats targeted for whites and students from other racial and ethnic groups. The five-year implementation period was divided into three phases, with thorough evaluations scheduled at the end of the first two. A committee of twenty-five citizens (the “Committee of 25”) was appointed by the board to monitor the implementation and assess the equity consequences of the new magnet plan. I was a member of the Committee of 25.

Although there were several modifications to the plan, its broad outlines were basically implemented. In the first year of the program, 1992–1993, nine schools added magnet programs. By the time depairing was completed in the 1996–1997 school year, thirty-eight of CMS’s 120 schools had magnet programs. See generally SMITH, supra note 19 (offering a detailed history of the school reform process in CMS from the 1960s to the present).


\textsuperscript{41} In 1999, I served as an expert witness for the defendant, the Charlotte-Mecklenburg Schools. One of the white plaintiff intervenors was elected to the school board in November 2001. In May 2002, the superintendent, Eric Smith, resigned to take a position in Maryland. To ensure continuity during the transition to neighborhood schools, in August 2002, the school board named James Pughsley, Smith’s deputy superintendent, as the superintendent. \textsc{Charlotte-Mecklenburg Sch., The History of Public Schools in Charlotte-Mecklenburg, at http://www.cms.k12.nc.us/discover/history.asp} (last visited Jan. 15, 2003) (on file with the North Carolina Law Review).

\textsuperscript{42} Capacchione v. Charlotte-Mecklenburg Sch., 57 F. Supp. 2d 228, 229 (W.D.N.C. 1999), aff’d in part and rev’d in part \textit{en banc per curiam} sub nom. Belk v. Charlotte-Mecklenburg Bd. of Educ., 269 F.3d 305 (4th Cir.), reconsideration denied \textit{en banc}, 274
weeks later, the school board moved to dismiss the case, and counsel for the original Swann plaintiffs moved to reopen Swann, claiming that the Capacchione lawsuit was a collateral attack on the outstanding Swann orders, and that the school board had not yet complied with them. Judge Robert Potter, "unequivocally opposed" to mandatory busing for desegregation before President Reagan appointed him to the federal bench,\(^4\) was assigned the case. In March 1998, Judge Potter denied CMS's motion to dismiss, reopened Swann, and consolidated it with the Capacchione lawsuit.\(^4^4\) Capacchione then intervened as a defendant in Swann, and a group of white families intervened in both cases, as defendants in Swann and as plaintiffs in Capacchione.\(^4^5\) Two black families with school children in CMS, Belk and Collins, entered the case as substitute representatives of the class of black students in Swann.\(^4^6\)

The case was tried from April through June 1999 with three separate counsel tables—one for the white families, one for the school board, and a third for the black families.\(^4^7\) In September 1999, Judge Potter entered an opinion in which he declared that CMS had (1) fulfilled the Swann orders and rid the system of all vestiges of segregation to the extent practicable and, thus, had attained unitary status, and (2) operated the magnet program ultra vires or outside the authority of the Swann orders, making the use of race in magnet admissions unconstitutional. He then entered an injunction permanently enjoining CMS from considering race in any facet of its operations.\(^4^8\) The court also awarded nominal damages and attorneys’ fees to the white families.\(^4^9\)

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\(^4^3\) Jim Morrill, Trial Brings School Case Full Circle, CHARLOTTE OBSERVER, Apr. 18, 1999, at 16A.


\(^4^7\) See generally Tim Simmons, Bitterness Overtakes Busing Trial, NEWS & OBSERVER (Raleigh, N.C.), June 23, 1999, at A1 (discussing the contentious nature of the litigation).

\(^4^8\) Capacchione, 57 F. Supp. 2d at 293–94.

\(^4^9\) Id. at 291–93.
The *Swann* plaintiffs and the school board appealed and obtained a stay of the order pending that appeal.\(^{50}\) A panel of the Fourth Circuit then overturned the district court in November 2000, ruling 2–1 that further proceedings were necessary to determine whether the school system had complied with the court orders regarding student assignment. The court found that the trial record as to the school siting decision, the monitoring of magnet transfers, and the transportation burden CMS placed on black students precluded a finding of unitary status.\(^{51}\) It also reversed 2–1 as to the constitutionality of the magnet schools, finding that the use of race in magnet school admissions was expressly authorized in the *Swann* orders.\(^{52}\) The court also reversed 3–0 as to the permanent injunction, finding no basis for the injunction in the trial record.\(^{53}\) As a result of these rulings, the court also found no basis for damages or attorneys' fees.\(^{54}\)

The white families successfully requested en banc review of the panel decision.\(^{55}\) The full Fourth Circuit, in September 2001, voted 7–4 to affirm the district court's unitary status declaration, finding it had to defer to the findings of the trial court.\(^{56}\) It also voted 6–5 to reverse the trial court as to the constitutionality of magnet school admissions, finding that CMS was compelled to use race under the *Swann* orders and thus was immune from any constitutional claim.\(^{57}\) The court also unanimously reversed the trial court as to the injunction, finding no basis for that order.\(^{58}\) The court then split 6–5 on the issue of attorneys' fees, finding that the white families had not prevailed on their magnet admissions claim and were not entitled to fees as intervening defendants in the unitary status aspect of the case.\(^{59}\)

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52. *Id.* at 276.
53. *Id.* at 277, 310.
54. *Id.* at 278.
56. *Id.* at 311.
57. *Id.*
58. *Id.*
59. *Id.*
The black families petitioned for certiorari in the Supreme Court on the unitary status decision, and the white families did the same as to the attorneys' fees decision. On April 15, 2002, the Supreme Court denied both petitions without comment.

Even before the Supreme Court denied the black plaintiffs' certiorari petition, CMS began to design a pupil assignment plan built around neighborhood schools for the 2002–2003 school year. This new arrangement, named the Family Choice Plan, allows parents to select either their neighborhood school or another school within one of four choice zones into which the countywide district is now divided. In fact, the Family Choice Plan is a neighborhood school-based assignment plan with an option for enrollment in magnets. During the first year, the great majority of families received their first, second, or third choices. Among families who did not, however, blacks were the least likely to receive any of their first three choices, and also were the least likely ethnic group to name their neighborhood schools as one of those choices.

This brief history of desegregation in CMS suggests why the district serves as a strategic site to explore the academic consequences of desegregation and segregation. Using survey data I collected in 1997, I demonstrate that the more CMS students—both black and white—were exposed to a truly desegregated education, the better they performed academically. I discuss why desegregated learning environments are superior to segregated settings. I also investigate the degree to which CMS actually desegregated its schools, and show how even in this school district highly regarded for its desegregation record, tracking resegregated many students within desegregated schools, thereby blunting the full potential of students to benefit from

desegregation. This Article presents initial data on the growing racial isolation and concentration of poor children in many of the 140 CMS schools after the first semester of the post-unitary status pupil assignment plan. I conclude by speculating about the future direction of current racial gaps in achievement, and the potential for racial antagonisms as the district returns to segregated neighborhood schools.

I. THE RELATIONSHIP OF DESEGREGATION, SEGREGATION, AND TRACKING TO RACIAL EQUALITY IN EDUCATIONAL PROCESSES AND OUTCOMES

The relationship between desegregation, segregation, and tracking to racial equality in education often is discussed in terms of first- and second-generation segregation. First-generation segregation generally refers to the racial segregation among schools within a school district, and has been the focus of national desegregation efforts since Brown v. Board of Education. Second-generation segregation refers to the racially correlated allocation of educational opportunities within schools, typically caused by curricular grouping or tracking of core academic classes in English, Math, Social Studies, and Science during secondary school. Because CMS has been desegregating since the mid-1970s while it has employed tracking in academic courses throughout its secondary schools, the district offers the opportunity to examine the relationship between academic outcomes and both first- and second-generation segregation.

A. Previous Research on Desegregation

In 1966, the Coleman Report found that academic outcomes were better for blacks who attended desegregated schools than for those who attended segregated schools. The Coleman Report was the first large-scale national study of school effects and equality of educational opportunity in the public school systems. Many

67. See generally KENNETH J. MEIER ET AL., RACE, CLASS, AND EDUCATION: THE POLITICS OF SECOND GENERATION DISCRIMINATION (1994) (discussing the politics of second-generation segregation whereby desegregated schools resegregate by tracking and ability grouping); Wells & Crain, supra note 11 (distinguishing the short-term consequences of desegregation for blacks, such as grades and test scores, from the long-term consequences, such as racial attitudes, educational and occupational attainment).
68. COLEMAN ET AL., supra note 11, at 22 (stating that “the achievement of minority pupils depends more on the schools they attend than does the achievement of majority pupils”).
contemporary debates over the race gap and academic achievement, including those on school resources, desegregation, compensatory education, and how we conceptualize equality of educational opportunity, have origins in the Coleman Report's findings.

The report was a response to section 402 of the Civil Rights Act of 1964, which provided:

The Commissioner shall conduct a survey and make a report to the President and the Congress, within two years of the enactment of this title, concerning the lack of availability of equal educational opportunities for individuals by reason of race, color, religion, or national origin in public educational institutions at all levels in the United States, its territories and possessions, and the District of Columbia. 69

A team of researchers led by sociologist James Coleman used multiple regression analysis to examine how differences in school resources, teacher characteristics, school racial composition, and student characteristics related to student achievement.

The major conclusions were: (1) ten years after the Brown decision, the majority of American students still attended racially segregated schools; (2) the achievement gap that characterized black and white children when they entered school widened over time with each additional year the students remained in school; (3) socioeconomic background and home environment were the strongest predictors of achievement for all students; (4) the characteristics of a school's student body, especially the average socioeconomic status and racial composition, were the next strongest predictors of achievement for minority students (the finding that blacks who attended majority white schools fared better than those who attended racially isolated black schools provided justification for the policy of mandatory busing for desegregation); (5) teacher experience and education had some effect but only on the achievement of southern blacks; and (6) school resources (including per pupil expenditures, measures of a school's physical resources) had little to no correlation with achievement.

In addition to providing evidence that blacks learned more in desegregated environments, the Coleman Report also influenced the nation's approach to providing equality of educational opportunities. Prior to 1966, conventional wisdom held that poor achievement among low income and minority students was due to the inferior quality of the schools they attended compared to the resource-rich

69. Id. at iii (quoting section 402 of the Civil Rights Act of 1964).
schools attended by middle class white youth. The Coleman Report turned that notion on its head; based on its findings, new policies aimed at reforming poor families and their children were introduced. These policies sought to infuse poor families with the values, orientations, child rearing strategies, and life styles of the middle class. These policies were implemented via a series of compensatory education programs, the most famous of which are the Head Start Preschool program and Title I/Chapter I programs in elementary schools.

While Coleman never rejected the claim that schools mattered, his findings were interpreted to suggest that academic gaps were due more to differences among students and their families rather than the characteristics and operations of schools. Both Head Start and Title I/Chapter I programs, however, have had only limited short-term successes and achievement gains associated with participation in the programs seem to fade over time. A number of researchers believe fading occurs because compensatory education’s concentration on changing low income and minority families ignores how schools organize and structure opportunities to learn or to fail.\(^\text{70}\)

Since the Coleman Report was published, social scientists, civil rights advocates, and ordinary citizens have studied and debated the social and academic consequences of school desegregation. These consequences fall into two categories: (1) long-term effects, such as enhanced educational and occupational attainment, as well as improved racial attitudes among blacks who experienced desegregation; and (2) short-term effects, such as higher grades and test scores.

It is generally agreed that desegregation exerts positive long-term effects on minority students’ life course.\(^\text{71}\) Blacks who attended

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70. See generally Valerie E. Lee & David T. Burkam, Inequality at the Starting Gate: Social Background Differences in Achievement As Children Begin School 30 (Report to the Economic Policy Institute, Revised Draft) (2002) (demonstrating that the elementary schools poor, inner city children attend are markedly inferior to those attended by middle class and suburban students) (on file with the North Carolina Law Review).

71. See Armor, supra note 9, at 113 (concluding that research on long-term outcomes offers the strongest argument for desegregated schools). See generally Amy S. Wells & Robert L. Crain, Stepping Over the Color Line: African-American Students in White Suburban Schools (1996) (discussing the outcomes of the St. Louis, Missouri, desegregation plan for blacks and whites); Jomills Henry Braddock & James M. McPartland, The Social and Academic Consequences of School Desegregation, Equality & Choice 5, 70 (Feb. 1988) (demonstrating that occupational attainment and interracial attitudes among Blacks are enhanced by desegregated education); Wells & Crain, supra note 11 (reviewing the long-term effects of school desegregation on the life chances of...
desegregated schools attain higher educational and occupational levels than those who did not; they are more likely to live and work in an integrated environment and to express less interracial hostility and fear of whites.

Disagreement centers on desegregation's short-term effects on achievement. Critics read the evidence on the short-term effects largely as a wash: they find no consistent academic benefits for blacks. Critics believe that desegregation triggers serious community disruptions both for blacks, who suffer from job losses, school closings, and inappropriate education, and for whites, who flee desegregating (and therefore, in their eyes, deteriorating) school systems.

Others read the evidence on the short-term effects of desegregation more positively. They conclude that when schools

African-American students. The life course refers to the sequential stages of social development humans experience from infancy through old age. Typically, at each stage of the life course, depending upon a society's norms, values, and opportunities available (here race, gender, and social class are relevant), individuals undertake common experiences. For example, in early adulthood, Americans complete their educations, find mates, begin families, and launch careers.

72. See ARMOR, supra note 9, at 112-13 (arguing that studies have not demonstrated that desegregation produces consistent social and educational benefits). See generally COOK ET AL., supra note 13, at 9 (reporting the findings from the 1984 National Institute of Education Panel's review of extant empirical studies of desegregation); CHRISTINE H. ROSSELL, THE CARROT OR THE STICK FOR SCHOOL DESEGREGATION POLICY: MAGNET SCHOOLS OR FORCED BUSING (1990) (arguing for voluntary rather than mandatory desegregation policies); Fuller, supra note 10 (noting several studies that reported desegregation did not result in satisfactory levels of academic achievement).

73. See Van Dempsey & George Noblit, Cultural Ignorance and School Desegregation: A Community Narrative, in BEYOND DESEGREGATION, supra note 9, at 115, 115-37 (analyzing, through two case studies, the effects of desegregation on black communities). See generally Vanessa Siddle-Walker, Valued Segregated Schools for African American Children, 70 REV. EDUC. RES. 253 (2000) (describing the beneficial ways that black teachers taught, nurtured, and stimulated their students during the era of Jim Crow education).

74. See ARMOR, supra note 9, at 174-80 (discussing the impact of desegregation on white flight). See generally ROSSELL, supra note 72 (arguing that mandatory busing activates white flight from cities to suburban communities and their schools).

consistently employ practices to enhance equality of opportunity (including the elimination of tracking and ability grouping), desegregation brings clear, though modest, academic benefits to black students and does no harm to whites. Minority students hardly benefit, however, from exposure to desegregated education in a school that does little to equalize educational opportunity in the classroom.

B. Previous Research on Tracking

The effects of early tracking\(^7\) cumulate over the course of each student's educational career.\(^7\) Therefore, it is important to consider

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\(^7\) Tracking and ability grouping are organizational features of schools. They refer to any between-classroom grouping practice at either the elementary or secondary school level, although ability groups tend to be associated with elementary school and tracking with secondary school. Such arrangements sort students into different classrooms (or small groups within classrooms) on the basis of their perceived ability or previous achievement. Students, presumed to be homogeneous with regard to ability and educational needs within particular tracks or groups, receive differentiated curricula and instruction. Within elementary school classrooms, students are often placed in ability groups for reading. In addition, school systems that have special education and gifted programs that pull students out of their regular classrooms are also tracked.

At the secondary level, educational tracks are sequences of courses within given subject domains, which are differentiated by the rigor of their content and the nature of their instruction. In theory, tracking is a meritocratic and technical process that allocates educational resources and opportunities commensurate with students' prior academic achievement, ability, and interest, and with course availability. Ideally, because of the resulting homogeneity of learners within classrooms produced by tracking, instructors can tailor instruction to the group's abilities and interests. See sources cited infra note 77.

\(^7\) See generally \textit{Samuel R. Lucas, Tracking Inequality} (1999) (demonstrating that even though the formal practice of tracking no longer exists in most public schools, the informal systems of sorting and selecting have much the same effects on inequality of educational opportunities) [hereinafter \textit{LUCAS, TRACKING INEQUALITY}]; \textit{Jeannie Oakes, Multiplying Inequalities: The Effects of Race, Social Class, and Tracking on Opportunities to Learn Mathematics and Science} (1990) (detailing how tracking in math and science creates substantive differences in students' knowledge that are exacerbated over time) [hereinafter \textit{OAKES, MULTIPLYING INEQUALITIES}]; Samuel R. Lucas, \textit{Effectively Maintained Inequality: Education Transitions, Track Mobility, and Social Background Effects}, 106 AM. J. SOC. 1642 (2001) (arguing that tracking functions as a key to effectively maintaining social inequality through stratifying educational outcomes) [hereinafter \textit{Lucas, Effectively Maintained}}
the effects of tracking on outcomes when assessing the effects of desegregation and segregation on racial equity in educational outcomes. Because of the pervasive practice of curricular differentiation, students are sorted into racially correlated educational trajectories soon after they enter school. In early elementary school, they are placed into ability groups for instruction; the process of identifying students for placement in gifted and special educational programs also begins at this time. Once students are identified for any program, whether gifted, regular, or special education, their curricula and instruction differ from those of other students. This leads to different educational careers: at each juncture or transition, the effects of the previous year's differentiated curriculum influence students' transitions to subsequent courses and schools.

Once they enter secondary school, students tend to learn academic subjects in tracked classrooms. Tracks are designed to match students' abilities with differentiated curriculum and

Inequality]; Jeannie Oakes, More Than Misapplied Technology: A Normative and Political Response to Hallinan on Tracking, 67 SOC. EDUC. 84 (1994) (elaborating how even if tracking were implemented as designed, which it rarely is, the practice still generates unequal access to opportunities to learn) [hereinafter Oakes, More Than Misapplied Technology].


79. See generally Tamela McNulty Eitle, Special Education or Racial Segregation: Understanding Variation in the Representation of Black Students in Educable Mentally Handicapped Programs, 43 SOC. Q. 575 (2002) (detailing results of a national study that found even after controlling for student and school characteristics, black male students are more likely to be placed in special education classes in school districts operating under court ordered desegregation plans); Kornhaber, supra note 78 (reviewing processes for identifying gifted students).

80. See generally TOM LOVELESS, THE TRACKING WARS (1999) (criticizing the detracking movement by arguing that detracking policies have been influenced by a handful of researchers with little empirical evidence that tracking is harmful); Lucas, Effectively Maintained Inequality, supra note 77 (suggesting that the selection of students for such specialized programs leads to unequal educational opportunities).
instruction. Unfortunately, in practice, tracking often falls short of its design. Within a given track, there is a wide range of student abilities. A growing body of research suggests that tracking assigns minority students unjustifiably and disproportionately to lower tracks and almost excludes them from the accelerated tracks; it offers them inferior opportunities to learn and is responsible, in part, for their lower achievement.

The consequences of tracking manifest in both academic and social domains. Educational advantages cumulate for those in the top tracks relative to those in the bottom tracks because of the differences in opportunities to learn. Academic achievement is strongly shaped

81. See generally LOVELESS, supra note 80 (describing tracking and the efforts to persuade schools to abandon or reduce tracking); Maureen T. Hallinan, Tracking: From Theory to Practice, 67 SOC. EDUC. 70 (1994) (laying out the theory underlying tracking and arguing that, in practice, its failures often stem from flawed implementation of the policy); Chen-Lin C. Kulik & James A. Kulik, Effects of Ability Grouping on Student Achievement, 23 EQUITY & EXCELLENCE 22 (1987) (reporting the results of research that found positive effects of ability grouping on student achievement); TOM LOVELESS, THE TRACKING AND ABILITY GROUPING DEBATE (Fordham Report 1998), at http://www.edexcellence.net/library/track.html (summarizing arguments for and against curricular differentiation and concluding that, overall, tracking’s benefits outweigh its shortcomings).

82. See generally WELNER, supra note 8 (discussing the social and legal histories of four school systems facing the prospect of court-ordered detracking); Mickelson, supra note 22 (reporting findings from a study of high school seniors in CMS where resegregation by tracking undermined many of the potential benefits of schools desegregating under the Swann order); Jeannie Oakes et al., Coursetaking & Achievement in Mathematics and Science: Inequalities that Endure and Change (May 2000) (unpublished manuscript, on file with the North Carolina Law Review) (summarizing decades of research on the ways that tracking in math and science continues to offer unequal access to opportunities to learn and how these inequalities correlate with race, gender, and social class).

83. See generally LUCAS, TRACKING INEQUALITY, supra note 77 (suggesting that informal systems of sorting and selecting have much the same effects as tracking on inequality of educational opportunities); WELNER, supra note 8, at 79–80 (concluding that once placed in low tracks, minority students “had to overcome great odds to move up within the tracked structure”); Lucas, Effectively Maintained Inequality, supra note 77 (arguing that tracking maintains social inequality); Mickelson, supra note 22 (showing that resegregation resulting from tracking undermines many of the potential benefits of desegregating schools); Samuel R. Lucas & Mark Berends, Sociodemographic Diversity, Correlated Achievement, and De Facto Tracking (2002) (unpublished manuscript, on file with the North Carolina Law Review) (showing that tracking is driven in part by the sociodemographic composition of the schools, with race and class diversity positively associated with greater de facto tracking even when achievement is held constant); Roslyn Arlin Mickelson, How Middle School Segregation Contributes to the Race Gap in Academic Achievement (Aug. 2001) (unpublished manuscript, on file with the North Carolina Law Review) (reporting findings from a study of eighth-grade middle school students in the Charlotte-Mecklenburg Schools where resegregation by tracking undermined many of the potential benefits of schools desegregating under the Swann order); Oakes et al., supra note 82 (revealing that serious gaps in achievement and advanced placement coursetaking remain for low-income minority students).
by tracking because students in different tracks receive distinctive curricular content and different instruction. Professor Jeannie Oakes and her colleagues report that students in higher level classes generally cover more subject matter, have better qualified instructors, and receive more challenging instruction than those in lower level classes. Tracking tends to reinforce the learning problems of educationally disadvantaged students: these students are provided with less effective instructors, who teach the least rigorous curricula using the methods least likely to challenge them to learn. In these ways, racially stratified tracks create a discriminatory cycle of restricted educational opportunities for minorities who are disproportionately assigned to lower tracks irrespective of their academic abilities.

Tracks socialize students to accept their position in the school’s status hierarchy where the top tracks are the most valued. Tracks also channel students into designated paths for future occupations. Because tracks tend to be homogeneous as to race, ethnicity, and social class, students receive limited exposure to individuals who differ from themselves on these important characteristics. Tracks also affect friendship patterns: students tend to make friends with others

84. Oakes et al., supra note 82, at 2.
85. See generally Merilee Finley, Teachers and Tracking in a Comprehensive High School, 57 SOC. EDUC. 233 (1984) (presenting findings from an ethnographic study of public high school English classes where the best teachers taught the top track students, thereby gaining status and the power to maintain their assignment teaching the most desirable students); Richard M. Ingersoll, The Problem of Underqualified Teachers in American Secondary Schools, 28 EDUC. RESEARCHER 26 (1999) (reporting findings from a national data set that show the weakest students are most likely to have the least qualified teachers); Mickelson, supra note 22 (noting that students in higher tracks are the most likely to have teachers who are credentialed and teaching in their field, whereas students in the lowest, non-special education tracks are much more likely to be taught by unlicensed, inexperienced teachers who are teaching outside of their field).
86. LUCAS, TRACKING INEQUALITY, supra note 77, at 58; N.C. EDUC. & LAW PROJECT, supra note 78, at 3; OAKES, MULTIPLYING INEQUALITIES, supra note 77, at vi–vii; WELNER, supra note 8, at 79; Mickelson, supra note 22, at 237; Oakes, More Than Misapplied Technology, supra note 77, at 87–88; Mickelson, supra note 83, at 7; Oakes et al., supra note 82, at 2. See generally Expert Report of Roslyn Arlin Mickelson, Capacchione v. Charlotte-Mecklenburg Sch., 57 F. Supp. 2d 228 (W.D.N.C. 1999) (No. 97-CV-482-P, 65-CV-1974-P) (demonstrating how the vestiges of the dual system contributed to the race gap in achievement among black secondary students in the CMS system); Lucas, Effectively Maintained Inequality, supra note 77 (arguing that tracking maintains social inequality).
87. See Noah Friedkin & Scott Thomas, Social Positions in Schooling, 70 SOC. EDUC. 239, 250 (1997) (arguing that formal tracking no longer characterizes the ways that differentiated curricula are organized in contemporary high schools); see also LUCAS, TRACKING INEQUALITY, supra note 77, at 2–4 (describing the evolution of informal tracking as an unremarked revolution).
in their own tracks.\textsuperscript{88} In these ways, future occupational and educational aspirations, as well as academic achievement, are shaped by track placement.\textsuperscript{89}

In theory, tracking is designed to enhance teaching and learning by targeting instruction and course content to students' ability and prior knowledge. Yet there is no consistent evidence that tracking, as currently implemented, is the most effective form of classroom organization for maximizing opportunities to learn for the majority of students. To the contrary, evidence suggests that tracking hinders these opportunities among students with mid- and low-abilities.\textsuperscript{90}

Moreover, track placements correlate strongly with students' race, ethnicity, and social class. In racially diverse schools, white students typically are found disproportionately in the top tracks while students of color—often as academically able as their white counterparts—are found disproportionately in the lower tracks. In this way, tracking limits minorities' access and maintains whites' access to the higher quality education. Some federal courts have recognized that tracking can undermine the potential benefits of policies or practices designed

\textsuperscript{88} See generally Maureen T. Hallinan & Stevens S. Smith, The Effects of Classroom Racial Composition on Students' Interracial Friendliness, 48 SOC. PSYCHOL. Q. 3 (1985) (showing that interracial friendliness is attached primarily to the number of opportunities students have for cross-race interaction); Warren N. Kubitschek & Maureen T. Hallinan, Tracking and Students' Friendships, 61 SOC. PSYCHOL. Q. 1 (1998) (suggesting that track placements affect friendship choices by encouraging more interaction within tracks, by causing a greater similarity among students within tracks, and because tracks are a generally recognized status hierarchy among students); Robert E. Slavin, Effects of Biracial Learning Teams on Cross-Racial Friendships, 71 J. EDUC. PSYCHOL. 381 (1979) (finding participation in biracial learning teams led to cross-racial friendships in desegregated junior high schools).

\textsuperscript{89} See WELLS & CRAIN, supra note 71, at 297-302; Oakes, More than Misapplied Technology, supra note 77, at 86; Wells & Crain, supra note 11, at 536-40. See generally Braddock & McPartland, supra note 71 (arguing that the interracial social networks that develop in integrated schools enhance the occupational and educational attainment of blacks).

\textsuperscript{90} See Simmons v. Hooks, 843 F. Supp. 1296, 1302-03 (E.D. Ark. 1994) (finding that ability grouping violated the Fourteenth Amendment rights of black children placed in the low groups); WELNER, supra note 8, at 40 (noting that courts have recognized that ability grouping tends, as a factual matter, to perpetuate segregation by springing up in apparent reaction to forced integration). See generally Robert Slavin, Ability Grouping and Student Achievement in Elementary Schools: A Best-Evidence Synthesis, 57 REV. EDUC. RES. 293 (1990) (critiquing the widespread practice of ability grouping in elementary schools because the achievement effects of the practice are essentially zero); Robert Slavin, Ability Grouping and Student Achievement in Secondary Schools: A Best-Evidence Synthesis, 60 REV. EDUC. RES. 471 (1993) (reviewing the limited positive and strong negative effects on student academic outcomes of tracking of academic courses in secondary schools).
to eliminate racial segregation in districts not yet declared unitary. Other federal courts have held that ability groups are not necessarily discriminatory in non-unitary districts.

The fact that tracking can subvert potential gains from desegregation is important for understanding why the previous research has been ambiguous about the effects of desegregation on test scores and grades. Much of the earlier research on school desegregation did not examine how segregated academic programs or tracks within desegregated schools affect racial equity in academic outcomes. Schools that are successfully desegregated at the building-level are often simultaneously resegregated by tracks within the school. The presence of academic classes in Math, Science, Social Studies, and English resegregated through tracking in desegregated schools (that is, schools with racially balanced student bodies) was commonplace in CMS. In the results reported here, I consider the effects of both classroom-level and school-level segregation.

II. METHODOLOGICAL DESIGN OF THIS STUDY

In the first part of this Article's findings I report the results from my 1997 survey of CMS middle school and high school students. The survey data are part of a fourteen-year, multi-method case study of educational reform in CMS. In the second part, I report CMS data on the student demographic composition of schools in the fall of 2002, the first semester following the unitary ruling and the implementation of a neighborhood school-based Family Choice pupil assignment plan.


93. Racially-identifiable schools reflect between-school segregation at the school level. Racially-identifiable tracking reflects within-school segregation at the classroom level. Schools desegregated at the school-level may remain or become segregated at the classroom-level through tracking, as is the case in Charlotte. Racially-identifiable schools are considered first-generation segregation; racially-identifiable classrooms in desegregating school systems are considered second-generation segregation. See Meier et al., supra note 67, at 79.

A. **Methodological Strengths of This Study**

Much of the prior research on the academic outcomes of desegregation and segregation suffers from a number of methodological problems, including small sample size, voluntary participation in desegregation, the brief duration of the desegregation treatment, and an absence of high-quality data as controls for intervening forces, such as family background, individual, and school characteristics.\(^9\)

The unique research design of this study means that data used in this research do not suffer from the shortcomings that plague much of the prior research on desegregation. Specifically, because of the mandatory nature of the CMS desegregation plan, students experiencing it were not self-selected. The large representative samples of students were taken from a random sample of 1996–1997 grade 8 Language Arts and grade 12 English classes stratified by track and drawn from every secondary school in the entire CMS system.

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\(^9\) See Wells & Crain, supra note 11, at 535–36. See generally Cook et al., supra note 13 (assessing the validity of nineteen empirical studies regarding desegregation and the academic achievements of black students); Meredith Phillips et al., *Does the Black-White Test Score Gap Widen After Children Enter School*, in THE BLACK-WHITE TEST SCORE GAP 229, 231 (Christopher Jencks & Meredith Phillips eds., 1998) (discussing the problems with research on the black-white test score gap).
Consequently, there is little selection bias in students and none in schools because all secondary schools in CMS participated. My use of parallel surveys with both middle school and high school students enhances the robustness of the findings.

Unlike prior desegregation research, I use multilevel regression analysis to examine simultaneously the effects of school-level and classroom-level segregation on academic outcomes. My study employs a longitudinal measure of each student’s exposure to first-generation segregation and measures of second-generation segregation (academic track placement in middle and high school). Most prior desegregation research fails to use multilevel regression analysis or to examine simultaneously school- and classroom-level segregation.

The research design offers a clear advantage over other studies, especially those employing national samples. Nationally representative data sets often have only a handful of students from a single school in selected districts. By focusing on a single district, this study considers CMS middle and high schools, their processes, practices, and their students, and the distribution of demographic characteristics and achievement outcomes across the schools—in their interdependent social, educational, and political contexts. This task is impossible with nationally representative samples. In this way I can detect district-wide trends and patterns that are missed in the large national samples typically used in desegregation research. The major disadvantage to the single district case study research design is that while findings have high levels of internal validity, they are not readily generalizable.

96. Because students are nested within schools, the possible relationship between students' academic outcomes and the characteristics of schools they attend must be addressed. Multilevel modeling enables the estimation of individual students' outcomes as a function of school-level factors and characteristics of students. See generally ITA KREFT & JAN DE LEEUW, INTRODUCING MULTILEVEL MODELING (1998) (explaining the nuances of multilevel modeling and regressions).

To model the between-school and within-school components of the explained variance of the response variables (EOG and EOC scores), multilevel regressions with random intercepts were performed using STATA. See generally SOPHIA RABE-HESKETH & BRIAN EVERITT, A HANDBOOK OF STATISTICAL ANALYSES USING STATA (2d ed. 2000) (explaining the STATA approach to data analysis). The low values of "rho," the intraclass correlation (ICC) that measures the proportion of the total variance in outcomes that exists between schools, indicate negligible between-school effects on the outcomes.

97. With colleagues from the University of South Florida, I am replicating the CMS study in the Hillsborough School District (Tampa, Florida). Like CMS, the Hillsborough School District recently was declared unitary after several decades of court-mandated desegregation. Manning v. Sch. Bd. of Hillsborough County, 244 F.3d 927, 929 (11th Cir.), cert. denied, 534 U.S. 824 (2001). This replication is the first in what I anticipate will be a
B. Middle and High School Surveys

Sample. In the spring of 1997, my team of researchers collected survey data from every middle school and high school in CMS. At every school, at least one class from each of the various English track levels was included in the fifty percent random sample of classes. All students in each selected class were surveyed. To encourage participation among students in the selected classes, I entered the names of respondents completing the survey into a lottery for cash prizes. On average, ninety percent of the students enrolled in the selected classes took part in the survey.

Data were obtained for 1,833 high school students: 611 (33.3%) were black; 1,119 (61.1%) were white; and 103 (5.6%) were Asian, Hispanic, or Native American. A total of 2,730 middle school students completed the survey: 1,014 (37.1%) of whom were black; 1,538 (56.3%) were white; and 178 (6.5%) were Asian, Hispanic, or Native American. Because of the small number of Hispanic, Asian, and Native American respondents, I analyzed only data from black and white students. The sample of respondents also excludes CMS students enrolled in exceptional children's classes, special programs, or special schools.\textsuperscript{98} The disproportionate number of black students in special education classes and special programs causes the proportion of black students in the nonspecial education classes and regular high schools to be less than the district's 1997 overall percentage of black students (41%). The samples, therefore, are biased toward underestimating the effects of segregated schooling on black children's achievement.

Data. The middle school and high school surveys were almost identical. The primary difference is that the high school version included questions about respondents' school-to-work educational experiences. The survey instruments ascertained students' attitudes toward education and the future, educational and occupational aspirations, work and leisure activities, demographic characteristics (age, race, gender), family background (mother's and father's educational and occupational attainment), and self-reported effort. CMS provided multiple measures of achievement and the history of prior schools attended by each student. CMS records provided

\textsuperscript{98} I collected data from special and alternative secondary schools—for example, those for pregnant teens—but do not analyze them because of the uneven quality of the data, high absentee rates among students, and small sample sizes by school.
indicators of school-level variables, such as proportion of teachers with full licensure and with advanced degrees.

Aggregate school system data and qualitative data from in-depth interviews with educators, parents, and civic leaders supplemented the survey data. Additional data used include CMS documents and reports, expert witness reports from the 1999 desegregation trial,\(^9\) and a set of phone interviews conducted from December 1998 through May 1999 with CMS secondary principals, senior administrators, and several current and former school board members. These interviews were designed to elicit information about the formal and informal policies and practices associated with race, desegregation, and the allocation of students to specific courses in CMS schools.\(^{100}\)

C. Dependent Variables

End of Grade ("EOG") for Grade 8 and End of Course ("EOC") for Grade 12 Scores. Two measures of achievement are used in the analyses reported here: middle school students' EOG test scores in reading, and high school students' EOC composite scores based on their Algebra 1, U.S. History, and tenth-grade English EOC scores.\(^{101}\) EOGs and EOCs are standardized measures of achievement used since the early 1990s in accordance with North Carolina's statewide standards-based reform. These particular measures can be problematic when used to make judgments or decisions about individual achievement because they were developed and validated for another purpose—as indicators of school-wide achievement.\(^{102}\)

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101. I report more comprehensive achievement results for high school students elsewhere, see Mickelson, supra note 22, at 250–52, and for middle school students, see Mickelson, supra note 83, at 27–30.

102. See AM. EDUC. RES. ASS'N, AERA POSITION STATEMENT CONCERNING HIGH STAKES TESTING IN PREK–12 EDUCATION, http://www.aera.net/about/policy/stakes.htm (July 2000) (on file with the North Carolina Law Review); AM. PSYCHOL. ASS'N,
Yet because standardized test scores, as Professor Willis Hawley observes, are the current "coin of the realm," students’ North Carolina standardized test scores are used here as indicators of their achievement.

Track placement. For middle school students, track placement is coded (1) regular, (2) academically gifted ("AG"), or (3) pre-international baccalaureate ("PreIB"). For high school students, track placement is coded (1) regular, (2) advanced, (3) academically gifted ("AG"), or (4) advanced placement ("AP")/international baccalaureate ("IB").

D. Independent Variables

Race. Because of the small numbers of Asians, Hispanics, and Native Americans in the sample, the analyses are confined to blacks (1) and whites (0). Whites are the excluded category in the regression analyses.

Gender. Each student’s gender is coded either female (1) or male (0). Males are the excluded category in the regression analyses.

Family background. Using factor analysis, I created a composite measure of family background (often called socioeconomic status) from indicators of mother’s and father’s educational and occupational attainment. Parents’ occupational attainments are coded with the Nakao-Treas Occupational Prestige Index. Education attainment scores range from (1) (less than high school) to (5) (graduate school degree).
Cultural capital. Exposure to high-status culture enhances students’ achievement because the formal curriculum reflects elite cultural forms, tastes, and distinctions. Students were asked whether they had received private instruction in art, music, or dance during the previous three years. The construct captures students’ access to high-status cultural resources that are distinct from socioeconomic status (yes = 1; no = 0). Although cultural capital is a complex and nuanced social construct that includes much more than private art, music, and dance lessons,\textsuperscript{106} the measure reflects families’ attempts to expose their children to high culture, an important aspect of cultural capital and the formal curriculum.\textsuperscript{107}

Effort. This variable reflects students’ self-reports regarding the amount of effort they usually put into their schoolwork. Choices range from “just enough to get by” (1) to “as much effort as possible all the time” (5).

Academic-oriented peer group. High school students were asked about their peers’ post-high school plans. The proportion of a student’s peer group that will enter a four-year college after high school (rather than, for example, working full time, enrolling in community college, or entering the military) indicates the strength of the respondent’s peer group’s academic orientation.

Prior achievement. Middle school students’ grade 2 California Achievement Test (“CAT”) Total Language Battery scores and high school students’ grade 6 CAT Total Language Battery scores are used in the regression analyses as a measure of their prior achievement. To control for their elementary schools’ effects on their CAT scores, I centered students’ scores on each middle student’s grade 2 or high school student’s grade 6 school mean on the CAT Total Language Battery. The actual variable used in the analyses is the respondent’s


score transformed into a deviation from his or her grade 2 or grade 6 elementary school's CAT mean.

Abstract attitudes toward education. Abstract attitudes are based on the core beliefs of the American Dream: opportunity through education exists for everyone, education is the solution to most individual and social problems, and one's educational credentials are evaluated by the larger society according to merit. Abstract attitudes are measured by a series of Likert scaled belief statements scored from (1) "strongly disagree" to (5) "strongly agree." The higher the score, the more positive the student's abstract attitudes.

Concrete attitudes toward education. Concrete attitudes are grounded in people's material realities, particularly the ways in which the forces of race, ethnicity, and class shape their experiences in the opportunity structure. Adolescents' concrete attitudes are expressions of their lived cultures—cultures produced in ongoing interactions with other societal institutions in arenas where meanings and conflicts related to class, race, and gender are lived out. Concrete attitudes are influenced by family and community members' actual experiences with education and opportunity. Abstract attitudes cannot predict achievement because they do not vary across groups; concrete attitudes, however, predict academic outcomes. Thus, they are useful windows into adolescents' perceptions of their own potential location in the stratification hierarchy, and they suggest how the perceptions influence respondents' educational outcomes. Like abstract attitudes, concrete attitudes are measured by a series of Likert scaled belief statements scored from (1) "strongly disagree" to (5) "strongly agree." The higher the score, the more positive are the student's concrete attitudes.

Proportion of elementary education in a segregated black school. This variable measures students' exposure to school-level (first-generation) segregation over time. Using information on students' educational histories in CMS, each school that a student attended was coded for its racial composition in the year(s) the student attended it. I developed an indicator of exposure to first-generation segregation by counting the total years (Kindergarten through grade 6) a student spent in a racially isolated black elementary school in CMS, then

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108. A Likert scale offers respondents choices on a continuum that typically has five to seven options. For example, this study employs a five-option scale ranging from (1) "strongly disagree" to (5) "strongly agree."

calculated that sum as a proportion of total years spent by that student in CMS elementary schools. In creating this construct, I followed the conventions used by the school district: a school was considered to be racially-isolated black if its minority enrollment exceeded by more than fifteen percent the systemwide black elementary school enrollment in a given year.

*Percent minority concentration in middle school.* This variable measures the minority concentration in a middle school’s student population. In the middle school EOG regression analyses, I use percent minority concentration as an indicator of first-generation segregation.

*Magnet.* This variable indicates whether the student’s middle school is a magnet school (1 = yes; 0 = no). CMS magnet schools receive more resources than nonmagnet schools and are widely thought to “cream” academically able students and their (active) parents from nonmagnet programs.10

*Percent gifted.* This measure represents the percentage of all students in the respondent’s high school who are designated as gifted or talented. CMS provides additional teacher resources to schools according to the size of their gifted populations. The percentage designated as gifted in the student population also may reflect the academic press of the high school itself.

**E. Analyses**

The analyses of the survey data proceeded in several steps. First, because students attend different schools, I explored the possible relationship between students’ outcomes and the characteristics of schools they attended. I used multilevel modeling to estimate individual students’ outcomes as a function of school-level factors and of characteristics of students themselves.11 To model the between-school and within-school components of the explained variance of the response variables, I used STATA to perform multilevel regressions with random intercepts, on all dependent variables.12 I performed these regressions separately for the middle school and high school samples. Further, I examined racial compositions of English, Social Studies, Math, and Science classes by track in CMS middle and high

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11. See generally KREFT & DE LEEUW, supra note 96 (explaining multilevel modeling).
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This procedure permitted me to evaluate if resegregation by track within schools was taking place.

F. Post-Unitary Student Demographics by Schools

The CMS district provided enrollment data by students' race and free/reduced lunch status for each school. I examined fall 2002 student demographics by school and compared them to those of the 2001 school year. This comparison enabled me to determine if, after the first semester of post-unitary status, the racial balance of schools has changed. Together the survey data and the longitudinal enrollment data by race enable me to examine the academic consequences of desegregation and segregation for CMS students.

III. FINDINGS

A. Effects of First-Generation Segregation

Although first-generation segregation in CMS was never eliminated entirely, during the early 1980s, the district came close to fulfilling the court order to eliminate the dual system. At that time, only a handful of schools were racially identifiable as minority or white. By the late 1980s, with a mere 1% increase (from 38% to 39%) in the proportion of black CMS students, the number of racially identifiable schools began to grow. In the 1998-1999 school year, with only an additional 2% increase during the previous ten years in the proportion of CMS students who were black (from 39% to 41%), about one-fourth of schools were racially identifiable black or white at the building level. By 1999, CMS was rapidly resegregating at the school level even though the district's demographics were relatively stable. The Charlotte-Mecklenburg area was still a

113. CMS, MONTHLY REPORTS, supra notes 21 and 26. A dual system refers to a school district that is segregated by race. Because there is typically a set of schools for whites and another one for children of color, the school system is considered a dual one. When all vestiges of the dual system have been eliminated to the extent practicable, the school system is considered unitary. See supra note 4 and accompanying text (defining unitary status).

majority-white community, and Mecklenburg County, as a whole, was more residentially integrated than it was thirty years before.\footnote{115. Expert Report of Dennis Lord at 13, Capacchione (No. 97-CV-482-P, 65-CV-1974-P).}

In the early 1980s, fewer than 5\% of black CMS students attended schools whose black enrollment exceeded court-mandated ceilings; in the mid- and late-1990s, the corresponding figure was approximately 27\%.\footnote{116. Expert Report of Stephen Samuel Smith at 12, Capacchione (No. 97-CV-482-P, 65-CV-1974-P).} Among grade 12 students who participated in this study in 1997, 37\% of blacks and 15\% of whites had some experience with segregated black elementary education during their career; among middle school students, 56.4\% of blacks and 21.2\% of whites experienced some segregated black elementary education.

The multilevel regression analyses identify the school-, family-, and individual-level factors that contribute to academic achievement. Table 1 presents the results of these analyses for middle school (EOG) and high school (EOC) standardized test scores. Reading left to right, the first column identifies the individual, family, and school variables in the achievement models I investigated. The next two columns present the regression coefficients and their standard errors for the analysis of the middle school data, and the final two columns present the regression coefficients and their standard errors for the analysis of the high school data.
### Table 1. Coefficients of Multilevel Regression Models of School Achievement for CMS Middle School Students (EOG Reading); and for CMS High School Students (EOC Factor), 1996–1997.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Middle School EOG Reading</th>
<th>High School EOC Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>S.E.</td>
</tr>
<tr>
<td>Race (Black)</td>
<td>-2.347***</td>
<td>0.329</td>
</tr>
<tr>
<td>Gender (Female)</td>
<td>0.778**</td>
<td>0.276</td>
</tr>
<tr>
<td>Family Background</td>
<td>0.722***</td>
<td>0.150</td>
</tr>
<tr>
<td>Cultural Capital (Yes)</td>
<td>0.553*</td>
<td>0.285</td>
</tr>
<tr>
<td>Effort</td>
<td>0.716***</td>
<td>0.152</td>
</tr>
<tr>
<td>Prior Achievement</td>
<td>0.104***</td>
<td>0.003</td>
</tr>
<tr>
<td>Magnet (Yes)</td>
<td>-0.520</td>
<td>0.632</td>
</tr>
<tr>
<td>Concrete Educational Attitudes</td>
<td>0.937***</td>
<td>0.134</td>
</tr>
<tr>
<td>Abstract Educational Attitudes</td>
<td>0.105</td>
<td>0.138</td>
</tr>
<tr>
<td>% Segregated Elementary Education</td>
<td>-0.018**</td>
<td>0.005</td>
</tr>
<tr>
<td>% Middle School Black Concentration</td>
<td>-0.054**</td>
<td>0.019</td>
</tr>
<tr>
<td>Academic-oriented Peer Group</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>College Track</td>
<td>2.638***</td>
<td>0.279</td>
</tr>
<tr>
<td>% Gifted</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>q (Rho)</td>
<td>0.046</td>
<td>0.003</td>
</tr>
<tr>
<td>Constant</td>
<td>157.652</td>
<td>167.877</td>
</tr>
<tr>
<td>N of Observations</td>
<td>1748</td>
<td>1313</td>
</tr>
<tr>
<td>N of Groups (schools)</td>
<td>24</td>
<td>11</td>
</tr>
</tbody>
</table>

* p < .05  
** p < .01  
*** p < .001  
-- variable not in model

The middle school results indicate that being female, socioeconomic status, cultural capital, prior achievement, concrete attitudes, effort, and college-bound track placement have a statistically significant positive effect on EOG reading scores, while being black has a statistically significant negative effect on achievement. Neither attending a magnet school nor abstract attitudes influence test scores. The high school results indicate that effort, family background, and cultural capital no longer significantly affect test scores but prior achievement, concrete attitudes, college-bound track placement, and academically oriented peers exert statistically significant positive influences on scores. Being female and being black have statistically significant negative effects on achievement among high school seniors.  

117. Female high school students tend to earn higher grades and attain more education than males, but male students continue to earn higher scores on standardized tests like the EOC and SAT. Roslyn Arlin Mickelson, *Why Does Jane Read and Write So Well?: The Anomaly of Women's Achievement*, 62 Soc. Educ. 47, 50 (1989).
school, the percentage of gifted students in the respondents' school, and abstract attitudes do not influence test scores.

The regression results indicate that attending a segregated black elementary school has direct negative effects on achievement for both middle school and high school students. Even after holding constant (controlling for) numerous individual and family background factors, the multilevel regression analyses indicate that the more time students—both blacks and whites—spend in segregated black elementary schools, the lower are their grade 8 EOG reading scores and grade 12 EOC scores. Middle school racial composition also has a significant effect on reading achievement: the larger the percentage of black students in a middle school, the lower are all its students' EOG reading scores.

To be sure, the direct effects of elementary and middle school segregation on achievement are relatively small in magnitude. But the size of the coefficient for elementary school segregation is small because it represents the negative effect of segregation on achievement for every additional one percent of elementary education spent in a segregated school. These negative effects cumulate over time.

**B. Effects of Desegregated Education**

The results of the regression analysis also indicate that the more time both black and white students spend in desegregated elementary schools, the higher their standardized test scores in middle and high school, and the higher their track placements in secondary school. Because track placement contributes substantially to achievement over and above students' family background, effort, and other individual characteristics, the fact that desegregated elementary school experiences predict higher secondary school track placement is an important positive outcome of desegregation over and above its direct effects on achievement itself.

Several reasons likely explain why desegregated education leads to higher achievement. One reason is that desegregated schools have better material and human resources. Across the nation segregated black schools and classrooms offer fewer material and human resources\(^{118}\) than do desegregated environments.\(^{119}\)

\(^{118}\) Human resources refer to the proportion of a school’s teachers, administrators, and specialists who are experienced, fully licensed, teaching in their area of expertise, and who have advanced degrees in subject areas. Material resources refer to the age and
Data from CMS certainly support this assertion. In CMS, tracked classrooms that are racially identifiable black and segregated black schools suffer from similar deficiencies in teacher resources. For example, the higher the percentage of black students in a school, the lower the percentage of the school’s fully credentialed teachers are experienced and possess master’s degrees.\textsuperscript{2} In 1997, when the surveys were conducted, the correlation between percentage black in the student population and teacher license was $-0.392$ in the middle schools and $-0.720$ in the high school—i.e., the more black students, the fewer licensed teachers in the schools. These patterns have changed little in subsequent years.\textsuperscript{121}

CMS secondary principals who I interviewed in 1998 and 1999 confirmed that while lower track students could have a highly qualified teacher, top-track students always do.\textsuperscript{122} Qualified, certified teachers are perhaps the most important resource available to children.\textsuperscript{123} In CMS, then, access to the single most important element of opportunities to learn—an experienced, credentialed teacher—is related strongly to the composition of the secondary school a student attends and to the track level of the classrooms in which the adolescent learns. In both cases, the fewer the number of black students, the better qualified and more experienced the teachers are likely to be.

Starkly different levels of material resources (up-to-date media centers, ample access to current technology, and newer, safer buildings) also are related to the school’s racial composition: fewer
resources are associated with higher percentages of black students.\textsuperscript{124} In 1997, segregated black high schools in CMS also offered fewer Advanced Placement courses and racially identifiable black elementary schools provided proportionately fewer services for gifted and talented students than did racially balanced schools.\textsuperscript{125}

In addition to differences in resources, there is another likely explanation for the relationship between desegregation and positive academic outcomes. A growing body of evidence indicates that diverse learning environments maximize opportunities to learn for all students.\textsuperscript{126} The work of cognitive psychologists, such as Professor Patricia Gurin, clarifies the mechanism by which desegregation enhances learning.\textsuperscript{127} Gurin’s experimental research demonstrates that students in diverse environments learn more than control group members, who work in racially homogeneous settings. According to Gurin, diversity inhibits “automaticity,” which is the tendency to travel down the same thinking paths developed in the past.\textsuperscript{128} In diverse learning environments thinking is pushed to broader and deeper levels associated with critical thinking.\textsuperscript{129}

C. Effects of Second-Generation Segregation

Curricular differentiation (ability grouping and identification for gifted or special education in elementary school and tracking in


\textsuperscript{127} Expert Report of Patricia Gurin, Gutter (No. 97-75928).

\textsuperscript{128} \textit{Id.} at 1–3; see also Virginia Gurin et al., \textit{Diversity in Higher Education: Theory and Impact on Educational Outcomes}, 72 HARV. EDUC. REV. 330, 330–66 (2002) (demonstrating that diversity introduces the relational discontinuities critical to identity construction and its subsequent role in fostering cognitive growth).

secondary school) begins early in students’ educational careers. Because I concentrate on secondary students here, I will discuss only briefly the roots of curricular differentiation in elementary school.

During early elementary school, disproportionate numbers of black students, especially males, are placed in special education, and disproportionate numbers of whites are identified for gifted education. To understand this pattern in the early sorting of students, we must understand its social and political context.

Mindy Kornhaber’s research on the identification process for gifted and talented, e.g., AG, education in CMS reveals how AG certification is an early source of racially correlated tracking in CMS. Kornhaber reported that throughout the early 1990s, Blacks in CMS were markedly under referred for AG assessments; consequently, programs for the gifted became and remain largely the domain of white students. According to one central office educator, gifted education has been used widely as a white track, and the CMS gifted program has been an “elitist, isolated, white-only program” that only recently has begun to change. Kornhaber described how formal AG identification is a high-stakes process, which some parents pursue and cultivate. She quoted one high-level staff member who observed, “Parents want elementary school identification as gifted because it allows entrance into middle school gifted classes.” They know that AG identification in elementary school launches the children onto a trajectory of high-track secondary school courses.

Using a nationally representative data set, Professor Tamela Eitle examined the relationship between special education placement rates among black students and the desegregation status of the school district. She found that in districts under court-ordered desegregation rulings, the proportions of blacks in special education are significantly higher than in otherwise comparable districts. Eitle suggests that higher rates of second-generation segregation through

132. Kornhaber, supra note 78, at 105.
133. Id. Central office educators, in contrast to building level educators like schoolteachers and principals, work at a school system’s administrative headquarters. For example, the superintendent, associate superintendents, and heads of departments of safety, transportation, human resources, and information systems are all central office educators.
134. Id. at 119.
135. Eitle, supra note 79, at 5.
special education placements of black students during elementary school may be a response to desegregation orders.

The patterns of racially correlated sorting of elementary students into special education and gifted programs as described by Eitle and by Kornhaber suggest some of the informal processes at work in districts under court mandates to desegregate. In Charlotte, these processes worked to recreate white privilege in the school system even as it desegregated. Elsewhere I have maintained that, insofar as racially-identifiable grouping and tracking can be considered second-generation segregation, one can argue quite plausibly that the establishment and maintenance of second-generation segregation was a political precondition of addressing first-generation segregation in Charlotte.

In my analysis of the racial composition of all Math, Science, English, and Social Studies course placements for the entire 1997 secondary school population, I demonstrated the extent to which CMS middle and high school academic courses are resegregated by track. In virtually all CMS secondary schools, core academic classes

137. This pattern of resegregation by track within CMS is not recent. In 1973, two years after the Swann decision, the administration reported to the CMS school board on the status of desegregation efforts. The report noted, among other problems arising from efforts to implement the court’s order, that “‘ability grouping’ too frequently is de-facto resegregation.” CHARLOTTE-MECKLENBURG SCH., PUPIL ASSIGNMENT PLAN STUDY 14 (revised Sept. 27, 1973). William Poe, the chair of the school board in 1975, explained to me why the district began “ability grouping” when it began to desegregate. He drew an example from the desegregation of West Charlotte, at that time the flagship high school of the black community. Poe stated that when students from the politically powerful “old money” white Myers Park neighborhood desegregated West Charlotte, an optional Open Program (a rigorous college prep track) was instituted to encourage whites to participate in desegregation. Telephone Interview with William Poe, Former Chairman, Charlotte-Mecklenburg School Board, in Charlotte, N.C. (Dec. 22, 1998). As Poe recalled, “[The Open Program] was created as an impetus for whites to enroll their kids in the school. The school board viewed it as a sop to white people.” Id. He explained that the creation of this track necessitated the hiring of new Chemistry, Calculus, and foreign language teachers at West Charlotte. Telephone Interview with William Poe, Former Chairman, Charlotte-Mecklenburg School Board, in Charlotte, N.C. (Dec. 22, 1998). According to Poe, “Whites needed to be assured that their children would get the same quality of education they had received at Myers Park High, not just the culinary and cosmetology classes offered to blacks at West Charlotte.” Id.

139. For my analyses of within-school segregation of secondary school academic courses, I draw upon a ± 15% bandwidth standard and consider a classroom to be racially isolated black if the proportion of black students in the classroom is greater than 15% above the proportion of blacks in the school; a classroom is racially isolated white if the proportion of black students in the classroom is 15% below the proportion of blacks in the school; and I consider all other classrooms to be racially balanced.
are tracked. I base this claim on an analysis of a CMS document that identifies the course name, track level, student count by race, period, and teacher's name for every course offered in the system's eleven high schools and twenty-four middle schools.\footnote{140. Charlotte-Mecklenburg Sch., Class Counts (1996–1997) (on file with author).}

The pattern of resegregation by track within secondary schools is illustrated in Table 2. Here readers can see the percentage of black students in a given school and in classes by subject and track level. I determined whether a classroom is racially balanced within a school by assessing whether the class's racial composition is within $\pm 15\%$ of the school's racial composition. Cochrane Middle School, for example, is 78% black but its AG Math and English classes enroll no black students. Though its Exceptional Children's ("EC") Math class is 84.5% black and is higher than the school's percentage of black students, it is still considered racially balanced because 84.5% is within the $\pm 15\%$ range. Although South Charlotte's EC Mathematics class with 13.2% black students is racially balanced, the school's EC Language Arts is racially imbalanced because 36% exceeds the $\pm 15\%$ range.

The high schools reflect the same pattern whereby schools' top-track classes are almost always racially imbalanced white ("RIW"), special education is almost always racially imbalanced black ("RIB"), and only regular classes are racially balanced (and some are RIB). Controlling for the racial composition of every secondary school, my analysis of all 1997 middle and high school course offerings shows that a majority of classes were racially balanced in none of the core academic areas of Math, Science, Social Studies, and English.\footnote{141. See Expert Report of Roslyn Arlin Mickelson at Exhibits 1A–1H, Capacchione, (No. 97-CV-482-P, 65-CV-1974-P); Mickelson, supra note 22, at 231–36; Mickelson, supra note 83, at 16–17 & tbl.4.}

Given that track placement is such a powerful influence on academic outcomes, the existence of racially correlated tracks in a desegregating school system seriously reduces the potential of school-level desegregation policies for improving black students' achievement.
Table 2. Racial Composition of Selected CMS Secondary Academic Courses by Track and School, 1996–1997.

<table>
<thead>
<tr>
<th></th>
<th>Middle School</th>
<th>Academically Gifted</th>
<th>Regular</th>
<th>Exceptional Children</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8th Grade Language Arts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Charlotte (RIW)</td>
<td>11.0</td>
<td>4.0</td>
<td>16.0</td>
<td>36.0</td>
</tr>
<tr>
<td>Carmel (D)</td>
<td>35.3</td>
<td>2.0</td>
<td>40.6</td>
<td>72.7</td>
</tr>
<tr>
<td>Cochrane (RIB)</td>
<td>78.0</td>
<td>0.0</td>
<td>84.8</td>
<td>84.5</td>
</tr>
<tr>
<td><strong>8th Grade Mathematics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Charlotte (RIW)</td>
<td>11.0</td>
<td>3.0</td>
<td>20.6</td>
<td>13.2</td>
</tr>
<tr>
<td>Carmel (D)</td>
<td>35.3</td>
<td>1.5</td>
<td>23.5</td>
<td>69.0</td>
</tr>
<tr>
<td>Cochrane (RIB)</td>
<td>78.0</td>
<td>0.0</td>
<td>78.1</td>
<td>86.3</td>
</tr>
<tr>
<td><strong>12th Grade English</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Mecklenburg (RIW)</td>
<td>21.6</td>
<td>5.1</td>
<td>35.2</td>
<td>33.3</td>
</tr>
<tr>
<td>Myers Park (D)</td>
<td>35.1</td>
<td>2.5</td>
<td>66.5</td>
<td>80.0</td>
</tr>
<tr>
<td>Garinger (RIB)</td>
<td>63.2</td>
<td>57.1</td>
<td>68.8</td>
<td>79.1</td>
</tr>
<tr>
<td><strong>Biology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Mecklenburg (RIW)</td>
<td>21.6</td>
<td>0.0</td>
<td>36.2</td>
<td>37.4</td>
</tr>
<tr>
<td>Myers Park (D)</td>
<td>35.1</td>
<td>1.9</td>
<td>76.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Garinger (RIB)</td>
<td>63.2</td>
<td>0.0</td>
<td>74.8</td>
<td>80.0</td>
</tr>
</tbody>
</table>

RIW = racially-isolated white  D = desegregated  RIB = racially-isolated black

One might argue that track assignments merely reflect objective decisions to allocate opportunities to learn in keeping with students' merit, and that any correlations with students' race are coincidental or due to racial differences in social class or in ability. Students' track assignments, however, are related to their race. I conducted contingency table analyses of track location by student race in middle and high schools, controlling for prior achievement as measured by CAT scores during students' elementary school years. I divided students into deciles based on their CAT scores and then compared track placements for blacks and whites within each decile range. The pattern among the most academically able students reflects the overall tendencies found throughout the other decile ranges—irrespective of their prior achievement, blacks are more likely than their comparably able white peers to be in lower tracks.

If race is not a factor in placements, within each decile range the proportions of blacks and whites in each track should be similar. Figure 1 presents the percentage of black grade 8 students by Language Arts track controlling for their prior achievement. Figure 2 presents the same for white grade 8 students. Moving left to right, when we compare the increase in percentage of students by decile in the top track, we find distinctly different placement patterns for blacks and whites. Whites are more likely to be in the top tracks than
blacks with similar CAT scores. For example, among grade 8
students in the top decile (ninetieth to the ninety-ninth percentile),
27.6% of whites (N = 92 of 152) and 81.3% of blacks (N = 13 of 16)
were enrolled in regular English classes, while 72.3% of whites (N =
110 of 152) but only 18.7% of blacks (N = 3 of 16) were assigned to
the top English track (AG or PreIB).

Figure 1. Grade 2 Language Battery and English Track Grade 8:
Black Students.

Figure 2. Grade 2 Language Battery and English Track Grade 8:
White Students.
Figure 3 presents the percentage of black grade 12 students by English track controlling for their prior achievement. Figure 4 presents the same for white grade 12 students. Again, moving left to right, when we compare the increase in percentage of students by decile in the top track we find distinctly different placement patterns for blacks and whites: whites are more likely than blacks to be in the top tracks although the differences are not as stark among seniors as they are for grade 8 students. For example, among grade 12 students whose grade 6 CAT scores were in the top decile (ninetieth to the ninety-ninth percentile), 20% of blacks (N = 2 of 10) but 53% of whites (N = 44 of 85) were enrolled in the AP/IB English track. Recall, these comparisons are among comparably able students.

If ability is the primary criterion for placements, within each track there should be a narrow range of ability and lower tracks should have primarily students with low CAT scores. A comparison of CAT scores among students within a given track indicates an enormous range of “abilities.” In the middle schools’ (the top) AG/PreIB track, 14.8% of whites and 5.8% of blacks scored in the first decile as grade 2 students. In fact, a greater proportion of whites (29.6%) with scores in the second decile are enrolled in AG/PreIB than that of blacks (18.8%) who scored in the top decile.\textsuperscript{142} Grade 12 students in the top high school track include those with CAT scores from the fourth through the tenth decile; similarly, regular track students scored in the first through the tenth deciles. My analyses thus indicate that ability alone cannot explain the pattern of racially correlated access to top (and bottom) tracks.

Are racial discrepancies in track placement related to race or to its correlates, such as family background or peer groups? To find the answer, I conducted multilevel ordered multinomial logistic regression analyses of track placement for the middle and high school samples. Even when I held constant prior achievement, attendance in segregated black elementary schools, gender, attitudes, effort, peer group (among seniors), and family background, black students still were more likely to be found in lower tracks than were comparably able whites. The findings from the logistic regression analyses of track placement indicate that placements are affected by students’ ascribed characteristics of race.

\textsuperscript{142} These findings and all others discussed but not shown here are available by request from the author.
Figure 3. Grade 6 Language Battery and English Track Grade 12: Black Students.

Figure 4. Grade 6 Language Battery and English Track Grade 12: White Students.
A recent incident illustrates this point. In early fall 2001, several thousand CMS middle school students, a majority of whom were black, were found to be tracked into lower level mathematics classes even though all had passed or excelled on their previous year's EOG math tests. Several weeks into the fall semester, in response to this discovery, the superintendent ordered the misplaced students to be moved into higher level, reconstituted math classes. The superintendent said that a number of decisions led to the misplacement of so many blacks into lower level math courses, including racial stereotyping: "I think people need to face that there are issues of bias and prejudice that play into this."\(^4\) Students end up in different tracks through a highly complex process that unfolds over years. While parents and students also participate to varying degrees in the process, the major responsibility still lies with educational decision-makers, such as teachers, counselors, and school administrators.\(^44\)

D. Family Choice, Neighborhood Schools, and Resegregation in Post-Unitary CMS

Beginning in fall 2002, CMS began a student assignment plan that is likely to resegregate a majority of the schools within the next few years. Resegregation will occur because Charlotte's neighborhoods are still racially segregated, although less so than in 1971.\(^45\) Calculations, based on the enrollments by school after the first month of the fall semester, indicate that thirty-two of the district's eighty-five elementary schools are racially identifiable black ("RIB") (compared to twenty-five in 2001–2002), twenty-one are racially identifiable white ("RIW") (compared with twelve in 2001–2002), and the number of racially balanced elementary schools declined from forty-nine in 2001–2002 to thirty-two.\(^46\) As Table 3

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146. Following CMS's long-standing practice, I consider an elementary school whose black proportion of the population is more than 15% above the school district's black
indicates, these changes represent a 19.4% decline in racially balanced elementary schools, an 8.6% increase in racially identifiable black schools, and a 10.7% increase in racially identifiable white schools.

Table 3. CMS Post-Unitary Status Racial and Social Class Demographics by School Level After First Month of Fall Semester 2002.

<table>
<thead>
<tr>
<th></th>
<th>Elementary</th>
<th>Middle</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2001-02</td>
<td>2002-03</td>
<td>2001-02</td>
</tr>
<tr>
<td>Number of Schools (N)</td>
<td>86</td>
<td>85**</td>
<td>26</td>
</tr>
<tr>
<td>% Racially Balanced* (N)</td>
<td>57 (49)</td>
<td>37.6 (32)</td>
<td>38.4 (10)</td>
</tr>
<tr>
<td>% Change</td>
<td>-19.4</td>
<td>-8.8</td>
<td>-14.7</td>
</tr>
<tr>
<td>% Racially Identifiable Black (N)</td>
<td>29 (25)</td>
<td>37.6 (32)</td>
<td>38.4 (10)</td>
</tr>
<tr>
<td>% Change 2002-03</td>
<td>+8.6</td>
<td>-1.4</td>
<td>+10.7</td>
</tr>
<tr>
<td>% Racially Identifiable White (N)</td>
<td>14 (12)</td>
<td>24.7 (21)</td>
<td>23.1 (6)</td>
</tr>
<tr>
<td>% Change 2002-03</td>
<td>+10.7</td>
<td>+10.2</td>
<td>+4</td>
</tr>
</tbody>
</table>

Source: Charlotte-Mecklenburg Schools Class Counts, May 2002; Charlotte-Mecklenburg Schools, Monthly Membership at End of Month One, September 17, 2002.

* Based on ± 15% CMS black and white populations for each year.
** Three old schools closed for repair or replacement and two new ones opened.

Among middle schools there are still ten RIB schools, nine RIW schools (up from six in 2001), and eight racially balanced schools (down from ten in 2001–02) that opened in the fall. These changes mean 8.8% fewer middle schools are racially balanced, 1.4% fewer are racially identifiable black (because the number of RIB schools remained stable, while the number of middle schools increased from sixteen to seventeen), and the number of RIW middle schools increased by 10.2%. Among high schools, five of the seventeen are RIB (up from three in 2001–2002), six are RIW (up from five in 2001–2002), and six are racially balanced (down from eight in 2001–2002). These changes mean 14.7% decline in racially balanced high schools,
a 10.7% increase in RIB high schools, and a 4% increase in the number of RIW high schools.

While this jump in resegregation in schools is striking, the increase in the proportion of black students learning in segregated schools accelerates a trend that began in the mid-1990s when a voluntary desegregation plan built around magnet schools replaced mandatory busing. From 1991 through 1994, roughly 19% of black students attended RIB schools. In 1996, the count rose to 23% and by 2000, 29% of black students attended RIB schools. In 2001, the number jumped to 37%. But in the 2002-2003 school year, fully 48% (an increase of 11% in one year) of CMS black students attended RIB schools. The proportion of blacks attending racially balanced schools is likely to drop rapidly in the years to come as central city black students “grandfathered” into suburban schools graduate from them. Suburban schools are likely to be less racially balanced next year. Thus, the percent of CMS black students in RIB schools and white students in RIW schools is likely to increase sharply in the near future.

The initial implementation of the new Family Choice Plan has led to significant imbalances in the utilization of seating capacities of schools. Under- and overutilization patterns are related to the schools’ racial composition. As Table 4 indicates, all but one of the thirty-nine underutilized schools are racially imbalanced minority schools (here I calculated imbalance summing black and Hispanic students into one “minority” category). Of the thirty-three overutilized schools, six (three elementary and three high schools) are racially identifiable minority (“RIM”), thirteen are racially balanced (“RB”), and fourteen are racially identifiable white (“RIW”).

With two exceptions, underutilized schools also underperform on North Carolina’s standardized tests (EOCs and EOGs). Chronically

147. CMS, MONTHLY REPORTS, supra note 23, at Sept. 19, 2002 (providing the 20th day count).
148. CMS, FREQUENTLY ASKED QUESTIONS, supra note 94, at 81.
149. Schools with underutilized seating capacity have fewer students than their physical plants were designed to serve. Overutilized schools have more students than their physical plants were designed to serve, necessitating the use of nonclassroom space, such as art or music rooms for classrooms or mobile classroom buildings. The conservative standards I use in calculating underutilization are intended to compensate for the intentionally lower classroom size in Equity Plus schools. To be consistent with the historical perspective of this Article and prior analyses of segregation and desegregation discussed in this Article, the analyses reported in Tables 1 through 3 used only the black and white students in the sample. For the new analysis of capacity, racial composition, and school quality reported in Table 4, I use the category of minority students (Blacks, Hispanics, and American Indians).
underperforming schools are identified as Equity Plus schools. CMS designates a school as an Equity Plus school if it has high concentrations of low-performing and poor students, and proportionately fewer qualified teachers (based on their licensure and experience). Equity Plus status means the school receives additional resources, including smaller classes and teacher bonuses.\textsuperscript{150} Table 4 indicates that at every level, underutilized schools that are also Equity Plus schools are racially isolated minority schools. Conversely, none of the overutilized schools, irrespective of their racial composition, is an Equity Plus school.

**Table 4. Utilization of Seat Capacity by School Level, Racial Composition of Student Population, and Equity Plus Status, CMS 2002–2003.**

<table>
<thead>
<tr>
<th>RIM</th>
<th>RB</th>
<th>RIW</th>
<th>RIM</th>
<th>RB</th>
<th>RIW</th>
<th>RIM</th>
<th>RB</th>
<th>RIW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Underutilization of Capacity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level</td>
<td>Elementary</td>
<td>Middle School</td>
<td>High School</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard</td>
<td>&lt;80%</td>
<td>&lt;80%</td>
<td>&lt;90%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>(52%–79%)</td>
<td>(57%–79%)</td>
<td>(76%–89%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>25</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>N Equity Plus</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td><strong>Overutilization of Capacity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level</td>
<td>Elementary</td>
<td>Middle School</td>
<td>High School</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard</td>
<td>&gt;100%</td>
<td>&gt;100%</td>
<td>&gt;100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>(102%–139%)</td>
<td>(102%–111%)</td>
<td>(116%–131%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>3</td>
<td>7</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>N Equity Plus</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>


There are several reasons for the relationship between underutilized schools and Equity Plus status. One is that class size is smaller by design in Equity Plus schools. Another reason is that parents tended not to choose low performing neighborhood schools.\textsuperscript{151} The clear relationship between underutilization of seat capacity, Equity Plus status (a measure of low school quality), and racial composition of these schools requires further study. Nevertheless, the findings from CMS’s return to a neighborhood schools-based assignment plan suggest how race, socioeconomic status, school quality, and choice plans intersect in ways that disadvantage poor children of color. The nexus of race, poverty, and low performance evident in underutilized Equity Plus schools further illustrates how and why segregation contributes to the race gap in academic outcomes.

\textsuperscript{150} CMS, BOARD RESOLUTION 2002–2003, supra note 63.

\textsuperscript{151} Helms, *supra* note 65.
CONCLUSION

The issues addressed in this Article lie at the intersection of several enduring questions in law, public policy, social science research, and educational practice: the relationship of desegregation and segregation to racial equality in educational processes and outcomes. In many ways, Charlotte stands as a strategic case for the study of these issues. The findings instruct us about the broader theoretical and methodological questions with which all desegregation research must grapple: (1) how to capture students' varied experiences with different forms and lengths of exposure to segregation and desegregation; and (2) the need to examine how extensively desegregation plans have been implemented before assessing their value as an equity-minded school reform. While the CMS findings are not broadly generalizable, they nonetheless suggest why so many desegregation programs seem to offer minority students such limited redress for historical inequalities in educational opportunities.

The unique data sets I collected in 1997 permitted me to examine the effects of exposure to desegregation and first- and second-generation segregation on achievement over the course of a student's thirteen-year career in CMS. Because both black and white students have received varying amounts of exposure to segregated and desegregated learning environments over time, I was able to compare the effects of school and classroom racial composition on North Carolina EOG and EOC test scores while controlling for individual-, family-, and school-level covariates of achievement. I reached three main conclusions. First, students—both black and white—who have experienced desegregated schools and classrooms have benefited academically in significant and substantive ways. Second, racially identifiable black schools and classrooms exert significant negative effects on both black and white students' academic outcomes. Third, even in desegregated middle and high schools, tracking helps to maintain white privilege by placing whites disproportionately into higher tracks than their comparably able black peers. This practice increases whites' access to better teachers and other resources, while it diminishes access to superior opportunities to learn for students in racially identifiable black tracks.

Although CMS achieved renown for its efforts to implement court-ordered desegregation from about 1971 to 2002, many of the district's practices and policies subverted Swann's mandate to provide all students with equitable opportunities to learn. Most notable are...
ACADEMICS AND DESEGREGATION

the growing number of segregated schools and the practice of tracking. In this Article I have described how, decades after court-mandated desegregation, many schools remained or became segregated. Since the mid-1980s, blacks and whites began to spend more of their elementary and secondary educations in segregated schools. I also demonstrated how the post-unitary status Family Choice Plan has accelerated this trend. Although, until recently, a majority of black and white CMS students attended desegregated schools for much of their education, from the mid-1970s to the present, secondary students' academic courses have been organized in ways that disproportionately relegate blacks into the lower tracks and disproportionately elevate whites into the higher, college-preparatory tracks. In these ways, resegregation by classroom within schools undermined the potential benefits of school-level desegregation for those who experienced it.

Despite significant narrowing in the last quarter-century, the black-white gap in achievement that existed in 1954 continues today. The findings from Charlotte suggest some important reasons for this persistence. The lessons from this strategic case study offer hope and promise for reducing racial inequities in educational outcomes. I believe that previous studies' ambiguous conclusions regarding the academic benefits of desegregated schooling occurred because scholars typically did not examine whether second-generation segregation undermined the benefits of first-generation desegregation, as I have done in this study. Moreover, previous studies did not measure desegregation longitudinally as I have done.

The return to neighborhood schools in fall 2002 means resegregation in CMS is likely to deepen each year. This situation does not bode well for black children's prospects for equal educational opportunities and outcomes. On the basis of the social science evidence on this topic, we can anticipate that racial antagonisms and racial gaps in achievement and attainment will grow in Charlotte.152

Future analyses will be necessary to examine the extent and effects of second-generation segregation under the new neighborhood-based assignment plan. Ironically, if extensive tracking is a response to first-generation desegregation efforts, we may find

152. See generally Braddock & McPartland, supra note 71 (reviewing evidence that a desegregated learning environment improves racial attitudes and thereby helps to break the intergenerational perpetuation of racial hostility); Wells & Crain, supra note 11 (same). Extrapolating from their arguments, I conclude that absent desegregation in CMS, racial misunderstandings, stereotypes, and hostilities will increase.
that under the new neighborhood-based assignment plan the political and social forces underlying tracking will be weaker. Under such circumstances, we may find in-school resegregation by track is reduced, a silver lining in an otherwise cloudy future of academic consequences of resegregation.

The vaunted CMS desegregation plan was once considered to be one of the most successful in the nation. The prospect of the school system's return after thirty-one years under court-ordered desegregation to segregated neighborhood schools with their likely educational and social consequences reflects how far this nation still is from fulfilling Brown's and Swann's mandates to provide equal educational opportunities for all young people.