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Equal Educational Opportunity by the Numbers: The Warren Court's Empirical Legacy

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Equal Educational Opportunity by the Numbers: The Warren Court's Empirical Legacy

Michael Heise*

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I. Introduction

To Chief Justice Earl Warren, footnote eleven in the Brown v. Board of Education¹ opinion was little more than a mere afterthought.² Chief Justice Warren's perspective on this issue remains remarkable for many reasons, not the least of which include his role in the opinion, as well as the larger context surrounding the case. Chief Justice Warren's status as the chief architect of the Brown opinion, through which the Court directly shaped the equal educational opportunity doctrine and confronted an issue possessing profound individual and social consequences, is well documented by historians.³ By drawing upon empirical social science evidence to inform a core tenet of the Court's understanding of equal education, the Warren Court established one of its enduring – if under-appreciated – legacies: the increased empiricization of the equal educational opportunity doctrine.

Evolving understandings about American education's "Holy Grail" – equal educational opportunity – have prompted three major reform initiatives designed to restructure American public schools and better equalize opportunities among students: school desegregation, finance, and choice. All three initiatives advance our understanding of and commitment to equal educational opportunity, yet simultaneously are backwards to *Brown* by incorporating empirical social science evidence. School desegregation litigation since *Brown* has relied heavily on empirical evidence, much of it assessing possible relations between a school's racial composition and student achievement. Similarly, school finance litigation has relied on empirical evidence to establish a link between school funding and student performance. Finally, the emerging push for increased school choice, notably litigation regarding

^{1. 347} U.S. 483 (1954).

^{2.} See Brown v. Bd. of Educ., 347 U.S. 483, 494 n.11 (1954) (citing psychological studies); see generally Mark A. Chesler et al., Social Science in Court: Mobilizing Experts in the School Desegregation Cases 22 (1988).

^{3.} See generally RICHARD KLUGER, SIMPLE JUSTICE: THE HISTORY OF BROWN V. BOARD OF EDUCATION AND BLACK AMERICA'S STRUGGLE FOR EQUALITY (1975) (discussing history of Brown opinion); WHAT BROWN v. BOARD OF EDUCATION SHOULD HAVE SAID (Jack M. Balkin ed., 2001) (same).

vouchers, possesses a critical empirical dimension that focuses on possible relations between school choice and student achievement and explores the implications that choice policies pose for public schools. The palpable influence of empirical social science on interpretations of equal education links the *Brown* opinion with all three successive education reform efforts.

Because one simply cannot know with certainty how equal education would have evolved absent footnote eleven in the *Brown* opinion, I am mindful that my thesis rests on an untestable proposition. In light of this limitation, the scope of my central claim warrants careful clarification and demarcation. I do not assert that *Brown* launched the equal education doctrine into a trajectory that it otherwise would not have achieved. Such an assertion is more expansive than comfort permits. Rather, my more modest claim is that the *Brown* opinion influenced, perhaps steepened or accelerated, a tendency – increased empiricization – already present. However, given the enormity of *Brown* in particular and equal education in general, even this claim meaningfully contributes to an important Warren Court legacy.

Although Chief Justice Warren famously remarked that footnote eleven "was only a note, after all," I argue that his assessment of footnote eleven and its contribution to the larger Warren Court legacy badly misses the mark. If my central claim is correct, it then becomes important to consider the consequences of an increasingly empiricized equal educational opportunity doctrine and how those consequences shape the Warren Court legacy. I consider two of these consequences in this Article and, not surprisingly, find costs and benefits associated with each.

One consequence involves how an empirical mooring informs our understanding of what equal education means. One immediate benefit is that by resorting to social science evidence as support for the proposition that state-enforced segregation constitutionally harms black schoolchildren, the Court made subsequent school desegregation litigation easier by effectively removing the need to prove individualized harm. On the other hand, by casting equal education in empirical terms, the Court simultaneously narrowed the doctrine, diluted the influence of broader notions of justice, and risked privileging social science evidence over background constitutional values.

A second consequence is institutional and flows from courts' comparative abilities to deploy empirical social science. Here, the benefits from an empirically moored equal educational opportunity doctrine include providing courts with a framework to analyze competing interpretations of equal education. In addition, social science equips courts with tools (empirical evidence) similar to those used by policymakers in the legislative and executive

^{4.} KLUGER, supra note 3, at 706.

branches. However, institutional costs from the courts' use of social science and empirical evidence include the stresses incident to pushing courts and judges into relatively unfamiliar intellectual terrain. Use of empirical evidence also uncovers institutional and capacity limitations of the courts' ability to work with such information.

This Article proceeds in four Parts. In Part II, I develop my central claim – that the Warren Court contributed to the empiricization of the equal educational opportunity doctrine. I begin by describing the equal education doctrine and its development prior to the Warren Court and its decision in Brown. I then turn to the Brown decision itself, with a particular emphasis on footnote eleven. As evidence of my claim, the Article then considers three specific post-Brown education litigation contexts for support: post-Brown school desegregation litigation, as well as litigation in the school finance and choice areas. In Part III, I consider the two main consequences of this particular Warren Court legacy. The first is how an empirical orientation confines the equal education doctrine. The second relates to institutional stresses flowing from courts' increasing use of and reliance on empirical social science. Finally, in Part IV, I endeavor to place this Warren Court empirical legacy into a broader jurisprudential context.

II. The Empiricization of Equal Educational Opportunity

A. Equal Educational Opportunity Before Brown

Three general observations frame discussions about the equal educational opportunity doctrine prior to *Brown*. First, the list of factors influencing the equal education doctrine over time is long and not confined at all to the Warren Court.⁵ Second, the trend toward increased empiricization in the law generally, predicted long ago by Justice Holmes,⁶ began decades prior to the *Brown* decision.⁷ Consequently, rather than initiating a change, the *Brown* decision accelerated a pre-existing general trend of empiricization. Third,

See James E. Ryan & Michael Heise, The Political Economy of School Choice, 111
 YALE L.J. 2043, 2050-58 (2002) (discussing influence of suburbs on equal educational opportunity doctrine).

^{6.} See OLIVER WENDELL HOLMES, The Path of the Law, in COLLECTED LEGAL PAPERS 167, 187 (1920) (predicting influence of "the man of statistics" on law).

^{7.} See generally JOHN H. SCHLEGEL, AMERICAN LEGAL REALISM AND EMPIRICAL SOCIAL SCIENCE (1995) (discussing influence of Legal Realists); Michael Heise, The Past, Present, and Future of Empirical Legal Scholarship: Judicial Decisionmaking and the New Empiricism, 2002 U. ILL. L. REV. (forthcoming). For an example of an early case drawing upon empirical social science evidence, see Muller v. Oregon, 208 U.S. 412, 419 n.1 (1908). See also Marion E. Doro, The Brandeis Brief, 11 VAND. L. REV. 783, 792-93 (1958) (noting use of empirical social science evidence).

credit for inventing the equal educational opportunity doctrine cannot properly be assigned to the Warren Court. All three points rein in my argument in important ways. Specifically, attention to and concerns over the growing conflation of law and social science as well as equal education predate the Warren Court.

This final point – that the equal educational opportunity doctrine predates Brown – warrants discussion. Although a comprehensive historical account of the equal educational opportunity doctrine's evolution is beyond the scope of this Article, a brief discussion of some of its highlights is in order. Pre-Brown case law is one (but not the only) obvious indication of the focus on the equal education doctrine that preceded the Warren Court. Much of the important, perhaps critical, work that supplied the precedential foundation upon which Brown rests took place before the Warren Court formally began in 1953.

1. The Legal Assault on Plessy: From Separate to Equal

The formal legal assault on the separate-but-equal doctrine, infamously articulated in *Plessy v. Ferguson*, ¹⁰ took place over decades and developed into a deliberate, systematic – indeed, brilliant – litigation strategy. The initial assault on the *Plessy* doctrine focused on its "separate" prong. In *Missouri ex rel. Gaines v. Canada*, ¹¹ the State of Missouri sought to meet its constitutional obligation to provide separate law school opportunities and facilities by paying for African American Missourians to undertake their legal training at out-of-state law schools. ¹² The Court disagreed and in 1938 concluded that the "separate" prong of the separate-but-equal doctrine imposed a duty on Missouri to provide legal education services within its borders. ¹³ To be sure, the logic of the *Gaines* decision kept open the possibility that states could constitutionally maintain single-race educational institutions. ¹⁴ However, the decision had the practical effect of increasing the cost to states of that possibility. The financial impact of the *Gaines* decision was distributed unevenly

^{8.} The absence in the research literature of a comprehensive analysis of the equal education doctrine and its evolution over time is a surprising and significant void.

^{9.} For a brief yet helpful summary and synthesis, see MARK G. YUDOF ET AL., EDUCATIONAL POLICY AND THE LAW 367-68 (4th ed. 2002).

^{10. 163} U.S. 537 (1896).

^{11. 305} U.S. 337 (1938).

^{12.} See Missouri ex rel. Gaines v. Canada, 305 U.S. 337, 352 (1938) (requiring admission of black students to state university law school, absent provision of separate program).

Id. at 350

^{14.} See id. at 349, 351 (confirming option of providing separate programs that are substantially equal).

across the states. It did not affect states that had already integrated their education facilities or constructed dual facilities, at least not immediately. Others states, however, felt strongly enough about separating the races that they undertook costly programs to establish separate educational facilities.

Having persuaded the Court to construe the separate-but-equal doctrine to mean that states had, at the very least, to establish separate educational facilities, litigants then turned their attention to the *Plessy* doctrine's "equal" prong. An important articulation of the Court's understanding of what equal education meant in this context involved the University of Texas School of Law.¹⁵ The State of Texas, confronting a non-white Texan applicant and understanding the implications of the *Gaines* decision, established a law school facility for non-white Texas residents.¹⁶ Texas intended the new law school, housed at the Texas State University for Negroes (at the time, also located in Austin), to meet its obligation under the already-imploding separate-but-equal doctrine.¹⁷

Although the Court in Sweatt v. Painter¹⁸ conceded that Texas's in-state non-white law school was "separate" (thus satisfying the requirement articulated in Gaines), it nevertheless found that the law school was unconstitutional because it fell short of meeting the Plessy doctrine's "equal" prong.¹⁹ The Court's rigorous comparison of Texas's white and non-white law schools in Sweatt warrants attention. Without resorting to anything resembling formal social science, the Justices painstakingly compared the physical and non-physical attributes of the two law schools.²⁰ Delving to a level of nuance informed by the Justices' first-hand knowledge of and experience with law schools and legal education, as well as exceptionally detailed amicus briefs,²¹ the Court's level and rigor of scrutiny rendered the Plessy doctrine little more than a feeble shell, at least as it applied to higher education.²²

^{15.} See Sweatt v. Painter, 339 U.S. 629, 635 (1950) (finding that separate non-white law school was not "equal").

^{16.} More specifically, having found against the University of Texas Law School, a state trial court gave the university six months to establish a separate but equal law school within the state for its resident non-white applicants. *Id.* at 632.

^{17.} Id

^{18. 339} U.S. 629 (1950).

^{19.} Sweatt v. Painter, 339 U.S. 629, 635-36 (1950).

^{20.} Id. at 632-34.

^{21.} See Jonathan L. Entin, Sweatt v. Painter, The End of Segregation, and the Transformation of Education Law, 5 REV. LITIG. 3, 42-54, 60-63 (1986) (discussing role of amicus briefs in Sweatt decision).

^{22.} For a detailed account of the Sweatt litigation, see generally id.

If the Court staggered the *Plessy* doctrine with the *Sweatt* decision, it all but gutted the *Plessy* doctrine in *McLaurin v. Oklahoma State Regents for Higher Education*, ²³ released on the same day as *Sweatt*. ²⁴ Recognizing the need to provide in-state educational facilities for non-white residents, as well as the likely economic futility of establishing two separate in-state educational facilities, Oklahoma decided to admit whites and non-whites into the same graduate schools. ²⁵ However, within the technically integrated schools, Oklahoma implemented policies and practices designed to insulate white students from non-white students, such as McLaurin. ²⁶

Just as the Court demonstrated its detailed understanding of legal education in *Sweatt*, in *McLaurin* the Court revealed a remarkably nuanced understanding of the complexities surrounding the more abstract concepts of learning and the educational experience. The *McLaurin* opinion acknowledged that a truly broad educational experience involves much more than the bricks-and-mortar issues associated with physical facilities.²⁷ Rather, the Court noted that critical educational benefits flow from the free and unfettered exchange of ideas and interaction among students.²⁸ By insulating white and non-white students from one another in classrooms, libraries, cafeterias, and elsewhere, the Court reasoned that the state "handicapped" and "impaired" McLaurin's ability to receive an education on equal terms, as the Constitution commands.²⁹ Consequently, the Court ruled that Oklahoma's program did not comport with the separate-but-equal requirement.³⁰ In so doing, the *McLaurin* opinion foreshadowed the outcome in *Brown*.

2. Non-Judicial Pre-Brown Contributions to Equal Educational Opportunity

It would be a mistake to assume that only federal courts were engaged in the desegregation movement that gripped much of the country for decades. As important as court decisions were to the development of the equal educational opportunity doctrine, other branches of the federal government, specifically Congress, participated in shaping the doctrine before the *Brown* deci-

^{23. 339} U.S. 637 (1950).

^{24.} See McLaurin v. Okla. State Regents for Higher Educ., 339 U.S. 637, 641 (1950) (finding that segregationist graduate school policies denied students equal education).

^{25.} Id. at 639.

^{26.} Id. at 640.

^{27.} Id. at 640-41.

^{28.} Id. at 641.

^{29.} Id.

^{30.} Id. at 642.

sion. Prior to the twentieth century, the federal government largely remained in the background. Because of the absence of any express constitutional mandate³¹ and American education's overwhelmingly local character, Congress's posture in the education sector during the nineteenth century is best described as passive and reactive. Notwithstanding a tradition of local control, stresses created by national emergencies – notably war – prompted Congress to become directly involved in education.

The Morill Act, passed during the Civil War, helped spur scientific, engineering, and agricultural programs at the college level.³² During World War I, Congress passed the Smith-Hughes Act, which promoted vocational education at the elementary and secondary level.³³ World War II prompted passage of the Lanham Act, which sought to blunt the effects of federal ownership of land on public school finance regimes (which are heavily dependent upon local property tax bases).³⁴

Moreover, at a more general level, the common school movement of the nineteenth century also contributed to an emerging national commitment to education. The common school movement, at least in theory, sought to embrace "all children" and was viewed as a mechanism by which individuals could traverse "social classes." In addition, state constitutions contributed by expressly obligating states to educate their citizenry. 36

B. The Warren Court, Equal Educational Opportunity, and Brown

Despite important pre-Brown developments in the equal educational opportunity doctrine, the Warren Court's imprint on the doctrine is clear. The shadow cast by the Brown decision over the equal education landscape is wide, long, and enduring. The opinion's significance remains difficult to overemphasize.

^{31.} See San Antonio Indep. Sch. Dist. v. Rodriguez, 411 U.S. 1, 35 (1972) ("Education, of course, is not among the rights afforded explicit protection under our Federal Constitution. Nor do we find any basis for saying it is implicitly so protected.").

^{32.} Morill Act, ch. 130, 12 Stat. 503 (1862) (codified as amended at 7 U.S.C. §§ 301-305, 307, 308 (2000)) ("An Act donating public lands to the several states and territories which may provide colleges for the benefit of agriculture and mechanical arts.").

^{33.} Smith-Hughes Vocational Education Act, ch. 114, 39 Stat. 929 (1917) (repealed 1997).

^{34.} Lanham Act, ch. 862, 54 Stat. 1125 (1940) (codified as amended at 42 U.S.C. §§ 1521-1524 (1994)).

^{35.} DAVID B. TYACK ET AL., LAW AND THE SHAPING OF PUBLIC EDUCATION, 1785-1954, at 16 (1987).

^{36.} Id. at 18.

Although at one level the *Brown* decision addresses and fundamentally shapes the equal education doctrine, the decision's reach extends much further and to many other levels. To many, the *Brown* decision is canonical and functions as a quasi-Rorschach test for legal theorists and the general public alike.³⁷ *Brown* is easily one of the most important legal decisions of the second half of the twentieth century, if not the most important decision. At least one commentator opined that the *Brown* opinion was "assuredly the most important litigation of any kind in any court since the Civil War."³⁸ Aside from *Roe v. Wade*,³⁹ *Miranda v. Arizona*,⁴⁰ and *Marbury v. Madison*,⁴¹ few decisions penetrate more deeply and reveal more about one's thoughts on such fundamental questions as the proper role of the courts in our constitutional structure than *Brown*.⁴² *Brown* is often invoked as a litmus test for theories of constitutional interpretation. Not surprisingly, as Professor Balkin explains, no theory of constitutional law is deemed sound if it cannot explain and justify the result reached in *Brown*.⁴³

Although few quibble with *Brown*'s overall importance as a legal decision, as well as the obvious "correctness" of the outcome, ⁴⁴ *Brown* stands for different things to different people. To some, the *Brown* decision articulates critical constitutional norms of justice and fairness. Some point to the *Brown* decision as triggering the civil rights movement. ⁴⁵ Others argue that it both embodies and advances the nation's "public values." Even some of *Brown*'s supporters, however, find some cause for concern. Some find the opinion

^{37.} Jack M. Balkin, Brown as Icon, in WHAT BROWN V. BOARD OF EDUCATION SHOULD HAVE SAID 3, 8, 12 (Jack M. Balkin ed., 2001).

^{38.} Louis H. Pollak, Thurgood Marshall: Lawyer and Justice, 40 MD. L. Rev. 405, 406 (1981).

^{39. 410} U.S. 113 (1973).

^{40. 384} U.S. 436 (1966).

^{41. 5} U.S. (1 Cranch) 137 (1803).

^{42.} See Roe v. Wade, 410 U.S. 113, 164-66 (1973) (finding statute restricting abortion to be unconstitutional); Miranda v. Arizona, 384 U.S. 436, 467-74 (1966) (requiring warning upon arrest and questioning); Marbury v. Madison, 5 U.S. (1 Cranch) 137, 179-80 (1803) (establishing power of judicial review). It is conceivable that the recent decision in Bush v. Gore, 531 U.S. 98 (2000), might warrant inclusion on this list. At this early juncture, however, not enough time has passed to assess its impact accurately.

^{43.} Jack M. Balkin, *Preface* to WHAT *BROWN v. BOARD OF EDUCATION* SHOULD HAVE SAID ix, x-xi (Jack M. Balkin ed., 2001).

^{44.} Balkin, supra note 37, at 4.

^{45.} See JACK GREENBERG, CRUSADERS IN THE COURTS: HOW A DEDICATED BAND OF LAWYERS FOUGHT FOR THE CIVIL RIGHTS REVOLUTION 12 (1994) (tracing civil rights movement to early decisions including *Brown*).

^{46.} Owen M. Fiss, The Supreme Court, 1978 Term - Foreward: The Forms of Justice, 93 HARV. L. REV. 1, 2, 9, 14, 29-30 (1979).

worrisome because it seems to "abandon the new religion of judicial restraint all too easily." To others, like legal historian Lucas Powe, Jr., it reflects the imposition of northern values upon the South. Still others, notably Herbert Wechsler, have argued that the decision reached a result that neutral principles could not support.

Despite questions about the structural integrity of its legal reasoning, *Brown*'s status as an American icon remains secure. ⁵⁰ Rather than dwell on the well-trod litany of legacies that can properly be assigned to *Brown*, I will focus instead on the discrete collision between the equal educational opportunity doctrine and empirical social science that the *Brown* decision marks.

As both history and law failed to provide an unambiguous legal rationale for the Court's rejection of the separate-but-equal doctrine, the Court turned to empirical social science. By boldly declaring that "separate is inherently unequal" in *Brown*, the Warren Court recast the equal educational opportunity doctrine in a fundamental way by making it clear that equality transcends, and was no longer partitionable along, racial lines. Although the Court resolved the issue of *de jure* segregation at the constitutional level in *Brown*, the larger task of actually increasing school integration remained (and still remains) an unfinished project. 53

Along with what the Court decided in Brown, how the Court crafted its argument also matters. In an effort to make its opinion as accessible and non-accusatory as possible, the Warren Court set out to write a brief, uncomplicated opinion. ⁵⁴ Consistent with this goal, the Court's core argument in Brown is remarkably brief, especially given the magnitude of the stakes involved. ⁵⁵

^{47.} Id. at 15.

^{48.} LUCAS A. POWE, Jr., THE WARREN COURT AND AMERICAN POLITICS 34 (2000).

^{49.} Herbert Wechsler, Toward Neutral Principles of Constitutional Law, 73 HARV. L. REV. 1, 31-34 (1959) (criticizing Brown opinion in terms of legal theory). But see Charles L. Black, Jr., The Lawfulness of the Segregation Decisions, 69 YALE L.J. 421, 421 (1960) (arguing that correctness of Brown decision is obvious).

^{50.} Balkin, supra note 37, at 25.

^{51.} Joseph P. Viteritti, A Truly Living Constitution: Why Educational Opportunity Trumps Strict Separation on the Voucher Question, 57 ANN. SURV. AM. L. 89, 93-94 (2000).

^{52.} Brown, 347 U.S. at 495. Notably, the Court declined to overrule Plessy expressly, choosing instead to leave it dangling in the proverbial wind.

^{53.} Unfortunately, data describing the extent of the nation's engagement with school desegregation are scarce. For a discussion, see Michael Heise, Assessing the Efficacy of School Desegregation, 46 SYR. L. REV. 1093, 1095 (1996).

^{54.} KLUGER, supra note 3, at 706; see also Jack M. Balkin, The History of the Brown Litigation, in WHAT BROWN V. BOARD OF EDUCATION SHOULD HAVE SAID 29, 34-35 (Jack M. Balkin ed., 2001) (stating that Chief Justice Warren made Brown opinion short and accessible in order to place authority of Court behind it).

^{55.} Of course, it could be persuasively argued that the argument and entire opinion were

A single sentence distills the Court's argument: "To separate [schoolchildren] from others of similar age and qualifications solely because of their race generates a feeling of inferiority as to their status in the community that may affect their hearts and minds in a way unlikely ever to be undone." Having advanced a psychological argument in support of its conclusion of constitutional harm, the Court referenced with favor a lower court finding that linked state-enforced segregation with the psychological harms. 57

Chief Justice Warren then sought to push the Court's psychological argument even further by rooting it in social science research and noting that "this finding is amply supported by modern authority." Consistent with traditional legal research and writing and prevailing (and present) norms, Chief Justice Warren then dropped a footnote, the famous footnote eleven, which cites to a list of social science sources for authority for the psychological harm proposition. 59

Notwithstanding the *Brown* decision itself, particularly its elegant yet forceful exposition of the equal educational opportunity doctrine, footnote eleven recasts the doctrine by mooring it in social science. In so doing, the Warren Court not only influenced the future of equal education, but also accelerated a building trend toward greater incorporation of social science evidence into legal theory by lawyers, judges, and courts. By using social science to construe equal education, Chief Justice Warren believed that the Court would not appear to be browbeating or morally condemning the South as a region or those who practiced state-enforced segregation. At least that was one outcome he sought. Despite the best of intentions, it is generally understood that his strategy famously backfired. The effort to lubricate public acceptance of the outcome in *Brown* with a non-accusatory tone generated costs. When measured in terms of criticism, these costs were significant.

Although the Court's opinion endeavored to minimize controversy (perhaps a futile goal), it arrived immediately. Amid the expected and unexpected cacophony, footnote eleven attracted particular attention. Critics

remarkably brief precisely because the magnitude of the stakes involved was so large.

^{56.} Brown, 347 U.S. at 494.

^{57.} See id. (quoting unreported findings of lower court in Brown v. Bd. of Educ., 98 F. Supp. 797 (D. Kan. 1951)). Other descriptions of the harms included: "[L]essening of motivation, alienation of the child from the educational institution, distortion of personal relationships, and various forms of antisocial behavior." Owen M. Fiss, Racial Imbalance in the Public Schools: The Constitutional Concepts, 78 HARV. L. REV. 564, 569 (1965).

^{58.} Brown, 347 U.S. at 494.

^{59.} *Id.* at 494 n.11.

^{60.} See Balkin, supra note 54, at 35 (stating that "even with a unanimous opinion southern politicians ridiculed the decision and resisted it in every imaginable way").

quickly focused on technical aspects of the social science used in Dr. Clark's study. They found much to work with because, at bottom, Dr. Clark's study involved little more than asking a few African American children to choose from an assortment of white and black dolls.⁶¹ When the African American schoolchildren indicated that the white dolls were "nicer," Dr. Clark concluded that the children lacked adequate self-esteem.⁶² The Court latched onto this finding and identified state-sponsored school segregation as its cause.⁶³

Observers characterize as "astonishing" that Dr. Clark's studies provided the foundation upon which rests "the most profound decision handed down by the Supreme Court in an entire century."64 Some recoiled from the implication of psychology's seeming usurpation of law.65 others from the underlying social science evidence itself. Although the methodological mechanics of Dr. Clark's test are generally well-known, a few points bear emphasis. Dr. Clark's studies were a rather "primitive" exercise of empirical social science. 66 As Professor Viteritti notes, the study was limited by a small sample size and the absence of anything resembling a control group. 67 Even more problematic was the finding that African American children in northern states without segregation were even more likely to prefer white dolls than African American children attending state-segregated schools in the South. 68 This finding, of course, casts severe doubt on the presumed causal link between statesponsored segregation and the psychological harm advanced in the Brown litigation. Potentially even more devastating was the inference that the result in Brown depended on what social science the decision cited. If that was the case, the implications for the result, had the social science evidence at the time not been positive, are unimaginable. Finally, the reliance on social science evidence in footnote eleven has not weathered the test of time well. Indeed, most constitutional scholars today basically eschew this particular path taken by Chief Justice Warren. 69

^{61.} POWE, supra note 48, at 43.

^{62.} Id.

^{63.} Brown, 347 U.S. at 494 n.11.

^{64.} Viteritti, supra note 51, at 94.

^{65.} See J. HARVIE WILKINSON III, FROM BROWN TO BAKKE: THE SUPREME COURT AND SCHOOL INTEGRATION: 1954-1978, at 33 (1979) (describing negative reaction to Brown in which critics questioned whether decision was matter of law or social science).

^{66.} Powe, supra note 48, at 42-43.

^{67.} Viteritti, supra note 51, at 94.

^{68.} Powe, supra note 48, at 43.

^{69.} See Jack M. Balkin, Rewriting Brown, in WHAT BROWN v. BOARD OF EDUCATION SHOULD HAVE SAID 44, 52 (Jack M. Balkin ed., 2001) (stating that many scholars disagree with Chief Justice Warren's reliance on social science evidence). In an interesting "thought experi-

To be sure, even if the Warren Court's reliance on empirical social science evidence failed to soften the opinion's tone, it nevertheless possessed some other benefits. First, Chief Justice Warren's desire – however futile it might appear in hindsight – to do everything possible to facilitate the nation's acceptance of a decision involving issues that continue to shape the nation's character succeeded in framing the intersection of race and education. Second, the reliance on empirical evidence produced practical, strategic benefits. By relying on Dr. Clark's work, the Court made it possible to circumvent the traditional need to establish particularized harm to specific children at individual schools. According to Dr. Clark, "the assumption of inequality could now be made wherever segregation existed." From the perspective of those seeking to use the courts to desegregate public schools, this aspect of the decision held enormous appeal. Given the opinion's magnitude, it is far from unreasonable to conclude that the benefits exceeded the costs.

C. Evidence of the Warren Court's Empirical Legacy

An assertion, like mine, that the Warren Court through the Brown opinion empiricized the equal educational opportunity doctrine, demands proof. A review of all three major litigation efforts seeking to structurally enhance educational opportunity since Brown – post-Brown school desegregation, school finance, and school choice – reveals the influence of empirical social science on equal education litigation.

1. Post-Brown School Desegregation Litigation: The Role of Demographics and Student Achievement

Although the school desegregation context quickly evolved following *Brown*, social science retained a role. Paradoxically, as criticism of its use in

ment," Professor Jack Balkin gathered eight other constitutional law scholars to "re-write" the Brown opinion in 2000. (Participants included: Professors Bruce Ackerman, Jack Balkin, Derrick Bell, Drew Days III, John Hart Ely, Catherine MacKinnon, Michael McConnell, Frank Michelman, and Cass Sunstein.) As Balkin notes, most declined to rely on empirical social science evidence as proof of the unconstitutionality of state-segregated schools. Id. Although Professor Ely relied upon the notion of psychological harm, he did not cite to the sources identified in footnote eleven. Id. Professor MacKinnon accepted the social science evidence relied upon in Brown, though she interpreted the evidence quite differently than did Chief Justice Warren. Id.

^{70.} See Kenneth B. Clark, The Social Scientists, the Brown Decision, and Contemporary Confusion, in Argument: The Oral Argument Before the Supreme Court in Brown V. BOARD OF EDUCATION OF TOPEKA, 1952-55, at xxxi, xxxvii (Leon Friedman ed., 1969) (stating that "social scientists made it possible to avoid the need to obtain proof of individual damage").

^{71.} Id.

legal decisions increased, so did the prominence of empirical social science in courts.⁷²

Shifts in legal strategy responded as well to the dynamic nature of school desegregation litigation. Three major events shaped post-Brown school desegregation litigation. One was the effort by southern public school districts to thwart the Brown decision. The Court's patience with these tactics was not unlimited. The Court's frustration came through in Green v. County School Board of New Kent County Tween the Court ordered the school district to "come forward with a plan that promises realistically to work, and promises realistically to work now." In 1971, the Court displayed its level of commitment by approving a plan to bus students within a district to achieve greater integration in Swann v. Charlotte-Mecklenberg Board of Education. To

Second, at the same time that the courts were wrestling with southern school districts, the school desegregation litigants turned their attention to northern school districts. Unlike their southern counterparts, litigants in the North could not point to formal state policies expressly segregating public schools. Rather, the causes of school segregation in the North were more complex and interrelated. Much of the school desegregation focus following *Brown* shifted to concerns about *de facto* (and away from *de jure*) school segregation.

A third event, and perhaps the single most important event shaping post-Brown school desegregation litigation, was the Court's Milliken v. Bradley⁷⁸ decision in 1974. In Milliken, the Court prohibited a metropolitan-wide busing plan that crossed school district boundaries.⁷⁹ More precisely, the Court refused to sanction interdistrict relief absent an interdistrict liability.⁸⁰ The consequences to most American cities included the demographic reality that urban public schools would remain overwhelmingly non-white.⁸¹

^{72.} CHESLER ET AL., supra note 2, at 24.

^{73.} See, e.g., HAROLDW. HOROWITZ & KENNETH L. KARST, LAW, LAWYERS, AND SOCIAL CHANGE 239-40 (1969) (noting glacial pace of school integration in South); Alexander Bickel, The Decade of School Desegregation: Progress and Prospects, 64 COLUM. L. REV. 193 (1964) (describing various ways southern school districts thwarted Brown).

^{74. 391} U.S. 430 (1968).

^{75.} Green v. County Sch. Bd. of New Kent County, 391 U.S. 430, 439 (1968).

^{76.} Swann v. Charlotte-Mecklenberg Bd. of Educ., 402 U.S. 1, 32 (1971) (affirming district court desegregation order).

^{77.} For a helpful description, see generally GARY ORFIELD, MUST WE BUS? (1978); U.S. COMM'N ON CIVIL RIGHTS, RACIAL ISOLATION IN THE PUBLIC SCHOOLS (1967).

^{78. 418} U.S. 717 (1974).

^{79.} Milliken v. Bradley, 418 U.S. 717, 752-53 (1974).

^{80.} Id. at 745.

^{81.} For a discussion about how the Milliken decision fits into a broader social context,

The shift from a *de jure* to *de facto* school desegregation strategy necessitated a change in the asserted harm. The harm in *Brown*, psychological damage flowing from state-sponsored desegregation, was no longer apt. In its place, litigants considered the cognitive harms to students flowing from racially isolated schools. Social scientists responded likewise and, as a consequence, continued to contribute to the litigation effort. Indeed, the magnitude of social science's role increased as defendant school districts, having realized its import, began marshaling their own empirical rebuttal evidence.⁸²

Efforts to disentangle the complicated interactions between race and student achievement confronted substantial methodological hurdles. If trying to figure out which variables influence student academic achievement was not difficult enough, derivative efforts to tease out the unique influence of racially-identifiable schools proved even more difficult. Further, many courts grappled with evidence seeking to assess the potential benefits of mandatory and voluntary school desegregation, as well as the differences between the two approaches. Not surprisingly, the scholarly literature offers few clear answers.⁸³

A district court's decision in *Hobson v. Hansen*⁸⁴ evidences many of the post-*Brown* changes in school desegregation litigation. The case also provides a glimpse into the scope and limits of empirical evidence as well as its role in litigation. ⁸⁵ In *Hobson*, the court admitted into evidence multiple sets of competing regression analyses endeavoring to document the extent and illeffects of segregated public schools in the District of Columbia. ⁸⁶ However, because both sides mounted complex and conflicting empirical testimonies, Judge Wright grew frustrated at its density or indeterminacy, or both. ⁸⁷ As a consequence, the court was "forced back to its own common sense approach to a problem which, though admittedly complex, has certainly been made more obscure than was necessary."

see Ryan & Heise, supra note 5, at 2046.

^{82.} For a thorough treatment of this point, see CHESLER ET AL., supra note 2, at 9.

^{83.} For an extensive compilation of the social science evidence, and related debates, on the relations between school desegregation and student achievement, see YUDOF ET AL., supra note 9, at 410-13.

^{84. 327} F. Supp. 844 (D.D.C. 1971).

^{85.} DONALD L. HOROWITZ, THE COURTS AND SOCIAL POLICY 107 (1977).

^{86.} Hobson v. Hansen, 327 F. Supp. 844, 850 (D.D.C. 1971). For a detailed description of the empirical studies conducted for and considered by the courts in the *Hobson* litigation, see HOROWITZ, *supra* note 85, at 125-46. *See also Hobson*, 327 F. Supp. at 850 (stating that "figures speak and when they do, courts listen" (quoting Brooks v. Beto, 366 F.2d 1, 9 (5th Cir. 1966))).

^{87.} Observers concluded that the empirical evidence was "inconclusive." HOROWITZ, supra note 85, at 145.

^{88.} Hobson, 327 F. Supp. at 859.

As previously discussed, efforts to racially integrate the nation's major urban public school systems came to an abrupt halt in 1974 after the Court's Milliken decision. 89 Recognizing the demographic realities confronting many urban school districts and the logic of the Brown decision two decades earlier. courts shifted their remedial strategy from a focus on integration to supplemental funding intended to offset the deleterious academic consequences of racially-identifiable schools. The Court's decision in Milliken II⁹⁰ signals this subtle yet critical change. In exchange for a decision (Milliken) that all but precludes anything remotely resembling an integrated educational environment for Detroit schoolchildren, the Court in Milliken II decided that the compensatory educational programs mandated by the district court were antly tailored to address and remedy the educational consequences of the constitutional In addition to reshaping school desegregation litigation, the Milliken II decision signals the transition of equal education litigation's focus from race to resources. 22 That school finance litigation eclipsed desegregation litigation⁹³ during this period is simply emblematic of this transition in litigation focus.

2. School Finance Litigation

Frustration with the slow and uneven pace of school desegregation, coupled with the implications of the *Milliken* decision, helped prompt school finance litigation. Advocates hoped that by attacking funding inequalities,

^{89.} But see Sheff v. O'Neill, 678 A.2d 1267, 1337 (Conn. 1996) (requiring action to desegregate schools in Hartford). For a helpful discussion of the Sheff decision, see generally James E. Ryan, Sheff, Segregation, and School Finance Litigation, 74 N.Y.U. L. REV. 529 (1999).

^{90.} Milliken v. Bradley, 433 U.S. 267, 290 (1977) [hereinafter Milliken II].

^{91.} Id.

^{92.} For more on this transition, see, for example, Michael Heise, Equal Educational Opportunity, Hollow Victories, and the Demise of School Finance Equity Theory: An Empirical Perspective and Alternative Explanation, 32 GA. L. REV. 543, 554-58 (1998) [hereinafter Heise, Equal Educational Opportunity] (arguing that Milliken II's conflation of race and resources broadened equal educational opportunity doctrine and was forerunner to school finance litigation); Michael Heise, The Courts v. Educational Standards, 120 PUB. INT. 55, 62 (1995) (discussing school finance litigation); James E. Ryan, The Influence of Race in School Finance Reform, 98 MICH. L. REV. 432, 477 (1999) ("Put more crudely, the [NAACP's] strategy was based on the notion that green follows white, and that black students would receive more educational resources if placed in white schools.").

^{93.} Today, the most active aspect of school desegregation involves unwinding court orders and districts seeking unitary status. See Gary Orfield & David Thronson, Dismantling Desegregation: Uncertain Gains, Unexpected Costs, 42 EMORY L.J. 759, 788 (1993) (criticizing courts for granting school districts' petitions for unitary status).

they would be able to equalize education by improving opportunities for poor and minority students. Like desegregation proponents, early school finance proponents advanced a "tying" strategy. Whereas school desegregation sought to tie the fate of white and black students together by placing them in the same schools, school finance equalization would tie the fate of poor and wealthy schools together by ensuring equal access to resources.⁹⁴

a. Successive "Waves" of School Finance Lawsuits

At the federal level, the Supreme Court put an early end to school finance litigation in the federal courts, ruling in San Antonio Independent School District v. Rodriguez⁹⁵ that unequal school funding schemes do not violate the United States Constitution.⁹⁶ Despite the early blow it inflicted, Rodriguez served to redirect school finance litigants to state constitutions, state education clauses, and state courts, where they have experienced mixed results. Since 1974, litigants have challenged the finance schemes in over forty states, and almost twenty state supreme courts have declared their respective school funding programs unconstitutional.⁹⁷

The initial wave of school finance lawsuits principally sought equalization of resources. A second wave focused on state education clauses. A third wave, launched in 1989, is moored in adequacy-based challenges. Most litigants now contend *not* that all students are entitled to the same resources, but rather that all students should receive the funds necessary to finance an adequate education. Although much has been and could be said about these cases, 102 one feature bears emphasis. One thread that joins school

^{94.} Sources for this paragraph include Heise, Equal Educational Opportunity, supra note 92, at 553-57; James E. Ryan, Schools, Race, and Money, 109 YALE L.J. 249, 259-60 (1999); Ryan, supra note 89, at 563-64.

^{95. 411} U.S. 1 (1973).

^{96.} San Antonio Indep. Sch. Dist. v. Rodriguez, 411 U.S. 1, 55 (1973).

^{97.} For descriptions of, and citations to, the cases, see Ryan, supra note 94, at 266-69 nn.70-86.

^{98.} See Peter Enrich, Leaving Equality Behind: New Directions in School Finance Reform, 48 VAND. L. REV. 101, 121-42 (1995) (reviewing history of school finance cases); Michael Heise, State Constitutions, School Finance Litigation, and the "Third Wave": From Equity to Adequacy, 68 TEMP. L. REV. 1151, 1152-53 (1995) (distinguishing between "equity" and "adequacy" in school finance).

^{99.} See id. at 1157-62 (reviewing school finance decisions based on state constitutions).

^{100.} See id. at 1162-66 (explaining adequacy-based litigation).

^{101.} See Ryan, supra note 94, at 268-69 (describing shift in theories and pointing out that not all cases since 1989 have shifted from equity to adequacy claims).

^{102.} For an excellent overview of the cases and discussion of the commentary, see Enrich.

finance lawsuits throughout all three waves is the use of empirical evidence to inform the meaning of equal educational opportunity, here construed in terms of finances.

b. The Role of Money

For many involved in educational reform policy debates, including school finance debates, the ultimate barometer of success or failure is academic achievement. To be sure, an explanation for why some students perform well and others perform poorly is endlessly debated in the literature. These enormously important debates aside, a core assumption upon which school finance litigation pivots is that school funding and student achievement correlate. The lingering dispute over whether money "matters" is noted for its technical complexities and endurance. The lingering dispute over whether money "matters" is noted for its technical complexities and endurance.

Two major studies, both by Professor Coleman, stimulated the general controversy. In the first, Coleman and colleagues considered whether school spending influences student achievement. In 1966, Coleman released a

supra note 98, at 166-83.

^{103.} See, e.g., Henry M. Levin, Educational Vouchers: Effectiveness, Choice, and Costs, 17 J. Pol'y Analysis & Mgmt. 373, 374 (1998) ("Because student achievement is considered to be a universal goal of schools, it has become the sine qua non for evaluating school reform.").

^{104.} See, e.g., JAMES S. COLEMAN ET AL., U.S. DEP'T OF HEALTH, EDUC. & WELFARE, EQUALITY OF EDUCATIONAL OPPORTUNITY 304 (1966) (finding that "an impressive percent of variance [in verbal achievement] is accounted for by student body characteristics"). Scores of subsequent studies have confirmed Coleman's conclusion. See generally RICHARD D. KAHLENBERG, ALL TOGETHER NOW: CREATING MIDDLE-CLASS SCHOOLS THROUGH PUBLIC SCHOOL CHOICE 26-28, 86-90 (2001) (discussing research findings relating to good teachers, class size, and parental involvement); Ryan, supra note 94, at 287 n.167.

educational opportunity, see ERIC A. HANUSHEK ET AL., MAKING SCHOOLS WORK: IMPROVING PERFORMANCE AND CONTROLLING COSTS (1994); ALLAN R. ODDEN & LAWRENCE O. PICUS, SCHOOL FINANCE: A POLICY PERSPECTIVE 277-81 (1992); Clayton P. Gillette, Opting Out of Public Provision, 73 DENV. U. L. REV. 1185, 1213-14 (1996); Eric A. Hanushek, Money Might Matter Somewhere: A Response to Hedges, Laine, and Greenwald, EDUC. RESEARCHER, May 1994, at 5; Eric A. Hanushek, The Impact of Differential Expenditures on School Performance, EDUC. RESEARCHER, May 1989, at 45; Eric A. Hanushek, Throwing Money at Schools, 1 J. POL'Y ANALYSIS & MGMT. 19 (1981); Eric A. Hanushek, When School Finance "Reform" May Not Be Good Policy, 28 HARV. J. ON LEGIS. 423 (1991). For articles generally supportive of a correlation between expenditures and educational opportunity, see Christopher F. Edley, Jr., Lawyers and Education Reform, 28 HARV. J. ON LEGIS. 293 (1991); Ronald F. Ferguson, Paying for Public Education: New Evidence on How and Why Money Matters, 28 HARV. J. ON LEGIS. 465 (1991); Larry V. Hedges et al., Does Money Matter? A Meta-Analysis of Studies of the Effects of Differential School Inputs on Student Outcomes, EDUC. RESEARCHER, April 1994, at 5.

mammoth and controversial report on the nation's schools, which concluded that family influence matters the most in determining student achievement. followed by the socioeconomic status of the student's classmates. 106 One central finding bears directly on a key assumption underpinning school finance litigation: what mattered very little, he concluded, was school spending.¹⁰⁷ Although scores of social scientists continue to debate the latter proposition about the influence of spending, 108 a remarkable consensus has formed on the point that the socioeconomic status of one's peers matters a great deal. 109 Indeed, numerous subsequent studies confirm that "the social composition of the student body is more highly related to achievement. independent of the student's own social background, than is any other school factor."110 Notably, education commentators of every stripe acknowledge the strength and consistency of these findings. 111 Simply put, "filf there is one thing that is more related to a child's academic achievement than coming from a poor household, it is going to school with children from other poor households."112 Significant by omission is a similar consensus on how school funding influences student achievement.

In addition to exploring the larger question of whether money matters in terms of student achievement, scholars have compared results from schools that spend different amounts on their students. Again, research by Professor

^{106.} See COLEMAN ET. AL, supra note 104, at 298-305 (discussing impact of several variables on student achievement).

^{107.} See id. at 21-22, 296-97, 312-16 (assessing impact of school expenditures on achievement).

^{108.} See supra note 105 (surveying literature discussing educational spending and educational opportunity).

^{109.} See GARY ORFIELD & SUSAN EATON, DISMANTLING DESEGREGATION: THE QUIET REVERSAL OF BROWN V. BOARD OF EDUCATION 53 (1996) (stating that powerful influence of socioeconomic status of peers on student achievement is "one of the most consistent findings in research on education").

^{110.} Ryan & Heise, supra note 5, at 2105 (citing James S. Coleman, Toward Open Schools, 9 Pub. INT. 20 (Fall 1967)). For discussion of the numerous studies confirming this point, see KAHLENBERG, supra note 104, at 26-28.

^{111.} See KAHLENBERG, supra note 104, at 37 (stating that "money is not the only issue that determines inequality. A more important factor, I am convinced, is the makeup of the student enrollment, who is sitting next to you in class" (quoting Interview by Ted Koppel with Jonathan Kozol, Nightline (ABC television broadcast, Sept. 17, 1992))); Chester E. Finn, Jr., Education That Works: Make the Schools Compete, HARV. BUS. REV., Sept.-Oct. 1987, at 63 (acknowledging that "disadvantaged children [tend] to learn more when they attend[] school with middle-class youngsters").

^{112.} Trine Tsouderos, Schools Out of Balance, TENNESSEAN, Dec. 27, 1998, at 1A (quoting James Guthrie).

Coleman remains at the heart of the ongoing scholarly debate. Professor Coleman (along with several colleagues) published the first major quantitative study exploring differences in student achievement between public and private (principally Catholic) schools. Coleman and his colleagues found that students in private schools performed slightly better, after controlling for student race and socioeconomic background. What makes the comparison especially important for the school finance debate is that most inner-city private schools (specifically, parochial schools) spend less on a per-pupil basis than their public school counterparts. The policy implications of private schools that spend less yet perform better are obvious and significant. These findings, not surprisingly, attracted criticism¹¹⁶ as well as stimulated further research. The college of the college of

c. How Courts in School Finance Lawsuits Treat the Role of Money

While academics continue to debate the relation between school funding and student academic achievement, judges continue to decide school finance cases. Interestingly, no doubt because of the question's wicked complexities, courts have split over the existence of a connection between school funding and student achievement. On the one hand, the United States Supreme Court described the asserted link between school spending and educational opportunity as "unsettled and disputed." On the other hand, commentators have noted that more than half of the state supreme courts that have confronted the same question have reached the opposite conclusion. Perhaps even more

^{113.} For a helpful summary of Professor Coleman's thirty-five years of research in the education policy area, see Richard D. Kahlenberg, *Learning from James Coleman*, 144 PUB. INT. 54, 55-58 (2001).

^{114.} See JAMES S. COLEMANET AL., HIGH SCHOOL ACHIEVEMENT: PUBLIC, CATHOLIC, AND PRIVATE SCHOOLS COMPARED 179-85 (1982) (comparing achievement levels in public and private schools).

^{115.} Thomas C. Berg, Anti-Catholicism and Modern Church-State Relations, 33 LOY. U. CHI. L.J. 121, 165 (2001).

^{116.} See, e.g., Arthur S. Goldberger & Glen G. Cain, The Causal Analysis of Cognitive Outcomes in the Coleman, Hoffer, and Kilgore Report, 55 SOC. OF EDUC. 103, 119-21 (1982) (criticizing Coleman et al. study for flaws in sampling, research design, and sample bias).

^{117.} See, e.g., Adam Gamoran, Student Achievement in Public Magnet, Public Comprehensive, and Private City High Schools, 18 EDUC. EVAL. & POL'Y ANALYSIS 1, 14 (1996) (finding no advantage for secular private schools); Caroline M. Hoxby, The Effects of Private School Vouchers on Schools and Students, in HOLDING SCHOOLS ACCOUNTABLE 177, 177-208 (Helen F. Ladd ed., 1996) (finding advantage for private schools).

^{118.} San Antonio Indep. Sch. Dist. v. Rodriguez, 411 U.S. 1, 23-24 (1973).

^{119.} See, e.g., John Dayton, Correlating Expenditures and Educational Opportunity in School Funding Litigation: The Judicial Perspective, 19 J. EDUC. FIN. 167, 178 (1993) (describing state court responses to asserted positive correlation between educational funding

startling is the confidence expressed by courts in reaching a conclusion on this issue, especially in light of the acknowledged uncertainty within the social science community.¹²⁰

3. School Choice Litigation

From one perspective, school choice – both public and private – arcs backward to school desegregation and school finance. To be sure, school choice is nascent by comparison and is capable of promoting goals, such as increased liberty and efficiency, which have little to do with equal educational opportunity. Nevertheless, it is fair to say that school choice represents the latest major attempt to restructure public education in order to equalize opportunities among students. As a policy, school choice seeks to enhance equality by granting poorer students a greater opportunity to choose their own schools – an opportunity that is now principally reserved for wealthier students. 123

School choice programs come in four main varieties: intra- and interdistrict public school choice, charter schools, and voucher plans. ¹²⁴ Although the least consequential in terms of the number of students presently served, publicly funded school voucher programs receive the most attention

and opportunity).

^{120.} For a fuller treatment of this point, see Michael Heise, Schoolhouses, Courthouses and Statehouses: Educational Finance, Constitutional Structure, and the Separation of Powers Doctrine, 33 LAND & WATER L. REV. 281, 291-93 (1998).

^{121.} For more explication of this point, see Ryan & Heise, supra note 5, at 2050-62.

^{122.} See JOHN E. CHUBB & TERRY M. MOE, POLITICS, MARKETS, & AMERICA'S SCHOOLS 185-229 (1990) (making efficiency-based argument in favor of school choice); see also JEFFREY R. HENIG, RETHINKING SCHOOL CHOICE: LIMITS OF THE MARKET METAPHOR 57 (1994) (describing theory that school choice will force schools "to increase the quality of education and the efficiency with which they deliver it, or else risk going out of business").

this point. See generally John E. Coons & Stephen D. Sugarman, Scholarships for Children (1992); Joseph P. Viteritti, Choosing Equality: School Choice, the Constitution, and Civil Society (1999). Notably, it is political conservatives – not typically known for supporting efforts to ensure equality between the poor and the wealthy – who often advocate school choice as a means of assuring that poor and middle-class parents have similar choices. See Kahlenberg, supra note 104, at 148 (summarizing conservative arguments in favor of school choice). William Bennett, for example, argues that "poor parents ought to be able to make the same kinds of choices that middle-class parents make for their children." Id.

^{124.} For purposes of discussion I will ignore the most significant form of "school choice": the choice of school exercised by individuals when selecting a place to live. For a helpful discussion of residential school choice, see Jeffrey R. Henig & Stephen D. Sugarman, *The Nature and Extent of School Choice, in School Choice and Social Controversy: Politics*, Policy, and Law 13, 14-17 (Stephen D. Sugarman & Frank R. Kemerer eds., 1999).

from policymakers and courts. 125 Three limited programs have been created in the last decade, in Milwaukee, Cleveland, and Florida. 126 All three programs provide vouchers that can be used at private schools, including religious schools. 127 Because voucher plans pose the most significant structural threat to the existing educational establishment and receive a disproportionate amount of public, judicial, and scholarly attention, my discussion focuses on this choice genre.

Not surprisingly, publicly funded voucher programs have attracted sustained litigation since their inception. The Supreme Court recently answered one long-debated question when it concluded that Cleveland's school voucher program did not offend the Constitution's Establishment Clause. 128 However, Simmons-Harris v. Zelman 129 leaves open numerous other legal questions raised by voucher programs. How voucher programs implicate the

^{125.} For a more expansive discussion of the four major types of school choice programs, see Ryan & Heise, *supra* note 5, at 2063-78.

^{126.} Much has been written about these plans. For a basic description of all three, see TERRY M. MOE, SCHOOLS, VOUCHERS, AND THE AMERICAN PUBLIC 36-38 (2001); Henig & Sugarman, supra note 124, at 26-28; see also VITERITTI, supra note 124, at 98-113 (discussing Milwaukee and Cleveland plans). In addition to these programs, Maine and Vermont provide money for students in rural districts too small to run their own schools to attend private schools, and many states pay the costs of at least some disabled students to attend private schools. Stephen D. Sugarman, School Choice and Public Funding, in SCHOOL CHOICE AND SOCIAL CONTROVERSY: POLITICS, POLICY, AND LAW 111, 128-29 (Stephen D. Sugarman & Frank R. Kemerer eds., 1999). Although the Vermont and Maine plans have caught the attention of voucher supporters, id. at 128, vouchers for students in districts too small to run schools, like payments to private schools for disabled students, are tangential to the general battle over vouchers, and we treat them accordingly.

^{127.} Henig & Sugarman, supra note 124, at 26-28. For discussion of the various legal challenges that have been filed against the programs, see Alison Frankel, Blackboard Jungle: On the Way to a Supreme Court Test Case with the School Voucher Litigation Road Show, AMERICAN LAWYER, May 2000, at 64, 68.

^{128.} Simmons-Harris v. Zelman, 536 U.S. 639, ____, 122 S. Ct. 2460, 2473 (2002). For commentary on the Zelman decision, see generally James E. Ryan & Michael Heise, Taking School Choice to the Suburbs, WASH. POST, July 3, 2002, at A16. Academic commentary on the general question concerning the constitutionality of the voucher programs – and related questions – is substantial. For a helpful summary of the constitutional issues raised, see Jesse H. Choper, Federal Constitutional Issues, in SCHOOL CHOICE AND SOCIAL CONTROVERSY: POLITICS, POLICY, AND LAW 235, 235-36 (Stephen D. Sugarman & Frank R. Kemerer eds., 1999). For citations to the some of the academic commentary, see generally KAHLENBERG, supra note 104; SCHOOL CHOICE AND SOCIAL CONTROVERSY: POLITICS, POLICY, AND LAW (Stephen D. Sugarman & Frank R. Kemerer eds., 1999); Michael Heise, School Choice, Educational Policy, and Legal Theory: Uncomfortable yet Inevitable Intersections, 1 U. CHI. Pol'y Rev. 79 (1997).

^{129. 536} U.S. 639, 122 S. Ct. 2460 (2002).

equal opportunity doctrine as well as their intersection with empirical social science remain key issues.

In policy debates surrounding the school choice issue, claims rooted in social science continue to swirl. Similar to the school desegregation and finance contexts, these claims have migrated from social science circles into courts assessing school choice policies. Empirical evidence on the actual or potential benefits of school choice, especially when private schools are involved, remains the subject of searing debate. Despite vigorous claims advanced by both sides of the debate surrounding the constitutionality of publicly funded voucher programs, the Court in *Zelman* had before it much of the contested social science evidence. Disputes and controversies aside, school choice's intersection with social science pivots on three critical points: integration, competitive effects, and student achievement.

a. Integration

Although school choice policies have been used to *integrate* rather than to segregate schools since the 1970s, ¹³² Professor Levin and others speculate that school choice would nonetheless result in jeopardizing decades of school integration efforts, fuel increased socioeconomic stratification, and thereby exacerbate, rather than ameliorate, social inequities. ¹³³ This argument pivots on a belief that if more families are empowered to choose among education options, families who are the most well informed, motivated, and economically well-off are more likely to avail themselves of greater school choice. ¹³⁴ Even

^{130.} See Jeffrey R. Henig, School Choice Outcomes, in SCHOOL CHOICE AND SOCIAL CONTROVERSY: POLITICS, POLICY, AND LAW 68, 97-101 (Stephen D. Sugarman & Frank R. Kemerer eds., 1999) (noting that increased data has not reduced debate).

^{131.} Non-parties presented much of the contested social science evidence to the Court through the more than thirty amicus briefs that they filed. For a listing of the briefs filed in the Zelman case, see Institute for Justice, School Choice Facts, at http://www.ij.org/cases/school/facts/ (last visited Jan. 2, 2003).

^{132.} See, e.g., HENIG, supra note 122, at 111 (discussing "controlled choice" plans); KAHLENBERG, supra note 104, at 116-30 (same); VITERITTI, supra note 123, at 58-60 (same).

^{133.} Betsy Levin, Race and School Choice, in SCHOOL CHOICE AND SOCIAL CONTROVERSY: POLITICS, POLICY, AND LAW 266, 286 (Stephen D. Sugarman & Frank R. Kemerer eds., 1999); see also Molly S. McUsic, The Law's Role in the Distribution of Education: The Promise and Pitfalls of School Finance Litigation, in LAW AND SCHOOL REFORM: SIX STRATEGIES FOR PROMOTING EDUCATIONAL EQUITY 88, 125-28 (Jay P. Heubert ed., 1999) (arguing that competition will result in greater class and racial segregation and stratification); Martha Minow, Reforming School Reform, 68 FORDHAM L. REV. 257, 282-83 (1999) (same); Amy S. Wells, The Sociology of School Choice: Why Some Win and Others Lose in the Educational Marketplace, in SCHOOL CHOICE: EXAMINING THE EVIDENCE 29, 29-48 (Edith Rassell & Richard Rothstein eds., 1993) (same).

^{134.} See PETER W. COOKSON, SCHOOL CHOICE 91-93 (1994) (discussing school choice

choice proponents recognize the salience of the "skimming problem" as well as the need for policymakers to address this problem when crafting choice programs.¹³⁵

A few key factors frame discussions about the possible impact of school choice policies on integration levels. First, as demographic statistics make clear, race and income differences segregate schools today. This result reflects the combination of residential segregation and neighborhood school assignment policies. Urban school districts principally serve poor, minority students. In addition, most minority students attend urban schools. Second, most of the publicly and privately funded voucher programs are structured so that eligible low-income children assigned to struggling urban school districts generally are confined to alternative schools physically located in the urban area. To put the point more directly, most voucher programs are designed to protect the ability of suburbs to control their schools. Both factors – the existing demographic profile of urban public schools and the structure of existing voucher programs – interact in a manner that substantially reduces the likelihood that voucher programs will dramatically alter racial and socioeconomic integration levels. 138

However, despite these significant structural barriers, emerging data are at worst mixed and at best hopeful about the prospects – admittedly small – for choice programs to increase school racial and socioeconomic integration. Specifically, data from evaluations of the voucher programs in Milwaukee and Cleveland reveal that program participants are in more integrated school settings than are their non-voucher counterparts who remain in public schools. These findings are due principally to the relatively small number

impact on school segregation); Henry M. Levin, Education as a Public and Private Good, in Public Values, Private Schools (Neal E. Devins ed., 1989) (arguing that private markets encourage specialization and discourage commonalities); see generally Jonathan Kozol, Savage Inequalities (1991) (describing effects of racial segregation on black student performance); AMY S. Wells, A Time to Choose (1993).

- 135. Terry M. Moe, *Private Vouchers*, in PRIVATE VOUCHERS 1, 23-26 (Terry M. Moe ed., 1995); see also MOE, supra note 126, at 10 (stating that "readers should be aware that I am a supporter of vouchers").
- 136. See VITERITTI, supra note 123, at 49 (discussing existence of racial separation in schools today); Gary Orfield & John T. Yun, Resegregation in American Schools (June 1999), at http://www.civilrightsproject.harvard.edu/research/deseg/reseg_schools99.php (reviewing trends shown by demographic statistics on racial segregation).
- 137. See generally DOUGLAS MASSEY & NANCY DENTON, AMERICAN APARTHEID: SEGREGATION AND THE MAKING OF THE UNDERCLASS (1993) (discussing how racial segregation is principal cause of creation of underclass).
 - 138. This and related points are developed more fully in Ryan & Heise, supra note 5.
- 139. JAY P. GREENE, CHOICE AND COMMUNITY: THE RACIAL, ECONOMIC, AND RELIGIOUS CONTEXT OF PARENTAL CHOICE IN CLEVELAND 5-8 (The Buckeye Inst. for Pub. Policy Solu-

of program participants along with the availability of comparatively integrated inner-city private schools.¹⁴⁰

b. Productive Competition

Many school choice advocates argue that choice will improve the efficiency and achievement of public schools by increasing competition. This argument comports with general economic theory, which posits that schools will respond to increased competition by increasing their efficiency and productivity. However, more refined applications of economic and political theory to the particular complexities incident to the education context provide less definitive guidance. On the one hand, choice might spur productive competition and raise the achievement levels of all schools. On the other hand, it might result in advantaged (for example, by wealth or achievement) students clustering in advantaged schools, with which less advantaged schools could not realistically compete. Until quite recently, a paucity of data hamstrung efforts to test the competing hypotheses empirically. Although new data are emerging, they are scant and support only tentative conclusions. Finally, as is frequently the case in the education literature, existing evidence on many salient points is mixed.

tions, Policy Report, 1999) (reporting demographic data from Cleveland).

^{140.} See, e.g., Nicole Garnett, The NAACP's Parent Trap, WKLY. STANDARD, Dec. 30, 1996-Jan. 6, 1997, at 16, 17 (reporting that "[m]any of the private and religious schools in inner-city Milwaukee are more integrated than their public counterparts, some of which are virtually all black"); Paul E. Peterson & Jay P. Greene, Race Relations & Central City Schools: It's Time for an Experiment with Vouchers, BROOKINGS REV., Spr. 1998, at 33, 36 (reporting statistics that show that private schools are typically "less racially isolated than their public school peers").

^{141.} See, e.g., MILTON FRIEDMAN, CAPITALISM AND FREEDOM 82-98 (1962) (describing economic effects of increased competition).

^{142.} See, e.g., Caroline M. Hoxby, Does Student Competition Among Public Schools Benefit Students and Taxpayers?, 90 AMER. ECON. REV. 1209, 1210 (2000) (describing merits of empirical work over theory); Charles M. Tiebout, A Pure Theory of Local Public Expenditures, 64 J. Pol. Econ. 416, 416-18 (1956) (explaining problem of determining level of expenditure on public goods).

^{143.} See Cecilia E. Rouse & Michele McLaughlin, Can the Invisible Hand Improve Education?: A Review of Competition and School Efficiency 50 (1998) (unpublished manuscript, on file with author) ("[T]he empirical literature on whether competition improves school efficiency is somewhat unsatisfying.").

^{144.} Compare JAYP. GREENE, ANEVALUATION OF THE FLORIDA A-PLUS ACCOUNTABILITY AND SCHOOL CHOICE PROGRAM 11 (2001) (finding positive competitive effects in Florida), and Frederick Hess et al., Coping with Competition: How School Systems Respond to School Choice 25-27 (unpublished manuscript, on file with author) (finding positive competitive effects in Arizona), available at http://www.ksg.harvard.edu/pepg/pdf/coping.pdf (last visited Jan. 3, 2002), with Christopher R. Geller et al., The Effect of Private School Competition on

Limitations aside, some tentative conclusions are nonetheless possible. On balance, research findings tilt in a direction that supports the proposition that increased school competition results in some increased school effectiveness. Professor Hoxby has found that increased competition for public schools generated positive effects on student achievement and has noted that these effects are more robust in districts with less educated adults and in districts located in states with higher degrees of local control.¹⁴⁵ Additional findings suggest that increased competition can stimulate high school graduation rates, ¹⁴⁶ direction of greater resources to the classroom, ¹⁴⁷ and overall school performance. ¹⁴⁸

If we assume, as seems quite plausible, that increased competition among schools for students provides positive benefits, a critical question that remains is whether school choice programs will spur such competition and generate the hypothesized (and observed) benefits. One intuitive suggestion is that limited choice programs generate limited competitive pressures that, in turn, stimulate limited competitive effects. The admittedly few and small voucher programs supply one source of data regarding school competition. The scant data that exist, however (and not surprisingly), remain in dispute. Assessments of the competitive effects of Florida's voucher program illustrate this point. The Florida A-Plus Program, first administered in 1998, assigns annual grades to every public school in Florida. A school's grade is based on its students'

PUBLIC SCHOOL PERFORMANCE 20-23 (Nat'l Ctr. for the Study of Privatization in Educ., Occasional Paper No. 15, 2001) (finding little evidence of competitive effects in Georgia), Gregory Camilli & Katrina Bulkley, Critique of "An Evaluation of the Florida A-Plus Program," 9 EDUC. POL'Y ANALYSIS ARCHIVES (2001), at http://epaa.asu.edu/epaa/v9n7/ (challenging Greene's findings on Florida Program), and Haggai Kupermintz, The Effects of Vouchers on School Improvement: Another Look at the Florida Data, 9 EDUC. POL'Y ANALYSIS ARCHIVES (2001), at http://epaa.asu.edu/epaa/v9n8/ (arguing that improvements in Florida program are function of one of three tested areas).

- 145. See generally Hoxby, supra note 142 (discussing benefits of Tiebout choice); Rouse & McLaughlin, supra note 143, at 40 (summarizing Hoxby's conclusions).
- 146. See Thomas S. Dee, Competition and the Quality of Public Schools, 17 ECON. EDUC. REV. 419, 424 (1998) (discussing relationship between competition and graduation rates).
- 147. See THOMAS S. DEE, EXPENSE PREFERENCE AND STUDENT ACHIEVEMENT IN SCHOOL DISTRICTS 21 (Univ. of Md. Dep't of Econ., Working Paper, 1998) (concluding that competition results in more resources used for instruction); CAROLINE HOXBY, DO PRIVATE SCHOOLS PROVIDE COMPETITION FOR PUBLIC SCHOOLS? 6 (Nat'l Bureau of Econ. Res., Working Paper No. 4978, 1995) (stating that "it is clear that private school competitiveness makes the total school budget depend positively on public school productivity"), available at http://www.nber.org/papers/w4978.
- 148. See GREENE, supra note 144, at ii (summarizing positive effects of competition on school performance).
- 149. See generally Frederick M. Hess, The Work Ahead, EDUC. NEXT, Win. 2001, at 8 (discussing likely results of array of stimuli on public schools).

performances on the Florida Comprehensive Assessment Tests (FCAT) in reading, writing, and math. If a school receives two "F" grades in a four-year period, students assigned to that school are eligible for state vouchers that can be redeemed at another private or public school in Florida. After the program's second year of operation, only two schools received two failing grades within the four-year window. Students attending those two schools were eligible for state-funded vouchers. Approximately 50 students availed themselves of the voucher opportunity, and most chose to attend nearby private, religiously-affiliated schools. The 2000 FCAT results did not generate any additional schools that met the two "F" grades within a four-year period threshold. Consequently, the program did not offer tuition vouchers to the students of any other schools.¹⁵⁰

Jay Greene has explored the hypothesis that Florida schools receiving one "F" grade have the greatest incentive to improve student performance to avoid the prospect of losing students because of the availability of state-funded vouchers. In his analysis of FCAT score changes from 1999 to 2000, he found that schools that received grades of "A," "B," or "C" did not change appreciably. Greene notes, however, that schools that received a grade of "D" "appear to have achieved somewhat greater improvements than those achieved by the schools with higher state grades. Moreover, schools that received "F" grades in 1999 experienced statistically significant increases in their test scores that were "more than twice as large as those experienced by schools with higher state-assigned grades. Section By comparing only those schools that had received a "high-F" grade with schools that had received a "low-D" grade, Greene ascribes the gains achieved by "higher-scoring F schools," which exceeded those realized by the "low-D" schools, to the competitive threat posed by the prospect of vouchers.

Others, however, ascribe the "dramatic improvements" in Florida's failing schools to different factors. ¹⁵⁶ Camilli and Bulkley, for example, challenge Greene's findings on methodological grounds. ¹⁵⁷ Another observer

^{150.} GREENE, supra note 144, at 2.

^{151.} Id. at 6.

^{152.} Id.

^{153.} Id.

^{154.} Id.

^{155.} Id. at 8.

^{156.} See, e.g., Kupermintz, supra note 144 (arguing that improvements are function of one of three tested areas).

^{157.} Camilli & Bulkley, supra note 144 (arguing that Greene's neglect of regression to mean and identification of voucher program's unique net effect bias his analysis). For Greene's response, see Jay P. Greene, A Reply to Critique of "An Evaluation of the Florida A-Plus

agrees with Green's findings about score improvements, especially by low-scoring schools, but argues that those schools attention to the writing component of Florida's testing regime, and not the "voucher effect," was the crucial difference that generated the improved scores.¹⁵⁸

c. Student Achievement

For most, the ultimate barometer of an education policy's efficacy is whether more students learn more. Evidence on the actual or potential influence of school choice on student academic achievement, especially when private schools are involved, has always been controversial. The controversy originated again with Professor Coleman, who along with several colleagues published the first major empirical study that examined differences in student achievement between public and private (principally Catholic) schools. Coleman and his colleagues found that students in private schools performed slightly better, after controlling for student race and socioeconomic background. Their findings, not surprisingly, attracted criticism. More recently, for every study finding an advantage for private schools, another study either challenges such findings or concludes that little or no such advantage exists.

The empirical research involving the Milwaukee voucher program illustrates the discord. On the one hand, a study by the state-appointed evaluator found no systematic differences in academic performance between voucher and public school students in Milwaukee. Other researchers reanalyzing the

Accountability and School Choice Program" (2001) (arguing that Camilli & Bulkley article mischaracterizes his findings), available at http://www.ksg.harvard.edu/pepg/.

^{158.} See Kupermintz, supra note 144 (arguing that improvements are function of one of three tested areas).

^{159.} COLEMAN ET AL., supra note 114, at 180.

^{160.} See, e.g., Goldberger & Cain, supra note 116, at 119-21 (criticizing Coleman et al. study for flaws in sampling, research design, and sample bias).

^{161.} See, e.g., Hoxby, supra note 117, at 177 (predicting increased enrollment and improved test scores for private schools).

^{162.} See, e.g., Gamoran, supra note 117, at 14 ("One of the most consistent findings of the study was the absence of any net achievement benefits to those who attended nonreligious private schools.").

^{163.} Although the academic discord involves such technical issues as selection bias, control groups, research design, and regression equation, the rancor surrounding the research on the Milwaukee voucher program has managed to spill into the national press. See, e.g., Bob Davis, Class Warfare: Dueling Professors Have Milwaukee Dazed Over School Vouchers, WALL St. J., Oct. 11, 1996, at A1 (discussing how two prominent social scientists have clashing viewpoints on Milwaukee experiment data).

^{164.} See JOHN F. WITTE, THE MARKET APPROACH TO EDUCATION 125, 133-36 (2000)

same data, however, reached the opposite conclusion. ¹⁶⁵ In a third independent analysis of the disputed Milwaukee data, Professor Rouse found a modest systemic advantage for voucher students in mathematics but no similar advantage in reading performance. ¹⁶⁶

Despite the lingering disputes about its use, social science research increasingly finds its way into legal arguments. 167 Interestingly, although the use of social science evidence in the education context arcs directly back to Brown and footnote eleven, others have used empirical evidence in a variety of different ways over the years. Despite important variation, some constants remain. One constant is that, as the post-Brown education litigation experience demonstrates, serious litigants pushing serious equal education opportunity claims almost invariably draw on social science evidence. This holds true whether the specific context is school desegregation, finance, or choice. Moreover, even though judicial opinions since Brown have shied away from mooring critical legal conclusions exclusively on social science research, courts are increasingly mindful of the research germane to the legal questions presented. Finally, if nothing else, observers have noted that despite its limitations and technical flaws, the quality of social science available for and used by litigants involved in equal education lawsuits today far exceeds that which the Court relied upon in Brown in 1954. 168

III. Some Consequences of the Warren Court's Empirical Legacy

A complete understanding of the potential significance of the Warren Court legacy will probably not be possible for another generation or two, if at all. That said, after some thirty years since the close of the Warren Court, its imprint on the equal educational opportunity doctrine through incorporating empirical social science has already emerged with surprising clarity. I will focus on two main consequences of this legacy. One consequence relates to the implications for the equal education doctrine. A second consequence is institutional and involves thrusting courts and lawyers into the relatively unfamiliar intellectual terrain of social science.

⁽arguing that voucher students in Milwaukee do not perform better on reading and math tests).

165. See, e.g., Paul E. Peterson, School Choice: A Report Card, 6 VA. J. Soc. Pol'Y & L.

47, 70-71 (1998) (arguing that Milwaukee's voucher students improved performance).

^{166.} See Cecilia E. Rouse, Private School Vouchers and Student Achievement, 113 Q.J. ECON. 553, 592-94 (1998) (analyzing Milwaukee data with respect to math and reading performance); see also Levin, supra note 103, at 378 (concurring in Rouse's "careful analysis").

^{167.} To see how some of this research reached the U.S. Supreme Court in the *Zelman* case, see *supra* note 131.

^{168.} See Viteritti, supra note 51, at 113-15 (describing relatively high quality of school choice empirical research).

A. How an Empirical Mooring Influences Equal Education

A fair analysis of the overall efficacy of the influence of the Warren Court's empirical legacy must include a balanced assessment of the associated benefits and costs. Paradoxically, some of the attributes that enhance equal education lawsuits can also make such litigation both difficult and problematic. A prime example is the inherent difficulty in measuring something as elusive as notions of equal education. Notably, on a mechanical level, the equal education doctrine is difficult to operationalize with any consistency and rigor. Numerous variables move in different directions simultaneously, increasing the complexity of an already difficult task. Even if precise mathematical formulations were possible, others challenges lurk. One potential discomfort for plaintiffs is that defendants can marshal their own empirical evidence to defend particular policies against legal challenges.

To be sure, an empirical orientation influences the equal education doctrine in ways that generate important benefits for those pushing constitutional litigation. As previously discussed, credible empirical findings relating to potential harms flowing from specific education policies can effectively obviate the traditional need to establish individualized harm and causation for each named plaintiff. 169 Moreover, empirical evidence supplies courts and iudges with something resembling a judicially discoverable and manageable standard under which to assess claims about unequal educational opportunity. 170 Additionally, it provides courts with a seemingly objective and neutral framework to point to as they reach difficult conclusions on vexingly complicated questions. A related byproduct is that an empirical orientation prompts litigators as well as judges to think more critically, analytically, and precisely about the contested issues. Moreover, the prevalence of empirical evidence encourages litigants to develop empirical dimensions of their evidentiary base and to craft legal arguments with an eye toward social science. Finally, these benefits appear fixed. Having incorporated social science evidence in such a seminal, public, and far-reaching decision as Brown, the Court is effectively estopped from ignoring similar evidence advanced in subsequent litigation involving equal educational opportunity.

Such doctrinal benefits flowing from an empirical mooring must be considered in light of related costs. Although it is important not to minimize the significance of the mechanical difficulties associated with empirically mooring equal education, a distinct and more significant cost is conceptual. Specifically, one major cost flows from the narrowing effect that the empirical

^{169.} See supra Part II.B (discussing empiricization of equal educational opportunity doctrine under Warren Court).

^{170.} See supra notes 58-59 and accompanying text (discussing Brown's use of social science to measure harm).

orientation exerts on the doctrine's development and interpretation. Thus, even if equal education somehow could be distilled accurately into a mathematical equation, important normative questions would still linger. At bottom, some commentators question the appropriateness of reducing judicial determinations of equal education to an empirical point. To some, questions about particular policies' implications for equal education are best cast as a question about constitutional values and "simple justice," not regression equations. That regression equations continue to exert considerable pull in the education context is a direct consequence of the Warren Court. Thus, the orientation of equal education around empirical social science — in some cases, raw statistics—deflects judges from articulating constitutional values or norms.

Moreover, one of the purported benefits of an empirical mooring – tethering illusive notions about equal education to a seemingly neutral and objective empirical framework – can mask potential subterfuge. More specifically, given the inherent imprecision and limitations of empirical analyses of complex issues (such as equal education), responsible social scientists acknowledge substantial ambiguity and latitude regarding some assessments of correlation among key variables and regarding what should be properly inferred from results. Judges and lawyers may seize upon these ambiguities and cloak personal preferences and client interests with social scientific garb to seek the veneer of empirical precision when little exists. To the extent that such opportunities exist and judges and lawyers seize them, the utility of empirical social science is diminished.

B. Institutional Costs

The Warren Court's empiricization of the equal educational opportunity doctrine also generates institutional costs. A constantly evolving (and growing) docket of cases advancing equal educational opportunity claims, combined with the doctrine's empirical mooring, imposes institutional costs by thrusting courts, judges, and lawyers further into comparatively unfamiliar intellectual terrain.

Judges recognize their own limitations in dealing with empirical social science evidence. Judges, almost all of whom are legally trained and a

^{171.} See, e.g., Viteritti, supra note 51, at 115 ("The notion that a panel of objective scholars will some day produce conclusive evidence to predict the educational and social consequences of a vigorous voucher program is sheer fantasy.").

^{172.} Id. at 117.

^{173.} I am indebted to my colleague James E. Ryan for raising this possibility.

^{174.} See, e.g., Craig v. Boren, 429 U.S. 190, 204 (1976) ("It is unrealistic to expect either members of the judiciary or state officials to be well versed in the rigors of experimental or statistical technique."). But cf. David L. Faigman, To Have and Not Have: Assessing the Value

product of the American legal education system, typically lack formal graduate training in research methodology. As a result, judges do not typically possess the requisite research tools to conduct, or even to assess critically, empirical research. Fewer still possess the inclination or time to update their existing research skills or analytical repertoire. To conduct or assess empirical research requires more than the traditional legal reasoning, research, and analytical skills that law schools impart to their students. If today only a handful of law schools offer a single course in statistics, research design, or empirical legal methods¹⁷⁵ – required staples in most graduate social science programs – far fewer did so years ago when most of today's judges were law students.

In addition to a general unfamiliarity with empirical social science, another source of frustration for judges is that they are frequently asked to resolve disputes that pivot on empirical questions that either lack an empirical research base or rest on research that is underdeveloped, inconclusive, or both. Anxiety over empirical uncertainty is especially apt in the equal education context. As discussed previously, when litigants push questions that pivot on asserted relations between student academic achievement and a school's (or district's) racial distribution, key dependent variables, such as student achievement, are notoriously difficult to measure. One aspect that distinguishes much social science in general – and education research in particular – is the reluctance, indeed, the general aversion to permit scholars to design and implement "pure" scientific protocols, which include control groups. The use of human subjects, especially schoolchildren, in such research is all but non-existent. Consequently, research must often proceed with "second-best" research designs.

of Social Science to the Law as Science and Policy, 38 EMORY L.J. 1005, 1080-82 (1989) (explaining ways to facilitate understanding of social science in judicial settings).

^{175.} The number of courses in empirical methods offered to law students is increasing. Presently, approximately twenty law schools offer such courses. I am inclined to believe that within five years the number of such courses will easily double. In ten or twenty years such courses may be ubiquitous in law schools. For more discussion, see Michael Heise, *The Importance of Being Empirical*, 26 PEPP. L. REV. 807, 817 n.50 (1999) (discussing empirical course offerings in law schools); Heise, *supra* note 7.

^{176.} See supra Part II.C (discussing legacy of Warren Court in litigation involving empirical evidence).

^{177.} For example, in the school choice context, Professor Caroline Hoxby describes random-assignment as the "gold-standard" of research designs. See Caroline M. Hoxby, Effects of Vouchers on Students and Families, in CAMBRIDGE SCHOOL CHOICE CONFERENCE 72, 85 (Manhattan Inst. Conference Series No. 5, 2000) (describing desired methodological characteristics of empirical research on school choice programs).

^{178.} See Henig, supra note 130, at 90-97 (discussing how selection bias flows from allowing parents, rather than research teams, to select their children's schools).

Related to questions about how well courts handle increasingly technical empirical evidence are normative questions about whether courts should do so. Strong institutional reasons augur caution. As previously discussed, judges traditionally lack training in social sciences. Moreover, judicial chambers, staffed principally with law clerks, administrative assistants, and other support staff, are not set up to review – let alone conduct – primary social science research.

Of course, other factors point in the opposite direction. For example, the absence of formal training is not (nor should it be) dispositive on the issue of whether courts should consider empirical evidence. After all, judges lack formal training in many of the areas into which litigants thrust them. Also, a functional understanding of the "exotica of empirical social science" is almost assuredly within the reach of most interested jurists. Finally, because Article III courts are fundamentally reactive due to the case and controversy requirement, where judges and courts find themselves flows substantially (though not exclusively¹⁷⁹) from where litigants take them. And litigants' already significant use of empirical evidence continues to rise.

Another related, but distinct, dimension to the institutional limitations involves the larger question about the efficacy of judicial efforts to influence public policy, including education policy. Setting aside the important normative considerations, whether the Warren Court (or other courts) as a descriptive matter can achieve what they set out to achieve is a matter of considerable debate. Indeed, the influence of the Warren Court's *Brown* decision on the public policy favoring integrated schools is implicated in this larger debate. Professor Rosenberg's *The Hollow Hope*¹⁸⁰ re-ignited the legal impact literature. To be sure, legal impact literature remains largely underdeveloped and overwhelmingly descriptive. In *The Hollow Hope*, Professor Rosenberg asks, "[T]o what degree, and under what conditions, can judicial processes be

^{179.} Of course, courts certainly have at their disposal the political question doctrine. It is conceivable that such a doctrine could be invoked when a court believes that the terrain into which litigants want to trench is not sufficiently "legal."

^{180.} GERALD N. ROSENBERG, THE HOLLOW HOPE: CAN COURTS BRING ABOUT SOCIAL CHANGE? (1991).

^{181.} The legal impact literature has been characterized as "small but exceedingly stimulating and valuable." Peter H. Schuck, *Public Law Litigation and Social Reform*, 102 YALE L.J. 1763, 1764 (1993) (reviewing GERALD P. LOPEZ, REBELLIOUS LAWYERING: ONE CHICANO'S VISION OF PROGRESSIVE LAW PRACTICE (1992), and ROSENBERG, *supra* note 180).

^{182.} Of course, important contributions to the legal impact literature exist, and some of these are empirical. See generally PAUL T. HILL & DOREN L. MADEY, EDUCATIONAL POLICY MAKING THROUGH THE CIVIL JUSTICE SYSTEM (1982) (examining implementation of federal handicapped legislation through federal courts); HOROWITZ, supra note 85 (analyzing role of courts in educational policy making); MICHAEL A. REBELL & ARTHUR R. BLOCK, EDUCATIONAL POLICY MAKING AND THE COURTS: AN EMPIRICAL STUDY OF JUDICIAL ACTIVISM (1982) (same).

used to produce political and social change?"¹⁸³ Rosenberg's inquiry raises yet another question: Did the empiricization of the equal educational opportunity doctrine contribute, impede, or not influence the Court's ability to achieve greater equity in the school context?

IV. Conclusion

To answer such a question presupposes that courts should, as a normative matter, draw on empirical social science when construing equal educational opportunity. As a dedicated and practicing empiricist, I find that such an assumption flows almost instinctively from me. Moreover, on one level, legitimate empirical dimensions lurk behind and permeate core equal education disputes. At the same time, however, many equal education disputes also raise issues that transcend numbers. In addition, my experience with empirical legal research has at once enhanced my view of how it can contribute to and inform traditional legal doctrine, as well as given me a healthy respect for empiricism's limitations.

Regardless of one's perspective on the growing empiricization of the law generally, it is important to put the implications for equal education, as well as our quest for better and fairer schools, into a broader context. As I have stressed previously, the Warren Court's contribution to the equal education doctrine's empiricization, achieved largely through Brown, took place while law and legal scholarship were becoming increasingly empirical. Thus, the Brown opinion is simultaneously a contributor to, and reflection of, a larger empirical orientation. Indeed, movement in legal scholarship both pushes and reflects this same trend. As Dean Revesz notes, the movement of the legal academy toward empirical research is among the most significant legal developments in the past few decades. 184 The thrust provided by Brown remains important. Although the Warren Court is far from the sole cause of this trend, its contribution to the equal education doctrine surely influenced this trend. The equal education doctrine and the increased integration of empirical social science into legal analysis are both individually and collectively important. Together they help shape the Warren Court legacy.

^{183.} ROSENBERG, supra note 180, at 1.

^{184.} See Richard L. Revesz, A Defense of Empirical Legal Scholarship, 69 U. CHI. L. REV. 169, 188 (2002) (discussing modern trend towards use of empirical research).