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**What New Social Science Evidence Suggests about
K-12 Diversity and Access to Higher Education for
Underrepresented Minority Students**

Roslyn Arlin Mickelson
University of North Carolina at Charlotte

WORKING DRAFT

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Abstract

This paper explores the links among academic achievement, race-, ethnic-, and class-correlated opportunities to learn in K-12 public schools, and the differential higher education eligibility rates of historically underrepresented minority students. The paper reports the initial findings from a survey of the extant social and behavioral science literatures on the effects of school and classroom composition on secondary school achievement and other educational outcomes relevant to higher education. I am conducting the survey under the auspices of the American Sociological Association's Sydney J. Spivack Program for Applied Research and Social Policy. Several facts-on-the-ground make a new synthesis rather urgent. Persistent race, ethnic, and social class gaps in achievement require renewed attention to all sources of these gaps, including the role of school and classroom composition. The demographic transformation of the US means student populations are becoming increasingly diverse in terms of ethnicity, language, and race. At the same time, school-level segregation has increased as federal enforcement of mandatory desegregation has declined. Recent research utilizing multilevel models and large-scale survey data sets reveal benefits of diversity and the harms of racial isolation for achievement. It concludes with recommendations for future studies to address lacunae in the research base and for education policies that may work to expand the numbers of URM students eligible for higher education.

The Supreme Court's decision in *Grutter* recognized the value of a diverse student body for higher education. The Court also set the timetable for eliminating the need for affirmative action in college admissions at twenty-five years (*Grutter*, 2003). If the need for affirmative action is to disappear within that time frame, public policies and institutions must identify and eradicate the sources of the race gap in higher education eligibility. Achievement in high school is central to eligibility for higher education. Persistent racial and ethnic differences in grades and SAT scores are key factors in differential access to higher education. Students, parents, educators, and admissions officers accept the proposition that grades and SAT scores reflect some combination of students' cumulative efforts, achievement, and prior learning. The sources of the race gaps in K-12 achievement (measured by grades and standardized test scores) have received sustained scholarly attention for decades. By comparison, scholarly attention to the race gaps in SAT scores is smaller, but growing.¹

¹ Whether SAT scores reflect students' social class and cultural background, family wealth, math and verbal reasoning skills, and/or have predictive validity for freshmen's grades or college graduation are subjects of intense debate. *See generally* WILLIAM G. BOWEN & DEREK BOK, *THE SHAPE OF THE RIVER: LONG-TERM CONSEQUENCES OF CONSIDERING RACE IN COLLEGE AND UNIVERSITY ADMISSIONS* (1998) (arguing that affirmative action in higher education enhances the education of all students through the diversity it engenders); JAMES CROUSE & DALE TRUSHEIM, *THE CASE AGAINST THE SAT* (1988) (foreshadowing many of the arguments that question the validity, reliability, and unintended social consequences of the SAT); NICHOLAS LEMANN, *THE BIG TEST: THE SECRET HISTORY OF THE AMERICAN MERITOCRACY* (1999) (providing a social history of the creation of the College Board and the SAT); *RETHINKING THE SAT: THE FUTURE OF STANDARDIZED TESTING IN UNIVERSITY ADMISSIONS* (Rebecca Zwick ed., 2002) (presenting data that raises questions about the historical purpose of the tests for college admissions, the predictive validity of SAT scores, and whether such scores should continue to be used in college admissions); Aaron M. Pallas & Karl L. Alexander, *Sex Differences in Quantitative SAT Performance: New Evidence on the Differential Coursework Hypothesis*, 20 AM. EDUC. RES. J. 165 (1983) (indicating that the number and rigor of high school math courses is a determinant of SAT performance); Brian Powell & Lala Carr Steelman, *Bewitched, Bothered, and Bewildering: The Use and Misuse of State SAT and ACT Scores*, 66 HARV. EDUC. REV. 27

For these reason, social, and behavioral scientists have investigated the ways that K-12 public education is organized to determine if the racial/ethnic composition of schools and classrooms contribute significantly to secondary school grades and standardized test scores. If there clear and consistent relationships among opportunities to learn in K-12 public schools and the race/ethnic composition of the schools and classrooms within them, then the diversity or lack thereof in K-12 learning environments is an important factor in the differential higher education eligibility rates of historically underrepresented minority students.

My paper presents early findings from an ongoing survey of the social science and education research on the effects of school and classroom racial composition on academic achievement. Based on early findings from recent research on the topic that I have collected, I find that (1) racially isolated classrooms and schools are associated with in inferior opportunities to learn that, in turn, impede higher education eligibility, (2) the classroom and school composition policies can be modified to maximize opportunities to learn and enhance higher education eligibility of under represented minorities (URM), and (3) new multimethod research on the relationship of K-12 composition, achievement., and college eligibility among American Indian, Asian American, Hispanic, and immigrant student populations is needed.

A number of amici curiae briefs recently filed in the Seattle (*Parents Involved in Community Schools v. Seattle School District No. 1 2006.*) and Louisville (*McFarland v. Jefferson County Public Schools*) voluntary desegregation cases present comprehensive reviews of the corpus of scholarship on the

(1996) (arguing that state-by-state differences in SAT and ACT scores must be corrected for compositional and demographic factors before comparisons across states can be meaningful). In a study that explicitly examined the relationship of segregation to SAT scores in the Charlotte Mecklenburg Schools (Mickelson 2006), I found that consistent negative effects on Blacks and Whites' achievement and SAT scores from elementary segregation, high school segregation, and racially-correlated tracking.

long- and short-term consequences of school and classroom cognitive and noncognitive outcomes. (c.f., in particular, *Brief of the American Educational Research Association* and *Brief of 553 Social Scientists*). In this paper, I offer a short history of the debates found in previous syntheses of the literature, showing the development of ideas over several decades of desegregation research. In addition to reviewing the evolution of ideas in older syntheses, I describe in some detail several recent studies because their findings are especially noteworthy for understanding the link between classroom and school composition, achievement, and eligibility for higher education. I also want to describe the American Sociological Association's Spivack Project under whose auspices I have been conducting my own survey of the extant literature. Finally, I offer policy recommendations for K-12 schools and classrooms, and for future research on this topic.

Background

The synthesis of the social science literature on which this paper is based was inspired by Attorney Julius Chamber's remarks during the Legacy of *Brown v. Board of Education* session at the 2004 American Sociological Association meeting. Mr. Chambers, renowned civil rights attorney, former head of the NAACP's Legal Defense and Education Fund, and Chancellor Emeritus of North Carolina Central University, challenged the sociologists before him to mobilize their research skills and scientific knowledge about the effects of diversity on educational outcomes in K-12 public schools. Chambers pointed out that civil rights litigators continue to use the courts in their struggle for equality of educational opportunity. He recalled how vital social science data on the effects of diversity in higher education were to the Supreme Court's 2003 decision upholding narrowly tailored affirmative action practices in *Grutter v. Bollinger*. Along with my colleague Kathryn Borman, I responded to Mr. Chamber's challenge with a proposal to the ASA to conduct a synthesis of extant research on the topic. The ASA offered support through the ASA's Sydney Spivack Program for

Applied Social Research and Social Policy, a standing committee of the ASA that works to connect social science knowledge to broad issues of applied social research and public policy.

Chamber's prescient challenge to social scientists was given none too soon. At the time he spoke to the ASA in 2004, several voluntary desegregation cases were working their way through the court system.² In June, the Supreme Court granted certiorari in the Louisville, KY case (*McFarland v. Jefferson County Public Schools*) and the Seattle, WA case (in *Parents Involved in Community Schools v. Seattle School District No. 1*). Many social scientists were available to assist the attorneys developing amici briefs for these cases. For example, the American Sociological Association's Spivack Project on the Effects of School and Classroom Composition on Educational Outcomes was well underway. In late 2005, we launched the Spivack Project. We began the literature survey in December, 2005. From January through May, 2006 we interviewed 31 eminent scholars in the field, and in June, 2006 we held an invitational workshop.

² Boger (2006) explains that in *Comfort v. Lynn School Committee* a judge concluded that racial diversity and avoiding racial and SES isolation are compelling government interests that justify race-conscious student assignment practices. Sitting en banc, the U.S. Court of Appeals for the 1st Circuit upheld the school district's race-conscious transfer policy. The U.S. Supreme Court denied certiorari, (*Comfort v. Lynn School Committee* 418 F. 3d 1(1st Cir) (en banc), Cert denied by *Comfort v. Lynn School Committee* US (2005).

The Fifth Circuit recently addressed this issue in *Cavalier v. Caddo Parish School Board*, striking down the use of race in the absence of any showing of a compelling governmental interest, absent any continuing school desegregation consent decree. That case has been remanded to the federal district court for further proceedings. In the Sixth Circuit, a federal district judge granted partial relief to the Louisville schools in June of 2004, upholding most aspects of a race-conscious student assignment plan in *McFarland v. Jefferson County Public Schools*. On appeal, the Sixth Circuit also affirmed most of the race-conscious student assignment (*McFarland v. Jefferson County Public Schools* 416 F. 3rd 513 [6th Circuit], rehearing en banc denied, 2005 US App.). In the Ninth Circuit, a decision in *Parents Involved in Community Schools v. Seattle School District No. 1*, upheld the use of race as a factor in Seattle high school student assignments. On appeal, a Ninth Circuit panel reversed that judgment. Sitting en banc, the Ninth Circuit affirmed the district court upholding Seattle's School District's practices (*Parents Involved in Community Schools v. Seattle School District No. 1* 426 F. 3rd. 1162 [9th Cir. 2005] (en banc).

Collection of Extant Research The Spivack Project's first stage is the creation of a searchable electronic database. My research assistants and I are conducting electronic and manual searches of the social science, economics, and education literature. As of this writing, 250 studies have been collected and coded and another 200 have been identified. Each piece of research is summarized, coded, and archived in a searchable electronic database. The collection of research for the Spivack electronic Archive will continue until possible items for inclusion are exhausted. Criteria for inclusion of research in the database include:

- Published and unpublished studies from different methodological traditions including qualitative studies, correlational studies, small- and large-scale surveys, experiments, and quasi-experiments.
- Literature reviews on the topic.
- Conceptual or theoretical works on the topic.
- Legal scholarship.

For inclusion in the database, the empirical studies (qualitative and quantitative) meet the following criteria:

- A focus on achievement, racial tolerance, or related outcomes (such as educational attainment, integrated adult peer relationships).
- A clearly reported and compelling logic to their research designs irrespective of the methodology.
- An ethnically, racially, linguistically diverse samples of U.S. students.
- A focus on classroom and/or school composition effects on outcomes.

When the literature survey is completed in 2007, a rigorous set of criteria will be developed for selecting the studies that will be synthesized in a monograph. Only a subset of the archive entries will be included in the actual synthesis for the monograph. We will be guided in the formulation of inclusion criteria by not only our professional expertise, but also by insights gained from a broad group of social scientists and methodologists who were interviewed and/or who attended the Spivack workshop (see below).

Interviews with Eminent Social Scientists and Education Rights Legal Scholars During the second stage of the Spivack process, ASA's Deputy Executive Officer Carla Howery, sociologist Kathryn Borman, and I interviewed 31 distinguished social scientists, social science methodologists, and legal scholars. Interviewees were selected because their scholarship has explored some aspect of the effects of school and classroom composition on educational outcomes or they use social science in their education rights litigation and/or scholarship. Interviewees' demographic characteristics were also considered in the selection of scholars in order to ensure ethnic and gender diversity amongst those who were interviewed. Among the scholars interviewed are twelve women and nineteen men were interviewed: Twenty-two Whites, five African Americans, three Latinas/os, and two Asian Americans (see Appendix I).

Each person was asked to opine on (a) what the extant empirical research reveals about composition effects on outcomes, (b) to identify weaknesses in the research base, (c) to suggest what an ideal research agenda on the topic (henceforth, the topic refers to the effects of school and classroom composition on educational outcomes) would address, and (d) what data would be necessary and research designs could best be employed in this ideal situation.

Initial analyses of the interviews indicate bimodal views among the experts regarding the effects of school and classroom composition on achievement outcomes. This is not surprising given that the interviewees were selected precisely in order to encompass a range of perspectives. Many interviewees believed there is clear, consistent evidence that diverse schools and classrooms have positive effects on achievement, while a number of others saw inconsistent or no clear achievement effects. Several interviewees discussed recent relevant studies by other scholars or studies that they had conducted. Two prominent desegregation researchers, David Armor and Christine Rossell, independently mentioned a study by Eric Hanushek and his colleagues (2006), who found that segregation in Texas schools is harmful to black students' achievement. Armor noted that Hanushek's study prompted him to revisit the question of compositional effects (Armor 2005, Armor & Watkins 2006).

There was consensus on several other questions. Experts saw both school and classroom composition as critical organizational components of the school structure that must be considered in future investigations. They agreed that because the extant literature focuses almost exclusively on Blacks and Whites, the knowledge base is woefully inadequate with regard to the effects of composition on Latinos, Asian Americans, Native Americans, immigrant, and language minority students' outcomes. The interviewees found the older literature unsuccessful distinguished between the influences of family socioeconomic status and school effects as the intersected with students' ethnicity. They further agreed the traditional focus on test scores misses important long-term outcomes such as educational attainment and occupational attainment. Most interviewees agree the research record shows diverse learning environments contribute to reduction of racism and racial fears.

The social scientists further agreed that much of the existing literature has varying degrees of methodological weakness, yet there was little consensus on what would constitute methodological rigor in future definitive studies of this topic. All the interviewees called for more research to address these gaps in the knowledge base. A significant number of interviewees called for future research to employ multiple methods, especially qualitative studies and large-scale surveys that incorporate data from various independent sources.

The Experts' Invitational Workshop The third stage of this process was an experts' workshop with a second group of expert social scientists and educational researchers. The American Sociological Association hosted the workshop June 9 through 11, 2006. The workshop panelists included twelve women and ten men. Nine were Whites, eight were African Americans, three were Asian Americans, and two were Latinas/os (See Appendix II).

Participants wrote a short memo (3-5 pages) addressing what they perceive to be the central issues for the Spivack Project's investigation of classroom and school composition. Workshop participants spent three days discussing and analyzing the set of memos in conjunction with the themes that emerged from the 31 interviews conducted earlier. The Spivack Workshop delineated a set of core scientific and methodological guidelines that will serve as recommendations when I conduct the actual literature synthesis and write the monograph and reports for stakeholders in the legal, educational, and policy communities.

The Monograph and Reports The fourth stage will be launched in 2007 when the survey of the literature is completed and all identified research has been coded and entered into the Spivack Archive database. Why is another synthesis needed now, especially in light of the many excellent

syntheses that were incorporated into the *Seattle* and *Louisville* briefs? To be sure, a number of scholars have conducted reviews and syntheses of the literature on the effects of classroom and school composition on educational outcomes that included achievement. Prior syntheses reflected cutting edge research at the time they were written. But their conclusions were constrained by the methodological limitations of the empirical studies included in the reviews. Few of the older empirical studies investigated the joint effects of school and classroom racial composition on outcomes. Nor did the older studies employ multilevel statistical models that incorporate the fact that students are nested *in* classrooms, and classrooms are nested *in* schools.³ Finally, most older

³ The most serious methodological flaw in older studies derives from the fact that there is a clear hierarchy consisting of students nested within classrooms, and classrooms nested within schools. Analyses that do not take this hierarchy into account produce biased and incorrect results. Newer studies that use multilevel models, such as hierarchical linear modeling (Raudenbusch & Bryk 2002) are able to address this dilemma. As Borman and Dowling (2006) explain:

HLM explicitly models the nested structure of the data and produces estimates that allow an accurate prediction of outcomes for members of groups as a function of the characteristics of the groups as well as the characteristics of the members. Most importantly, the methodology allows researchers to disentangle how schools and students' family backgrounds contribute to learning outcomes. The methodology offers a clearer interpretation of the relative effects of school characteristics, including racial/ethnic composition, and family background, including race/ethnicity and social class, on students' academic outcomes. This approach enhances the level of precision in the estimates, thus increasing the quality of inferences made from the data.

In comparison, the traditional OLS regression approach, which Coleman and past analysts of the *EEO* data employed, applies a single equation and predicts student outcomes at only one level. This causes problems with estimation the variation in achievement outcomes and, in turn, affects the accuracy of inferences that can be made from the data. When we estimate, for instance, the effects of student and school characteristics in the same equation that predicts student-level outcomes (e.g., achievement) we are assuming that the school and individual characteristics are from a simple random sample. This is clearly not true since large numbers of individuals were sampled from each of the schools represented in the data set. The school characteristics are all the same for the group of students who are enrolled within the same school. Therefore, the "true" variance in school characteristics is underestimated by OLS. Also, when clustered or nested data are submitted to a traditional regression analysis the assumption of independence of units of analysis (a fundamental assumption in statistical analysis) is violated, which leads the researcher to falsely conclude that results are statistically significant and reliable.

literature syntheses focused on Blacks and Whites because most of the empirical literature ignored social class differences among students, and other ethnic, language, and racial minority populations.

Today, there is much better data on the key questions of interest (national, state-wide, and district-wide data sets with multiple measures of exposure to classroom and school segregation) and much more sophisticated statistical tools (e.g., multilevel regression models) to use in reaching scientific conclusions on the effects of school and classroom racial composition on educational outcomes. As noted in the previous section, the recent empirical studies have expanded the population of students to include Asian Americans, Latinos, English language learners, and others missing from older studies. But the newer research is scattered across disciplines that include the social sciences, education, and economics, and much of it is still in the process of undergoing peer review for publication.

The Spivack literature survey and synthesis will bridge the parochial character of academic disciplines. In addition, because it is useful to consider desegregation effects on cognitive and non-cognitive outcomes in terms of long- and short-term effects, the Spivack synthesis will address each quadrant of the table below:

Diversity and Educational Outcomes		
	Short Term	Long Term
Academic	I Academic achievement	II Educational attainment Educational aspirations
Nonacademic	III Occupational aspirations Interracial peer groups Tolerant racial attitudes	IV Occupational attainment Democratic values for social cohesion & racial tolerance

Early Research on Compositional Effects on Outcomes

The next section of this paper provides a brief history of the findings from earlier syntheses of the literature as a context for the Spivack Project itself. The earliest syntheses of studies on academic outcomes of desegregation found no consistent positive effects on academics from desegregated education (St. John 1975). It is noteworthy that the early studies that St. John reviewed reported outcomes from many desegregation plans that had been implemented for only a few years. In the next generation of syntheses, social scientists began to report positive effects (Hochschild 1983; Mahard & Crain 1983). For example, Mahard & Crain's (1983) meta-analysis of 93 studies, more than half of which were randomized experiments or longitudinal designs with segregated black control groups, reported effect sizes of up to .3 standard deviation in math outcomes.

Literature syntheses conducted between the early-1980s and mid- 1990s addressed both academic outcomes, like test scores in math and reading, and nonacademic outcomes such as interracial friendships, racial attitudes, and occupational attainment. Overall, syntheses this period tended to agree that desegregation resulted in positive long-term status attainment outcomes for Blacks and Whites who attended diverse high schools (Braddock & McPartland 1988; Braddock, Dawkins, & Trent 1992; Hallinan 1998; Hawley 2002; Hochschild 1983; Schofield 1995; Wells & Crain 1994). The syntheses also reported that desegregation was associated with positive racial attitudes and the reduction of racial prejudice. However, these syntheses were still inconclusive about short-term outcomes of desegregation.

Syntheses from this period varied widely in how they approached the task of literature reviews, and consequently, conclusions about the short-term academic effects of school composition varied widely. For example, one of the most influential of these earlier syntheses was a

National Institute of Education panel that examined the then-extant corpus of empirical studies on the effects of desegregation on Black students' reading and math achievement (Cook 1984). Chaired by methodologist Thomas Cook, the panel selected the most "methodologically rigorous" 19 of the (then) 157 empirical studies on desegregation and black achievement. What constituted methodological rigor was a question of intense debate then (and now). The panel excluded 138 studies because their designs, samples, and measures did not meet the panel's stringent definition of methodological rigor: experimental design. Despite panel member Robert Crain's protests, the NIE panel excluded most of the studies included in his and Mahard's previously published 1983 meta-analysis.

Eight panelists reanalyzed the 19 methodologically rigorous studies and then conducted a meta-analysis. Crain maintained his and Mahard's 1983 the meta-analysis was valid and did reanalyze the 19 studies. In his summary of the seven panelists' meta-analyses of the 19 best studies, Cook concluded that (a) although desegregation increased mean reading levels, it did not cause either an increase or decrease in blacks' mathematical achievement; and (b) the small sample size and nonnormal distributions used in all the studies undermined confidence in estimating population parameters from the results. Cook tepidly concluded that he had "little confidence that we know much about how desegregation affects reading" (1984, pp. 40-41).⁴ Nonetheless, the Cook study is often cited by desegregation critics as evidence of the policy's failure.⁵

⁴ However, Cook also stated "In retrospect, the decision to restrict the selection criteria to a common set rather than let the panelists select their own, and the failure to assess each of Crain's 93 studies according to the panel's criteria, may have unnecessarily restricted both the sample of studies and the heterogeneity in assumptions on which the theory behind the use of multiple panelists depends (1984, p.39)"

⁵ C.f., *Brief of Drs. Armor, A. Thernstrom, and S. Thernstrom* (2006).

More recent literature syntheses of the effects of school composition conducted during the next 15 years (roughly the late 1980s through the early 2000s) continued to fall roughly into two camps: those that reported positive, albeit weak, effects of school diversity on reading and math and (when included) science outcomes, and those that found no positive effects of desegregation on math outcomes. A prominent critic of desegregation, David Armor (Armor 1995, 2002), wrote several literature syntheses in which he weighed the harms and benefits of mandatory desegregation. He concluded mandatory desegregation has few benefits and many harms. Armor's syntheses extensively cite his own largely unpublished opus of expert witness reports that invariably found no effects of desegregation on achievement.⁶ In contrast, the synthesis written by scholars who found positive effects from desegregation drew from a wide variety of published conducted by themselves and other scholars (Braddock & Eitle 2003; Hallinan 1998, Hawley 2002; Schofield 1995).

First- and Second-Generation Segregation Beginning in the late 1980s, scholarship on the topic of school composition effects on achievement began to distinguish between first- and second-generation segregation (Meier, Stewart, & England, 1989; Wells & Crain, 1994; Welner & Oakes, 1996). Researchers referred to the racial composition of schools within a single district as first-generation segregation, and they consider the racially-identifiable grouping or tracking as second-generation segregation. A number of scholars reported that in school systems under court orders to

⁶ Armor has served as an expert witness in about 40 cases (Armor 2003). He was the primary expert witness for the white plaintiffs seeking an end to judicial supervision of the Charlotte-Mecklenburg Schools (*Capacchione v. Charlotte-Mecklenburg Schools* 1999). I was one of the expert witnesses for the defendant, the Charlotte-Mecklenburg Schools. Several articles based on my expert report or the survey data upon which it was based have been published in peer-reviewed scholarly journals (Mickelson 2001; Mickelson & Greene 2005; Mickelson & Heath 1999) and law journals (Mickelson 2003a, 2003b, 2006).

desegregate, ability grouping and tracking were informally used to resegregate students even in “desegregated schools” (Eitle 2002; Lucas 1999; Mickelson 2001; Oakes 2005; Welner 2001; Welner and Oakes 1996).

The first- and second-generation segregation literature dovetailed with the growing empirical literature on the effects of classroom composition, ability grouping, and tracking on opportunities to learn (Gamoran 1992; Kulik & Kulik 1982, 1987; Oakes 1985, 1990; Slavin 1990). The ability grouping and tracking literature addressed two questions: are track assignments correlated with students’ social class and/or racial backgrounds? And are ability groups and tracks optimal organizational strategies for maximizing learning and instruction? Research demonstrated that ability groups and tracks were invariably correlated with students’ race and class. Middle class and White students were more likely to learn in higher tracks than minority students and those from lower socioeconomic classes (Gamoran 1992; Lucas 1999, Loveless 1998, Oakes 1985, 1990; Oakes et al 1990; Wheelock 1994). But researchers did not agree if this correlation existed independent of students’ abilities, prior performance, and preferences. Neither could they agree as to whether tracking as an instructional strategy advanced opportunities to learn or reinforced existing inequalities among students.

Irrespective of these debates, it was indisputable that tracking and ability grouping resegregated students within desegregated schools, thereby blunting the potential benefits of desegregation as a reform to close the achievement gap. Oakes (2005), Lucas (1999), Welner (2001), Eitle (2002; Mickelson (2001) and others have shown that racially correlated grouping practices contribute to the race gap. A recent spate of empirical studies examined learning in heterogeneous classrooms. The studies demonstrated how to maximize learning for all students in diverse

classrooms. For example, Burriss and her colleagues (2006), Boaler (2006), and Horn (2006) all found that math achievement improved in heterogeneous classrooms. Webb et al (1998) found heterogeneous groups improved science outcomes for all but the highest achievers. Just as Terenzini et al (2001) found that diversity among science learners improved college performance, Herrenkohl (2006) found that heterogeneous classrooms improved elementary science achievement. Cohen and Lotan (2003) developed an extensive corpus of research demonstrating how complex instruction in heterogeneous classrooms enhances achievement for all students.

Recent Research on Compositional Effects on Outcomes

I now turn to a discussion of recent empirical studies about school and classroom compositional effects on achievement. These are important because as a set, they pose a fairly serious challenge the inconclusive findings from the older literature reviews. The set of *amici* briefs in support of the respondents in the Seattle and Louisville cases summarize much of the extant literature including many of the newer studies. But I want to spend some time discussing few of the newer studies that show positive affective and cognitive outcomes associated with desegregated learning environments. Importantly, the new studies address several of the shortcomings of the older empirical research. The newer studies use random samples of ethnically diverse students; multilevel data analysis that takes into consideration the fact that students are nested within schools; and several of them examine both classroom and school compositional effects on outcomes.

Schiff, Firestone, & Young (1999) used NELS data to examine the effects of school composition on mathematics achievement. They found that irrespective of students' own ethnicity or social class, schools that were neither racially isolated white nor racially isolated minority provided the optimal composition for mathematics achievement Using multilevel modeling on a random

sample of high school seniors and eighth graders from the Charlotte-Mecklenburg Schools, I found both first- and second-generation segregation negatively affected the academic outcomes of Blacks and Whites (Mickelson 2001, 2006a, 2006b). Borman and her colleagues (2005), employing multilevel modeling with statewide data from Florida, found that school segregation negatively influenced mathematics achievement among minority students. They attribute a significant portion of the race gaps to segregation. Muller et al (2005) examined the effects of school and classroom composition on the mathematics achievement of White, Black, Latino, and Asian students. Using the Adolescent Health national data set, they found racial imbalance in schools was associated with lower minority student grades and enrollment in four-year postsecondary institutions. Brown (2006) reported higher reading scores among all students who attend desegregated schools. In fact, she found that diverse environments are superior to both racially isolated minority and racially isolated white schools.

Four newer studies are especially noteworthy not only because of their findings, but in some cases, because of their authors. Hanushek, Kain, [and](#) Rivkin (2006) used econometric models to examine the effects of school minority composition on Texas students' math and reading outcomes. They found that [having a higher](#) percent of Black classmates had a strong, adverse effect on [Black students'](#) achievement, but a noticeably smaller adverse effect on White and Hispanic students' outcomes. Armor and Watkins (2005) used 2003 and 2005 [National Assessment of Educational Progress \(NAEP\)](#) data to explore the relationship between school racial composition and achievement. They [concluded that segregation had a](#) modest, negative effect on math achievement, but no [effect on](#) reading. [At the same time, they found](#) there were no segregation effects in some states and large effects in others. In another paper, Armor (2006) conducted analyses of 1996 NAEP data on 8th graders' math scores [using](#) percent black, not percent white, in schools as a

measure of school racial composition. He reported lower scores for the SES-adjusted achievement of Blacks in predominantly black schools.

Borman and Dowling (2006) replicated the [study upon which the](#) 1966 Coleman Report [was based](#) by analyzing the original data with multilevel modeling (a technique not available 40 years ago).⁷ They reported [clear evidence](#) that attending a high-poverty school or a highly segregated African American school has a profoundly negative effect on students' achievement outcomes, above and beyond the effect of [their](#) individual poverty or minority status. In dramatic contrast to previous analyses of the Coleman data, Borman [and Dowling's](#) findings revealed [that school context effects are much more significant than](#) family background effects.

Noncognitive outcomes from diverse learning environments are arguably relevant to increasing higher education eligibility for URM students, albeit indirectly. I will summarize recent findings on noncognitive outcomes only briefly because while they may be highly relevant for admission and persistence in higher education, to date, most admissions processes do not formally incorporate noncognitive outcomes into their decision-making. The extant literature on noncognitive outcomes of desegregation has been fairly consistent with regard to racial attitudes, intergroup relations, and status attainment. Overall, evidence indicates desegregation enhances minority students' long-term outcomes such as educational and occupational attainment. Diverse

⁷ The highly influential and controversial Coleman Report (Coleman et al 1966) concluded: (a) public schools were still segregated ten years after the Supreme Court ordered desegregation, (b) the achievement of Black students lagged behind that of Whites and the gap grew with every grade, (c) the amount of money spent on education no longer varied by students' race—as it had at the time of the *Brown* decision—although regional differences existed, (d) differences in expenditures were less important for achievement than differences in SES, (e) the most powerful predictor of student achievement was the student's family background, and the mean family background of the school attended, and (f) Black children who attended desegregated schools achieved more than those who attended segregated schools.

schooling reduces interracial hostility (Braddock & McPartland 1988; Wells & Crain, 1994). Pettigrew and Tropp's (2006) recent meta analysis of over 500 studies found intergroup contact typically reduces prejudice. The analyses found that under Allport's (1957) optimal contact conditions, even greater levels of prejudice reduction obtained. Wells and her colleagues (2007) conducted interviews with 500 graduates of the class of 1980. They reported that the experiences of the white, black, and Latino graduates of these desegregated schools were consistent with Pettigrew and Tropp's findings.

The preponderance of the newest evidence, then, suggests a positive relationship between diverse schools and classrooms and higher achievement, more positive interracial contacts, and attitudes. However, this summary is preliminary and a more definitive synthesis must await the completion of the Spivack Project's work.

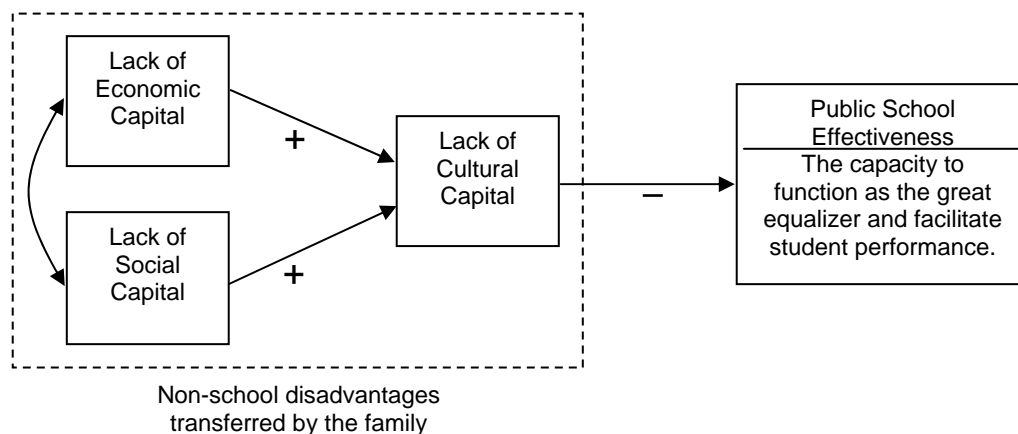
How Diversity Affects Learning

As we know, correlations between school composition and achievement outcomes do not explain the mechanisms by which the relationship works. One common type of explanation focuses on inputs and resources: desegregated environments have better teachers, newer books, equipments, and more academically oriented peers). Other explanations concentrate on cognitive processes that are shaped by working and learning with people who are diverse. Gurin and her associates (2002), for example, argue that diversity stimulates higher level thinking because, among other ways, it impedes automaticity in thinking.

In the course of my Spivack literature survey, I came across a new study that introduces a conceptual model of how desegregation makes a difference in the capacity of public schools to help their students succeed despite their severe non-school problems. The study is also important

because of its use of modern sociology of education to account for the benefits of diversity for fostering achievement. The study by Argun Saatcioglu of Case Western Reserve University draws on three basic concepts that address differences among families: their economic capital, social capital, and cultural capital. He uses 20 years of longitudinal data from the Cleveland public schools, much of the extensive data coming from the court supervising the schools. His study is unique in that he has large scale longitudinal data on students, their families, the students' neighborhoods—including income, crime, and quality of life indicators--, school-level teachers, resources, the other students in the school, communities in which schools are located from multiple independent sources. Saatcioglu maintains that students in the contemporary urban settings have markedly lower levels of economic, social, and cultural capital. Specifically, he finds the extreme lack of economic capital and social capital in urban areas diminishes the cultural capital available to children, which in turn complicates urban public schools' task. (see Figure 1).

Figure 1
A Conceptual Model of the Effect of Family-Transferred
Non-school Disadvantages on Public School Effectiveness



Source: Saatcioglu (2006)

Saatcioglu maintains that desegregation fundamentally reduces the vulnerability of urban schools to non-school problems that are grounded in the low-income minority students' lack of financial, social, and cultural capital. His findings indicate that desegregation accomplished this in two ways. First, mixing students for racial balance helps redistribute non-school advantages (and disadvantages) more evenly across the schools. When student populations in desegregated Cleveland schools were comprised of poor minorities and affluent and near-affluent whites, it was easier for the average school to cope with non-school impediments to achievement that affected the average student. Saatcioglu shows that desegregation made a considerable difference in the extent to which the average CMSD school was vulnerable to students' non-school problems. Racially balanced student populations are comprised of students who have access to varying distributions of economic, social, and cultural capital. As a result of this redistribution, the average school faces a lower degree of non-school problems, enabling it to function more effectively.

Second, desegregation fosters school equity in terms of tangible resources (such as funds and facilities) and administrative quality (for example, principal and staff experience and credentials). As a result of these two changes, the whole school system becomes more effective in addressing students' non-school problems and facilitating academic performance. Resegregation, on the other hand, allows non-school problems to become concentrated in schools that serve poor minorities, creating student compositions that amplify the extent to which economic, social, and cultural impediments undermine education. Since segregated schools that serve urban minorities also tend to be inferior in terms of their resources and design, the educational chances of the students in such schools are further impaired. Although, Cleveland's desegregated schools never became fully effective in overcoming non-school adversities, they were consistently *less ineffective* than segregated schools were in facilitating student performance, especially the performance of minority students.

Argun Saatcioglu's 20 year-long case study of Cleveland is a sophisticated structural analysis that advances our understanding of HOW desegregation works to improve K-12 achievement by showing how it enhances school effectiveness. His study focuses on the ecology of the school and its neighborhood, and how these intersect with the social, cultural, and financial capital reserves of students and their families. It is a unique and important contribution to the social science literature on how compositional effects shape educational outcomes.

Summary and Conclusion

Several factors make this paper's focus on K-12 diversity and access to higher education for URM rather urgent.

- The ongoing demographic transformation of the US means student populations are becoming increasingly diverse in ethnicity, language, social class, and race (Pew Hispanic Center 2006).
- School-level segregation has increased (Orfield & Lee 2006) as federal enforcement of mandatory desegregation has decreased, while within-school segregation via tracking and grouping has intensified as a response to the standards and accountability movement.
- Persistent race, ethnic, and social class gaps in achievement require that researchers and policy makers pay attention to all sources of these gaps, including the social organization of schools and classrooms.
- Recent empirical research utilizing advanced multivariate statistical tools such as multilevel modeling and high quality national and statewide data sets, reveals the benefits

of diversity and the harms of racial isolation for achievement among students from underrepresented racial minority groups.

- Several research and policy recommendations emerge from these findings.

Research Recommendations

The Spivack Project's survey of the literature has identified serious lacunae in the social and behavioral science knowledge base, particularly with regard to students from underrepresented minority populations. There is relatively little about the effects of composition on Latinos, Asian and Pacific Islanders, Native Americans, immigrants, and English-language learners. Future research must include students from these populations.

We need to know more about HOW diverse classrooms and schools intervene in the learning and teaching processes. Like Saatioglu's study of the Cleveland public schools, we need more ecological studies that delve deeply into the ways that neighborhoods, families, and schools interact to advance or hinder achievement.

We must utilize all methodological tools to answer these questions, not just randomized field experiments. We need more large scale studies utilizing longitudinal data from multiple independent sources of data on students, their families, the students' neighborhoods. While empirical studies are valuable, they cannot tell us everything we need to know about process. Qualitative studies, like those of Amy Wells and her colleagues are invaluable for this purpose.

Policy Recommendations

We must rethink the role of standardized tests, like the SAT, for college eligibility. So long access to the most rigorous curricula, the best teachers, and an academic climate that supports and sustains excellence are related to racial composition of schools and classrooms, standardized tests purporting to measure cognitive skills that predict college persistence will be measuring the effects of racial segregation as well.

Schools must work to eliminate grouping and tracking. Even if the Supreme Court's upholds the Seattle and Louisville voluntary desegregation plans, within school segregation from ability grouping and tracking will remain important sources of racially correlated educational inequality that affect achievement and eligibility for URM.

Admissions decisions that recognize and reward graduation from diverse K-12 public schools will legitimize and reward parents and students who make decisions to attend such schools. This recommendation is problematic for many reasons, not the least of which is that many students

from URM populations have no choices of schools to attend. Additionally, even diverse schools are often resegregated by tracking. Nevertheless, a policy that reward attending a diverse K-12 may contribute to expanding the pool of eligible URM indirectly by changing incentive structures for all families. Once more they become diverse because of this incentive structure, formerly segregated schools may be more effective in educating their students.

As a concluding comment I want to repeat something Dean Christopher Edley said during his address to the American Educational Research Association this April. He noted that dealing with issues of educational inequality isn't rocket science, "its harder than rocket science." I agree. As the recent syntheses of this literature cited in the *Seattle* and *Louisville* briefs demonstrated, we have a strong research base upon which to build our scientific knowledge. The continuing Spivack Project will contribute to this knowledge base by mapping its landscape for scholars, public policy makers, and the public.

References

- Allport, G. (1954). *The Nature of Prejudice*. Cambridge, MA: Addison-Wesley.
- Armor, D. J. (1995). *Forced Justice. School Desegregation and the Law*. New York: Oxford University Press.
- Armor, D.J. (2002). "Desegregation and Academic Achievement." in *School Desegregation in the 21st Century*. C. Rossell, D. Armor, & H. Walberg (Eds), Westport, CT: Praeger, (Pp. 147-188).
- Armor, D.J. (2003). "Reflections of an Expert Witness" Pp. 3-24 in The End of Desegregation? S.J. Caldas and C. L. Bankston (eds). New York: Nova.
- Armor, D. J. (2006). "Lessons Learned from School Desegregation," in Paul Peterson, ed., *Generational Change: Closing the Test Score Gap*, Lanham, MD: Rowman & Littlefield, (Pp. 115-142).
- Armor, D., & Watkins, S. (2005) "School Segregation and Black Achievement: New Evidence from the 2003 NAEP." George Mason University School of Public Policy, unpublished paper, December.
- Boger, Jack. (2006). Personal Communication regarding :Current Cases on K-12 Use of Race in Student Assignments."January 30, 2006
- Boaler, J. (2006) How a Detracked Mathematics Class Approach Promoted Respect, Responsibility and Achievement. *Theory into Practice*, 45 (1), 40-46.
- Borman, G. and M. Dowling. (2006) "Schools and Inequality:A Multilevel Analysis of Coleman's Equality of Educational Opportunity Data" Paper presented at the meetings of the American Educational Research Association. San Francisco, April.
- Borman, K. et al. (2004). "Accountability in a postdesegregation era: The continuing significance of racial segregation in Florida's schools." *American Educational Research Association* 41: 605-645.

- Braddock II, J. H., and T. Eitle. (2003). "School Desegregation: Research, Policy, Practice, and Future Directions", in James A. Banks & Cherry McGee (eds.), *Handbook of Research on Multicultural Education*, 2nd Ed, Jossey-Bass: San Francisco, CA.
- Braddock II, J. (1980). The Perpetuation of Segregation Across Levels of Education: A Behavioral Assessment of the Contact-Hypothesis. *Sociology of Education*, 53, 178-186.
- Braddock II, J. and McPartland, J. (1982) Assessing School Desegregation Effects: New Directions in Research. *Research in Sociology of Education and Socialization*, 3, 259-282.
- Brown, Shelly. (1999) High School Racial Composition: Balancing Excellence and Equity. Paper presented at the meetings of the American Sociological Association. Washington, DC. August.
- Brown v. Board of Education*, 347 U.S. 483 (1954).
- Burris, C., Heubert, J. & Levin, H. (2006). Accelerating Mathematics Achievement using Heterogeneous Grouping. *American Educational Research Journal*, 43, 105-136.
- Cavalier v. Caddo Parish School Board*, 403 F.3d 246 (5th Cir. 2005)
- Comfort v. Lynn School Committee*, 263 F. Supp. 2d 209 (D. Mass, 2003).
- Coleman, J., Campbell, E. Q., Hobson, C., McPartland, J., Mood, A., Winfield, F., & York, R. (1966). Equality of educational opportunity. Washington, DC: U.S. Government Printing Office.
- Cook, T. (1984). *School Desegregation and Black Achievement*. Washington, DC: National Institute of Education.
- Crain, R. & Mahard, R. (1983) The Effect of Research Methodology on Desegregation Achievement Studies: A Meta-Analysis. *The American Journal of Sociology*, 88, 839-854.

Cook, Thomas. (1984). School desegregation and black achievement. Washington, DC: U. S. Department of Education.

Crain, Robert, & Mahard, Rita. E. (1983). "The effects of research methodology on desegregation achievement studies: A meta-analysis. American Journal of Sociology (88):839-854.

Eitle, Tamela McNulty. 2002. "Special Education or Racial Segregation: Understanding Variation in the Representation of Black Students in Educable Mentally Handicapped Programs." The Sociological Quarterly 43: 575-605.

Gamoran, A. (1992). "The Variable Effects of High School Tracking." *American Sociological Review*, 57, 812-828.

Granovetter, M. (1989). "The microstructure of school desegregation." in *School Desegregation Research: New Directions in Situational Analysis*. J. Praeger, D. Longshore, and M. Seeman (Eds). New York: Plenum Press, (p. 81-110).

Grutter v. Bollinger 123 S. Ct. 2325 (2003).

Hallinan, M. (1998). Diversity Effects on Student Outcomes: Social Science Evidence. *Ohio State Law Journal*. 59 (3), 733-754.

Hanushek, E., Kain, J. and Rivkin, S. (2006). *New Evidence about Brown v. Board of Education: The Complex Effects of School Racial Composition on Achievement*. NBER Working Paper No. 8741..

Hawley, Willis. (2002). Diversity and Educational Quality. Unpublished manuscript. School of Education, University of Maryland, College Park.

Herrenkohl, L. (2006). Intellectual Role Taking: Supporting Discussion in Heterogeneous Elementary Science Classes. *Theory Into Practice*, 45 (1), 47-54.

Hochschild, Jennifer. (1984). *The New American Dilemma*. New Haven: Yale University Press.

Horn, I. S. (2006). "Lessons Learned From Detracked Mathematics Departments. *Theory into Practice* 45 (1), 21-35.

- Kulik, C., & Kulik, J. (1982). Effects of ability grouping on secondary school students: A meta-analysis of evaluation findings. *American Educational Research Journal*, 19: 415-428.
- Kulik, C., & Kulik, J. (1987). "Effects of Ability Grouping on Student Achievement." *Equity and Excellence* 23, 22-30.
- Lee, V. E., Smith, J. B., & Croninger, R. G. (1997). How high school organization influences the equitable distribution of learning in mathematics and science. *Sociology of Education*, 70, 128-150.
- Loveless, T. (1998). *The Tracking and Ability Grouping Debate*. Retrieved August 1998 from <http://www.edexcellence.net/library/track.html#anchor979998>.
- Lucas, S. R. (1999) *Tracking Inequality*. New York: Teachers College Press.
- Mahard, R. and Crain, R. (1983) "Research on Minority Achievement in Desegregated Schools."
- McFarland v. Jefferson County Public Schools*, 330 F. Supp. 2d 834 (W.D. Ky. 2004).
- Meier, Kenneth. J., Stewart, James J., & England, Robert E. (1989). *Race, class, and education: The politics of second-generation discrimination*. Madison, WI: University of Wisconsin Press.
- Mickelson, R.A. (2006). "Segregation and the SAT." *Ohio State Law Journal* 67, 158-199.
- Mickelson, R.A. (2001). "Subverting Swann: First- and Second- Generation Segregation in Charlotte, North Carolina" *American Educational Research Journal* , 38, 215-252.
- Muller, C., Riegle-Crumb, C., Schiller, K., Wilkinson, L. and Frank, K. (2004) Race and Academic Achievement in Integrated High Schools: Opportunity and Stratification. Paper presented at the Annual Meetings of the American Sociological Association, San Francisco, CA, August 14.
- Oakes, J. (1985). *Keeping track: How schools structure inequality*. New Haven: Yale University Press.

- Oakes, J. (2005). *Keeping track: How schools structure inequality*. Revised Edition. New Haven: Yale University Press.
- Orfield, G. and C. Lee. (2006). Racial Transformation and the Changing Nature of Segregation. The Civil Rights Project.
- Parents Involved in Community Schools v. Seattle School District No. 1* 426 F. 3rd. 1162 [9th Cir. 2005
- Pettigrew, T., and L. Tropp. (2006). A Meta-analytic Test of Group Contact Theory. *Interpersonal Relations and Group Processes*. 90: 751-783.
- Pew Hispanic Center (2006). *The Changing Landscape of American Public Education: New Students, New Schools*. Available at: <http://pewhispanic.org/reports> Downloaded 5 October, 2006.
- Saatcioglu, A. (2006). Non-school Problems and Urban School Desegregation: An Historical Analysis of the Implications of Desegregation for School Effectiveness in the Cleveland Municipal School District. Paper presented at the American Sociological Association, Montreal, Quebec. August.
- Schiff, J., Firestone, W. & Young, J. (1999). Organizational Context for Student Achievement: The Case of Student Racial Compositions. Paper presented at the annual conference of the American Educational Research Association in Montreal, Quebec, Canada. April.
- Schiff, J., Firestone, W. & Young, J. (1999). Organizational Context for Student Achievement: The Case of Student Racial Compositions (*Paper presented at the annual conference of the American Educational Research Association in Montreal, Quebec, Canada*).
- Schofield, J.W. (1995). "Review of Research on School Desegregation's Impact on Elementary and Secondary School Students", Pp/ 597-615 in *Handbook of Research on Multicultural Education*, James A. Banks & Cherry A. McGee Banks (eds). Menlo Park, CA: Jossey-Bass.
- Slavin, R. (1990). "Achievement effects of ability groups in secondary schools: A best-evidence synthesis." Review of Educational Research, 60, 471-499.

- St. John, N. (1975). *School Desegregation: Outcomes for Children*. New York: Wiley.
- Swann v. Charlotte-Mecklenburg Schools*, 402 U.S. 1, 15 (1971).
- Terenzini, P., Cabrera, A., Colbeck, C., Bjorklund, S. & Prente, J. (2001) Racial and Ethnic Diversity in the Classroom: Does it Promote Student Learning? *The Journal of Higher Education*, 72 (5), 509-531.
- Webb, N. M., Nemer, K., & Chizhik, A. & Sugrue, B. (1998). "Equity issues in collaborative group assessment: Group composition and performance." *American Educational Research Journal*, 35(4), 607-651.
- Wells, Amy S., & Robert L. Crain. (1994). "Perpetuation theory and the long-term effects of school desegregation." Review of Educational Research 64: 531-556.
- Wells, A.S. et al. (2007). Both Sides Now: How Desegregation Changed Us. Forthcoming Cambridge, MA: Harvard University Press.
- Welner, K. G. (2001). *Legal rights. Local wrongs*. Albany, NY: SUNY Press.
- Welner, K. & J. Oakes. (1996). "(L) Ability Grouping: The new susceptibility of school tracking systems to legal challenges." *Harvard Educational Review*. 66, 451-470.
- Xiong, Y.S., & M. Zhou. (2006). "Structuring Inequality: How California Selectively Tests, Classifies, and Tracks Language Minority Students" in D. Mitchell (Ed) *California Policy Options* Los Angeles: UCLA Lewis Center for Regional Policy Studies.

Appendix I

**Social Scientists, Research Methodologists, and Education Rights Attorneys
Interviewed during January through May, 2006 by their
Ethnicity, Gender, Discipline, and Affiliation**

African American Females

Shelly Brown	Sociology	University of North Carolina, Greensboro
Karolyn Tyson	Sociology	University of North Carolina, Chapel Hill

African American Males

Jomills Braddock, III	Sociology	University of Miami
William Darity, Jr.	Economics/Sociology	University of North Carolina, Chapel Hill
Charles V. Willie	Sociology	Harvard University

Asian Females

Maika Watanabe	Sociology/Education	San Francisco State University
Min Zhou	Sociology	University of California, Los Angeles

Latinas

Norma Cantu	Law	University of Texas, Austin
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Latinos

William Velez	Sociology	University of Wisconsin, Milwaukee
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White Females

Maureen Hallinan	Sociology	Notre Dame University
Jennifer Hochschild	Political Science	Harvard University
Jeannie Oakes	Sociology	University of California, Los Angeles
Meredith Phillips	Sociology/Public Policy	University of California, Los Angeles
Christine Rossell	Political Science	Boston College
Janet Schofield	Psychology	University of Pittsburgh
Amy Stuart Wells	Sociology	Teachers College, Columbia University

White Males

David Armor	Sociology	George Mason University
Carl Bankston	Sociology	Tulane University
Richard Berk	Sociology/Statistics	University of California, Los Angeles
John Charles Boger	Law	University of North Carolina, Chapel Hill
Charles Clodfelter	Economics	Duke University
Thomas Cook	Research Methods/Sociology	Northwestern University
Robert Crain	Sociology	Teachers College, Columbia University
Jan de Leeuw	Statistics	University of California, Los Angeles
Eric Hanushek	Economics	Hoover Institute/Stanford University
Willis Hawley	Political Science/Education	University of Maryland
Thomas Henderson	Law	Private Practice
Al Kauffman	Law	Harvard University
James McPartland	Sociology	Johns Hopkins University
James Ryan	Law	University of Virginia
Kevin Welner	Law/Education Policy	University of Colorado, Boulder

Appendix II

June Spivack Workshop Participants by their Ethnicity, Gender, Discipline, and Affiliation

African American Females

Prudence Carter	Sociology	Harvard University
Janelle Scott	Sociology/Education	New York University
Karolyn Tyson	Sociology	UNC, Chapel Hill

African American Males

Ronald Ferguson	Economics	Harvard University
Jerome Morris	Education	University of Georgia
Samuel Lucas	Sociology	University of California, Berkeley
William Trent	Sociology	University of Illinois
William Tyson	Sociology	University of South Florida

Asian American Females

Lai-Wan Wong	Cultural Linguistics	Independent Scholar/Policy Analyst
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Asian American Males

Angelo Ancheta	Law	University of Santa Clara
John Yun	Education	University of California, Santa Barbara

Latinas

Sylvia Hurtado	Education	University of California, Los Angeles
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Latinos

Ricardo Stanton-Salazar	Sociology	University of Southern California
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White Females

Kathryn Borman	Anthropology	University of South Florida
Stephanie Deluca	Sociology	Johns Hopkins University
Tamela Eitle	Sociology	University of Miami
Roslyn Mickelson	Sociology	UNC Charlotte
Pamela Perry	Sociology	University of California, Santa Cruz
Elizabeth Stearns	Sociology	UNC Charlotte
Amy Stuart Wells	Sociology/Education	Teachers College/Columbia University

White Males

Sean Kelly	Sociology	Notre Dame University
Sean Reardon	Sociology	Stanford University
Russell Rumburger	Economics/Education	UC Santa Barbara