School-Based Reform and the Socioeconomic Opportunity Gap: The Role of Differentiation, Standards-Based Reform, and Teacher Learning Communities

by
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Introduction

My family and I immigrated to New York City from Dominican Republic when I was three, in pursuit of educational opportunities and the hallowed American Dream. As the potential for education to determine one’s life outcomes was instilled in me both by my parents and American cultural mediums, I fervently dedicated myself to being the first person in my family to go to college and to being a successful immigrant in America overall. I can indeed say that I have achieved these educational goals as I will be the first person in my family to graduate from college this spring. However, I can’t help but acknowledge that this is largely because I did not stay in the public education system and attended private school for my secondary schooling. Although I was academically successful at my inner-city public schools, I did not feel intellectually challenged or supported at these places. I also was deeply perturbed by the pervasive failure of my peers at my public schools and of low-income and/or students of color in general in the public education system; with each increasing grade, the number of low-income and/or individuals of color who were also succeeding in my schools was diminishing. As such, I sought out entry into private schools as a guidance counselor had mentioned they could provide me with more intellectual rigor and support. In fifth grade, I was fortunate enough to gain admission into Prep for Prep, a rigorous preparatory program for low-income students of color, and subsequently into private school.

As I attended my private high school, and later Wesleyan University, institutions which differed so greatly from the public schools I had attended in
the Bronx, not only in terms of their support systems and academic resources, but also in the learning opportunities afforded to their students, I began to see vast disparities between the educational experience afforded to me and that of my peers at these public schools. As I reflected critically on my educational experiences, I realized that our public education system is currently failing the majority of students attending predominantly low-income and high-minority schools, as evident by the socioeconomic and racial/ethnic educational gaps that exist in this country, as well as the high drop-out rates of low-income and/or minority youth overall. It seems then that the American Dream is not an achievable reality for the majority of low-income and/or individuals of color, like myself. As such, the American education system is currently not living up to the ideology of social mobility and meritocratic ideals that supposedly constitute American education. Consequently, I have committed myself to critically examining the causes of educational inequity in our public school system and developing possible solutions for providing equal learning opportunities for all students, regardless of socioeconomic background or race, both through my service and through my academic inquiry. Therefore, I have endeavored for this thesis to serve as a pivotal step in my actualization of this goal.

My primary research questions are regarding what institutional practices in schools could be contributing to the socioeconomic educational inequities and what school-based reforms could be proposed as strategies to provide more equitable learning opportunities to all students and address the socioeconomic educational gap. Although, I primarily focus on socioeconomic educational
inequities for this work, I acknowledge that class and race have been intimately linked both historically and presently in American institutions and society. I indeed found that many of these detrimental practices do contribute to the racial/ethnic educational gap as well and posit that the reforms I investigate in this work could also be means by which to reduce racial ethnic inequities as well.

Most recently, there has also been a more fervent call to action in the research and policy sphere regarding socioeconomic educational inequities due to the fact that although racial ethnic educational gaps have narrowed in the past few decades, the socioeconomic educational gap has not and has in fact grown dramatically in the last decades; it is around 30%-40% greater among children born in 2001 than among those born in 1975. (Reardan 2011). Furthermore, the “...the income achievement gap (defined here as the income difference between a child from a family at the 90th percentile of the family income distribution and a child from a family at the 10th percentile) is now nearly twice as large as the black-white achievement gap” (Reardan 2011, 91). Through my exploration of school-based reform efforts as mechanisms through which to diminish socioeconomic inequities, I endeavor to contribute to this research and to answer this call to action.

Theoretical Framework

When discussing socioeconomic educational inequity and its determinants, some scholars have adopted an individualistic approach to the socioeconomic educational gap and attribute its causes to the choices and personality attributes of low-income students and their families, whereas others
have adopted a structural approach to this gap and argue that our social institutions, such as our schools, are primarily responsible for reproducing and maintaining the socioeconomic educational gap because they are structured to privilege the interests of those in power in society, specifically that of the upper/middle class. I assume this structural approach to socioeconomic inequality and adopt Charles Tilly's theory of opportunity hoarding to illustrate that the socioeconomic educational gap can be attributed to the opportunity hoarding of the upper/middle class of the valuable resource of educational opportunity. I conceptualize the theories of Bowles and Gintis, and Bourdieu and Lareau, regarding social reproduction, and cultural capital respectively, as mechanisms through which opportunity hoarding manifests itself in schools. Opportunity hoarding refers to the means through which:

“...members of a categorically bounded network acquire access to a resource that is valuable, renewable, subject to monopoly, supportive of network activities, and enhanced by the networks' modus operandi” (1999, 10).

As a result of opportunity hoarding, categorical groups exercise power differently in institutions and “… much of what observers ordinarily interpret as individual differences that create inequality [are] actually the consequence of categorical organization” (1999, 19). Tilly's focus on social organization is crucial as it provides us with a structural framework through which we can explore socioeconomic inequality by studying institutions and the social interactions between different categorical relationships, such as classes or races, which characterize them, rather than by studying individuals and their characteristics. Max Weber proposed a similar mechanism to opportunity
hoarding, that of social closure, the mechanism by which powerful classes limit access to social and economic resources though the use of exclusionary tactics (1946). However for Tilly, these exclusionary practices are not limited to the powerful classes, and can also be carried out by other social classes. Through the practice of opportunity hoarding and the exploitative practices through which those in power gain unequally from the labor of other social groups in our capitalist socioeconomic system, institutions are structured to produce unequal access to resources. It is important to note that this institutionalization of inequality is perpetuated regardless of the intentionality of actors as these “inequities stem from the cultural context and systemic properties of schools rather than from the intentions of the adults within them” (Oakes 2005, 212). Tilly refers to this phenomenon as durable inequality. One of the ways through which durable inequality is maintained is emulation, which refers to the process by which inequalities in pre-existing institutions are reproduced in other institutions according to the same categorical group dynamics (1999, 86).

Emulation is a method of institutional organization that relies on exterior categories, transplanted from other institutions, rather than interior categories, which arise within an institution. It is effective because it relies on inequalities we as a society are familiar with and reinforces our perceived boundaries of social categories. Based on this theoretical framework of opportunity hoarding, I argue that our institutions of schooling have been designed to produce unequal access to opportunities to learn for its low-income students.

In Schooling in Capitalist America, Bowles and Gintis's social reproduction
theory can be conceptualized as a mechanism through which the opportunity hoarding of the elite in the institution of schooling is evident. In this work, they provide a comprehensive account of how socioeconomic class affects educational attainment: there is a “close correspondence between the social relationships which govern personal interaction in the work place and the relationships of the educational system” (Bowles and Gintis 1976, 12). This relationship, which they refer to as the correspondence principle, is also very similar to Tilly’s theory of emulation, as pre-existing class inequalities are acted upon in schools; thus, just as discrimination manifests itself according to the interior category of socioeconomic class in our economic institutions, it manifests itself in schools according to the exterior category of socioeconomic class. Bowles and Gintis best illustrate this correspondence principle in their longitudinal research in which they compared the educational attainment of generations of white males to that of their parents. They found that educational attainment was strongly correlated with parental economic status and parental educational background both in relation to the quality of the education that individuals received and the number of years of schooling they completed. Bowles and Gintis chose to study this relationship between socioeconomic class and educational attainment among white males in order to show how strong this relationship is, as even white males, which as a categorical group have more power than other groups such as blacks or women, are still susceptible to the detrimental effects of socioeconomic class.

Class socialization, which is evident in schools through the behaviors with
which students are inculcated and for which they are rewarded based on their socioeconomic backgrounds, as well as tracking practices, also serve as an example of opportunity hoarding. Bowles and Gintis argue that the institution of schooling prepares students for the class-appropriate niches that they will occupy in the workplace and in greater society. Thus, “through the educational encounter, individuals are induced to accept the degree of powerlessness with which they will be faced as mature workers” (1976, 265). Teachers and administrators contribute to this objective, either purposefully or indirectly, by rewarding students academically for behavior that is conducive to work relationships (1976). Thus, when teachers conceptualize “good” students, they often think of students who do not talk back to teachers and follow rules; these behaviors also characterize “good” workers. The hierarchical organization of schools also parallels that of many workplaces. Furthermore, tracking in public schools, which is often carried out according to socioeconomic and racial lines, as low-income students and students of color are more likely to be placed in lower tracks, can be seen as an example of how schools structure students’ social interactions to socialize students for the workplace, by surrounding them with individuals like themselves and by limiting their access to the whole curriculum (Darling-Hammond 2011). Tracking can also be seen as means of opportunity hoarding through which the interests of upper/middle class individuals are actively promulgated and maintained, as it denies opportunities to students of other classes within not only the arena of schools but also other societal institutions, as their lack of access to educational resources limits their overall
social mobility.

Bourdieu’s theory of the systematic valuing of the cultural capital of the elite in schools can be used to further illustrate how opportunity hoarding occurs in schools. In *Reproduction in Education, Society, and Culture*, Bourdieu (1977) states that the knowledge and behaviors valued in schools are defined according to the interests and culture of the dominant classes, which he defines as cultural capital. All families transmit their own forms of cultural capital, but that of the upper/middle class, is privileged in our schools, just as their economic capital is in greater society, because they have power over our societal institutions. Thus upper/middle class knowledge and behaviors are seen as legitimate and one must aspire to acquire and reproduce them. In order to be successful both in schools and other societal institutions one must demonstrate that one has the “cultural competency” of the elite as success is defined according to their standards. Bourdieu refers to this imposition of the norms of the dominant class on the rest of society as “symbolic violence” because it “…conceal[s] the power relations which are the basis of its force” (Bourdieu 1977, 4). Through this symbolic violence, those in power impose their meanings and understandings as culturally legitimate and conceal the selective privileging of their values and their power over institutions.

In *Unequal Childhoods*, Lareau expands upon Bourdieu’s theory of cultural capital, by illustrating how the child-rearing practices of upper/middle class families, which are qualitatively different from that of most working class families, are rewarded differently in our social institutions (2003). She states
that: “Cultural training in the home is awarded unequal value in dominant institutions because of the close compatibility between the standards of child rearing in privileged homes and the (arbitrary) standards proposed by these institutions” (2003, 276). In doing so she is affirming that there are a “dominant set of cultural repertoires about how children are raised” with which we are indoctrinated as a society, which hold up upper/middle class child-rearing practices as a model to which we should aspire (2003,4). Any practices which deviate from these upper/middle class norms, even though these norms are culturally arbitrary, are considered “bad parenting” and subject parents to critiques of the “home environments” they are providing for their children and whether these environments are conducive to children’s’ success, which is also defined according to upper/middle class norms. Through their child-rearing practices, which Lareau conceptualizes as “concerted cultivation,” upper/middle class parents purposefully transmit to their children the language and skills necessary to navigate our social institutions, as they themselves have engineered them, and thus transmit to them a “sense of entitlement.” As a result, “...upper/middle class children benefit, in ways that are invisible to them and to their parents, from the degree of similarity between the cultural repertoires in the home and those standards adopted by institutions” (Lareau, 2003, 5).

Working-class parents, on the other hand, employ child-rearing practices, which Lareau conceptualizes as “accomplishment of natural growth,” that are not as conducive to preparing their children for institutional encounters and instill in them a “sense of constraint,” as they are more concerned with children’s self-
directed development and delineating boundaries between adults and children. Lareau stresses, however, that both strategies are effective for parents in context, but result in upper/middle class children acquiring a “differential advantage” over working-class children (2003, 5). Through Tilly’s framework of opportunity hoarding, we can see that this selective valuing of upper/middle class parenting practices by our institutions, such as our schools, and by extension the cultural capital that they transmit, is another mechanism by which elites maintain their positioning in the American class hierarchy and transmit their advantages to their offspring.

In *Home Advantage*, Lareau discusses how upper/middle class parental involvement, which is more prevalent than working-class parental involvement both because of economic constraints on working-class families and notions that parents have about the role of teachers and schools, can be seen as a form of cultural capital (2000). It is not that upper/middle class parents value their children’s’ education more than working-class parents and thus are more involved, which is a common misconception that is often touted in our society, but rather that working-class parents do not actively interfere with their children’s schooling because they rely on the experience of teachers and schools. Working-class parents, who often have lower levels of education than their children’s teachers, conceptualize schooling as the responsibility of schools and teachers and so defer to their decisions (2000,108). Upper/middle class parents, who often have higher levels of education then their children’s teachers, conceptualize themselves as active participants in their children’s schooling and
so involve themselves more in their children’s education. Furthermore, Bourdieu theorized that teachers themselves are granted “status authority” because of their affiliation with the institutions of schooling (Bourdieu 1977, 109). This concept of “status authority” may explain why working class parents and children do not often question their teachers or their practices. However it is important to note that this status authority is not greater than or equal to the authority of the dominant class as evident by the frequent challenges to the authority of teachers by upper/middle class parents. Lee and Bowen found that working-class parental involvement and upper/middle class parental involvement were rewarded differently in schools, even in situations where they were quantitatively comparable (Lee & Bowen, 2006). This finding highlights that only certain types of parental involvement are rewarded in our schools, just like only certain forms of cultural capital are valued in our institutions. Lareau and Horvat illustrate that merely possessing cultural capital is not enough, as schools reward parents’ and students’ activation of cultural capital as well (1999). Thus upper/middle class parental involvement can be seen as another example of opportunity hoarding, as this “home advantage” better positions upper/middle class children for success not only in school, but also in all venues, because it equips them with the language and skills necessary to navigate and bend the rules of our social institutions.

When discussing pedagogy in schools, Bourdieu discusses how pedagogic authority is granted to the values and knowledge systems of the dominant class because of their overall societal power. This power also results in the
misrecognition of the pedagogic authority and the knowledge base of the elite as truth, rather than as arbitrary or culturally biased (1977). This process is so effective that we think of any knowledge or behavior that goes against these values as illegitimate and wrong. Nowhere is this more apparent than in schools; Teachers reward students for mastering only specific cultural knowledge and displaying specific cultural behaviors. Our schools, therefore, characterize mastery of “culturally arbitrary knowledge,” which has been imposed by the pedagogic authority of the upper/middle class, as characteristics of individual children, rather than as a result of their access to this specific knowledge because of their socioeconomic background. Lareau stresses that “schools are not neutral institutions but reflect the experiences of the dominant class” (1987, 35). As a result, we can see that students of the dominant class would not have problems achieving in schools because their parents transmit to them their cultural capital, which embodies the skills and knowledge valued in schools (Bourdieu 1977). Thinking in this theoretical framework, the socioeconomic educational gap could be a result of cultural dissonance on the part of low-income students because of their lack of familiarity with the culture of the elite, rather than a lack of effort or intelligence on the part of low-income students. Tilly would agree with this finding as he states that “categorically differentiated family experience strongly affects children’s school performance and teachers’ evaluations of that performance…” (Tilly 1999, 14). Thus, as a result of the opportunity hoarding practices of the upper/middle class through the systematic valuing of their cultural capital in the educational system,
socioeconomic inequalities are further perpetuated.

In order to illustrate how the knowledge that is valued in the American education system is culturally determined by the upper/middle class, I will briefly explore the objectives of public education in America. When public education was first established in America, its primary objectives were to integrate workers from primarily lower classes and non-white ethnic groups into the labor force and to instill the populace with meritocratic ideals by providing them with the idea of social mobility through education (Bowles and Gintis 1976). Nowhere is the belief in social mobility more championed than in our school systems today, where children are regularly told they have equal access to educational opportunities in this country despite their socioeconomic or ethnic backgrounds, even though our widening racial and socioeconomic educational gaps would seem to tell us that social mobility through education is a fallacy. Bowles and Gintis argue that the public education system in our country provided those in power with a means by which they could continue to exercise social control over the masses (1976, 10). It is evident that providing equal learning opportunities to all students was not one of the objectives of public education, as Thomas Jefferson himself, one of the historical pioneers of public education, argued for differential educational tracking, “for the labored and the learned” in schools according to class distinction (Bowles and Gintis 1976, 29). Jefferson proposed such a system, which can be compared to our modern tracking mechanisms, to maintain the interests of the upper/middle class and exert social control over those who were not part of their categorical
group. It would seem then that the institution of schooling is not a “great equalizer of the conditions of men,” as Horace Mann, one of the founders of public education, once claimed, but rather upholds the status quo and reproduces class and ethnic inequalities. Thus, from this brief exploration of the objectives of public schooling, one can see how American schools have served as arenas in which the social control of the upper/middle class and socioeconomic inequities as a whole have been maintained and reproduced.

Throughout my subsequent chapters, I will use this theoretical framework of opportunity hoarding to contextualize my understandings of institutional practices. In my next section I will provide the objective of this work and an overview of its organizational structure.

Overview

Through this work, I aim to evaluate current institutional practices in schools that may be contributing to the socioeconomic educational gap and to suggest practices that schools could implement to narrow the socioeconomic educational gap based on my theoretical framework of opportunity hoarding, review of the literature in the fields of sociology, psychology, and education regarding these practices, and my qualitative and quantitative analysis. Chenoweth’s (2007) *It’s Being Done: Academic Success in Unexpected Schools*, in which she profiles public schools which have been successful at providing students with equal access to learning opportunities and improving overall student achievement, deeply influenced my development of my institutional practices of interest, as I used her process of evaluating institutional practices to
guide my identification of which practices seemed to be hindering student achievement and which practices seemed to be fostering student achievement throughout my work.

In Chapter I, I present different perspectives regarding the socioeconomic educational gap based on individual and structural analyses in order to situate my approach in the context of previous research. In Chapter II, I discuss differentiation, my first institutional practice of interest, and its potential to positively affect student achievement and lessen the socioeconomic educational gap overall, and examine how the current and historical practice of tracking in schools has contributed to this gap. In Chapter III, I present teacher and school community developed standards-based reform, my second institutional practice of interest, as a possible mechanism by which to narrow the socioeconomic educational gap and evaluate how the institutional practice of externally-imposed standards-based reform has contributed to socioeconomic educational inequity. In Chapter IV, I examine whether the development of teacher learning communities, my third factor of interest, could impact the socioeconomic educational gap and highlight how the current institutional practice of bureaucratic management in schools have impacted socioeconomic inequality. In Chapters V and VI, based on qualitative observations and quantitative observations respectively, I explore the relationship between these three institutional practices of differentiation, standards-based reform, and teacher learning communities, and student achievement overall. In my conclusion, I review the overall findings of this work regarding these causes and solutions to
socioeconomic inequity, and suggest systemic change that could be implemented in the institution of schooling and society overall to sustain these school-based reforms.
Chapter I
Evaluating Socioeconomic Educational Inequity: Is the Socioeconomic Educational Gap an Achievement Gap or an Opportunity Gap?

Introduction

In this chapter, I endeavor to show how our current understandings of socioeconomic educational inequities are founded on individualistic theories rather than on structural theories. I will first present explanations for the socioeconomic educational gap that focus on the unequal achievement of students; I have thus termed these achievement gap perspectives. Then I will present explanations for the socioeconomic educational gap that focus on the unequal access to learning opportunities between low-income students and their higher-income counterparts; I will refer to these as opportunity gap perspectives. Finally, I will evaluate the findings of achievement gap theorists from a structural framework and assess which explanations explain the socioeconomic educational gap best.

Achievement Gap Perspectives

Coleman's (1966) Equality of Educational Opportunity Report, which was commissioned by Congress under the 1964 Civil Rights Act to study educational opportunities in American schools, has been cited numerous times as evidence that family socioeconomic background is the greatest determinant of educational outcomes. One of Coleman’s findings was that student family background had a greater impact on educational outcomes than schools did, particularly in regards to school resources. Many researchers interpreted this as
evidence for theories of schooling in which schools did not greatly effect student achievement, and instead focused on family and out-of-school environments as arenas in which educational inequalities could be addressed (Jenks 1973).

The most important out-of-school factor focused on by achievement gap researchers is that of students’ socioeconomic backgrounds. Entwistle et. al (2005) aimed to show that the socioeconomic backgrounds of students were more important predictors of student achievement than other school characteristics. They indeed found that student socioeconomic background was correlated with future educational attainment: low-income students were academically behind in their early years of school and they later had lower levels of educational attainment. Although Entwistle et al. controlled for school characteristics such as quality and size, they did not control for overall school socioeconomic composition. Using the Early Childhood Longitudinal Study Kindergarten Class of 1998-99 (ECLS-K), Downey et al. aimed to expand on studies of educational inequality by focusing on inequality in learning that is not associated with socioeconomic status and race. They showed that gaps in reading and math skills grow primarily during summer vacation and argued that non-school factors are the main source of inequality (Downey, von Hippel, & Broh, 2004). They found these inequalities, which accounted for 90% of the achievement gap, greatly decrease during the school year and therefore hypothesized that schools serve as equalizers. Burkam et. al (2004) found that summer learning between Kindergarten and 1st grade is socioeconomically stratified, which also lends support to findings regarding the fact that
achievement gaps widen in the summer (Burkam, Ready, Lee, & LoGerfo, 2004). Condron also found that socioeconomic gaps widen most in the summer (2009). He posited this was because during the summer, non-school factors, such as student socioeconomic background, exercise more influence on children's academic outcomes. Entwistle et al. hypothesized that the concentrated poverty in inner-city neighborhoods could also account for summer learning gaps, as when children were out of school, these communities were not able to “turn on the faucet,” or provide similar resources to those provided during school time for all students and to those upper/middle class children have in their neighborhoods (1998, 51). They thus advocated for summer school programs for low-income students, in order to overcome the negative effects that their socioeconomic backgrounds had on their achievement.

The home environments of low-income families were also presented as a significant predictor of educational outcomes. Alexander et al. explored the summer learning gap and evaluated the effects of out-of-school environments on student achievement. They found that low-income students performed similarly with their higher-income counterparts during the school year but fell behind over the summer (Alexander, Entwistle, & Olson, 2001). They hypothesized that this may be because of the lack of availability of enrichment in the home environments of these children as a result of the negative effects of concentrated poverty. Entwistle et al. also hypothesized that high levels of maternal stress, which are prevalent in low-income home environments, could be suppressing student achievement and be responsible for low-income children's summer
learning deficits as they had more contact with parents in the summer and thus were susceptible to stress themselves (Entwistle et al. 1998). In a later longitudinal study in 2005, they found that low-income students were more likely to be academically behind in their early years of school and that this affected their overall educational attainment up to age 22 (Alexander, Entwisle, & Olson, 2007). They interpreted this finding as further evidence for their claim that home environments were greater determinants of educational outcomes and consequently advocated for early education programs and interventions which would address inequalities at home. Although they suggested that schools could be a venue in which these socioeconomic inequities could be addressed, they advocated primarily for intervention strategies in students’ home environments. In doing so they placed the responsibility of educational equity onto low-income families and their practices.

In *Whatever it Takes*, Tough documents many studies which find that language use differs between upper/middle class and low-income households, both in terms of the complexity of words and the overall size of vocabulary parents and children possess (2008). On average, upper/middle class children know twice as many words as their lower-income counterparts as early as at age 3 (2008). Caldwell, the developer of the Home Observation for Measurement of the Environment (HOME), attempted to evaluate parenting practices and found that upper/middle class children tended to “…experience parenting that was more sensitive, more encouraging, less intrusive, and less detached” (Tough, 44). She found that these students scored higher on standardized tests and had
higher levels of academic achievement and thus hypothesized that these parenting behaviors might positively affect children’ academic development. Farah, a renowned child development researcher, elaborated on these findings and found that these parental behaviors, such as maternal sensitivity in particular, were positively correlated with children’s cognitive stimulation (Tough 2008, 43). Numerous researchers used the HOME assessment and found that these behaviors were not as prevalent in low-income families as they were in upper/middle class families and advocated for low-income parents to adopt these parenting strategies (Entwistle et al. 1998, Brooks-Gunn 2005, Tough 2008). Researchers also found that poor children did not often possess high levels of non-cognitive school readiness skills, which were necessary for school success, such as impulse control, and thus hypothesized that they were not actively fostered in low-income households (McLeod 1998, Magnuson and Votruba-Drzal 2009). Lewis (1965) attributed this lack of self-efficacy among poor individuals to the “culture of poverty,” a subculture which the poor had developed in response to their social circumstances.

“Once [the culture of poverty] comes into existence it tends to perpetuate itself from generation to generation because of its effect on the children. By the time slum children are age six or seven they have usually absorbed the basic values and attitudes of their subculture and are not psychologically geared to take full advantage of changing conditions or increased opportunities that may occur in their lifetime.” (1965, x).

Thus, according to Lewis, as this culture of poverty is ingrained into the psyches of poor individuals as early as age six and limits their ability to envision social mobility for themselves, poor children internalize low expectations for themselves, which result in low levels of motivation and low levels of academic
success. As a result of their subculture, they develop a unique value system that is self-defeating, and self-perpetuating and resign themselves to their class positions (Leacock 1971). The deterministic nature of this argument lends support to critiques of low-income families as it claims that these families are not capable of fostering academic success among their children because of this subculture.

Sociologists also attributed educational inequalities to the family structures of low-income children. In Children, Schools, and Inequality, Entwistle at al. focused on the family structures of low-income families and found that many of them were composed of single-mother households. They found a negative relationship between these family structures and student achievement (1998). In their discussion about the family structure and home environment of low-income and black children, Thernstrom and Thernstrom posited that single-mother households resulted in a lack of cognitive stimulation and emotional support from low-income parents (2003). By using examples of inner city schools that had little to no socioeconomic educational gap, they proposed that poor students needed to be held to higher standards, so that they could exercise social mobility. They also blamed low-income parents and children for academic failure because they claimed that these individuals lacked initiative and effort when it came to their educational achievement.

Many researchers have also focused on the effect of poverty on educational outcomes. Approximately 21% percent of children, around 15.3 million, live in families that are considered officially poor according to the
federal poverty threshold, which is currently $22,350 for a family of four (National Center for Children in Poverty 2011). However, the National Center for Child Poverty has shown that on average families need an income equal to about two times the federal poverty level to meet their most basic needs, such as food and housing security, and thus this statistic may underestimate the actual magnitude of childhood poverty (2009). Poverty includes not only income-based poverty but also resource poverty, such as lack of access to educational and social resources because of one’s socioeconomic status. Engle and Black found that low-income children are more likely to demonstrate low levels of school readiness and poor early academic achievement, which are strong indicators of later educational outcomes such as grade retention, special education placement, and likelihood of student dropout (Engle and Black 2008). Berliner illustrated that there is a positive correlation between student achievement and increased family income (2007). He also demonstrated that home environments of working-class students affect their achievement more drastically than do those of upper/middle class students because factors such as childhood poverty, segregation, and environmental discrimination, which are unique to the experiences of low-income students in their communities, are especially linked to learning deficits. He refers to this phenomenon as neighborhood deprivation. Based on his findings, Berliner argues that poverty is a persistent determinant of students’ early educational outcomes and argues for policies that mitigate poverty.
In *Inequality*, Jencks et al. argue that investing in school-based reform will not catalyze change in one's social and economic outcomes because the cognitive inequalities between individuals of different socioeconomic backgrounds (and races) can not be overcome by schooling. They base these claims on their findings that school characteristics, such as resources as represented by funding, were not significantly correlated with student achievement once family background was controlled for. In accordance with the prevailing scholarship regarding the heritability of intelligence during their time, they argue that the differential outcomes of individuals from different socioeconomic backgrounds can be attributed to genetic inequalities between these individuals (Jenks et al. 1973). Furthermore, Jenks et al. contend that students have equal access to learning opportunities as a result of social movements such as the Civil Rights Movement, and government policies, such as mandated schooling laws (1973, 22). As such, they posit that "Equalizing educational opportunity would do very little to make adults more equal" since the socioeconomic outcomes of low-income and/or ethnic minorities have not increased greatly despite their increased access to schooling" (1973,255). As such, they affirm that these genetic cognitive inequalities significantly affect individuals’ life trajectories and that the institution of schooling cannot counteract the potent effect of genetics.

In summary, these critiques of the effects of student’s socioeconomic background, home environments, and parenting practices on student achievement attribute the socioeconomic educational gap to differences between individuals and families. Thus, the achievement gap framework relies
primarily on individualistic approaches to explaining the socioeconomic educational gap.

**Opportunity Gap Perspective**

In this section, I will present the opportunity gap perspective, which posits that socioeconomic inequality stems from “...accumulated differences in access to key educational resources - expert teachers, personal attention, high-quality curriculum opportunities, good educational materials, plentiful information resources - that support learning at home and at school (Darling-Hammond 28). This unequal provisioning of access to key resources, which is achieved through institutional practices in schools, advances the interests of the upper/middle class and serves as an example of their opportunity hoarding.

One of the biggest mechanisms that contributes to the socioeconomic opportunity gap is the unequal funding practices of schools within school boards. Condron and Roscigno found that the problem of school funding lies not at the federal or state level, but at the local level. They highlight that low-income schools often receive less local funding than their higher-income counterparts, although they receive equal state and federal funding (Condron & Roscigno, 2003) Studies have advocated for funding to be proportional to student needs, and that more money be allotted per low-income child (Darling-Hammond 2011). Yet schools with high concentrations of low-income children are still underfunded despite these policy recommendations. Condron and Roscigno also highlight that unequal school funding patterns within school districts are negatively associated with student achievement and show how poor school
funding affects school characteristics such as teacher quality, class sizes, and other instructional practices and how these negatively correlate with student achievement. They posit that these local practices may be a result of the fact that the constituency of school boards is more likely to be upper/middle class and thus may systematically underfund schools with high amounts of low-income children either directly or indirectly because of the classism embedded in our social institutions.

Greenwald et. al suggest that school inputs, such as funding, may be a stronger determinant of student achievement than students’ own socioeconomic backgrounds. They found a positive relationship between funding and student achievement, contrary to the findings of the Coleman report. However, they were not able to discern what uses of funding contributed to student achievement and thus recommend that future research focus on how and where school funding is allocated so that it can most effectively affect student achievement. They also showed that low-income schools are more likely to be funded at lower levels than higher-income schools because local school funding is allocated according to property taxes (Greenwald, Hedges, & Laine, 1996) We can see how school funding practices which allocate money based on the socioeconomic factors of the surrounding residential community would disproportionately disadvantage students in high-poverty neighborhoods. These practices also serve as examples of opportunity hoarding which reinforce pre-existing class inequalities by providing people with education matched to their socioeconomic backgrounds, so that upper/middle class students get better quality education than their
lower-income peers simply because they were born into powerful categorical groups.

Although recent federal and state policies have attempted to dispel this correlation between education and socioeconomic status with mandates that require equal funding among districts, state and district zoning practices make it so that low-income students are often still restricted to their neighborhood schools, which are underfunded within districts as found by Condron and Roscigno (2003). This institutionalized classicism is legal and ensures that quality education remains a privilege, controlled by the upper/middle class, rather than a right for all. Thus, the upper/middle class could be considered to be “...a hegemonic power exercising extensive state power and controlling a wide variety of resources” (Tilly 1999, 12). Ladson-Billings discusses the link between the historic and present day socioeconomic policies and educational inequalities. It is important to note the link she draws between decisions made in other institutions and how they affect educational institutions and the educational outcomes of children. She also refers to the socioeconomic achievement gap as an opportunity gap and likens it to an education debt owed to low-income students by government and schools. (Ladson-Billings, 2006) This indeed would be accurate if we think of socioeconomic inequalities as a result of the hegemony and opportunity hoarding of the upper/middle class.

High quality teachers can also be conceptualized as a valuable resource that the upper/middle class monopolizes for their own children. Darling-Hammond (2010) posits that teachers are the most inequitably distributed
school resource. This claim resonates with Desimone and Long’s finding that low-achieving students, who were predominantly low-income students, were more likely to be assigned to low-quality teachers, such as those who had less than two years of teaching experience (Desimone & Long, 2010). Although they did not determine why this might be so, this finding highlights that practices within schools and districts may be influenced by school socioeconomic composition and may not be in the best interests of all students. High rates of teacher turnover have been found to be especially prevalent among low-income and high-minority schools (Darling-Hammond, 2010; Hamilton, Loeb, & Wyckoff, 2002; Hanushek, Rivkin, Rothstein, & Podgursky, 2004). Condron and Roscigno found that high-quality teachers, such as those with more experience or skills, who were previously at low-income schools often chose to move to higher-income schools (Condron & Roscigno, 2003). They hypothesize teachers may do so because higher-income schools tend to have more resources and higher salaries. Furthermore, it has indeed been found that teachers themselves are tracked, as highly qualified students tend to get assigned to high-achieving students, who tend to be high-income students, as a result of tracking practices (Tach and Farkas 2006; Chenoweth 2007). Thus, we can see that low-income children are often denied access to high-quality teachers, because of the opportunity hoarding practices of the upper/middle class.

When discussing access to equal learning opportunities in school, nowhere is it more apparent that low-income children are being done a disservice than in the tracking practices of many schools, which
disproportionately place low-income children in low-tracks. As Gamoran (2000) states,

“Often the differences in classroom experiences are tied to social background; that is, unequal learning opportunities lead to wider gaps in achievement among students from different backgrounds. (94).

By tracking students as early as kindergarten, low-income students are denied access to challenging curricula which they could benefit from. It has been found that low-track students do indeed benefit from more challenging work (Darling-Hammond 2011). Furthermore, the correspondence between what students learn in low-tracks and vocational training for jobs has been found to be very high (Bowles and Gintis 1967, Gamoran 2011).

Differences in curricula between predominantly low-income public schools and mixed and high-income schools are also vast. Darling-Hammond found that wealthy school districts often offered foreign languages as early as elementary school whereas poorer districts offered these courses either at a minimal level or not at all in high schools (2011). She finds through comparative analysis that the “knowledge” gap that exists between the curricula of high-income and low-income students is much greater in the U.S. than in other high-achieving countries around the world (Darling Hammond 2011, 54). This “knowledge” gap may result from the opportunity hoarding practices of the elite in order to maintain their dominance, as providing equal opportunities to knowledge might weaken their relative power in the hierarchical American class structure.
In summary, the opportunity gap framework attributes the socioeconomic educational gap to differences in learning opportunities afforded to students based on their socioeconomic backgrounds rather than their individual circumstances.

In the next section, I aim to critique, reconcile, and reinterpret the findings of researchers who analyze the socioeconomic educational gap from a structural theoretical framework. I argue that we should reexamine this gap from a structural framework as shifting the paradigm through which socioeconomic educational gaps are understood from that of attributing these gaps to differences between families and individuals, but rather to structural differences between classes regarding access to learning opportunities, could inform future educational research and policies aimed at addressing socioeconomic educational inequalities.

**Critiques of the Achievement Gap Perspective**

When critiquing individualistic approaches regarding the effects of students’ socioeconomic background on student achievement, it is important to note that many studies that find that individual student socioeconomic background has a great effect on student achievement do not take into account school socioeconomic composition. Many sociologists have found that the socioeconomic composition of a school is more predictive of students’ achievement than the individual socioeconomic background of students. Sirin performed a meta-analysis on previous studies regarding whether school socioeconomic composition or individual socioeconomic background was a
stronger determinant of student achievement. He found moderate effects for student socioeconomic background on student achievement and strong effects for school socioeconomic composition on student achievement (Sirin, 2005). He proposes that future research should focus on how school socioeconomic composition affects students’ educational opportunities rather than how individual socioeconomic backgrounds affect students’ performance. Magnuson et al. (2007) found that large class size and poor academic instruction, which are common characteristics of low-income schools, are also negatively correlated with academic performance. Cook and Evans (2000) found that around 75% of the decrease in the achievement gap between black and white students who attended the same school and had parents with similar educational backgrounds could be attributed to changes in school characteristics. This highlights that within-school factors may have a stronger effect on student achievement than family background characteristics. They also found that although school quality had remained relatively consistent over time, school quality in low-income urban schools had declined over time in comparison to mixed-income and high-income schools. It seems then that school districts and boards prioritize maintaining the quality of schooling for upper/middle class children over doing so for working-class children. This would make sense, as upper/middle class individuals are more likely to be both physically represented in these decision-making institutions because of their pre-existing power and availability as a result of their more reasonable work commitments, and ideologically because of their control over our societal institutions. When discussing class in America in
comparison to other developed countries, Wright and Rogers found that wealth disparities in the U.S., which are greater than any of their developed counterparts, were due mostly to public policy decisions rather than market decisions (2010, 207). As Sacks explains, “The staggering economic inequalities that open the gates of opportunity for the children of the affluent and well-educated families...slam the gates shut for children born without social and economic privilege” (Sacks 2007, 1). This finding would lend support to the fact that public policies are designed to meet the needs of those in power, which in American society is the upper/middle class. Thus, the lack of control working-class individuals have in the academic achievement in the institution of schooling is a result of the fact that they and their parents do not have any input in our educational, economic, or political institutions. Ironically enough, one of Coleman’s findings which is often overlooked is that “the social composition [of a school’s] student body is more highly related to student achievement, independent of the students’ own social background, than is any school factor” (Darling-Hammond 37). This finding would then seem to highlight that the concentrated disadvantage students experience in low-income schools, as a result of their lack of access to quality educational resources because of the opportunity hoarding practices of the elite, may be more important than any individual student background characteristics. Thus, researchers who focus on the individual characteristics of students, rather than on the structural characteristics of schools, may not capture the robust effects of concentrated disadvantage.
Furthermore, focusing on the effects of individual socioeconomic background on student achievement obscures the opportunity hoarding practices of the upper/middle class as it conceptualizes socioeconomic background as an input that individuals have great control over, regardless of access to quality schooling, rather than as an output, which is largely influenced by one’s access to valuable social and economic resources. One of the primary reasons we believe that socioeconomic background is a characteristic which individuals have agency over is because the American ideals of meritocracy have been ingrained into our psyches by our major social institutions. However, one’s access to these resources is largely determined structurally according to which categorical group we belong to rather than our individual attributes or efforts as demonstrated by numerous studies which show limited social mobility in the U.S. and staggering wealth inequalities (Bowles and Gintis 1967, Wright and Rogers 2010). Even though Entwistle et. al claim that family background is one of the prominent determinants of educational attainment, they also acknowledge that the phenomenon of “effectively maintained inequality” could be taking place (Entwistle et. al 2005). Effectively maintained inequality, as termed by Lucas, posits that “socioeconomically advantaged actors secure for themselves and their children some degree of advantage wherever advantages are commonly possible” (Entwistle et al. 2005). This phenomenon is very similar to Tilly’s opportunity hoarding theory and durable inequality theory. Entwistle et al. themselves suggest that schools could be a venue in which social inequities could be addressed, but choose to focus primarily on intervention strategies in
students’ home environments because of their individualistic framework. If we interpret Entwistle et. al’s findings through a structural framework, the reason that the early academic achievement of low-income students may be so predictive of their future outcomes is because due to their membership in a disadvantaged categorical group, low-income students have been denied access to the power and resources needed to change these outcomes.

Summer learning socioeconomic inequalities are commonly discussed in the literature as a result of differences in home environments between individuals of different socioeconomic backgrounds. While it is indeed the case that low-income families and high-income families provide different levels of economic and social resources to their children, this is largely because of our socioeconomic structure rather than individual parenting choices. Numerous studies have found that the level of parental investment low-income families and upper/middle class families place on student achievement and children’s development overall are comparable (Lee and Bowen 2006). As mentioned previously however, the parental investment and involvement of these families are evaluated differently by our institutions (Lee and Bowen 2006). Even the presence of books in a household could also be seen as a measure of cultural capital, rather than parental neglect or investment. It seems then that educational policies, which call for increased parental involvement on the part of low-income families, would only perpetuate the advantages of the upper/middle class as their parental involvement would be evaluated as qualitatively higher even if quantitatively this may not be the case. Thus, attributing summer
learning gaps to home environments may not be methodologically sound as low-income parents may be putting in effort to help their students succeed academically but may not be being rewarded for their efforts, due to the fact that their transmission of cultural capital is not equally valued by our institutions.

When discussing the effects of the home environment of low-income children on their achievement, it is important to note that many researchers have recently questioned the applicability of the HOME assessment to low-income families because they measure parental competency according to upper/middle class standards (Totsika 2004). As such, the low scores that low-income families receive are understandable as their amounts of economic or social resources are lower than that of upper/middle class families because of classicist institutional practices and exclusionary tactics on the part of the elite. Entwistle et. Al seem to affirm similar class-biased notions, as they state that upper/middle class parents know how to “’turn on the faucet’ while parents who are less well off do not” (Entwistle et al. 1998, 48). In doing so, they privilege the parenting practices of the elite and invalidate non-mainstream parenting practices. As Garcia-Coll et al. state:

“This establishment and maintenance of white upper/middle class childrearing patterns as the standard for normal development of intellectual, cognitive, and social competencies not only obscures cultural differences in child rearing, but assumes that anything other than mainstream competencies are inferior.” (1995, 1865).

Furthermore, by framing parental investment as an issue of knowledge rather than an issue of ability, Entwistle et al. make it seem like low-income parents are incompetent and do not acknowledge possible socioeconomic constraints which
may limit the parental investment of low-income individuals. Lareau’s discussion of the selective valuing of the parenting practices of the upper/middle class by institutions are also particularly relevant in regards to these findings. As she reminds us, “the standards of social institutions ... are infused with the family life and experiences of the privileged social class...[they do not] show how an individual's class position provides advantages (i.e., resources) that help him/her comply with the standards of the institution” (Lareau 2000, 5). A supplement to the HOME environment, referred to as the SHIF, has been developed to analyze low-income parenting practices in the context of their class positioning and economic constraints (U.S. Department of Health and Human Services 2003). Future research on the home environments of low-income children should make use of this measure so that they can be more objective and inclusive of low-income parenting practices.

When achievement gap theorists critique the home environments of low-income individuals and their conduciveness to academic achievement, they often reference the “culture of poverty.” This argument is classicist as it presupposes that any attitudes that are not similar to those of the dominant group are deviant and even inferior (Bourdieu 1977). The “culture of poverty” argument also is far too deterministic as it assumes that one’s attitudes to circumstances in life are immutable in early childhood and that individuals cannot overcome these attitudes. Attributing the outcomes of individuals to individual decisions rather than institutional practices can also be conceptualized as a means by which the upper/middle class maintain their social control over those they marginalize by
inculcating them with negative attitudes towards themselves and fellow members of their categorical groups. Tilly states that much of what we attribute to individuals is more accurately attributed to their categorical groups and a result of inequality in their access to resources (1999). The institution of schooling is one of the primary venues in which this misattribution of outcomes to individuals’ behaviors occurs: “[schools]...implant in those [they] marginalize a set of cognitive and evaluative categories that lead them to see themselves as the causal agents of a process that is actually institutionally determined” (Macleod, 2009). By stressing self-determination on a micro-level basis despite the lack of autonomy working-class individuals have on a macro-level basis, the hegemony of the elite over our institutions is preserved and obscured. Drucker states:

“Just as we deceive the lower-class child with our promises of success and adaptation to the “good life” in America, we deceive ourselves when we seize upon the “culture of poverty” to explain massive school and social failure within our society (1971, 61).

Indeed, the “culture of poverty” argument seems to imply that low-income individuals choose not to exercise agency over their outcomes because of their different value systems in their subcultures rather than that they are unable to do so because of their lack of opportunities and access to institutions as a result of structural barriers put in place by the upper/middle class. However, studies have shown that many low-income individuals aspire to the same mainstream achievement and social mobility ideologies that “culture of poverty” theorists suppose they reject (Apple 1979; MacLeod 2008). Perhaps then “culture of poverty” theorists should critically analyze the process of selective valuing of
certain “subcultures” in our institutions and dominant culture and direct their critiques at the categorical groups that have the power to determine this process rather than on the individuals that are marginalized as a result.

Especially when discussing language development in low-income households, it is important to note that our measures of appropriate levels of word usage and complexity of words is modeled on the levels of upper/middle class families and thus could be considered culturally biased and arbitrary. Bourdieu discusses “educationally profitable linguistic capital” as language use that is rewarded in schools (1977, 116). Linguistic capital, like cultural capital, is transmitted to children by their parents and rewarded differently in schools. Since the home environments of upper/middle class children are more aligned with that of schools and social institutions, their linguistic capital is thought to be appropriate. Lareau indeed documented that language use in schools is comparable to language use in upper/middle class homes (Lareau 2000). Bourdieu states that just as pedagogic authority is granted to upper/middle class knowledge, the same is true of their forms of communication, including their language use (1977). Perhaps then the word exposure of children is a reflection of parental cultural capital as well. If this the case, we should expect there to be vocabulary gap between students of different socioeconomic backgrounds, because they have different levels of familiarity and access to “scholarly language” due to their parents respective cultural capital and relationships to institutions (1977, 73). Leacock reinforces this point by stating that “cultural norms and definitions of roles are constantly reinforced for an
individual, or redirected, by the institutional structures within which he
functions” (1971,16).

When discussing the family structure of low-income families and its
relationship to student achievement, the blaming of individuals rather than
institutions for these family structures is not only problematic but also culturally
biased. When discussing cultural capital, Bourdieu states that when we
conceptualize socially acceptable behavior and valued knowledge, we often
reference the behavior and cultural capital of upper/middle class individuals,
and discuss these as individual characteristics, rather than direct our focus to the
institutional selective valuing of arbitrary behaviors and knowledge. In their
attempts to quantify cognitive stimulation and emotional support, the
Thernstroms show their own biases as they evaluate such practices based on
their internalization of the upper/middle class white cultural framework as
dominant and privilege their cultural capital over that of working-class/black
individuals (Thernstrom and Thernstrom 2003). Thus, when researchers
critique low-income family structures for not being conducive to academic
success, they do not conceptualize alternative family structures, such as single-
mother households, as valid because they do not conform to dominant norms, as
their characterization of parenting practices as well as their outcomes of interest
are defined in relation to an upper/middle class ideal of a two-parent nuclear
family. One can see this in the fact that the Thernstroms call these families
“dysfunctional families” and state that: “...[they] are no excuse for widespread,
chronic educational failure” (Thernstrom and Thernstrom 2003, 44). They also
do not account for institutional practices and societal conditions that may increase the prevalence of these alternative family structures. Perhaps then these researchers should reinterpret these family structures in relation to their contexts and consider working-class/black family structures as effective adaptive strategies to respond to the opportunity hoarding practices of the upper/middle class.

In regards to theorists who argue that schools do not and cannot moderate socioeconomic inequalities between individuals, their methodology does not acknowledge the greater inequalities between categorical groups or power dynamics between them (Jencks et al. 1973). Jenks et al. choose to make individuals the subject of their inquiry because according to their prior research differences between individuals are quantitatively greater than differences between groups (1973). However, perhaps if Jencks shifted his attention off of the inputs of individuals, such as individual student socioeconomic background, and onto the inputs of categorical groups, such as the opportunity hoarding practices on the part of the upper/middle class, his analysis would find greater qualitative inequalities between groups. Jenks himself has acknowledged that:

"...individualistic framework[s] [are] not designed to capture the impact of relational, organizational, and collective processes are the institutional influences on mobility and opportunity; the operation and organization of schools...ideologies of group differences shared by members of society and institutionalized in organizational practices and norms that affect social outcomes..." (Jenks and Phillip 1998, 510).

It would seem then that Jenks and his collaborators have moved on from analyzing individual causes for inequality and are now incorporating structural
analysis of institutions and their practices, such as schools, into their work. Indeed, in *The Black-White Test Score Gap* (1998), they advocate for investments in institutional policies that improve overall school quality, such as small classroom sizes, high standards for all students, and improving teacher quality school quality, as mechanisms through which to promote greater, social equity (Jencks and Phillip 1998). These findings indicate a radical departure from Jenks’ former stance regarding the futility of schooling to one that acknowledges the staunch capacity of school-based reform to impact one’s overall social outcomes.

**Conclusion**

In conclusion, the opportunity gap framework seems to be a more appropriate methodological framework by which to conceptualize socioeconomic educational inequality because it relies on a structural approach to socioeconomic educational inequities. By applying the structural framework of opportunity hoarding and utilizing the works of Tilly, Bourdieu, and Lareau to explain this phenomenon, I challenge the individualistic framework proposed by achievement gap researchers and argue that the socioeconomic educational gap stems from unequal access to learning opportunities within schools rather than differences between students, which result from the opportunity hoarding practices of the elite and their control over the institution of schooling. As such, I adopt the perspectives of Darling-Hammond and others and conceptualize this gap as a socioeconomic opportunity gap and will refer to it as such throughout this work.
In my next chapter I will explore the relationship between tracking and student achievement, and whether differentiation could be implemented in schools to lessen the socioeconomic opportunity gap.
Chapter II
Evaluating the Effects of Tracking and Differentiation on the Socioeconomic Opportunity Gap

Introduction

In this chapter, I will analyze the effects of tracking practices on student achievement and whether differentiation could serve as a mechanism by which schools could lessen the socioeconomic opportunity gap. Tracking, which is also commonly termed as ability grouping, refers to the practice of separating students according to perceived ability for all subjects, and is more commonly practiced in American high schools. This is achieved by having different tracks, either in the form of different classes such as a low-ability-level class and a high-ability-level class, or by utilizing ability groupings within a classroom for the majority of instruction. A student’s track placement often determines the access he or she will have to high-quality learning opportunities and exposure to high-quality curricula. Low-income students are disproportionately represented in low-tracks both because of selection biases on the part of teachers and administrators and overreliance on standardized test scores as indicators of academic achievement. Differentiation, refers to the practice of providing students with exposure to the same curricula for the majority of time, while addressing any skills they may be struggling with both through instructional practices and grouping, so that all students can have access to high-quality curricula and knowledge, regardless of their perceived ability. What distinguishes differentiation from tracking/ability grouping is the fact that
student groupings are skill-based and thus fluid as students learn. Thus, whereas
in tracking students are classified as low-ability students for all subjects and
remain in these groupings for the whole instructional year and often across
years, and thus would not have access to the same knowledge that their high-
ability peers do, in contrast in differentiation students learn together for the
majority of the time and thus have access to the same high-quality curricula,
while also being provided with tailored instruction and groupings to promote
their mastery of specific skills.

In this chapter, I will first provide a brief overview of the history of
tracking in American schooling. Then I will frame tracking practices in the
context of the opportunity hoarding practices of the upper/middle class. Next I
will evaluate whether tracking provides differential learning opportunities to
and promotes unequal achievement among students in different tracks. Lastly, I
will review research regarding differentiation and its effects on student
achievement and appraise whether utilizing differentiation in schools could
diminishing the socioeconomic opportunity gap.

History of Tracking in American Schooling

Prior to the late 19th century, schools mostly served upper/middle class
white students. According to Oakes, secondary schools were primarily the
domains of elite students: "...by 1890 fewer than 10 percent of the nation’s
fourteen- to seventeen-year olds were attending public or private secondary
schools" (17). These secondary schools varied greatly, ranging from college
preparatory schools to vocational schools. Although students were separated
into grades or age groups at all levels of schooling, ability grouping was not a common practice in schools (Oakes 2005). In 1892, in response to the concerns of teachers and college administrators that high school coursework and college admissions requirements were not aligned, the National Education Association assigned the task of standardizing the high school curriculum to the Committee of Ten, a group of U.S. educators, headed by Charles Eliot, president of Harvard University at the time. In their resolutions, which were adopted by secondary schools across the nation, they suggested that all high school students in the country be exposed to similar courses of study regardless if they were college-bound or career-bound in order to promote an educated and cohesive citizenry:

“...Every subject which is taught at all in a secondary school should be taught in the same way and to the same extent to every pupil so long as he pursues it no matter what the probable destination of the pupil may be or at what point his education is to cease” (Report of the Committee of Ten 1984).

As a result of the influx of low-income and immigrant students to secondary schools in the late 19th century, schools were faced with the new challenge of teaching students from different socioeconomic, ethnic, and linguistic backgrounds. In 1918, the National Education Association was called on once again by teachers to propose strategies by which schools could teach diverse students who were perceived to have different abilities and orientations to learning, both because of ideological concerns regarding the intelligences of these low-income and immigrant children and because of growing concerns of inefficiency in the schooling system. The NEA organized the Commission on the Reorganization of Secondary Education, which, in its Cardinal Principles of Secondary Education report, advocated for a “new focus that would take into
account individual differences, goals, attitudes, and abilities” (The Cardinal Principles of Education 1918). It is important to highlight that efficiency rather than equality were the goals and assumed responsibilities of these schools.

Many functionalists championed tracking practices at the time, because of its presumed efficiency and functionalism, and argued that teaching ability-grouped students would allow teachers to meet the needs of students, as teaching homogenous groups was perceived to be more effective than teaching heterogeneous groups (Barr et al. 1992). Stanley Hall, a child development researcher, stated that the role of schools was to “...study the needs of various children and design curricula around the differences around them” (Oakes 2005, 23). As Oakes states,

“Gone was the nineteenth-century notion of the need for common learnings to build a cohesive nation. In its place was curricular differentiation-tracking and ability grouping- with markedly different learnings for what were seen as markedly different groups of students” (2005, 21).

Some functionalists even went as far as to claim that the original standards set by the Committee of Ten were elitist and that they were overly concerned with college preparatory material, which was deemed not relevant for working-class children (Loveless 1999, 33). Ironically, tracking was championed as being egalitarian as evident in the statements of a superintendent of Boston schools in 1908: “Until very recently [the schools] have offered equal opportunity for all to receive one kind of education, but what will make them democratic is to provide opportunity for all to receive education as will fit them equally well for their particular life work” (Oakes 2005, 34). It is important to note that this “particular life work” was largely determined by one’s socioeconomic and ethnic
background rather than student choice regarding his or her academic trajectory and future career aspirations.

Ideological arguments for tracking also emerged in response to the notions of cognitive differences between individuals of different socioeconomic and ethnic backgrounds promulgated by contemporary social scientists, as evident in the numerous studies regarding the heritability of intelligence. For example, Lewis Terman, whose intelligence tests informed popular IQ tests such as the Stanford-Binet test and the SAT, stated that individuals with IQs below 70 were best suited for unskilled labor. Since he found that such low IQ scores were prevalent among ethnic minorities, he suggested that ethnic children be “...segregated in special classes...they cannot master abstractions, but they can often be made efficient workers” (Oakes 2005, 37). Social Darwinism particularly took root at this time and was used to frame socioeconomic inequities and disparities between ethnic groups as the result of the biological and natural inferiority of immigrants and the poor. Thus, the perceived objectivity of IQ tests was coupled with the popular racist and classist sentiments to legitimatize tracking practices in schools. Growing concerns regarding the need to Americanize immigrant children were also prevalent at the time. Schools were thus seen as venues in which to promote “American” values, primarily those of the upper/middle class. This Americanization movement, coupled with the “...ethnocentric ideas of social Darwinism...converged in the concept of the comprehensive high school, complete with differentiated education and with ability grouping and tracking”
(Oakes 2005, 30). This phenomenon of class and ethnic based curriculum differentiation persisted until the late 20th century when Oakes and her contemporaries brought to light the inequalities in quality of curricula and instruction between tracks and the disproportionate assignment of low-income and ethnic students to low tracks.

Gamoran states that the majority of American schools at both the primary and secondary level employ some form of tracking or ability grouping today (2000). Thus although many schools restructured and got rid of their formal tracks, many still use some form of tracking/ability grouping and are still denying low-income students equal opportunities to learn.

**Tracking as Opportunity Hoarding and Social Reproduction**

Tracking provides differential access to knowledge and unequal learning opportunities to low-income students, as evident by the differences in curricula that Oakes studied. For example, Oakes documented that Shakespeare was primarily taught to only high-track students, whereas low-track students were taught young adult fiction and short texts (Oakes 1975, 79). She also found that calculus was offered more commonly in higher-income schools than in low-income schools: “...80 percent of schools serving predominantly white students offered calculus, whereas only half the schools in which all or almost all students came from minority backgrounds did so” (Gamoran 2000, 100). Michael Young, a British sociologist, argues that power is unevenly distributed in societies as a result of the unequal distribution of knowledge across groups. He states that “this unequal distribution of power is maintained by those already in power by
their control of the ways in which institutions transmit knowledge” (Oakes 2005, 199). By controlling who has access to knowledge of Shakespeare and Calculus, the upper/middle class can maintain its privilege and socio-cultural dominance. This control over the transmission of knowledge in institutions, through tracking practices, can thus be seen as a form of opportunity hoarding.

Furthermore, resistance to detracking has been found to be most common among the parents of high-track students, who are mostly upper/middle class, as they feel their students will be exposed to lower-quality curricula and instruction and that their learning will be hindered by heterogeneous groupings (Loveless 1999). Upper/middle class parents often maneuver their children into high tracks through their use of their social and cultural capital if their child’s “ability” is not enough to get them placed favorably (Useem 1992; Wheelock 1992). In doing so, they ensure that their students remain in the highest positions within the track structure and secure advantages for themselves, as previously suggested by Lucas in his effectively maintained inequality theory (Lucas 2000). Tracking thus serves as a gate-keeping mechanism through which the opportunity hoarding of the upper/middle class is maintained and obscured.

Michael Apple, building on Young’s work, suggests that high-status knowledge, which is defined by the elite, is made a “scarce commodity whose distribution is limited” (Oakes 2005, 199). Tracking upholds the monopolization of the elite over the scarce resource of high-quality curricula and instruction, and limits the distribution of the high-status knowledge to only students in high-
tracks, who are primarily upper/middle class themselves. This control is further strengthened by the fact that since low-income students are exposed to low-status knowledge in low tracks, they often cannot move to high-tracks, even if they are deemed able, because of their lack of access to this high-status knowledge (Oakes 2005) Furthermore, the lack of mobility across tracks prevents social mobility as a whole because of the relationship between power and high-status knowledge. Durable inequality is thus reinforced by the illusion of merit-based tracking, by basing tracks on student “ability,” and the championing of meritocratic ideals, by presenting track mobility, and by extension social mobility, as a reality that students can achieve (Tilly 1999; Oakes 2005).

When discussing high-status knowledge, Bourdieu’s concepts of pedagogic authority and social reproduction are especially apt. As previously mentioned, the pedagogic authority of the upper/middle class, i.e. their knowledge and values, are taught in schools (1977). Thus student achievement is measured according to their acquisition of this knowledge and compliance to these values. Nowhere is the enshrinement of upper/middle class cultural capital more apparent than in Thorndike’s intelligence tests; As historian Clarence Karier says, “his influence on American education may in part be accounted for by the fact that he, more than most, built into his studies his own middle–class values and then dared to call them ‘scientific’” (Oakes 2005, 37). The disproportionate amount of low-income and nonwhite students in low-tracks both historically and presently is not coincidental since Thorndike’s tests
and other “objective” IQ tests that largely informed students’ track placement in the 1900s have deemed them lacking of upper/middle class cultural capital. Thus not only do low-income students in low-tracks not have access to high-status knowledge in their homes because their families lack the “appropriate” cultural capital, they are also systematically denied access to this cultural capital in schools through their low-track placements. Furthermore, this differential access to skills and content in schools affect students’ later academic outcomes because institutions of higher learning tend to reward the knowledge acquired by high-track students more than that acquired by low-track students.

Oakes also found that “proper behavior” and compliance was emphasized more in low-track classrooms than high-track classrooms, both from teacher and student testimonials (2005, 85). This finding lends support to Bourdieu’s theory of symbolic violence, which would posit that because of the cultural mismatch between low-income students’ values and those which are valued in schools, school administrators would attempt to indoctrinate them with upper/middle class values and in doing so would unconsciously enforce the socio-cultural dominance of upper/middle class values on them and punish them for noncompliance (1977). This symbolic violence then “…may be reflected in the school’s assessment of poor and minority students’ general aptitude or ability to understand instruction as much as any innate capacity to learn “(Oakes 2005, 104). This conflation of ability and compliance is also evident in the frequent labeling of low-track learners, and by extension low-track students, as being unable to learn because of their dysfunctional relationships to authority
and learning. Furthermore, poor behavior and low achievement may be 
indicators of student resistance to the inculcation of upper/middle class values 
and knowledge. Haberman (1991) terms this emphasis on compliance and 
student behavior modification as a "pedagogy of poverty." As a result of this 
"pedagogy of poverty," opportunities to learn are further minimized in low-track 
classrooms, since valuable time that could be spent on instruction is allotted to 
behavior management.

This "pedagogy of poverty" and behavior management also support 
Bowles and Gintis’ theories on how schools reproduce class dynamics and 
maintain the social hierarchy by instilling in students class-appropriate 
behavior. Schools foster class-appropriate behavior by “[promoting the] 
acceptance of coercion and obedience to established authority” among students 
in low-tracks (Oakes 2005, 134). This sentiment regarding the instruction of 
class-appropriate behavior, which resonates with Bowles and Gintis’ 
correspondence principle, was stated aptly by Boston’s superintendent of 
schools in 1893, when he advocated for manual training to be taught in urban 
schools so that "...schooling could be made relevant to these children’s’ future 
lives as workers" (Oakes 2005, 31). This is evident in the fact that Oakes found 
that students in high- tracks reported learning content that was relevant to 
future academic pursuits, whereas students in low-tracks reported learning 
content that was relevant to employment and basic job skills (2005). Oakes also 
found that characteristics that were valued in high-track classes such as 
independence and innovativeness were not rewarded in low-track classes;
students in low-tracks who showed such characteristics were labeled as resistant and difficult. Instead, docility and compliance were stressed in low-tracks and students who showed such traits were considered obedient and successful students (2005). Schools then constrain the agency and choice of low-income children and socialize them for their appropriate social niches through tracking, in a manner similar to that of other societal institutions such as the workplace. Oakes poses the following question:

“Could it be that we are teaching kids at the bottom of the educational hierarchy—who are more likely to be from poor and minority groups—behaviors that will prepare them to fit in at the lowest levels of the social and economic hierarchy? (Oakes 2005, 91).

Her findings suggest that the answer to this question is a resounding yes.

Thus, tracking can be understood as a sorting apparatus through which the privilege of the upper/middle class is maintained and preexisting socioeconomic inequality is reproduced. In the next section, I will examine the selection processes by which students are placed into tracks in order to analyze whether these track placements are valid measures of students’ ability to learn.

**Track Placement Processes**

Tracking placements are by and large dependent on three factors: prior student achievement, teacher and counselor assessments, and varying degrees of parental involvement and student choice. When discussing prior student achievement, it is important to note that prior tracking/ability grouping may be responsible for gaps in learning low-income students may have. Student achievement is also often measured according to standardized tests despite the fact that these tests are often upper/middle class centric as the knowledge,
experience, and language they reward is that of the upper/middle class; “That is, white upper/middle class children are most likely to do well on them because of the compatibility of their language and experiences with the language and content of test questions...and with most of the adults doing the testing” (Oakes 2005, 11). Teacher and counselor assessments of students perceived ability can also be based on classicist and racist assumptions, either unintentionally or intentionally, and thus are not the most accurate criteria by which to assess ability.

When discussing the issue of student and parent involvement, it is important to note that the influence that students and parents have on track placement has been found to be moderated by socioeconomic background. Higher-income students are more likely to get assigned initially to higher-tracks or reassigned as a result of not only their perceived ability but also parental advocacy (Useem 1991; Useem 1992; Wells and Oakes 1996; Kelly 2010). Laureau’s findings regarding the tendency of upper/middle class parents to question their children’s’ teachers more as a result of their familiarity with the cultural capital favored in schools is an example of such parental advocacy (2000). These parents possess the cultural capital necessary to navigate schools because the institution of schooling, like other societal institutions, rewards the cultural capital of the elite as a result of their overall societal power (Tilly 1999). Higher parental levels of education may also translate to more practical knowledge about the inner workings of schools and tracking practices in general. Useem (1992) also found that less educated parents were more likely to
either not know that their students were placed in low-tracks or not understand
the tracking systems at their children’s schools. Student choice may also not be
the best criteria for tracking placement as teachers and administrators often
influence student decisions (Oakes 2005). Students often adhere to the track
recommendations made by these actors since they trust their judgment.
Furthermore, low-income students who have been placed in low-tracks
previously may opt for continued low-track placement as a result of internalized
self-fulfilling prophecies about the suitability of their low-track placement and
their ability to achieve (Gamoran 1986; Pallas et al 1994). Thus, track placement
processes do not seem to be objective measures of students’ ability to learn.

In the next section I will illustrate the effects of tracking on student learning
opportunities and achievement across tracks and elaborate on how tracking
limits the achievement of low-track children, who are disproportionately low-
income children, and thus contributes to the socioeconomic opportunity gap.

**Tracking and the Socioeconomic Opportunity Gap**

The socioeconomic composition of schools has been found to be a
predictor of tracking/ability grouping use. Lucas and Berends (2002) found that
schools employed de facto tracking practices as a response to socioeconomic and
ethnic diversity. Their finding is supported by the fact that schools with high
amounts of low-income and ethnic students are more likely to track than schools
that serve predominately upper/middle class white students (Wheelock 1992).
In doing so these schools provide differential learning opportunities to their
students based on their socioeconomic backgrounds and widen the preexisting
socioeconomic opportunity gap. The quality of teaching, which has been found to have direct effects on student achievement, has also been found to vary across tracks, as teachers assigned to low tracks have been found to utilize ineffective teaching practices (Oakes 2005; Desimone & Long, 2010) Teacher preferences for instructing high-track students may also limit the quality of teachers in low-tracks.

Though homogenous grouping according to student ability addresses the functional concerns of educators who believe that teaching homogenous groups is more effective, grouping students homogenously for the majority of instruction has been found to result in differential achievement for students. Whereas minimal positive effects of homogenous grouping have been found for high-track students, the majority of research has either found large negative effects of homogenous grouping for low-track students or no effects for all students (Ansalone 2010; Gamoran and Mare 1989; Kulik and Kulik 1992; Wheelock 1992; Gamoran et al. 1995, Tach and Farkas 2006) These negative and neutral effects on student achievement are most likely explained by the fact that the pace, quality of instruction, and complexity of curricula of high-level tracks is higher-quality than that of other tracks.

By comparing the achievement of tracked students to non-tracked counterparts, many researchers have found that student achievement and learning gains would be improved if students were not tracked at all (Mason et al.; Wheelock 1992; Hallinan et al. 2003, Condron 2008). Low-income students in Catholic schools have been used as a control group by which to assess the affects
of tracking, because of the lack of tracking practices in Catholic schools. Studies have found that these students show high levels of success when exposed to high-quality college preparatory curricula and instruction, and have termed this phenomenon as the “Catholic school advantage” (Bryk et al. 1995). Such findings have been cited as evidence that homogenous groupings are not necessary for high student achievement and that track placements may be stifling the achievement potential of low-income students. The Educational Research Service (1992) found that low-track students learned as much or more than their high-track counterparts when they were provided with the opportunity to engage with high-quality curricula and instruction (Tomlinson 2006). In their research regarding the differential opportunities present between high and low tracks, Hallinan et al. suggest, “...given the way ability groups are currently formed in secondary schools, students generally would attain higher test scores if provided with the greater learning opportunities that characterize higher-ability groups.” (Hallinan et al. 2003, 121). Gamoran (1992) demonstrated that tracking contributes to the further widening of the achievement gap when he stated that “achievement gaps between students in different tracks widened more than the overall disparity between students who had dropped out of school after 10th grade and those who stayed in school” (194). This finding equates the detrimental effects of tracking on student achievement to those of student drop out overall and further corroborates that tracking students does not contribute to their learning potential but rather keeps it stagnant. In 2004, the National Academy of Sciences documented the strong negative effects of low-
track classes on student achievement and even advocated for the abolishment of low-tracks (Oakes 2005). Indeed, many schools have “detracked” in response to these equity concerns. Through these studies, it is apparent that tracking provides students with differential access to high-quality instruction and knowledge and further limits the opportunities of low-income children to learn.

In the next section, I will explore detracking efforts and their strengths and weaknesses and evaluate whether differentiation could be an innovative means by which to aid detracking efforts and decrease the socioeconomic opportunity gap.

**Detracking’s Successes and Failures and the Promises of Differentiation**

In the late 1980’s, schools across the nation began to detrack in response to research highlighting the negative effects of tracking and the unequal learning opportunities between high and low tracks (Loveless 1999). Detracking can be defined as the practice of teaching all students in heterogeneous groupings across all subjects. Advocates of detracking argue that detracking is the most equitable means of ensuring students have access to the same knowledge and curricula. Some teachers detracked by adjusting their instruction styles to the needs of the mid-level students in the class rather than high or low learners so as to provide some comprehension for all students (Wheelock 1992). Others responded by abandoning their high-track curricula in favor of low-track curricula in order to accommodate the perceived abilities of formerly low-track students (Tomlinson 2006). However, many of these approaches did not produce significant student achievement. Consequently, many schools quickly
returned to grouping their students into ability groups, through indirect and informal methods (Gamoran and Weinstein 1998). This lack of significant gains in student achievement may have resulted from the fact that formerly low-track students may have needed more support to catch up to the pace of the class and to transition into working with higher quality curricula. Furthermore, resorting to mid-level curricula may have hampered the achievement of high-track students who may not have felt challenged by this information. Whatever the case may be these detracking efforts, though informed by equity concerns, did not improve student achievement perhaps because detracking by itself, though it can increase access to high-quality knowledge for all students, does not compensate for the gaps in learning formerly low-tracked students may have nor does it supplement the instruction of formerly high-tracked students.

When discussing the usage of ability grouping overall, it is important to note that ability grouping usage by itself does not inhibit student achievement as long as these groupings are fluid and skill-specific. The permanence of ability groupings in tracking is problematic because it assumes crystallized conceptions of student ability, does not take into account how prior unequal access to knowledge has affected student achievement, and does not acknowledge potential student growth and skill mastery over time. Furthermore, the lack of fluidity among tracking ability groups do not allow for these gaps in learning to be remedied. Hallinan et al. (2003) suggest that ability grouping usage be reformed by utilizing “instructional accommodation” as a way to expose all
students to the same information using different modalities and paces in order to address the ramifications of prior tracking practices.

Differentiation can be conceptualized as an example of instructional accommodation, which could facilitate learning for all students by providing class work and homework that is responsive to students’ skill levels and different learning styles. When Oakes advocated for detracking she “[hoped] that the medium of instruction would be varied to accommodate a variety of learning styles in the classroom and further equalize students’ opportunities to learn...” (2005, 206). Differentiation accomplishes these objectives of detracking by not only providing students with equal exposure to high-quality curricula and instruction for the majority of their time but also meeting the needs of different types of learners and compensating for preexisting gaps in learning between low-income children and their upper/middle class counterparts.

The positive effects of differentiation on student achievement are corroborated by recent studies regarding the achievement gains of kindergarteners of all skill levels as a result of within-class skill grouping (Tach and Farkas 2006; Condron 2008). Beecher and Sweeney (2008) chronicle the effectiveness of differentiation at an elementary school in closing pre-existing socioeconomic and ethnic achievement gaps in the school and advocate for differentiation to be implemented in schools nationwide. Slavin (1990) found skill-based groupings have a positive effect on student achievement, especially when paired with differentiated instruction (Gamoran 2000). Tomlinson (2006) stresses the importance of promoting a climate of high expectations for all when
differentiating so that skill-based groupings do not have negative effects on students' perceptions of their learning potential and do not reinforce preexisting socioeconomic inequities.

It is crucial for groupings in differentiation to allow for student mobility and growth so that they do not resemble tracking ability groupings. Homogenous skill-based groupings should be used in conjunction with heterogeneous skill-based cooperative groupings so that students can learn from and teach one another cooperatively (Wheelock 1992, Tomlinson 2006). Skill levels should be measured for different content through the use of pre- and post-assessments to assess student comprehension prior to and after instruction. Teachers and administrators should make active efforts to make sure that they are not disproportionately placing low-income and ethnic students in low-skill groups by developing methods by which to measure students’ skills that are not dependent on upper/middle class cultural capital. When assessing student skill level, such assessments must be made with the understanding that these levels are not fixed and can and should be improved by scaffolding activities for students rather than denying them access to challenging curricula because of beliefs of inadequacy and innate ability.

When discussing whether formerly low-track students can catch up to their high-track peers, it is important to note that such an objective can only be accomplished if student access to information and curricula is equal and if differentiation is provided throughout a students’ educational experiences. For example, all students should have access to high-quality knowledge, such as
Calculus and other college preparatory classes. However, students should be provided with scaffolding and any skill interventions they may need, through groupings and instructional styles, so that they may acquire this material at their own speeds. Doing so could remedy prior inequities in learning opportunities students may have from prior schooling experiences. Providing equitable learning opportunities to students should result in more equitable student achievement overall and should be the priority of differentiation efforts. Thus, it is crucial that differentiation efforts be coupled with high standards, in the form of high-quality instruction and expectations for all students overall, which I will discuss in my next chapter.

In conclusion, differentiation seems to be a promising means by which to provide all students with equitable learning opportunities regardless of their socioeconomic backgrounds and perceived abilities. In my next chapter, I will evaluate how standards-based reform, specifically that of the development and provisioning of high-quality curricula for all students, could be a means by which to further decrease the socioeconomic opportunity gap.
Chapter III
Reflections on the History of Standards-Based Reform, NCLB, and Future Directions for Standards-Based Reform

Introduction

In this chapter, I will analyze whether standards-based reform, that of setting standards by which to measure and evaluate student achievement, teacher curricula, and school environments, could narrow the socioeconomic opportunity gap. Standards-based reform has been championed by current educational reform policies, most notably the No Child Left Behind Act of 2001 (NCLB). Accountability measures regarding the performance of students, teachers, and schools have been stressed by NCLB, through the use of high-stakes testing and punitive measures for non-compliant parties.

I will first provide a brief history of standards-based reform in American schooling. Next I will discuss historic standards-based reform in the context of the opportunity hoarding practices of the upper/middle class. Then I will evaluate NCLB and its effects on the socioeconomic opportunity gap, and briefly postulate the potential effects Race to the Top, the current standards-based reform initiative, could have on this gap. Then I will discuss research regarding the effectiveness of different types of standards-based reform and assess whether such reform should be externally-imposed or developed by teacher communities. Finally, I will suggest future directions for standards-based reform and assess the effects of teacher and school community standards-based reform efforts on the socioeconomic opportunity gap.
History of Standards-based Reform in American Schooling

As previously discussed in chapter II, prior to the late 19th century schools across America did not have common standards for evaluating the content of curricula or teacher instructional practices or student achievement. In 1892, in order to align high school curricular content with that of the knowledge and skills required for college entry and success, the Committee of Ten recommended that high schools nationwide standardize their curricula to include specific college preparatory courses and delineate the content and skill objectives for each of these subjects (Report of the Committee of Ten 1984). These recommendations can be conceptualized as the earliest forms of standardization in American schools. These standards were adopted and implemented in the majority of the nation's high schools up until around 1918, when the Commission on the Reorganization of Secondary Education nullified these curricular standards in their Cardinal Principles of Secondary Education. Instead, the commission highlighted “fundamental processes,” skills across all subjects that students should master for future educational or vocational success, and advocated that students be tracked and grouped and that curricula be differentiated based on perceived student intelligence, which was largely correlated with students’ socioeconomic and racial backgrounds (The Cardinal Principles of Education 1918). However, these reforms did not provide curricular frameworks or assessments by which to determine student mastery of these “fundamental processes.” Thus, schools and states began to devise their own assessments of student mastery, such as school exit exams.
Standardized testing did not become widely used as a means of assessing student mastery of skills until the early 20th century. In response to the poor academic performance of American students in comparison to their international counterparts, which was documented in a *Nation at Risk*, an educational report prepared by the National Commission on Excellence in 1983, the writers of *A Nation at Risk* deemed that American curricula, instructional methods, teacher preparation and quality, and student achievement, particularly in secondary schools, were not equipping students with the basic skills they needed to compete in the global economy as future workers. They suggested that standardized testing be carried out across schools at all levels to highlight what skills American children were struggling with and to hold schools accountable for their students’ performance. In their recommendations, they also called for the adoption of voluntary national standards, the implementation of a “back-to-basics” curriculum, which would focus on basic skill acquisition among students, and a greater investment in teacher preparation and quality (Ravitch 2010). These standardized testing recommendations were indeed adopted by many states and schools. As a result, standardized testing performance and school accountability became a major issue for policymakers and the federal government. The importance placed on standardized tests is evident by the fact that standardized testing performance was used to provide resources to schools who had high numbers of underachieving students, through Title I allocations, in the Elementary and Secondary Act of 1965 (Ravitch 2010). The issue became so critical that even presidents attempted to mobilize around this issue as evident
by Bush Sr. and Clinton’s Goals 2000: Educate America Act, Bush’s NCLB legislation, and most recently Obama’s Race to the Top initiative, all of which I will discuss later on in this chapter.

**Opportunity Hoarding and Standards-Based Reform**

In the next section I will explore how the elite have navigated these historic standards-based reforms, respectively that of the Committee of Ten and the Commission on the Reorganization of Secondary Education, and have advanced their students’ achievement and monopolization of educational resources through their opportunity hoarding practices.

*Changing Definitions of Merit as an Elite Strategy to Counteract the Equitable Standards-Based Reform of the Committee of Ten*

As a result of the overall expansion of the high school population and the introduction of high numbers of students from low-income and immigrant backgrounds, as a result of compulsory schooling laws in the late 19th and 20th century, the exclusive access of the elite to educational resources was challenged. Furthermore, as access to college preparatory classes was available to all students as a result of the standards-based reform regarding the provisioning of high-quality curricula to all students enacted by the Committee of Ten, low-income students began to gain admissions into institutions of higher learning, which had formerly been exclusively upper/middle class realms.

In order to foster their educational interests exclusively, the elite looked for strategies by which to restrict the access of low-income students to colleges. They did so by manipulating the definition of “merit,” upon which college
admissions were based, and in doing so defined student admissibility according to these subjective measures. Initially they relied on mastery of the classics such as Latin and Greek, as their criteria, because they assumed that low-income students would not have access to this knowledge. However, low-income students overcame this obstacle to their educational advancement. As a result, the elite had to devise a new meaning for merit by which to exclude these groups from the valuable resource of education. They then transitioned to requiring that students take IQ tests and standardized tests, which were inherently biased to the “intelligences” of upper/middle class children, as they presumed that intelligence was hereditary (Sacks 2007). Yet despite these efforts to prevent low-income students from infiltrating institutions of higher learning, some low-income students, primarily Jewish immigrants, were able to score well on these IQ tests, both through test preparation and their familiarity with upper/middle class cultural capital from their school environments, and thus gained entrance to these enclaves of elite power. This posed such a great threat to the elite’s monopoly over higher education that the Head of Columbia referred to this phenomenon as the “Jewish Problem” (Karabel 2005).

As restricting access through these previous definitions of “merit” had not worked, they transitioned to a system of evaluating student “well-roundedness,” which they defined as non-cognitive attributes, such as involvement in extracurricular activities, which they deemed necessary to succeed in their institutions (Karabel 2005). Lareau (2003) found that these were unfair admissions measures because low-income children are
disproportionately uninvolved in extracurricular activities in comparison to their higher-income counterparts, primarily because they cannot afford to participate in these expensive activities. If students are being rewarded for involvement in such activities, as this involvement would constitute merit, we can see how selecting students based on this definition of “merit” has served as a means of excluding many working-class students both historically and currently, despite the fact that they may be academically capable of succeeding in these schools, according to the very terms of these institutions as demonstrated by their mastery of coursework and SAT scores. The desired applicants then would be those who have the right “degree of cultural attainment” and who have been immersed within the dominant culture (Bourdieu 1977, 35). These subjective evaluations, according to upper/middle class cultural capital and knowledge, can even be found in elementary schools. In Unequal Childhoods, Lareau (2003) documented that some elementary school teachers evaluated students on non-cognitive factors, similar to merit, either indirectly or directly.

The elite have indeed succeeded at limiting the access of working-class individuals to institutions of higher learning as illustrated by the low percentage of working-class students attending institutions of higher learning: Only seven percent of students at four year institutions and three percent of students at elite colleges come from the bottom quartile of the income distribution (Alon, 2009) This statistic highlights that this opportunity hoarding through the construction of merit has persisted up until the present day. Thus, by determining admissions according to such subjective criteria as “merit”, rather than objective measures
of student achievement, the elite were able to limit the college admissibility of low-income students based on whether they possessed their cultural capital and counteract the equitable outcomes of standards-based reform established by the Committee of Ten.

Curriculum Differentiation and Opportunity Hoarding

When curriculum differentiation, the earliest manifestation of the tracking practices present in schools today, was proposed by the Commission on the Reorganization of Secondary Education, institutions of higher learning and the greater American populace generally supported this practice, even though it would provide students with differential access to learning opportunities, as they believed that there were intellectual differences between these students and their white and upper/middle class peers. As a result of this curriculum differentiation, courses at many schools, particularly at the high school level, were not uniform both within and between schools in terms of their content or expectations for student achievement. The validity of curriculum differentiation was strengthened by the scientific research of the time, which suggested aptitude differences between affluent white children and poor and nonwhite children could be attributed primarily to genetic and cultural differences. According to Darling-Hammond, these notions regarding the lower aptitudes of low-income children in comparison to that of upper/middle class children were promulgated so effectively by the elite that “it was widely agreed that...’city schools should give up the exceedingly democratic idea that all are equal, and that our society is devoid of classes’ and prepare students for their future place
Schooling was conceived as a mechanism through which to prepare students for socially appropriate niches according to their socioeconomic and ethnic backgrounds. However, as IQ tests are not objective assessments because their characterization of intelligence is based on upper/middle class knowledge, one can see how utilizing such assessments served the opportunity hoarding agenda of the elite.

Thus the standards-based reform of curriculum differentiation reinforces the overall control of access to opportunities of the upper/middle class by restricting the access of poor and nonwhite students to opportunities for educational advancement through denying them exposure to challenging and high-quality curricula. By doing so, the elite also maintain their control over other societal organizations, as access to educational resources effects one’s ability to affect their outcomes. Bowles and Gintis’ correspondence principle can also be applied as the “fundamental processes,” or skills that were emphasized in high and low tracks were correlated with those deemed necessary for success for elites and laborers respectively. Schools were also seen as mechanisms by which to assimilate foreign and poor students into mainstream American culture by inculcating them with the values and ideas of the dominant classes (Oakes 2005). Bourdieu’s theories of cultural capital and symbolic violence are also apt as the curricula which were taught in schools privileged the knowledge of upper/middle class white students, rewarded the behaviors of “assimilated” students, and stigmatized the cultures and value systems of nonwhite poor students. This system of curriculum differentiation persists today, in the form of
tracking, and continues to limit the access to learning opportunities of low-income students, as discussed in the previous chapter.

**No Child Left Behind and the Socioeconomic Opportunity Gap**

*Overview of NCLB*

In this section, I will explore the successes and failures of NCLB, our most recent form of standards-based reform, and evaluate its effects on the socioeconomic opportunity gap. In 2001, NCLB was proposed to “[ensure] that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments [by 2014]” (Foorman, Kalinowski, Sexton 2007, 17). Some of the key provisions that were suggested within NCLB in order to achieve this objective of providing equal opportunity to all students were that schools use standardized tests to assess student achievement, that states evaluate schools according to their student achievement by measuring their Adequate Yearly Progress (AYP), and that all students be provided with a “highly qualified” teacher, which was defined as a teacher who had at least a bachelor’s degree and certification in their subject area (Foorman, Kalinowski, Sexton 2007). Consequences for failing to meet AYP requirements included the loss of funding, the provisioning of choice to their students, the takeover and “restructuring” of schools, and eventually the closing of schools that failed consecutively 3 years in a row.

Although NCLB claims to be concerned with equal learning opportunities for students, its high-stakes testing and punitive measures have resulted in
states prioritizing student test performance rather than equality of access to learning opportunities. This is evident in the fact that many states and schools have largely ignored NCLB’s mandate that they invest in improving teacher preparation and quality to equalize students’ differential access to learning opportunities. Indeed, one can see that the current focus of much of our recent standards-based reform has been concerned with basic proficiency rather than if students have equal learning opportunities or if mastery of these skills actually reflects student learning.

Content, Performance, and OTL Standards and NCLB

When discussing NCLB, it is important to distinguish between content standards, performance standards, and opportunity-to-learn standards in order to evaluate the effectiveness of this standards-based reform. A content standard refers to the specific information and skills teachers should teach (Ravitch 1996). A performance standard refers to the level of mastery of curricular content and skills students should demonstrate (Ravitch 1996). According to the Goals 2000 Act, which served as the precursor to NCLB, an opportunity-to-learn (OTL) standard refers to:

“...The criteria for, and the basis of, assessing the sufficiency or quality of the resources, practices, and conditions necessary at each level of the education system... to provide all students with an opportunity to learn the material in voluntary national content standards or state content standards” (Porter 1995, 21).

In this section, I will evaluate whether NCLB included the aforementioned standards and whether doing so affected the socioeconomic opportunity gap.
Although the performance standards of NCLB were clearly defined as 100% of students meeting proficiency on math and reading assessments, and a timeline of 2014 was set for this goal, without content standards, states and schools had no consistent measures by which to set these performance standards and continued to provide unequal opportunities to low-income and/or ethnic students. Ironically, the makers of NCLB had largely abandoned content standards in order to avoid any possible negative receptivity the American populace might have towards content standards as demonstrated by their negative reactions to the content standards, though voluntary, of the Goals 2000 Act. These standards were not received well by some of the American populace as they felt that they were infusing students with particular worldviews that were biased towards the interests of certain political parties and that they would take away from the autonomy of states and school districts to determine what information they deemed valuable for instruction (Darling-Hammond 1997, Ravitch 2010). However, these content standards were praised for their general specification of what knowledge and skills students should be learning at different grades, crucial guidelines which were missing from NCLB. Perhaps then if NCLB had included some general content standards, states and schools would have had clear guidelines regarding how to meet these performance standards.

As a result of the high-stakes nature of NCLB, specifically that of the punitive consequences for schools that failed to meet adequate yearly progress (AYP), some states set low expectations and performance standards so that their
schools could meet these criteria and avoid being penalized by NCLB. They did so by manipulating their definitions of "proficiency; for example, proficiency scores ranged between states from “...the 6th percentile to the 77th” (Ravitch 2010, 107). The disparities between actual student achievement and test scores, however, became apparent in the low scores of marginalized students on the National Assessment of Educational Progress (NAEP) that states were required to participate in as part of NCLB (Ravitch 2010). Perhaps schools did not place a strong emphasis on or attempt to manipulate NAEP performance since it had no punitive consequences. Since NCLB required schools to disaggregate student achievement scores by socioeconomic class and ethnic groups, schools who struggled most to meet AYP or even cheated so as to not face NCLB’s punitive measures, were primarily failing because of the test scores of their low-income students and ethnic students. In response, some schools with high numbers of low-income and or ethnic students took matters into their own hands and manipulated test scores by controlling which students took assessments by pushing out low-performing students who would bring down test scores, through exit exams and retention practices. Some schools even classified these students as mentally disabled or limited English speakers so that they could take modified tests that would not be included in the school averages (Ravitch 2010). As passing math and reading standardized tests became the main focus of instruction for teachers and administrators nationwide, schools even went so far as to eliminate other subjects from the curriculum (Darling-Hammond 2010). Through these manipulative practices, the performance standards set by the
NCLB have been further invalidated and have resulted in the marginalization of the learning opportunities of low-income children. As Darling-Hammond states, as a result of NCLB, “... students who have no control of the quality of education they receive are the ones held most accountable- and punished most severely and repeatedly for the failures of the system in which they are trapped” (Darling-Hammond 2010, 79). The high numbers of closures of “failing schools,” as previously mentioned schools who did not meet AYP three years in a row, would indeed serve as example of how NCLB’s school accountability measures have disproportionately negatively affected the learning opportunities of low-income students. Indeed, rather than prioritizing the development of strategies to improve the learning environments of low-income schools, which would result in sustainable long-term structural change in schools, NCLB has instead proffered school choice, which seems like a temporary ineffective fix to the inequities both between and within schools.

It is also important to note that states and schools have not adhered to the opportunity-to-learn-standards included in NCLB’s original framework, that of providing adequate level of resources, staff, and funding which schools need in order to have all their children meet content and performance standards. This may be because the federal government did not provide schools with the federal, state, and school district support they would need, such as additional resources and funding, to invest in and prioritize these standards. As Darling-Hammond stated, “If not accompanied by measures to ensure equal opportunity to learn, national content and performance standards could help widen the achievement
gap between the advantaged and disadvantaged in our society" (Darling-Hammond 2010). Thus, although the equity concerns of NCLB were admirable, its overall lack of coordinated implementation of content standards, and OTL standards, with its performance standards has incapacitated NCLB's potential positive effects on student achievement.

Teacher Quality and NCLB

It is important to note that investing in teacher preparation programs and quality were clear policy recommendations of both A Nation at Risk and NCLB. Both of these policies called for standards-based reform to also develop standards for what high-quality teacher preparation and practice should be like in all schools, particularly in low-income schools. Some states did in fact create solutions by which more qualified teachers could be placed in low-income schools (Darling-Hammond 2010). Some did so by raising the requirements for their teachers, others through incentive programs. However since improving teaching quality was not the main focus of NCLB, even though it was in the original wording of the federal mandate, many states did not develop such initiatives. In 2003, Desimone, Smith, and Frisvold found that there were no significant gains in overall teacher quality for students after the implementation of NCLB (2007). Furthermore, some states even lowered the requirements needed for people to enter the teaching profession, which undermined the standards for high-quality teaching, such as the definition of a “highly qualified teacher” set forth by the NCLB. Desimone, Smith, and Frisvold's study found that teachers in low-income schools were more likely to be uncertified in their
subject areas (2007). They hypothesized that limited funding and resources on the part of low-income schools and school board decisions that privileged the interests of affluent schools over their low-income counterparts promoted unequal investments in teacher quality across schools. Through these practices, the preexisting gaps in teacher quality between low-income and affluent schools were further exacerbated as many of these poorly prepared teachers were disproportionately placed in low-income schools in order to respond to their staffing needs.

This phenomenon of unequal teacher quality distribution across socioeconomic lines is particularly endemic to the United States as evident by the fact that the U.S. ranked 4th out of 46 countries in an international study regarding inequality of access to qualified teachers between high-income and low-income students (Akiba et al. 2007, 381). As teacher quality is not evenly distributed both within and between schools, as a result of teacher tracking practices, district practices, and teacher preferences, low-income students are disproportionately less likely to experience high-quality teaching and to benefit from the positive effects that high-quality teaching can have on student achievement (Hamilton et al. 2002, Rivkin et al. 2004, Darling-Hammond 2010). Thus, NCLB’s mandate that all students have access to a “highly-qualified teacher” has been largely evaded and has counteracted the potential narrowing of the socioeconomic opportunity gap that could have resulted from investments in teacher quality across all schools.
When discussing the importance of teacher quality to student achievement overall, “Teacher quality is widely recognized by policymakers, practitioners, and researchers alike to be the most powerful school-related influence on a child’s academic performance” (Akiba et al. 2007, 369). Coleman et. Al. (1966) found that teacher characteristics, such as teacher’s years of experience, level of education, testing scores, explained more of the variance in student achievement than any other school resource. Ferguson (1991) found that teacher quality, as defined by experience, master's degrees and certification scores, was one of the strongest determinants of student achievement: teacher quality affected variation between student achievement within a district more than any other factor, even a student’s socioeconomic background and race. Darling-Hammond (2001) found that teacher quality had a more significant effect on student achievement than either student race or parental education level. Hanushek et al. (2004) found that investing in “...having five years of good teachers in a row...could overcome the average seventh-grade mathematics achievement gap between lower-income kids...and those from higher-income families”(37). As evident by these findings, investments in teacher quality may be potential means by which to reduce the socioeconomic opportunity gap.

It is important to note however, that what constitutes high quality teaching, both in terms of preparation and practices, is largely debated by sociologists and educators alike (Hanushek 1997, Darling-Hammond 2001, Wayne and Youngs 2003, Rivkin et al. 2004). In their meta-analysis of studies regarding teacher preparation and student achievement, Rivkin et al. (2005)
found that whether a teacher possessed a master’s degree did not have a statistically significant relationship on teacher quality, as defined by student achievement. Using data from the NELS (National Education Longitudinal Study of 1988), Goldhaber and Brewer (2001) found that when comparing the mathematics achievement of 12th grade students, who were taught by teachers with credentials, to counterparts who were taught by teachers with emergency or temporary credentials, student achievement was similar. Thus, they concluded that teacher certification did not have a significant effect on student achievement and even advocated for its abolishment. However, Darling-Hammond et al. (2001) found that these findings were inaccurate because the similar levels of achievement could largely be attributed to selection bias, as they found that the “ uncertified” teachers in Goldhaber’s and Brewer’s sample were similar to teachers with standard certification, in terms of coursework and experience. Darling-Hammond et al. (2004), as well as Hanushek et al. (2004), highlight that existing credentialing programs do not define clearly what constitutes “good” and “bad” teaching practices. Perhaps then investing in teacher preparation will require the development of teacher evaluation systems, which I discuss later in this chapter.

Autonomy of Teacher Communities and NCLB

When discussing teacher’s negative receptivity to NCLB and its standards-based reform, it is important to note that the problem teachers had with NCLB was not its high standards emphasis but rather the fact that its high-stakes testing methods led to their lack of involvement in decision making at
their schools and in their classrooms. Teachers and administrators often referred to NCLB’s standards-based reform as a “standardization movement,” in order to convey the sense of conformity and loss of autonomy that its high-stakes nature invokes. Phillips and Flashman found that teachers in low-income schools felt less control over their teaching practices and instructional control than teachers in affluent schools in after NCLB was implemented (2007). Phillips and Flashman also found that teachers were more likely to perceive that their autonomy had decreased especially when they felt that reform efforts were not addressing their concerns and did not include them rather than just in response to overall standards-based reform (2007). This a crucial point as it highlights that teachers sometimes perceive that there is a juxtaposition between the interests of external reforms and their own, which I will explore in the next section. High teacher turnover also became more common in low-income schools as a result of the compromising of teacher autonomy (Phillips and Flashman 2007, Darling-Hammond 2010). Furthermore, as a result of this perceived loss of autonomy, teachers were further dissuaded from teaching in disadvantaged schools, as they were are often more testing oriented. Thus, the overall teaching capacity in low-income schools diminished greatly.

In summary, NCLB failed to address the socioeconomic achievement gap, because of its uncoordinated content, performance, and OTL standards, its lack of investment in its mandate to improve teacher quality, and its high-stakes nature’s implications for teacher communities and their perceived autonomy.
Evaluating Race to the Top’s Effects on the Socioeconomic Opportunity Gap

President Obama’s current Race to the Top Initiative has the potential to serve as a model for such standards-based reform. Its emphasis on using data to inform restructuring efforts in schools could lead to innovative and responsive strategies to address student needs. Its emphasis on common standards by “encouraging states to work jointly toward a system of common academic standards that builds toward college and career readiness, and that includes improved assessments designed to measure critical knowledge and higher-order thinking skills” could also be a step in the right direction as this consistency and collaboration could foster student achievement (2009).

However, Race to the Top also seems like it will make many of the same mistakes that NCLB made. For example, its rewarding of the charter schools model will be detrimental to low-income schools who do not have the same resources and teacher capacity which these charter schools may have. Incentives also should not be offered to schools based on their student achievement unless it is coupled with investment in low-income schools and their resources so that their student achievement can be reflective of the efforts of schools and students. As Apple states, “[Standards will] ratify and exacerbate gender, race, and class differences in the absence of sufficient resources...” (Ravitch 1997, 22).

Furthermore, its evaluations of teacher quality according to students’ standardized test performance and possible implementation of merit pay, could be especially detrimental to teacher retention in low-income schools, as teachers may be motivated to not teach in these environments, because of their high
numbers of low-performing students. While Race to the Top’s emphasis on teacher quality and teacher preparation is laudable, unless it is coupled with systemic investments regarding promoting teacher equity across schools, the socioeconomic opportunity gap will remain at a standstill.

**Effectiveness of Different Types of Standards-Based Reform**

When discussing whether standards-based reform efforts should be externally-imposed, as was the case in NCLB, or internally developed, such as teacher and school community directed standards-based reform, advocates for externally-imposed standards argue that is the most objective way to set common standards for the performance of students, teachers, and schools (Porter 1989). As Meier states, reformers thought “[the] American education needed to be re-imagined, made more rigorous, and, above all, brought under the control of experts who–unlike educators and parents–understood the new demands of our economy and culture” (Meir 2000, 4). Thus, such reforms assume that outside “experts” should develop these standards because they know best what knowledge and skills students need to be competitive in the global workforce. Advocates of external-based reforms also argue that if schools and/or teacher communities themselves created standards, there would be no means of either generating consensus among these communities regarding these standards, or holding them accountable to these internally developed standards because there would be no external entity to monitor the effectiveness of these standards.
Although these concerns may justify externally-imposed standards-based reform to its proponents, teacher and school communities have largely reacted negatively to such reform and instead promote internally developed teacher and school community directed standards-based reform because they feel that these communities know the needs of their students and what standards would best improve their achievement. In response to concerns about objectivity, advocates of such reform state that external “experts” know little about the specificities of school communities and thus can not determine what students should learn (Meir 2000). In response to concerns about accountability, supporters of teacher and school community developed standards-based reform state that if teachers are empowered more in their local contexts, these problems of accountability will be resolved because perceptions of their ability to exert authority in their schools will be increased. Advocates for this reform strategy also highlight that externally-based reform have challenged the autonomy of teachers and diminished trust in the ability and knowledge of teachers’ in their school communities and classrooms(Phillips and Flashman 2007, Darling-Hammond 2010). Meier summarizes this critique succinctly by stating that: “Standardization instead turns teachers...into the local instruments of externally-imposed expert judgment” (2000, 1). In doing so, externally-standards based reform has been perceived by many teachers as an impediment to their interests and a challenge to their capacities.

When reconciling these different types of standards-based reform, it is important to note that more positive gains for student achievement have been
documented when teachers actively participate in standards-based reform then when it is imposed on them (Darling-Hammond 2010). When contrasting these findings with the inadequate gains made by externally-based reforms, such as NCLB, teacher community and school community developed standards-based reform seem like promising strategies for decreasing the socioeconomic opportunity gap.

In the next section, I will present what future standards-based reform could look like, by incorporating lessons from NCLB and delineating how this teacher and school community developed reform could promote greater access to high-quality learning opportunities for all students.

**Future Directions for Standards-Based Reform**

*Implementation of Content, Performance, and OTL Standards*

When it comes to standards-based reform, it is important for content standards, performance standards, and OTL standards to be implemented together, as in conjunction they provide clear consistent curricular frameworks that scaffold student learning. It is important that these content standards serve as guides rather than constraints so that they do not challenge teacher autonomy and involvement in these reform efforts (Darling-Hammond 1997). Darling-Hammond emphasizes how content standards can be utilized as curricular frameworks, by providing examples of high-quality teaching and student work (1997). Content standards can also empower traditionally marginalized students as by setting high standards for all students and providing access to a high-quality curricula for all, the “…low expectations for low-income students
reproduced in marking, teaching styles, tracking difficulty of work allocated…” can be counteracted and stifled (Gamoran 2000,96).

Performance standards should also be school-specific and even tailored to the needs of individual students, by using growth models to assess student comprehension and overall school progress as standardized tests should not be our only measures of student outcomes (Foorman, Kalinowski, Sexton 2007). Thus, testing and other measures of student comprehension should be reexamined regularly so as to promote “data-informed” instructional decisions that target student growth. As Gamoran highlights standards-based reform should be concerned with the quality of student learning opportunities as well rather than just their standardized test performance (Gamoran 2001). In these “learner-focused” environments, as Darling-Hammond terms them, students will be empowered through their exposure to high standards (1997). This does not mean that standards should be lowered for low-performing students or low-income schools, but rather that focus should be placed on how teacher communities can better address the needs of different student bodies while still holding high standards and expectations for all students. Darling-Hammond highlights that “[creating] strategies that can support the individually appropriate teaching needed to produce high levels of success for diverse learners was not the goal of the last century’s reformers” (1997). This goal needs to be at the forefront of these teacher and school community standards-based reforms in order to counteract the low expectations of certain students that are promulgated in schools and to decouple student’s socioeconomic backgrounds
from their socioeconomic outcomes. As Weinstein (1996) states, "without altering the institutionalized system of high expectations for some and low expectations for others, tough standards and punitive accountability will at best repeat the status quo or at worst increase the sting of failure" (18). Current practices of early intervention for low-performing students within classroom settings rather than tracking will also lead to equal access to challenging curricula for all students.

Opportunity-to-learn standards should also be utilized to show what a school's specific needs are and to hold the federal government, states, and schools accountable for fostering environments in which all students can succeed. It is important to take into account that standards cannot be successful without changes in the resources, funding practices, and teacher quality, of most low-income schools. Darling-Hammond states that “setting standards may send signals about the learning that is valued by society, but it will not create the conditions for learning where they do not exist” (1997, 261). OTL standards should be used for accountability purposes, so that federal, state, school district, and individual school decisions can be reevaluated to address how they can best promote student success (Porter 1995). Furthermore, our current emphasis on outputs of student achievement rather than on inputs such as equal educational opportunities should also be reevaluated.
Investments in Teacher Quality and Development of Standards for Evaluating and Improving Teacher Quality

When discussing future directions for teacher and school community developed standards-based reform, investing in teacher quality is crucial for its successful implementation as many studies have found that if schools do not invest in teacher quality, they often have to direct funding to providing training and professional development opportunities for their underprepared teachers, a cost which could be avoided if they invested in teacher quality upfront (Darling-Hammond 2010). Investing in teacher quality is especially crucial for urban school reform, as “...the places where schools recruit the least-prepared teachers to begin with are those that also have the fewer resources to support learning once teachers are in the classroom” (Darling-Hammond 2010, 206).

As a result of the strong relationship between teacher quality and student achievement, scholars and policymakers have looked into devising reliable measures by which to assess teacher quality in order to promote overall student achievement and ameliorate achievement gaps. Recently, value-added modeling (VAM), the practice by which teacher quality and performance are determined according to students’ standardized tests gains, has been used by school districts as a teacher evaluation and effectiveness measure. Teachers’ VAM scores have been found to be useful measures by which to assess teachers’ general performance over time when their student population and instructional practices remain similar (Hanushek et al. 2004, Rivkin et al. 2005, Darling-Hammond 2010). However, as previously discussed, standardized tests scores
are not accurate measures of student achievement because they measure mastery of class biased information rather than student learning. Although teachers themselves have stated that student testing outcomes are more direct measures of their test preparation practices rather than their instructional practices, VAM scores have been championed as valid and accurate representations of teacher quality and effectiveness, and have been used by many states, such as New York, to influence teacher retention decisions (Darling-Hammond et al. 2012). The RAND Corporation states that this usage of VAM scores may not be apt as “the research base is currently insufficient to support the use of VAM for high-stakes decisions about individual teachers or schools” (Darling-Hammond et al. AERA Briefing 2011, 6). Numerous studies have also found that teachers’ value-added scores may not be the most accurate measures of teacher quality and/or effectiveness as they are highly mutable when either the methods used to obtain them differed or if the student population changes (Darling-Hammond et al. AERA Briefing 2011, Darling-Hammond et al. 2012). For example, the same teacher may receive a certain VAM score on one assessment and a higher or lower VAM score on another assessment in the same year. Furthermore, teachers with higher quantities of low-income students, limited-English learners, and students with special needs, are more likely to receive lower VAM scores: thus the same teacher may receive a different VAM score based on the varying composition of students in his or her classroom. It is also unclear how student demographics are taken into account in VAM modeling.
Consequently, the current use of VAM scores to inform high-stakes teacher accountability policies, by evaluating teacher quality based on the standardized test performance of their students, could contribute to the socioeconomic opportunity gap as high-quality teachers may be discouraged from teaching underrepresented student groups if they fear their VAM scores will decrease, and that as a result of this perceived decrease in their quality and effectiveness, they will be penalized (Darling, Hammond et al. 2012). Furthermore, none of the nations in the world that have high student achievement, such as Finland, employ such high-stakes accountability policies (Darling-Hammond 2010).

Furthermore, VAM assessments assume that students are assigned randomly to teachers, which does not take into account the deleterious effects of student tracking, which were discussed in the previous chapter. Evaluations of teacher quality could be informed by current standards-based evaluation systems used by licensure and certification bodies, such as the National Board for Professional Training. Connecticut’s adoption of a standards-based teacher evaluation program in the early 1990s, provide a good case study of how such programs can contribute to student achievement, as evident by the fact that in 1998, “…more eight graders in Connecticut were proficient in reading and writing than in any other state…” (Darling-Hammond 2010, 133). CT also showed strong progress on decreasing its socioeconomic educational gap, which is currently the largest in the nation (Connecticut Council for Education Reform 2011). These achievement gains were primarily attributed to their standards-
based evaluation policies, which constituted of an array of practices, such as structured observations, videotapes of classroom teaching, and analyses of portfolios of student work. They also coupled these initiatives with teacher development initiatives, such as setting higher standards for teacher education and certification programs, and providing financial incentives and professional development opportunities to recruit and retain new teachers (Sadovnik et al. 2008, Darling-Hammond 2010). Borman and Kimball (2005) also found that measuring teacher quality according to standards-based evaluation systems was positively associated with overall student achievement and reduction in the socioeconomic achievement gap within classrooms. Darling-Hammond (2010) also documented student gains on standardized tests and improvements in teaching practices among teachers who had participated in standards-based evaluation systems. Perhaps then, these standards-based evaluation systems could also address inconsistencies between the teacher evaluation programs in different states. Furthermore, teacher evaluation systems have been found to be more effective when teachers create them rather than when external bodies such as states or the federal government create them (Gamoran 2000, Darling-Hammond et al. 2012). Perhaps then boards of teachers could develop and implement standards-based evaluation systems and synthesize them with VAM scores, as a comprehensive means by which to measure teacher professional growth and to hold schools accountable for providing all students with access to highly qualified teachers.
Conclusion

Overall, teacher and school community standards-based reform could be an effective means of addressing the socioeconomic opportunity gap if it is implemented along with investing in teacher quality and teacher evaluation systems, led primarily by teachers and school administrators rather than the federal government or states. In my next chapter, I will discuss how developing teacher learning communities in schools could be a means by which to further decrease the socioeconomic opportunity gap.
Chapter IV
Evaluating the Effects of Teacher Learning Communities on the Socioeconomic Opportunity Gap

Introduction

In this chapter, I will analyze whether developing teacher learning communities in schools could lessen the socioeconomic opportunity gap. When I use the term "teacher learning communities" I am referring to "[communities in which] teachers work collaboratively to reflect on practice, examine evidence about the relationship between practice and student outcomes, and make changes that improve teaching and learning for the particular students in their classes" (McLaughlin and Talbert 2006, 4). Many schools in high-achieving nations, such as Finland, are characterized by teacher learning communities, which have been found to have positive effects on instructional practices and student learning and achievement gains (Darling-Hammond 2010). In contrast, few American schools can be described as teacher learning communities as they rely more on notions of the efficiency of bureaucratic practices.

I will first briefly discuss historical educational practices regarding the organization of teacher communities in schools. Then I will analyze the current bureaucratic management of teachers in terms of the opportunity hoarding framework. Next, I will provide a review of current research regarding how teaching learning communities have improved teaching and student learning and contributed to overall student achievement gains in American schools. Then I will present Finland’s teacher learning communities as a case study of how
teacher-learning communities can promote high student achievement. Finally I will discuss how schools can best foster teacher learning communities by synthesizing strategies from American and Finnish models.

**History of Organization of Teaching Communities**

In the late 19th century, as the demand for public schooling grew in many cities in response to the growing population, the American populace became concerned with how to develop efficient and well-managed schools. “In response, and in a quest for social order, progressive reformers placed great faith in ‘scientific management.’” (Sizer 1992, 206). Influenced by the effectiveness of factories and the emphasis on specialization as a result of the Industrial Revolution, “Schools were developed as specialized organizations run by carefully prescribed procedures engineered to yield standard products” (Darling-Hammond 1997, 16). Many scholars of the time posited that administrators, rather than teacher communities, should manage schools, to maintain quality control and standardization. This rhetoric is evident by the fact that in 1890, the Committee on City School Systems of the National Education Association referenced Herbert Spencer on the value of "a differentiation of structure and a specialization of function," and stated that schools should implement specialized administrative structures "with well-defined functions and powers" (Tyack 1967, 6.) Whereas formerly school principals often also held teacher roles in their schools, the role of principals became strictly supervisory (Tyack & Hansot, 1980). This severance of administrative duties from teaching duties was carried out in order to clearly delineate the power
dynamics between administrators and teachers. As such, hierarchical power structures were developed, in which administrators, who were often brought into schools rather than originally part of the school community, governed over the actions and behaviors of teachers (Tyack 1967). Advocates of bureaucratic management argued that teachers could not be trusted to make decisions regarding student achievement without external guidance and thus suggested that their autonomy regarding their instructional practices, curricula, and school communities be diminished (Tyack 1967, Graham 2005). This indeed occurred as Cuban (1993) documents the imposition of top-down reforms and reduction of teacher autonomy around the late 19th and early 20th century. In 1903 Charles B. Gilbert, the superintendent of schools in Rochester, New York, warned that large institutions tended "to subordinate the individual. . . . This is particularly true in great school systems. . . . The demands of the organization itself are so great, it requires so much executive power to keep the machine running... we are in danger of forgetting that the business of the school is to teach children." (Tyack 1967, 479). Indeed many teachers left the profession as a result of this devaluing of their individual knowledge, the de-emphasis on what was best for children, and the standardization of teaching practices.

This bureaucratic management and standardization of teaching practices is still prevalent in American schools. As Sizer (1992) states, “The bureaucratic standardization of American education is now a fact; we have One Best System...”(7). According to Darling-Hammond (1997), U.S. schools hire more administrative staff than any other industrialized country and thus are the most
administratively “top-heavy” institutions of schooling. As Darling-Hammond states:

“[This] century-old U.S. decision to invest in large highly specialized school organizations that design and monitor teaching rather than in knowledgeable teachers who could make decisions themselves has led to a system that fails at the most critical tasks of teaching” (Darling-Hammond 1997, 20.)

This top-down approach is centered on micromanaging the practices of teachers and schools and limits the agency and professional freedom of teachers. As a result of this top-down approach, hierarchical management and a lack of trust in the capacity of teachers dominate our educational agenda, rather than teacher preparation and development, as is the case in other high-achieving countries, such as Finland. This is apparent in the fact that the educational reform initiatives, such as NCLB and Race to the Top, which have been implemented in schools, have been primarily government-led and developed without consulting teacher communities.

Advocates of our current bureaucratic educational policies argue that school administrators, and other external bodies, such as school management organizations and/or federal and state governments, know best and should be the major decision makers when it comes to making recommendations and policies regarding student achievement, because teacher communities have not implemented external reforms, such as NCLB, effectively historically. Cuban (1993) attributes this teacher blaming and lack of trust in teacher communities as a result of the fact that the current bureaucratic nature of the education system is not transparent and thus teachers have been framed as “gatekeepers of reform” and as having more autonomy over their practices than they actually
possess. In actuality, in a majority of schools, as a result of external reforms, teacher autonomy has been marginalized as schools and administrative leaders have perceived there to be a necessary trade-off between teacher input and control and these reforms. This is supported by the fact that in Newmann et al.’s (1996) study of restructuring schools, many schools who either had started to develop teacher learning communities or were considering doing so were dissuaded from doing so because they felt pressured by external reform, specifically NCLB, to shift their school missions from focusing on teacher and student learning to basic compliance with high-stakes testing requirements. Yet paradoxically when it comes to accountability for student failure and stagnancy in achievement, teachers are currently held strongly accountable for student achievement, as evident by the firing of whole teacher communities and the taking over of schools by “turnaround” professionals, even though teachers have minimal autonomy over their practices.

In the next section, I will contextualize how the current bureaucratic management of teachers has been capitalized on by the upper/middle class as a means to ensure their students’ interests are privileged and to maintain their control over the institution of schooling.

**Opportunity Hoarding and Current Bureaucratic Management**

Current American educational policies, which have resulted in the bureaucratic disenfranchisement of teacher communities, can be seen as examples of the opportunity hoarding practices of the upper/middle class. By
micromanaging teacher communities, the elite have been able to mobilize their influence on schools to uphold their children’s’ interests.

The resistance of upper/middle class parents to detracking efforts in the 90s serves as an example of their opportunity hoarding (Wells and Oakes 1996). Examples such as these illustrate how elite parents are able to continue to exercise their control over our societal institutions as a result of their overall societal power. In doing so, they curtailed the autonomy of these teacher-led movements and were able to stifle their egalitarian sensibilities. In order to ensure that their children’s access to high-quality learning opportunities would not be challenged, despite the incompatibility of such privileged access with the overall achievement of other students and equity concerns, these parents mobilized and stymied these detracking efforts in many schools. Lareau and Horvat (1999) conceptualize these resistance efforts as moments of reproduction/isolation, which they define as “...the coming together of various forces to provide an advantage to the child in his or her life trajectory” (48.). They found that upper/middle class parents were able to enact these moments of reproduction/isolation because the current power dynamics of schools reward their input over that of marginalized parents and even teachers.

Another example of this opportunity hoarding on the part of the elite can be found in the curtailing the autonomy and decision making of teacher communities, specifically unions, which have often been portrayed as untrustworthy inept communities, by contract stipulations such as that teachers cannot negotiate over curricular input and other instructional practices, has also
upheld the interests of elite parents who are concerned that their students’ achievement may be comprised by the empowerment of teacher communities. It seems then that the elite occupy a peripheral position in the hierarchical management systems of schools as well, through which they can micromanage the practices of teacher communities because of their overall societal power.

**Teacher Learning Communities and Student Achievement**

In this section, I will elaborate on research regarding the effect of teacher learning communities on student achievement in American schools and whether cultivating them in schools could narrow student achievement gaps. Using NELS data, Lee and Smith (1995) showed that teacher communities in “restructured” schools, which were characterized by “a movement from the bureaucratic form of American schooling toward the communal form,” had a positive effect on 10th-grade student achievement gains (242). Furthermore, teacher communities had more of an effect on student achievement than students’ socioeconomic background (Lee and Smith 1995). Newmann et al. (1996) also found that many of the gains made regarding student achievement occurred across socioeconomic lines in schools that had transformed themselves into teacher learning communities. This finding is substantial as it suggests that teacher learning communities may be particularly conducive to the achievement of low-income students and thus investing in them in schools could decrease the socioeconomic opportunity gap.

Using the School Restructuring Study (SRS), a sample of twenty-four “restructured” schools, Newmann et al. (1996) found that when school-based
teacher professional communities were in place in their schools, teachers were more likely to provide their students with more learning opportunities than were available in other schools without these communities (Newman et al. 1996.) These teacher professional communities, which were characterized by teacher collaboration, teacher-led strategies, and student-focused objectives, can be likened to teacher learning communities (Newmann et al. 1996).

"Restructured" schools were able to increase learning opportunities by decreasing tracking/ability grouping practices and implementing standards-based reform, as suggested in previous chapters, as well as by developing teacher learning communities, as advocated for in this chapter. Newmann et al. (1996) determined that based on these criteria, “…less than 10% of 180,000 U.S. public schools are comprehensively restructured” (7). Talbert and McLaughlin (2008) posit that “research on teaching points to the need for social-normative change in schools serving poor students of color, in particular creating collaborative teacher teams focused on improving student learning- what we call ‘teacher learning communities’” (Talbert and McLaughlin 2008, 177.) Perhaps then restructuring schools by developing teacher learning communities, as well as implementing the aforementioned practices, could be a comprehensive means by which to increase opportunities to learn for all students and to promote equitable achievement.

Researchers have identified that whether school environments provide teachers with opportunities for learning and autonomy is critical to the development and sustainability of teacher learning communities (Newmann et
quality teaching depends not just upon the employment of well-prepared teachers but also upon their continued and situated learning and conditions of work..." (179). Talbert and McLaughlin (1994) also found a positive relationship between teacher communities and teacher retention. The importance of schools concerning themselves with the learning conditions in their environments is evident in Darling-Hammond and Post’s (2000) finding that whether schools provide teachers with opportunities for learning, such as professional development and collaboration, and with opportunities for autonomy, such as teacher involvement in decision-making and curriculum development, strongly influenced their plans to remain in the teaching profession. Furthermore, in Newmann et al.’s (1996) study, restructured schools whose teacher learning communities did not achieve their objectives of increasing student achievement and of building capacity among their teachers, were often unable to do so because they had not increased their teachers’ learning opportunities and had only minimally empowered teachers, as evident through superficial commitments to teacher autonomy and collaboration that were not coupled with organizational support and change.

It is important to note that opportunities for teacher learning are disproportionately distributed across socioeconomic lines, just like other educational resources, such as high-quality teachers. Borman and Rachuba (2000) found significant differences in access to professional development opportunities between teachers in high poverty schools and teachers in low
poverty schools as those in high-SES schools had more opportunities than their counterparts. Darling-Hammond (2011) also found that teachers in low-SES schools often received one-day professional development workshops rather than extensive professional development initiatives. These externally developed professional development workshops, which often are adopted because of funding incentives, do not support teacher learning and development as they do not build on teacher’s knowledge of their students’ needs or appease the interests and needs of their respective teacher communities (Talbert and McLaughlin 2008). This inequitable access can be attributed to funding disparities between low-SES and high-SES schools and the overall disparities in learning environments that result from them. Overall, these findings highlight that the current environments of most low-income schools do not foster opportunities for teacher learning and autonomy.

Based on her study of fifteen public schools that have shown high levels of student achievement, which can be compared to Newmann’s “restructured” schools, Chenoweth (2007) found that schools that provided teachers with these opportunities often had supportive leadership. She found that principals in schools which successfully provided teachers with greater opportunities for learning and autonomy often delegated authority and implemented organizational structures which allowed for collaborative decision making and fostered collective responsibility regarding school achievement among all school professionals (Chenoweth 2007). This was evident in the fact that most of the schools in her cohort granted teachers input regarding curriculum, school
policies and procedures, and even funding allocations (Chenoweth, 2007). She also found that they often provided their teachers with time for in-school teacher collaboration and observation of their peers. Indeed, in the successful teacher learning communities Newmann et al. (1996) and McLaughlin and Talbert (2006) observed, the leadership of these communities served as co-architects with teachers as they developed overall school cultures and teacher-led professional development. Chenoweth saw similar leadership in the high-achieving schools she studied, which she characterized as “distributed leadership," and advocated for such models to be implemented in other schools trying to replicate the success of these schools (Chenoweth 2007). Darling-Hammond et al. (1995) highlight that, "...[these] organic forms of professional leadership...[should] develop intrinsically in connection with systemic organizational change within a school” (Linda Darling-Hammond, Bullmaster, & Cobb, 1995). As implementing such leadership would require organizational change and an upheaval of the bureaucratic norms in our schools, principals should be prepared to navigate possible resistance to such change on the part of both external bodies and teachers as they engage in these efforts to increase opportunities for teacher learning and autonomy.

In summary, research on preexisting teacher learning communities in America has found that their effects on student achievement have been positive and have contributed to reducing the socioeconomic opportunity gap. In the next section, I will elaborate upon Finland’s model of teacher learning communities and illustrate how developing these communities in Finnish schools has resulted
in high levels of student achievement, due to their high levels of teacher collaboration and autonomy.

**Finland’s Teacher Learning Communities**

When discussing Finland’s academic achievement, it is important to note that Finland has transformed itself from being one of the most low-achieving education systems in Europe to one of the most high-achieving systems over the past 20 years (Darling-Hammond 2010). Comparing Finland’s student achievement to the U.S.’s on the 2009 PISA (Programme for International Student Assessment), which is an international assessment that evaluates the achievement of 15-year-old students across the subjects of reading, math, and science, among members of the OECD (Organisation for Economic Co-operation and Development), highlights how substantial their achievement is: respectively Finland was ranked as 3rd among all OECD participants whereas the U.S. was ranked as 17th (OECD, PISA 2009). Finnish educators and policymakers attribute their recent student achievement to its cultivation of its teacher learning communities. It is also important to note that in Finland, student performance is primarily assessed through the use of classroom assessments developed by teacher communities, school-specific growth reports rather than standardized testing (Sahlberg 2010). Thus the fact that Finnish students are doing so well on standardized tests, despite the lack of focus on them in their schools, highlights how high-caliber their student achievement is.

In order to garner strategies regarding the development of teacher learning communities from the Finnish model, one must understand how
widespread collaboration opportunities and teacher-led professional development are embedded in both teacher preparation programs and school settings. For example, Finnish schools provide their teachers with time for collaboration both in school and out of school, by reducing their teaching loads (Sahlberg 2010). “Whereas teachers in high-achieving nations spend 40 to 60% of their time preparing and learning to teach well, most U.S. teachers have no time to work with colleagues during the school day” (Darling-Hammond 2010, 201). When it comes to teaching loads, Darling-Hammond (2011) found that American teachers spend more time teaching than their counterparts in high-achieving nations. This is illustrated by the fact that Sahlberg (2010) found that “The American teacher spends almost twice as long every week teaching than her Finnish peer”(63). As such, Finnish teachers have more time within the day to plan their lessons and curricula, collaborate with their peers, and to reflect on how their instructional practices affect student achievement. Finnish traditional theoretical classes of education schools are also coupled with intensive experiential teaching opportunities in partner schools, which provide collaboration and mentoring opportunities between teacher candidates and “expert” teachers. Although some American schools of education have coupled their teacher preparation programs with similar school partnerships, the level of collaboration and mentoring efforts are not nearly as intensive as those present in Finnish schools (Darling-Hammond 2011). Furthermore, these high levels of collaboration and mentoring are sustained in Finnish schools once teachers enter classrooms. Finnish teachers are also able to influence their schools more
directly than their international counterparts as they are given more autonomy, which is evident in their active involvement in curriculum development and setting of school agendas. As Sahlberg states, "Much as teachers around the world enter the profession with a mission to build community and transmit culture, Finnish teachers, in contrast to their peers in so many countries, have the latitude and power to follow through" (Sahlberg 2010, 7). Such collaboration and autonomy are not present in the majority of American schools where teachers work in isolation, follow externally prescribed curricula, and have little to no say in school decision-making.

According to Finnish teachers, the desirability of the teaching profession lies in the high levels of teacher-led professional development present in Finnish schools, which are sustained by their high levels of autonomy and collaboration. Many say that they would be more likely to leave their professions if their opportunities to learn and collaborate with their peers, through these professional development initiatives, diminished rather than if their pay was decreased (Sahlberg 2010). Finland's commitment to providing its teachers with learning opportunities is apparent in the large financial investment in teacher preparation on the part of the government. When a prospective teacher considers entering education in Finland, they do so with the understanding that they will be required to obtain a master's degree, in either general education, if they are teaching at the elementary level, or their intended teaching field, if they are teaching at the secondary level. This master's degree requirement might be a financial deterrent for a prospective teacher if not for the fact that the
government subsidizes the cost of this postsecondary education for its teachers. This financial commitment to teacher education and preparation programs may also be part of the reason why there are such high rates of teaching aspirations among Finnish high school graduates. Socio-cultural notions regarding the importance of the teaching profession may also partially explain this phenomenon as teaching is viewed as one of the most valued professions in Finnish society. As a result of this prioritization of teacher learning opportunities, financial incentives to support teacher learning, and the socio-cultural prestige of teaching, one can see that teacher learning communities are highly valued by Finnish educators and policymakers alike.

When discussing Finland’s high student achievement and whether its educational model can be transposed to other countries, its small size and homogeneity are often cited as possible impediments for its applicability to heterogeneous larger populations, such as the U.S. Indeed, the fact that only about 4% of the Finnish population, which is around 5.3 million people, is foreign born highlights that this homogeneity and smallness are indeed realities for Finland. However, Finland has been recognized for its efforts and successes at providing immigrant children with learning opportunities that are comparable to that of all of its students. It achieves this by supplementing the instruction of these students with intensive in and out of class Finnish language learning programs (Partunen 2011). Finland’s investment in its language and ethnic minorities is so great that it allocates increased funds to schools with high amounts of immigrant groups so that these schools can provide this
supplemental instruction. Furthermore, when comparing Norway to Finland, Norway, which is also a small homogenous country, one does not find similar high levels of student achievement, but rather levels more comparable to that of American student achievement, even though Norway is more similar to Finland demographically (Abrams 2011). However, Norway is more similar to the U.S. when it comes to educational policy as it relies strongly on bureaucratic management practices and externally imposed standards rather than on teacher learning communities, and teacher collaboration and autonomy as is the case in Finland. This discrepancy highlights that what sets Finland apart from other nations is not its demographics but its educational policy. This is further emphasized by the fact that American student scores have decreased on PISA math assessments over 2000-2006 while Finnish student scores have increased over this time period (Sahlberg 2010). Perhaps then deemphasizing the management of teachers and instead focusing on developing teacher learning communities in American schools based on the Finnish model could lead to increased learning opportunities for teachers and students.

In the next section, I will suggest some strategies American schools can implement to develop similar teacher learning communities, by synthesizing American research on teacher learning communities and Finland’s model, as a potential means by which to narrow the socioeconomic opportunity gap.

**Developing Teacher Learning Communities in American Schools**

In order to develop teacher learning communities in American schools, there needs to be an investment in fostering teacher collaboration within and
among schools, as well as providing teacher communities with greater autonomy and power to influence their school’s practices and decisions. Doing so would require a shift from our current bureaucratic-style educational practices in the American education system to decentralized school-based practices, as “...current [American] teachers’ routines, workload, and professional relationships are vastly different from those of teachers in schools that have teacher learning communities (L. Darling-Hammond & Bransford, 2007). Such a transformation could be achieved by fostering greater teacher collaboration and autonomy both in American teacher education programs and schools.

Currently, the majority of preparation programs and American schools do not promote collaboration among their respective teachers in training and veteran teachers or the development of teacher communities in their schools. Furthermore, when teachers enter schools, many abide to individualistic norms about teaching and do not collaborate with their peers, as a result of the lack of support structures for such collaboration in American schools and internalized socio-cultural beliefs about the nature of teaching. Pairing teacher candidates with mentor teachers both during their preparation and in their initial school placements, as is common throughout a Finnish teacher’s career, could eschew these individualistic norms and promote collaboration among teachers. Furthermore, teacher education, both pre-service and in-service training, should concern itself with emphasizing constant teacher learning because: “It has become increasingly clear that if we want to improve schools for student learning, we must also improve schools for the adults who work within them ... We have only recently come to understand that student learning also depends
on the extent to which schools support the ongoing development and productive exercise of teachers knowledge and skills” (Smylie and Hart 1999, 421).

Thus, professional learning communities could be a mechanism through which this constant teacher learning could occur. Newmann et al. (1996) state that such communities, characterized by shared purposes, collaboration, and collective responsibility for student learning, are critical to effective teaching and improve student learning. Just as we are concerned with providing appropriate learning environments for children in our schools, so too must we be concerned with providing similar environments for our teachers. Most high-achieving nations, such as Finland, embed 15 to 25 hours a week of planning and collaboration time at school, and an additional 2-4 weeks of time to attend conferences, observe other schools, and engage in lesson study (Darling-Hammond 2010). This statistic highlights how great the commitment regarding providing opportunities for teacher learning and collaboration is in our peer countries. Darling-Hammond et al. (1995) state that teacher leadership must be linked to teacher learning in order to be effective. Perhaps then, implementing mentor programs and provisioning opportunities for teacher learning could be the foundation for transforming current dysfunctional teacher dynamics into teacher learning communities.

Empowering teachers by providing them with the ability to work together and by granting them more agency over their curriculum development, instructional practices, school policy decision-making, and overall school culture, as many teaching learning communities do, could promote more collective responsibility and accountability regarding student learning outcomes.
and existing opportunity gaps. In order to develop these teacher learning communities, structural and organizational changes would have to be made, regarding the school day and instructional time of teachers, so that they could have more time to plan and collaborate with their peers. Teaching networks, groups of teacher learning communities across schools, such as the teachers involved in developing the National Board for Professional Teaching Standards, could be innovative means to share best practices between schools and further develop mentoring and collaborative relationships. Teachers who participated in this national task stated that they learned a lot from their fellow peers and this knowledge-building endeavor (Linda Darling-Hammond & McLaughlin, 1995). Darling-Hammond envisions a conceptualization of teachers “...grounded in collaboration, critical inquiry, and a conception of teacher as decision maker and designer of practice” (Linda Darling-Hammond et al., 1995). If society perceived educators as such, perhaps more American youth would want to be teachers, and salaries and professional development opportunities would increase, as they did in Finland because of the social prestige afforded to teaching. Unfortunately, the reductive adage of “Those who can, do. Those who can’t, teach” shows the lack of respectability and status currently allocated to teachers in America.

Meir (2003) highlights that fostering school-based professional development allows for trust to be restored to teacher judgment and for community self-determination to occur: “As effective teaching absolutely requires substantial authority, the decentralizing of substantial authority to the persons close to the students is essential” (Sizer 1992, 1995) She argues that schools are limited in
their ability to implement their own reforms and influence their overall communities as a result of the standardization movement, as well as the bureaucratic nature of American schools overall. Tyack (1991) found that reforms proposed and implemented by school administrators and teachers themselves to make their work easier or more efficient or to improve their professional status generally seemed to be better received than external models. As Newmann et al. (1996) state “structural innovation cannot be understood, and should not be undertaken, without considering school culture” (7). Perhaps then teacher learning communities could design school-based professional development initiatives for their respective schools to further sustain their communities' objectives.

Investing in school-based teacher-led professional development initiatives requires providing teachers with greater agency and autonomy and time, so that these initiatives can be child-driven and have more tangible effects on student achievement. When I discuss professional development, I employ Reitzug's definition: "processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators so that they might, in turn, improve the learning of students" (Reitzug 2002, 236). Thus, professional development is not only for the betterment of teachers, but students as well. Externally developed professional development models, which often are adopted because of funding incentives, do not support teacher learning and development as they do not build on teacher’s knowledge of their students’ needs or schools’ specificities (McLaughlin and Talbert 2001, 2006; Talbert and McLaughlin
Such models, which Darling-Hammond refers to as “flavor of the month” workshops, are often only effective for short periods of time, as they are not self-sustaining and often do not enhance teachers’ practices (Darling-Hammond 2010).

“Capacity-building policies view knowledge as constructed by and with practitioners for use in their own contexts, rather than as something conveyed by policy makers as a single solution for top-down implementation” (Linda Darling-Hammond & McLaughlin, 1995)

Professional development efforts thus should rely on student needs and school community specific models rather than irrelevant models developed by federal and state governments and external bodies. These models do not necessarily have to invalidate external recommendations and research but rather could be adapted as schools see fit for their staff’s needs and interests.

In conclusion, developing teacher learning communities in American schools could improve overall student learning as this active teacher learning, collaboration, and autonomy could improve overall teacher practices. Akiba et al. (2007) even posit that collaboration could ameliorate the overall teacher quality gap by making up for differences among teachers.

“To a large extent, these changes represent a switch from bureaucratic accountability – that is hierarchical systems that pass down decisions and hold employees accountable for following the rules, whether or not they are effective-to professional accountability- that is knowledge-based systems that help build capacity in schools for doing the work well, and hold people accountable for using professional practices that enable student success” (Darling-Hammond 2010, 270).

Thus developing teacher learning communities seems to be an innovative means by which to promote equitable power dynamics among American schools, which
could translate to greater equal distribution of learning opportunities among students.

In my next section, I will present my qualitative analysis regarding whether the three factors I have focused on in this work have an effect on student achievement at the schools I observed, and whether they can be used as mechanisms by which to decrease the socioeconomic opportunity gap in schools overall.
Chapter V
Qualitative Analysis

Introduction

For my qualitative research, I observed three elementary schools, the Troy* school in CT, the Palm* Charter school in CT, and P.S. X* in NY\(^1\), that all had similar socioeconomic and racial demographics as they are all predominantly low-income high-minority schools. The majority of my findings are based on my observations at the Troy School: I observed primarily 4\(^{th}\) grade classrooms for around 150 hours from September to April. I was particularly interested in investigating whether these schools made use of the three institutional practices, differentiation, standards-based reform, and teacher learning communities, which I have identified in this work as positively correlated with student achievement.

When it comes to indicators of student achievement, I include measures of standardized test score performance because they are commonly used as a proxy for student achievement in studies of school effectiveness. When possible, I also try to reference non-testing school-based assessments of student achievement as well to supplement this information. As these schools were selected based on their high student achievement and not compared to struggling peer schools, I acknowledge that my practices of interest may be more prevalent than might be the case in traditional public schools because of these school's successes.

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\(^1\) Pseudonyms have been provided to ensure school confidentiality.
In order to contextualize my findings, I will briefly provide information regarding student demographics and student achievement, as represented by standardized test performance, at each of these schools. Next, I will present my findings for each of my areas of interest respectively. Finally, I will contextualize them in terms of what lessons can be garnered for overall school reform aimed at narrowing the socioeconomic opportunity gap.

**Profiles of the Schools**

The Troy School is a K-5 school with a 12:1 student-teacher ratio. According the U.S. Department of Education, about 75% of its students are free or reduced lunch eligible and 65% are students of color (NCES, 2010.) It can thus be conceptualized as a high poverty school, a school in which 75%-100% of students are on free or reduced lunch. When it comes to its standardized test score performance, the Troy school’s scores on the CMT for each of the three subjects it tests (Math, Reading, and Writing) are as high or higher than that of its peer schools. These test scores, which serve as a measure of student achievement, are particularly laudable given the fact that its peer schools’ students are around 40% free or reduced lunch eligible and are either 50% or more white (Great Schools Report 2011). The Troy School’s students go on to attend various middle schools in its school district. I chose to do my observations at the Troy School based on these high levels of student achievement and its positive reputation as a high-performing high-poverty school among school professionals and the local community.
The Palm Charter School is a K-4 school whose student-teacher ratio is also 12:1. It reports that 79% of its students are free or reduced lunch eligible and that 85% of them are students of color. Thus it too can be classified as a high-poverty school. When it comes to standardized test score performance, it reports that its students outperformed their peers at other public schools by 14 percentage points. A majority of its students go on to attend the Palm Charter Middle School, which serves grade levels 5-8. Overall, the schools in its network have similar student demographics and similar levels of student achievement. I chose to observe the Palm Charter School in order to see if any of my institutional practices of interest were present in a charter school environment as well.

P.S. X is a K-8 school with a 13:1 student-teacher ratio. According the U.S. Department of Education, 94% of its students are free or reduced lunch and 98% are Latino, and thus it too can be considered a high-poverty school (NCES 2011). When it comes to standardized test score performance, its scores were considerably lower than the state average (Great Schools, 2011.) However, it is important to note that some of this low performance may be attributed to the fact that students at P.S. X take the same assessments that English proficient students do, if they have been in the NY public school system for two years or more, despite the fact that a large percentage of P.S. X’s students are English language learners and thus have varying levels of English proficiency. P.S. X offers a dual language program for students, with alternating instruction in Spanish and English, which students opt into either by choice or based on their
language proficiency. However, P.S. X received a grade of a B on the NYC Progress Report, which is based on a comprehensive framework for evaluating school performance in regards to student achievement in the areas of school environment, student performance and student progress, and particularly rewards schools for achieving exemplary progress among high-need students (such as low-income students, students of color, and English Language Learners) (Great Schools 2011). This progress grade would seem to indicate then that P.S. X can be characterized as a high-performing school as well in terms of its student achievement gains and community overall, despite its low test performance. I chose to observe at P.S. X in order to see if the Troy School’s practices were school-specific or also prevalent at other public schools.

**Differentiation**

Differentiation/ skill grouping practices at the Troy School were evident in instructional practices, student groupings for class work, and individual student assignments both in-class and at home. It is important to note that differentiation was emphasized and supported across The Troy School’s district and that teachers were provided with professional development opportunities regarding how to implement this practice. The differentiation practices of teachers varied, as some teachers did not utilize skill groupings but did differentiate instruction and assignments, while others did not differentiate instruction but did utilize skill groupings and differentiated assignments. Differentiation was also more commonly used for math instruction than reading
instruction. The only differentiation I observed regarding reading was in the form of student reading-level specific homework assignments.

In terms of math differentiation, one method I saw implemented at the Troy School was that of centers, which were leveled assignments regarding the topic of instruction that students worked on for part of the instructional period either independently or with instructional aides or their teachers. Students were assigned their centers at the beginning of the year and as their levels changed throughout the year, so too did their center work. Centers were adjusted every other week according to the skills with which students were having difficulties, based on their performance on in-class assessments and teacher observations, so that they could practice and reinforce these skills. After center work, students then all worked on the same activities and worksheets regarding the topic of instruction for the rest of the math block, either unassisted or assisted. One teacher opined that this approach of having students work on leveled work first provided students with greater opportunities to learn as it allowed for students to receive intervention or more challenging work depending on their needs on a daily basis. She also said that by using centers she and the aides were able to use this independent student work time to target students who needed individual assistance with the specific material or skill of that week.

When teachers made use of instructional differentiation at the Troy School, they did so by having students work at stations in small groups. When students reached the teachers’ station, the teacher was able to customize her
instruction to the specific needs of that group. Student groupings were fluid and were based on the skill-set being taught rather than perceived ability. When teachers had aides in the classrooms, they sometimes utilized them as a means to differentiate instruction by having them teach students mini-lessons or reinforce skills. Wesleyan tutors were sometimes also enlisted to aid in differentiating instruction by working with students outside of class during instructional time. Afterschool activities were also tailored to specific student skill levels ranging from reinforcing class material for struggling students to providing more challenging work for advanced students. In terms of differentiated homework assignments at the Troy School, teachers were more likely to differentiate reading assignments than math assignments. This may have been to compensate for the lack of differentiation for reading instruction. Teachers claimed that by differentiating homework assignments students could learn the overall concept being taught while still working on skills they had not yet mastered. While teachers acknowledged differentiating homework was time-consuming, they claimed being able to customize student learning was invaluable.

When it came to differentiation at the Palm Charter School, there was more of an emphasis on whole-class instruction than on skill groupings. This may be because groupings might seem incompatible with the Palm Charter School motto of high standards for all students. However, the administrator I spoke to did mention that student skill levels and growth were discussed weekly in teacher meetings and that teachers often made individual plans for each of
their students, which included differentiation practices either in terms of how subjects were reinforced with students or how assignments were designed. The Palm Charter School also made frequent use of reading groups, which were based on student reading level, as a way to provide students with reading interventions, as small-group work made tackling differences in reading ability more manageable for teachers. Overall, the Palm Charter School seemed to utilize differentiation more frequently outside of the classroom than in the classroom.

In terms of differentiation at P.S. X, I did not observe any explicit differentiation during instructional time. Whole-class instruction might be more common at P.S. X because P.S. X has a large number of English language learners and teachers may find it easier to teach everyone at the same speed. However, P.S. X seemed to make use of afterschool activities and small groupings of students to both review skills students were learning in class and test-prep strategies. When I asked teachers at P.S. X about differentiation, they expressed an interest in implementing it in their classrooms as they noticed that students understood different material at different speeds and wanted to adjust to their specific needs.

Overall, differentiation and skill grouping seemed to have positive effects on student achievement, based on both student performance on in-class assessments and standardized tests. One teacher at the Troy School lauded differentiation because it allowed teachers and students to not view student learning as stagnant; she cited that one of her students who had been classified
as a special education student, who would have been classified as a low-track student, excelled in her class primarily because her use of differentiation allowed her to adjust instruction and material to his learning style and speed. When discussing possible negative effects of skill grouping and differentiation, teachers mentioned that students might not catch up with their higher-achieving peers regardless of these practices. In spite of this limitation, A teacher at the Troy School stated that differentiation and skill grouping contributed positively to her overall student achievement, as she saw much more growth among her students, particularly struggling students, when she utilized skill grouping and differentiation, in comparison to growth among students in previous years of instruction when she had not implemented these practices. When discussing differentiation overall, teachers across all three schools stressed the importance of ensuring that groupings were fluid and constantly re-assessed so that they would not resemble tracks and so that student growth could be rewarded and sustained.

**Standards-Based Reform**

When it comes to standards-based reform, all of the schools I observed had strong commitments to providing all students with high-quality learning opportunities as evident by the fact that all students were exposed to high-quality curricula. Although I was not able to evaluate curricula quality in comparison to other schools, I deemed the curricula at these schools as high quality because overall student growth was stressed, rather than just standardized test performance. When observing instruction, skill and content
acquisition seemed to be the focus of instruction rather than just standardized test preparation as demonstrated by the fact that teachers taught thematic skill and content units for the majority of instruction and did not explicitly teach test preparation skills. Standardized test performance was presented to students as an important measure of student achievement, but not framed as the sole indicator, and students were often reminded that their overall growth and performance on school-based assessments was also valued. When discussing school culture overall, high expectations for students and teachers were evident at all of these institutions. For example at the Troy School and P.S. X, teachers commonly espoused belief in the achievement potential of all of their students. These beliefs were reinforced by signs around the schools proclaiming, “all students can learn” and “knowledge is power.” At Palm Charter School similar signs could be found in the halls as well as a “no excuses” pledge, which is aimed at counteracting both student and teacher negativity that may take away from student achievement. These emblems serve as physical embodiments of the respective school cultures of each school.

When it comes to devising and implementing assessments other than standardized tests as measures of student achievement, teachers at the Troy School and Palm Charter School had mechanisms by which they evaluated student growth, such as pre and post testing and student goal setting. Pretests and posttests, assessments designed for evaluating student prior knowledge and acquired knowledge after instruction, which were common at the Troy School, were frequently used to evaluate student progress and overall growth. Student-
specific goals, which were generated both by students individually and in conjunction with teachers at both the Troy and Palm Charter Schools, such as Y student’s reading level will go up by 1 ½ grade levels by the end of the year, also allowed for student growth to be focused on and prioritized. One teacher at the Troy School also highlighted that differentiated homework was especially useful for evaluating student growth and could be supplemented with standard assessments as another measure of student achievement. For ELL students at P.S. X, alternate evaluations and testing were provided in their native languages so as to allow them to transition into English language testing. Teachers at P.S. X also cited keeping track of overall student growth both in terms of language acquisition and skill and content acquisition.

In terms of content standards and curricular decisions, teachers at all of the schools cited being influenced by standards created by bodies of teachers either within their school networks, which was the case for the Palm Charter School, or at the district-level, as was the case at the Troy School, or by external committees of teachers and professionals, such as the Common Core standards, which were implemented at P.S. X. Though there was a range in which kind of standards were implemented it is important to note that all of these standards were created or informed by teacher communities and allowed teachers to modify them as they deemed necessary, and thus preserved their autonomy and professionalism. The Common Core standards, which were developed in the summer of 2009, are aimed at aligning school curricula with college and career readiness standards. As a cohort of teachers and researchers across different
states developed them, these Common Core standards also capitalize on the strengths and lessons of state-specific standards. They are also a particularly good example of how content standards can serve as curricular guides rather than constraints. Evaluating opportunity-to-learn standards at these schools was complicated by the systemic components of OTL standards, which were not observable at the school level.

As for investments in teacher quality and preparation, all of these schools were strongly committed to building their teachers’ capacity and made use of both in-school resources and external resources to do so. For example the Troy School made use of mentoring partnerships provided to beginning teachers at the district-level. Newly certified teachers in CT prior to July 2009 all participated in the Beginning Educator Support and Training (BEST) program, which outlined performance goals for teachers. The BEST program was also used for evaluative purposes, as it required teachers to qualify their teaching by engaging in exercises such as videotaping their lessons. Palm Charter School has made teacher mentoring and evaluation a top priority by creating positions, such as academic heads and/or lead teachers, which are responsible for carrying out both mentoring, observations, and teacher-tailored training across their network. As P.S. X is in NYC and NYC schools are making use of value-added assessments of teachers, teachers at P.S. X had been evaluated according to VAM models. As previously mentioned, these scores place a strong emphasis on test prep instruction rather than quality instruction overall and thus are not the best indicators of teacher quality. It is also unclear how student demographics are
taken into account in VAM modeling, which is crucial if this system is to be used for the purposes of comparing teachers and making retention decisions. As teachers in P.S. X came into the NY public school system through various certification routes, mentoring and training experiences varied greatly.

Overall, standards-based reform seemed to have positive effects on student achievement as illustrated by consistent high standards for students and teachers, access to high-quality curricula for all students, and emphasis on student growth across all of the schools.

**Teacher Learning Communities and Professional Development**

Teacher collaboration, which is a crucial part of successful teacher learning communities, was emphasized at all of the schools and strongly championed as being conducive to student achievement. At all three schools, teachers of the same grade-level often collaborated on curriculum development and administered similar assessments and assignments. Teachers stated that by collaborating they were able to reduce their workloads and allot more time to their instructional techniques such as differentiation or classroom management. Teachers at the Troy School also had weekly data team meetings, some at the school level and some at the district level, in which they looked at student achievement data and devised strategies together regarding how to best improve student performance. Teachers at the Palm Charter School were provided with explicit time during the day for collaboration efforts and had frequent grade-level team meetings to address teaching practices and student needs. Such an approach was facilitated by the fact that teachers had more time
available because of the extended school day. The teachers I observed at P.S. X co-taught each other's classes on alternate days, in English and Spanish respectively. These teachers also placed a great value on collaboration and stated that it made their workloads more manageable and provided them with increased opportunities to learn and improve their instruction.

Professional development at these schools ranged from workshops by external professionals to teacher-generated programs. Although I did not observe professional development sessions, teacher descriptions and assessments of them provided me with some strengths and weaknesses of different PD strategies. For example at the Troy School, at which teachers had formal professional development opportunities bimonthly that were often based on their school community interests, teachers cited that they felt that these workshops were helpful and applicable to their classrooms. In contrast, at P.S. X where teachers had infrequent PD workshops that were broader in nature, they stated that these workshops sometimes were ineffective or limited in their scope. The Palm Charter School came closest to resembling the model of teacher learning communities I have outlined in this work. As such, professional development opportunities were often worked seamlessly into the school day and also supplemented by external opportunities that teachers attended either as a cohort or of their own volition. When discussing professional development overall, teachers at all of the schools agreed that the most effective way to implement professional development would be to make it part of teachers' daily routines and to customize it to school-specific goals and overall school culture.
When discussing teacher’s ability to influence their school culture, teachers at all schools cited the organization of their teacher communities, which they claimed were less hierarchical and more communal, as the critical factor that allowed them to have such strong control and influence on their respective schools. They cited having this ability to shape their school’s culture and missions as crucial to their decisions to initially teach at their schools and to remain there. Teachers at all three schools attributed much of the communal structures and nature of their school to their leadership. For example, teachers at the Troy School cited that their principal was very much open to their suggestions and made them feel like they had autonomy and that their input was valued at their school. Teachers at the Palm Charter School stated they were drawn to charter schools because they perceived their principals as being more receptive to teacher input and teacher-led reform. It is important to note that the development of teacher learning communities and teacher professional development was purported as a priority for the network of schools to which the Palm Charter School belonged. The fact that the Palm Charter School was able to provide support for its teacher learning communities may also lie in their increased autonomy regarding their institutional practices as a result of their charter. This highlights the importance of increasing school autonomy over institutional practices for all schools overall. Teachers at P.S. X highlighted that the Dual Language program they have in their school was made possible by their principal’s receptivity to their interest in such a program and the flexibility they were given regarding their instructional schedules so that they could devise
methods by which to implement this program while still preparing their students for required standardized tests. Indeed, principals and administrators at all of these schools seemed to foster these respective school cultures actively by decentralizing authority and granting high levels of agency to their teachers.

Overall, the various ways through which these schools prioritized teacher collaboration and learning as well as valued teacher autonomy and input are invaluable models for how schools could develop and sustain teacher learning communities. For example perhaps school districts should take on this impetus. Or perhaps these efforts should be school-based and led by school professionals such as teachers and administrators, both at individual schools, as was the case at the Troy School and P.S. X, and across schools, as was the case in the network of charter schools of which the Palm Charter is a part. Although teacher learning communities require much restructuring of the American school structure and norms overall, these schools all showed strong foundations upon which such models could be developed. Teachers also seemed to benefit greatly from what teacher collaboration and autonomy they did have, which further highlights the need for schools to move away from traditional bureaucratic organizational structures to teacher learning communities.

**Conclusion**

In conclusion, these qualitative observations provide support for my advocacy for differentiation, standards-based reform, and teacher learning communities as tools that schools can adopt to increase learning opportunities for students. Furthermore, as Troy School and P.S. X only became high-
performing schools in the last few years, it would seem that these practices may be partially responsible for their recent improvement and should be replicated in other schools.

However, one can also see the need for overall systemic change in order to sustain these strategies. Constraints such as the lack of support for providing equal access to high quality for all students, the prioritizing of standardized test performance, and bureaucratic practices that limit the power of teacher communities are impediments to the implementation of these practices and need to be addressed. Thus, these institutional practices will require systemic change on the part of individual schools and our institution of schooling overall. I will briefly illustrate what this systemic change could look like in my conclusion. Overall, one can see that such practices can and should be implemented in our schools as strategies by which to lessen the socioeconomic opportunity gap, as evident in these case studies.

In my next section, I will present my data analysis regarding the effects of the three factors I have chosen as mechanisms by which to decrease the socioeconomic opportunity gap in schools on student achievement through multilevel modeling.
Chapter VI
Quantitative Analysis

Introduction

For the quantitative component of my research, I aimed to investigate the relationships between the school characteristics on which I focused on in this thesis and student achievement: that of school socioeconomic composition in chapter I, differentiation/ability grouping usage in Chapter II, teacher quality in chapter III, and teacher collaboration, professional development, and autonomy in chapter IV, by using multiple regression analysis.

My hypotheses were as follows: 1) the association between school socioeconomic composition and student achievement will be statistically significant and negative. 2) The association between ability grouping and student achievement will be statistically significant and positive. 3) The association between teacher collaboration and professional development measures and student achievement will be statistically significant and positive. I was not able to explore the relationship between standards-based reform and student achievement that I explored in chapter III quantitatively as I did not find indicators of such reform in my dataset.

For my analysis, I utilized the public-use Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K) data. The ECLS-K, a nationally representative data set, contains information regarding children's early school experiences from kindergarten until eighth grade at the child, teacher, and school level. Parents, teachers, and school administrators provided information
about student demographic information, such as race and socioeconomic composition, and teacher, classroom, and school characteristics. Information was collected in the fall and the spring of kindergarten (1998-99), the fall and spring of 1st grade (1999-2000), the spring of 3rd grade (2002), the spring of 5th grade (2004), and the spring of 8th grade (2007). I limited my analyses to the kindergarten cohort.

Methodology

Independent Variables

For my independent variable of school socioeconomic composition, I created a variable (SCHOOLSES) by aggregating the percentage of students receiving free lunch and the percentage of students receiving reduced lunch per school based on information from the school data. Approximately 1/3 of the public schools in the sample had either the lowest (0%-25%) or highest (75%-100%) rates of students’ eligible for free and reduced lunch. As the values of this measure increase, the concentration of low-income students in a school increases. Students’ free and reduced lunch eligibility has been used as measures of school socioeconomic composition in previous studies and so are reliable indicators (Greenwald et al. 1996, Sirin et al. 2005). Furthermore, throughout my work, I have highlighted that school characteristics should be the focus of research regarding how to improve student achievement rather than students’ socioeconomic background.

For my independent variable of ability grouping, I generated a dummy variable regarding teacher usage of grouping for reading and math
independently based on his or her response to the following question from the teacher questionnaire: (1) How many achievement groups in reading/math do you currently have in this child’s class? I conceptualized this use of groupings within classrooms as an indicator of differentiation practices rather than tracking because students were grouped for specific skills rather than all of instruction. Condron (2008) also used this variable and conceptualized the use of these groupings as skill groupings as well. If teachers indicated they did not use grouping, I coded this response as 0. If teachers used 1 or more groups, I coded this response as 1. Respectively around 65% of reading teachers and around 55% of math teachers reported using ability grouping.

For my independent variable of teacher quality, I included measures of teacher qualifications, such as certification and masters’ degrees, as these are often used as proxies for measuring teacher quality, from the teacher data. I generated dummy variables for each of the various types of certifications (no certificate, regular certificate, temporary certificate, alternative certificate, highest certificate possible). Respectively about 60% of the teachers had a Bachelor’s degree or lower, 27% had a Master’s degree, and 13% had an advanced degree.

For my independent variable of teacher collaboration, I created three variables (TEACH_COLL, TEACH_CURR, and TEACH_DISC) using information from the teacher data of the ECLS-K. The questions regarding collaboration were as follows: 1) How often have you participated in the following school-related activities since the beginning of the year? A) Meeting with other teachers to
discuss lesson planning (recoded as TEACH_COLL), B) Meeting with other teachers to discuss curriculum development (recoded as TEACH_CURR), C) Meeting with other teachers or specialists to discuss individual children (recoded as TEACH_DISC) Responses were recoded as follows: 1= Never, 2= Monthly, 3= Weekly, 4= Daily. In terms of teacher collaboration, most of the teachers either collaborated monthly or weekly (respectively about 40% and 42% of the teachers). As for collaborating on lesson plans, the majority of teachers in the sample, about 66%, reported doing so monthly. The majority of teachers, around 67% indicated that they discussed curriculum development on a monthly basis. The majority of teachers, around 64%, also reported discussing individual children with other teachers and/or specialists on a monthly basis.

For my independent variable of professional development, I generated six dummy variables, (TEACH_TRAINING, TEACH_WKSHP, TEACH_FDBACK, TEACH_SKILLS, TEACH_OBSV, TEACH_OTHERPD), coded as 0=No and 1=Yes respectively, based on information from the teacher questionnaire. The questions I selected for my information regarding professional development were as follows: 1) In which of the following staff development and training activities have you participated during the current academic year? A) Three or more In-Service training days (recoded as TEACH_TRAINING), B) Workshops involving study groups or small-group problem solving (recoded as TEACH_WKSHP), C) Peer observation and feedback (recoded as TEACH_FDBACK), D) Follow-up support for a teacher trying out new skills and knowledge in the classroom (recoded as TEACH_SKILLS), E) Visits to, or
observations of other schools (recoded as TEACH_OBSV), F) Other staff training (recoded as TEACH_OTHERPD). When it came to participating in In-Service training, the majority of teachers, about 80%, reported doing so. As for participating in small/group and problem solving workshops, about 51% of the teachers reported engaging in these workshops. The majority of teachers, about 63%, did not observe their peers or give each other feedback. The majority of teachers also did not receive support in trying out new skills, did not visit or observe other schools, or participate in other professional development (respectively 66%, 73%, and 86% of the teachers).

For my measure of perceived teacher autonomy, I generated a variable (recoded as TEACH_CONTROL) based on this question: how much control do you feel you have in your classroom over such areas as selecting skills to be taught, deciding about teaching techniques, and disciplining children? Values were respectively 1=No control, 2=slight control, 3=some control, 4=moderate control, 5= a great deal of control. The majority of teachers, about 60%, indicated that they felt they had a great deal of control over their instructional practices and disciplinary decisions. As there were no indicators of actual teacher autonomy, I could not substantiate whether teacher’s self-evaluations were accurate and so I termed this measure perceived autonomy.

Control Variables

At the child level, I controlled for demographic characteristics, specifically those of race and socioeconomic background, as these have been found to be independently associated with student achievement in numerous studies.
(Duncan and Magnuson 2005, Garcia-Coll et al. 1996, Engle and Black 2008). The race of the child was provided by parents in the child questionnaire. I generated dummy variables for each race, with 0= not “race” and 1= “race.” In this sample, 56% of the children were classified as white, 14% as Black, 18% as Latino, 6% as Asian, and 5% as Other. I also included children’s poverty level status and family income as measures of socioeconomic background. Poverty level status (coded as WK_POV), which was coded as 0 if a child was below the poverty line and 1 if they were above or at the poverty line, was based on the federal poverty threshold in 1998, which was $16,450 for a family of four (Federal Registry 1998). About 79% of the children were classified as being at or above the poverty threshold and 21% as below it. Family income (coded as WKINCOME) was reported to the nearest thousand by families on the parent interview section of the child data. The mean income of this sample is provided in the appendix. I included these measures of socioeconomic background in order to control for any effects student socioeconomic background may independently have on student achievement.

At the school-level, I also controlled for school characteristics, such as school type and racial/ethnic composition, as these characteristics have also been found to be independently associated with student achievement (Brown-Jeffy 2009; Duncan and Magnuson 2005; Harris 2010;). I generated a dummy variable for school type (recoded as PUBLIC), of which the values were 0 if the school was not a public school and 1 if the school was a public school. About 77% of the schools in the sample were public. For my independent variable of
school racial/ethnic composition, I created a variable (PER_MINORITY) which represented the percentage of minority students per school based on information from the school data. As the values of this measure increase, the concentration of minority students in a school increases. The distributions of minority students across the schools varied greatly, with the highest distribution being around 0%-10% for about 32% of the schools.

**Dependent Variable**

For my dependent variable of student achievement, I calculated respective reading and math gains scores by subtracting Kindergarten Fall Item Response Theory (IRT) scores from Spring IRT scores using the child data (coded as READ_GAINS and MATH_GAINS). IRT Scores do not necessarily reflect the number of questions students answered correctly on these assessments but rather “...represent[s] estimates of the number of items students would have answered correctly if they had taken all of the 92 questions in the first-and second-stage reading forms...” (U.S. Department of Education 2002a: 3-4). The means of these gain scores are provided in the appendix.

**Analysis**

I utilized OLS regressions, as is common in multiple regression analysis, in order to explore the relationships between student achievement and the school characteristics on which I focused in this work. When discussing regression analysis, it is important to state that these estimates of these relationships are correlational and should not be conceptualized as causal relationships. Multiple regression analysis is used to predict the relationship
between a dependent variable and two or more independent variables. A linear regression equation can be represented as $Y = B_0 + B_1(\text{Variable 1}) + B_2(\text{Variable 2}) + \ldots + \varepsilon$. $Y$ refers to the predicted value of the dependent variable given the independent variables. $B_0$ refers to the constant, which is the intercept or point at which the line crosses the Y axis. $B_1$ and $B_2$ refer to the regression coefficients, which describe the respective slopes, the rate of change of the dependent variable in relation to each independent variable, of the lines of the regression equation. $\varepsilon$ represents the error term, which refers to the possible error predicted by this relationship.
Results

I. OLS Estimates for Relationships between Student Reading and Math Gains and School Characteristics

Table 1. Relationship between Student Reading Gains and School Characteristics

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<th>model4</th>
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Entries are unstandardized regression coefficients.

legend: * p<0.05; ** p<0.01; *** p<0.001
Table 2. Relationship between Student Math Gains and School Characteristics

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Entries are unstandardized regression coefficients.

**Key**
Model 1: School Socioeconomic Composition + Controls
Model 2: School Socioeconomic Composition + Controls + Ability Grouping
Model 3: School Socioeconomic Composition + Controls + Ability Grouping + Teacher Quality
Model 4: School Socioeconomic Composition + Controls + Ability Grouping + Teacher Quality + Teacher Professional Development and Collaboration (Full Model)
Effects of Controls on Reading and Math Gains

From these tables, we can see that most of the child-level controls, specifically that of race and socioeconomic background, were statistically significant for both reading and math gains. The only discrepancies to note were that being Latino was only significant for math gains, in which being Latino was negatively correlated with math gains as seen in Table 2, and that Other, which referred to students who had not been identified as White, Black, Latino, or Asian by their parents, was not statistically significant for either reading or math gains. However, in Table 2, one can see that Other became slightly significant and negatively correlated with math gains in the full model. Respectively being Black was negatively correlated with student gains, whereas being Asian was positively correlated with student gains. White was the reference category and thus was not included in the model. Being at or above the poverty threshold and having greater amounts of income were positively correlated with student gains.

In regards to school-level controls, the school characteristics of whether a school was public or not and a school’s percentage of minority students were only significant for reading gains. As represented in Table 1, being a public school was negatively correlated with reading gains, whereas having higher concentrations of minority students was positively correlated with reading gains.

Effects of School Socioeconomic Composition on Reading and Math Gains

For both reading and math gains, the relationship between school socioeconomic composition and student gains was statistically significant and
negatively correlated. Thus, as the concentration of low-income students at a school increased, by 25% increments, reading and math gains decreased.

Effects of Ability Grouping on Reading and Math Gains

As seen in both tables, ability grouping usage was found to be statistically significant and positively correlated with both reading and math gains.

Effects of Teacher Quality on Reading and Math Gains

As for the teacher qualification measures, the majority of these measures were not statistically significant. However, alternative certification was significant and negatively correlated with both reading and math gains. Having a Master’s degree was statistically significant and negatively correlated only for math gains. Being uncertified was also significant and positively correlated only for math gains.

Effects of Teacher Collaboration and Professional Development on Reading and Math Gains

As for the teacher collaboration measures, TEACH_COLL and TEACH_DISC were statistically significant only for reading gains. In Table 1, one can see that collaborating on lesson plans was positively correlated with gains whereas discussing individual students was negatively correlated with gains. Teacher autonomy was not statistically significant for either math or reading gains. As for the professional development measures, TEACH_TRAINING, which as previously mentioned, referred to whether teachers participated in three or more days of In-Service training was statistically significant and negative for only reading gains. TEACHER_OTHERPD, which referred to other non-specified professional
development, was also statistically significant and positively correlated with reading gains. TEACH_WKSHP, which referred to whether teachers attended workshops involving study groups or small-group problem solving, was significant and negatively correlated with only math gains.

II. Comparison of Effect Sizes Across Reading and Math Gains

Table 3. Effect Size of Variables of Interest on Student Achievement Gains

<table>
<thead>
<tr>
<th>Variables</th>
<th>Reading Gains</th>
<th>Math Gains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in School Characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The effect size of moving from a high-poverty school (75%-100%) to a low-poverty school (0%-25%)</td>
<td>.52</td>
<td>.64</td>
</tr>
<tr>
<td>The effect size of moving from a public school to a private school</td>
<td>.65</td>
<td>N.S.</td>
</tr>
<tr>
<td>The effect size of moving from a high-minority school (75%-100%) to a low-minority school (0%-25%)</td>
<td>-.75</td>
<td>N.S.</td>
</tr>
<tr>
<td>Changes in Student Characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The effect size of a $10,000 increase in income</td>
<td>.04</td>
<td>.06</td>
</tr>
<tr>
<td>The effect size of moving from below the poverty threshold to at or above the poverty threshold</td>
<td>1.06</td>
<td>.69</td>
</tr>
<tr>
<td>Changes in Ability grouping usage</td>
<td>The effect size of moving to a school in which ability grouping is used</td>
<td>1.32</td>
</tr>
<tr>
<td>Changes in Teacher Quality</td>
<td>The effect size of having a teacher with alternative certification vs. one with a regular credential</td>
<td>-1.54</td>
</tr>
<tr>
<td></td>
<td>The effect size of having an uncertified teacher vs. one with a regular certification</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td>The effect size of having a teacher with a Master’s degree vs. one with a Bachelor's degree</td>
<td>N.S.</td>
</tr>
<tr>
<td>Changes in Teacher Community and Professional Development Practices</td>
<td>The effect size of moving to a school in which teacher collaboration is present</td>
<td>.42</td>
</tr>
<tr>
<td></td>
<td>The effect size of moving to a school where teachers do not attend In-Service days</td>
<td>.58</td>
</tr>
<tr>
<td></td>
<td>The effect size of moving to a school in which teachers do not discuss individual students with other teachers or specialists</td>
<td>.33</td>
</tr>
</tbody>
</table>
From this table, we can discuss effect size differences between reading and math gains and compare the magnitudes of the effects of these school characteristics to each other.

**Effect Sizes of School Socioeconomic Composition vs. Student Socioeconomic Background**

Based on a comparison between the effects of school socioeconomic composition on reading and math gains, we see that school socioeconomic composition has a greater effect on math achievement. An increase in income of $10,000 has a slightly greater effect on math achievement than on reading achievement as well. These commonalities may suggest that increased financial resources at the school and family level are especially beneficial for student math achievement. However, moving above the poverty threshold has a greater effect on reading outcomes than math outcomes. This may be because poverty is more detrimental for student reading ability than student math ability.

As for whether school socioeconomic composition or individual student socioeconomic background have greater effects, one can see that increasing school socioeconomic composition has a greater effect on both reading and math
than increasing student socioeconomic background. This lends support to my claim that school socioeconomic composition has more of an effect on student achievement than individual student socioeconomic background does. However, the effects of decreasing child poverty are greater than increasing socioeconomic background. This may be because the effects of poverty, despite changes in the school environment, may persist because of the ramifications of poverty on the cognitive development of children during early childhood (Duncan and Magnuson 2005; Engle and Black 2008).

**Effect Sizes of School Racial/Ethnic Composition and School Type on Reading Gains**

When discussing reading achievement, comparing the effects of the aforementioned characteristics suggests that students benefit from attending schools with high percentages of minority students. The first finding suggests that when school socioeconomic composition is controlled for, racial/ethnic composition does not have the negative effects on student reading achievement that it has been found to have in other studies (see Hanushek et al. 2002 for an example of negative peer race effects) Goza and Ryabov (2009) found differences for peer race effects on student achievement among different racial/ethnic groups: whereas Black students benefited from integrated mixed-race peer groups, Latino and Asian students seemed to benefit from co-ethnic/same race peer groups just as much as they did from mixed-race peer groups. This suggests that the importance of racially integrated peer groups may lie primarily in the funding and resources that are associated with the increase of
white students in a school (Harris 2011). These findings are particularly interesting as they suggest that socioeconomic segregation may be a more significant determinant of student achievement than racial segregation. Perhaps then the racial achievement gap would be decreased by addressing school socioeconomic composition overall.

The effect size of moving to a private school, which was also only significant for reading achievement, was greater than both the effects of school socioeconomic composition and student socioeconomic background. This may be because the overall quality of private schools may decrease the effects of these socioeconomic characteristics.

**Effect Size of Ability Grouping vs. School Socioeconomic Composition and Other School Characteristics**

When discussing the effects of ability grouping usage, it is important to note that ability grouping usage had the greatest effect of all of these characteristics on student reading achievement. Specifically ability grouping affected student reading achievement more than twice as much as school socioeconomic composition did. This strongly supports claims regarding ability grouping usage as a means of increasing overall student achievement and decreasing the socioeconomic achievement gap. Ability grouping usage also has a greater effect on reading achievement than math achievement. This may be because differences between the subject matter may make it more effective to group students for reading skill instruction than math instruction. It could also
be because teachers use ability grouping more for reading than math as found in this sample.

**Effect Size of Teacher Quality Measures vs. School Socioeconomic Composition**

The effect sizes of significant teacher quality measures, that of alternative certification for reading, and a Master's degree and no certification for math, were smaller than the effects of most of the other characteristics. For these effect sizes the reference group is a teacher with a regular certification. The fact that having a teacher with alternative certification was significant for reading has been documented previously (Darling-Hammond and Post 2000; Akiba et al. 2007) The fact that having a Master's degree had a negative effect and having no certification had a positive effect suggests that teacher quality may not be as strong a determinant of student achievement, once school socioeconomic background is controlled for. The fact that being uncertified was positively correlated with student achievement may also be because these teachers may have other relevant subject knowledge that is not indicated in this data set. Perhaps then future research should examine the effect of teacher relevant subject knowledge on student achievement in order to determine whether this explains this positive effect of being uncertified.

**Effect Sizes of Teacher Collaboration, Teacher Professional Development vs. School Socioeconomic Composition**

Although teacher collaboration was only significant for reading achievement, the magnitude of its effect was very close to that of school
socioeconomic composition. This suggests that increasing teacher collaboration could increase overall student reading achievement. The magnitude of the effect size of other unspecified professional development on reading achievement was comparable to that of teacher collaboration overall. However, since only a small percentage of teachers participated in other professional development, this finding may be spurious. The fact that discussing individual students and small group/problem solving workshops had negative effects, for reading and math achievement respectively, suggest that these practices may not be being carried out in the most effective ways in schools. The fact that the magnitude of the effect of not participating in In-Service workshops was greater than the magnitude of the effect of a school's socioeconomic composition on reading achievement suggests that such professional development endeavors should be reevaluated as they do not seem to be beneficial for student achievement.

**Discussion**

*Summary of Effects of School Characteristics of Interest*

From this quantitative analysis, I have garnered that the school characteristics that I have focused on in this work, specifically that of school socioeconomic composition, ability grouping usage, teacher quality, teacher collaboration, and teacher professional development, do have significant characteristics on student achievement, although some are only significant for certain subjects. When contextualizing these findings in terms of my qualitative analysis, the positive effects of ability grouping usage and teacher collaboration were substantiated. However, the effects of school socioeconomic composition
and individual student socioeconomic background did not decrease greatly when these practices were introduced into the model, which at first glance suggests that implementing these practices in schools may not be as effective at narrowing the socioeconomic opportunity gap as proposed in this work. However, it is important to note that this analysis is of the effects of current manifestations of these practices. For example the fact that In-Service workshops have negative effects on student achievement highlights that current professional development practices in schools are ineffective. Also, ability grouping usage in this context may not necessarily incorporate all the facets of differentiation that I have evaluated in this work and thus may not have as strong of an effect on student achievement. The findings of this analysis illustrate that these institutional practices that have been found to have negative effects on student achievement, such as the current limited nature of teacher collaboration and professional development opportunities, are still practiced in many American schools. As has been articulated through this work, reforming these practices has promising effects for student achievement and the overall narrowing of the socioeconomic achievement gap, which lie beyond the scope of these current practices.

As there was no overall SES composite indicator, which also included measures of parental education and occupation, for Kindergarten in the ECLS-K, the socioeconomic background measure may not have been the most accurate measure. The fact that the magnitude of the effect of school socioeconomic composition was not greater than that of the effect of poverty may highlight that
school reform efforts should particularly concern themselves with addressing the effects of poverty on student achievement in schools. This also highlights the fact that school reform needs to be coupled with overall systematic change, which I will briefly discuss in my conclusion. Overall, the institutional practices discussed throughout this work seem to be possible mechanisms through which to begin school-based reform efforts.

**Future Research**

For future research, longitudinal analysis regarding these reading and math gains could be carried out to see if the significance of these relationships is sustained and whether their effect sizes decrease or increase. It is also important to note that regression analysis assumes there is no multicollinearity, or correlation between variables. This is not necessarily the case for the ECLS-K data because of its nested nature as a result of the nested quality of schooling experiences, as in student outcomes and characteristics (child-level data) are affected by classroom and teacher characteristics (teacher-level data), which in turn are affected by school characteristics (school-level data). Multilevel models are particularly appropriate for use with nested data sets. Therefore, building on this preliminary analysis by investigating the relationships between these characteristics and student achievement through the use of multilevel modeling could also provide more information on the effects of these practices on student achievement and how they could lessen the socioeconomic opportunity gap.
Table 4. Descriptive Statistics of Variables

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<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
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<th>Max</th>
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</tbody>
</table>
Conclusion

Throughout this work, I have examined institutional practices in schools that seem to be contributing to the socioeconomic opportunity gap and have put forward potential school-based reform strategies that could be implemented to decrease socioeconomic inequities within schools. In conclusion, I will synthesize my findings regarding these school-based reform strategies, respectively that of differentiation, teacher and school community developed standards-based reform, and the development of teacher learning communities, and explore how they could be implemented together in order to provide more equitable learning opportunities for all students. Next, I will address some potential critiques of these practices and of school-based reform efforts as a whole. Then, I will suggest systemic changes, both within the institution of schooling and society as a whole, that could be implemented in conjunction with these reforms. Finally, I will propose how the American populace could endeavor to counteract the opportunity hoarding practices of the upper/middle class and the socioeconomic opportunity gap.

Differentiation, Standards-Based Reform, and the Development of Teacher Learning Communities and the Socioeconomic Opportunity Gap

As I have documented through this work, these school-based reform strategies seem to be concrete mechanisms through which schools could address the socioeconomic opportunity gap. When evaluating differentiation and its effects on student achievement and whether it could lead to equitable learning outcomes, I found that skill groupings were beneficial to student learning as long
as all students were exposed to the same curricula for the majority of their instruction, as evident in the works of Slavin (1990) and Tomlinson (2006). I corroborated these positive effects in my own quantitative analysis, in which ability grouping had a positive effect on reading and math gains, and through my qualitative observations, in which a student at the Troy school who would have been placed in a low-track, was able to have access to high-quality curricula because of his teacher’s use of differentiation.

When exploring whether teacher and school community developed standards-based reform could lead to increased student achievement and equitable learning opportunities, through my evaluation of NCLB, I was able to delineate how teacher and school community developed standards-based reform could be implemented and posit their potential positive effects on student growth. I indeed did see such standards-based reforms at the schools I observed as evident by the use of Common Core standards at P.S. X and the investments in teacher quality at the Troy School and Palm Charter School. In order for teacher and school community standards-based reform to be effective, such reform needs to ensure that all students are provided access to these high-quality standards and curricula. Perhaps then differentiation could be coupled with teacher and community developed standards-based reform in order to increase equitable access to high-quality learning opportunities by providing all students with exposure to high-quality curricula while at the same time addressing any former student learning gaps through the provisioning of intervention and student-customized instruction.
When discussing the development of teacher learning communities and their potential effects on student achievement, through my evaluation of the teacher learning communities discussed by Newmann (1996) and Talbert and McLaughlin (2008), as well as the case study of Finland, I found that teacher collaboration and learning was conducive to student achievement. Through my qualitative and quantitative analysis, I was able to more fully explore which professional development strategies negatively and positively impacted student achievement, based on both teachers’ assessments and the effects on reading and math gains. Perhaps then teacher learning communities could be synthesized with the aforementioned teacher and community developed standards-based reform, by serving as cohorts, in which curricular content could be generated, knowledge about student needs, such as differentiation, could be shared, and in which teacher collaboration could be facilitated. Overall, one can see that these school-based reforms can and should be implemented in our schools as strategies by which to lessen the socioeconomic opportunity gap, as evident through this thesis.

**Potential Critiques of School-Based Reforms**

One potential critique of these school-based reform strategies is that they assume a greater amount of agency than is the case in schools and thus overestimate the abilities of these schools to determine their institutional practices. While I acknowledge that the agency of schools is indeed limited, both because of the current bureaucratic management of schools that I explored in
chapter IV, and because of the overall nested nature of schools\textsuperscript{2}, I argue that schools can still implement these practices in these preexisting structures, as the schools that I observed did, or challenge these structures and accommodate them to the needs of their specific school communities, as the schools in Newmann’s (1996) study did. Doing so may not be easy, because of either resistance from the elite and/or school administrators and governments as a whole. However, this bottom-up approach will certainly be more effective for accomplishing the goals of school communities and ensuring the sustainability of reform efforts overall, as teachers are far more likely to comply with reforms when they have been actively involved in developing them, as shown in both chapter III and IV.

Another potential critique of these school-based reform strategies is that they place too much trust in the intentions of teachers and administrators and may assume that they have egalitarian sentiments. While I acknowledge that teachers may not be invested in reforming to ensure equitable outcomes for all of their students, either because of a lack of belief in the achievement potential of all their students, or because they think doing so will require them to adjust their practices and routines, these egalitarian sensibilities can be achieved in school communities both through the leadership of individuals who do value equity and fostering this commitment among their educators. As discussed in the introduction, since the actions of teachers have been aligned with the reproduction of the privileging of the interests of the upper/middle class

\footnote{\textsuperscript{2}See Weick (1973); Barr, Dreeben and Wiratchal (1983); and Tyler (1995) for more in-depth explorations of the}
without their knowledge, one must not assume that teachers have vested anti-
egalitarian interests despite their actions. Furthermore, critiques that focus on
the intentionality of teachers rely on individualistic approaches to
socioeconomic inequity, which as discussed in chapter I, do not take into account
the structural causes of these practices, such as the opportunity hoarding of the
elite.

**Need for Systemic Change to Sustain School-Based Reforms**

Although I have identified the institution of schooling as the primary site
in which these reforms should be carried out, these reforms must be coupled
with overall systemic change in order to be most effective. In the next section, I
will briefly discuss how Finland has coupled their school reforms with overall
systemic reform directed at reducing socioeconomic inequities through their
school funding policies and social welfare system, and advance potential
strategies through which the U.S. could carry out similar systemic change, in the
form of overall social and economic reforms, in order to sustain the gains of
these school-based reform strategies.

As previously discussed in chapter IV, the Finnish education system is
championed internationally as a model for how other countries could improve
their student achievement because of the exceptional performance of their
students in comparison to that of their peers in other highly developed nations.
While a lot of Finland’s success can be attributed to its institutional practices of
investing in its teacher learning communities, its school funding policies also

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organizational structure of schools.
promote more equitable access to learning opportunities for students because more money is provided to needier schools, such as those with high numbers of immigrant students, so they can provide these students with any differentiation and intervention needs they may have. This also results in schools being more equitable across socioeconomic lines, as is the case in Finland, where the majority of schools are public because their quality is so high. Finland’s social welfare system, also facilitates its students’ achievement by provisioning students and their families with social services, such as universal access to high-quality daycare and stipends for poor families. These support systems for students both within and outside of schools allow Finland to respond to societal inequities in its greater society so that Finnish schools can focus on providing their students with equal learning opportunities. These systemic changes do indeed seem to have reduced socioeconomic inequities in Finland, as evident by the fact that they have the 2nd lowest child poverty rate internationally (Darling-Hammond 2010). In stark contrast, the child poverty rate in the U.S. is the highest among all of the industrialized nations, perhaps because of their lack of a similar commitment to reducing socioeconomic inequities. As Darling-Hammond states,

“one wonders what we might accomplish as a nation if we could finally set aside what appears to be our de facto commitment to inequality, so profoundly at odds with our rhetoric of equity, and put the millions of dollars spent continually arguing and litigating into building a high-quality education system for all children” (2010, 164).

The U.S. government and American schools overall could adapt some of these Finnish strategies to address socioeconomic inequity in our society as a
whole. The U.S. could do so by adopting similar investments in more equitable funding and allocation of resources between and within schools and government initiatives to address greater socioeconomic inequities. As Coleman states, “It is only insofar as both the distribution and intensity of the resources act to free a child’s opportunity from the accident of birth into a given family that a society can come near to the achievement of equality of opportunity” (1967, 15). Indeed, supplementing these school-based reforms with investments in systemic change both within schools and in society as a whole could promote this equitable distribution of learning opportunities for all students and decrease the socioeconomic opportunity gap.

A Call to Action to Address the Socioeconomic Opportunity Gap

Through this work, I have endeavored to answer the call to action regarding the socioeconomic opportunity gap by exploring how current institutional practices contribute to the socioeconomic opportunity gap. When discussing how citizenry could deal with durable inequality and limit the opportunity hoarding practices of the elite, Tilly stresses that they could do so by demanding institutional reforms through social movements. Tilly suggests that such a mobilization on the part of the peoples would occur if and when situations became so dire for marginalized groups that they organized themselves and disrupted the privileges of the elite. I argue that the socioeconomic opportunity gap needs to be taken up as a cause by the American populace, as if it is not addressed, it will widen into an abyss.
Perhaps then, a social movement can be brought about by disseminating this information regarding the opportunity hoarding practices of the elite in schools and what future school-based reform strategies we could implement to challenge the institutional practices in schools and in our society as a whole that perpetuate and maintain the socioeconomic opportunity gap. Such a social movement could indeed be what we need to transform our public education system into arenas in which the opportunity hoarding practices of the upper/middle class are stifled and equitable learning opportunities are provided for all.
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