Neoliberal Education Reform and the Perpetuation of Inequality

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Abstract
New York has some of the most segregated high schools in the country, and schools serving low-income and minority students have the lowest graduation rates. This paper discusses changes in inequality between New York City high schools during a period of neoliberal education reform. Neoliberal education reforms are intended to improve schooling through choice and accountability policies. I find that segregation has increased in the best performing schools during this era of reform, and that race and class maintain a negative impact on graduation rates despite the implementation of neoliberal policies. I argue that these policies not only fail to reduce inequality, but exacerbate and reproduce existing class and race inequalities in schooling.

Keywords
neoliberalism, education policy, New York City, high schools, inequality, high school graduation, segregation, school choice, accountability, dissimilarity index, growth curve model

Introduction
Education has the potential to elevate the life chances and opportunities of those born into poverty and disadvantage. Horace Mann created the first public education system on this principal, in hopes that an equal availability of schooling for all would reduce social divisions. Mann (cited in Cremin, 1957) states that ‘education, then, beyond all other divides of human origin, is a great equalizer of conditions of men – the balance wheel of the social machinery’.

If education is to have its intended effect, all students must have access to an education that prepares them for success. Unfortunately, poor, black, Hispanic and non-native English speakers are least likely to have such access, and they are most likely to attend segregated low-quality schools. Throughout the history of public schooling, reforms have been implemented to improve access to educational opportunities. This research will provide an understanding of whether access and equality has improved during a neoliberal reform era in New York City. In addition to
analyzing factors that impact graduation rates, this work examines the racial segregation of students by school quality.

This research uses high school graduation rates as a measure of school quality because high school graduation rates are a national priority in our effort to have a globally competitive workforce. The global market calls for more advanced skills and technology than it did decades ago, and high schools are tasked with introducing students to these skills. To this end, there is a push to reduce dropout rates and improve graduation rates. Research has focused on high schools that do not graduate more than 40% of their freshmen (Balfanz and Legters, 2004). These schools, dubbed dropout factories, are qualitatively different in demographic composition. They are segregated and more likely serve mostly poor, black and Hispanic students. Dropout factories are the focus of policy and interventions designed to improve educational opportunities for all students. Increasing graduation rates is a signal to reformers and to the public that school quality is improving and more American youth are being prepared for the global labor force.

The number of diplomas awarded by a high school is a sign of how many of their students leave prepared for postsecondary life. Schools serving mostly black and Hispanic students are least likely to prepare their students for postsecondary life. Neoliberal reforms are intended to raise standards and attainment for all groups. Under neoliberal reforms, high school graduation rates are used in accountability systems to determine whether a school is meeting its expected progress targets. Schools with persistently low graduation rates are subject to sanctions and may eventually close. Graduation rates are also a symbol of school quality for parents and students. High school graduation rates are made available on high school websites, in the NYC high school directory (which students receive and use to pick high schools), and they are used to rank high schools’ desirability.

In education, neoliberal strategies focus on high-stakes accountability, increased assessment, and school choice. Under neoliberal reform, schools are mandated to increase the number of assessments they administer and are penalized or rewarded according to student performance. Schools are then classified by this performance, and this classification serves as a measure of school quality for parents when selecting schools.

Neoliberal reforms rely on parents having complete information about schools and their right to choose schools rather than attend a zoned school. Choice is intended to reduce the connection between neighborhood of residence and school quality, so that students living in poor or segregated neighborhoods are not relegated to the worst schools. Neoliberal reforms are not directly aimed at reducing inequality. Neoliberalism assumes that when all schools are improved and all families have school choice, they will have a better system of schools to choose from and that they will choose the school that best suits their needs. I argue that this indirect focus does not reduce inequality, and does not create a system of schools in which all students have equal access to a high-quality education. Furthermore, I suggest that these reforms may do more harm than good. There is evidence showing that they may exacerbate inequality in low-performing schools (Booher-Jennings, 2005; Jennings and Sohn, 2014).

Neoliberal reforms require extensive changes to data collection, testing, staffing, and operations. A great deal of tax money and time has been allocated to the implementation of these reforms. Using school-level public data, this research will examine changes in inequality during a period of neoliberal reform in New York City between 2000 and 2013.

This paper will begin by explaining the problem of inequality between high schools. It will then consider the history and implementation of neoliberal policy as a solution to this problem. After an explanation of my methods, I will discuss my findings and their implications for understanding educational inequality. Findings suggest that segregation and inequality of outcomes are not reduced during an era of neoliberal reform.
Education Inequality

The national graduation rate is above 80% for the first time in history (Balfanz et al., 2014). While graduation rates have increased over time, inequalities by race have persisted. The graduation rates of non-Hispanic whites and Asians have exceeded those of blacks and Hispanics since 1972 (Chapman et al., 2011). A high school diploma increases one’s chances to be socially mobile, but those most in need of this mobility have been least likely to benefit.

A high school diploma has become the minimum credential required for occupational success and financial security. Declines in domestic manufacturing during the 1970s and 1980s led to the closure of many urban factories. The loss of manufacturing jobs limited employment opportunities for uneducated urban workers and increased the need for educational credentials (Wilson, 1996; Bettis, 1994). This increased demand for educational credentials has negatively impacted black and Hispanic men (Wilson, 1996). Black and Hispanic students are least likely to earn a high school diploma and most likely to be unemployed. As of 2010, the national unemployment rate for whites is 8.7, compared to 16.0 and 12.5 for blacks and Hispanics respectively.

Black and Hispanic students are both more likely than whites and Asians to be poor and to attend low-performing schools. Black and Hispanic youth are more likely to earn a GED instead of a conventional high school diploma. They are also more likely to take more than four years to graduate (Murnane, 2013). This inequality of opportunity is linked to the type of schools they attend. ‘In 2008, one-half of all high school dropouts attended one of the 1746 high schools with high dropout rates’ (Murnane, 2013). Black and Hispanic students are isolated in the worst performing urban schools. Balfanz et al. (2014) refer to these schools as dropout factories, those in which less than 60% of the 9th grade class is still enrolled four years later. In 2004, half of all black and 40% of all Hispanic students nationwide were enrolled in dropout factories. By 2012, 23% of black and 15% of Hispanics were enrolled in dropout factories. Progress has been made, but half of the remaining dropout factories are located in urban areas that serve mostly black and Hispanic students (Balfanz et al., 2014).

The school one attends has an impact on their long-term outcomes as well. Goldsmith (2009) finds that attending a minority concentrated school is associated with lower educational attainment later in life. Black and Hispanic students who attend these schools are less likely to earn a high school diploma or a bachelor’s degree. When students from these schools do go to college, they identify gaps in their high school education that disadvantaged them in their college courses (Reid and Moore, 2008). African American students are less likely to be ready for college, especially those coming from high-poverty schools (Moore et al., 2010).

Urban schools serving mostly black, Hispanic or poor students suffer from a host of issues, which may help explain their unequal outcomes. These schools have fewer qualified teachers (Darling-Hammond, 2004, Lankford et al., 2002; Clotfelter et al., 2010). These schools also have fewer monetary resources (Carter, 1984; Condron and Roscigno, 2003). In addition, teachers in these low-income schools often report a low sense of responsibility for student learning (Diamond et al., 2004). For a host of reasons, urban schools have a lower capacity to educate their students.

Neoliberal reforms have been implemented to improve the quality of all schools. The next section will explain what neoliberal reform is and how it has been implemented. This section will end with a discussion of the empirical literature studying the impact of these policies on inequality.

Neoliberal Education Reform

Neoliberalism is the ideology that currently guides the reform of public services. The hallmark of neoliberal reform is the effort to limit the public distribution of goods and services and to privatize
services such as hospitals, education, transportation, welfare, and social security. Neoliberals argue that public goods and services are delivered most effectively when service providers compete for clients in a free market, as they do in the private sector.

The neoliberal argument rests on a strong faith in free market competition, which relies on choice and rational individualism (Apple, 2006). Neoliberals believe that all individuals are self-interested and rational, and that given complete information, they will make the choice that is in their best interest. In a free market, people must have the power to choose between several options for all social transactions. Freedom of choice creates competition between service providers, such that they all strive to maximize the quality and efficiency of services available. Neoliberals assume that individuals will not choose service providers or businesses that are failing, and that failing businesses will not survive. In free market competition, organizations that survive do so based on their own merit and effort.

Free market competition is beneficial to the consumer because it requires businesses to constantly innovate and improve. Free market competition is also seen as an effective way to insure that public funds are being used efficiently. The role of the state under neoliberal reforms is to insure that public services are maximizing their potential, and to regulate their improvement or facilitate their termination.

The application of neoliberal values to education reform began in the 1970s in response to financial crises, the civil rights movement, and the social improvement programs implemented under President Lyndon B. Johnson. The 1960s and 1970s reform climate was characterized by compensatory and redistributive policies. The civil rights era sought to provide equal access to public institutions and opportunities for all races. The Elementary and Secondary Education Act of 1965 provided funding, called Title 1 funding, to schools that serve high percentages of children from low-income families. President Johnson also implemented a set of programs to eliminate inequality and racial injustice. These programs included the Economic Opportunity Act of 1964, which created the social welfare programs Job Corps and Head Start. America was in a prosperous phase during the 1960s and federal reforms aimed to redistribute some of the money to the most impoverished groups.

In 1964, James Coleman of Johns Hopkins University was commissioned to study the association between resource disparities in schools and achievement gaps. This research was conceived based on the assumption of the great society, that reducing inequality of opportunity would solve social problems (Hanushek and Kain, 1972). This research was expected to support the implementation of Title 1 funding, by showing that inadequate resources would negatively impact student performance (Karsten, 1999). Unfortunately, Coleman’s results did not show this expected relationship. He found that the biggest influences on student outcomes were social background and peers. Coleman’s research was used to question the premise of the great society (Gamoran and Long, 2006, Britze et al., 2010). Coleman’s research was used to argue that public spending on social programs was not an effective use of resources.

Social welfare spending was at its highest during the late 1960s and early 1970s. American manufacturing began to slow during the 1970s, creating a financial crisis that lasted into the 1980s. Criticisms of welfare spending rose as tax receipts, jobs, wages and America’s overall international prowess declined. Milton Friedman’s work was used to invoke the shift from a welfare state to a neoliberal state. Friedman argues against centralized government economic programs and spending. He argues that ‘centralized economic planning is consistent with its own brand of chaos and disorganization and that centralized planning may raise far greater barriers to free international intercourse than unregulated capitalism ever did’ (Friedman, 1951: 4). Conservative anti-welfare rhetoric rose consistently through the 1970s and reached a peak with the election of President Ronald Reagan. Reagan was a proponent of deregulating and privatizing public services as well as drastically decreasing spending on public services like education, health care, and transportation.
President Reagan commissioned a study of American high schools to assess the quality of course offerings and outcomes. A Nation at Risk (ANAR) was published in 1983 under the Reagan administration. ANAR decried public education for failing to provide a rigorous and competitive education to American students. The report states that Americans will not be internationally competitive unless students are held to higher standards and taught a more challenging curriculum. The release of ANAR led to a spike in public disapproval of the public education system. There was an overall sentiment that public schools were failing America because they were not creating competent students who could join the increasingly technical workforce.

The release of A Nation at Risk marks a shift from the US as a welfare state concerned with improving the lives of all citizens to a neoliberal state concerned with maximizing the potential of individuals, the efficiency of social institutions, and America’s global prowess. The democratic purpose of schooling is to reduce inequality between people, create critical thinkers and to develop competent members of society. Civil Rights reforms focused on making sure that schools had the resources and materials necessary to do so. During the 1970s and 1980s, there was an increased focus on outputs, and measuring the performance and ability of students. Following the release of ANAR, there was a massive increase in testing, measurement, and evaluation of schooling outcomes as a measure of school quality. Schools were seen less as a vehicle for democratic citizenship and more as institutions with an obligation to maximize student performance and the number of credentials awarded.

This shift towards a neoliberal education system makes students and families consumers and schools businesses that are in competition with each other to attract consumers. In 1990, Chubb and Moe published *Politics, Markets, and American Schools*. In this book, the authors build on the finding that private schools have better performance than public schools (Coleman et al., 1982). They argue that private schools perform better because they attract high-performing students, but also because they are better organized. The authors note that private schools are accountable to parents rather than the rules of the bureaucratic public education system or teachers unions. A private school that does not meet the demands of parents will close eventually, while a public school may remain open. They argue that public school parents don’t have the power to choose schools, which prevents competition between schools. Without competition there is no incentive for public schools to continually improve.

The key to improving schools, for Chubb and Moe, is that parents should have the same power over public schools that they have in private schools and in private business: the power to choose. Chubb and Moe promote a new and more privatized type of school that has little state involvement and limited bureaucratic control. These schools can accept and expel anyone they choose and there is no tenure for teachers. These schools are accountable to parents, not the state. Essentially, the authors argue that by treating the schools as businesses and families as clients, the quality of public education will be improved. This argument reshaped educational discourse so that school reform is now dominated by the use of market logic, specifically the logic of choice and competition.

**The Implementation of Neoliberal Reform**

The early 1990s was an ideal time for the work of Chubb and Moe to be released and for the implementation of neoliberal reform. The ideas of Chubb and Moe provided a solid explanation and solution to improve what was perceived to be a failing public education system. It also catalyzed a shift towards the privatization of public education. Reducing the public control of education allows schools to be controlled by market forces, reducing them to a commodity whose value lies in test scores and attainment rates (Giroux, 2012). Reform efforts to increase choice began during the late 1980s and early 1990s with the standards-based reform movement led by Presidents Bush and
Clinton. These presidents sought to implement statewide learning standards and to expand choice, with little success (Lubienski, 2005).

These reforms were followed by the No Child Left Behind Act of 2002 under President George W. Bush. No Child Left Behind (NCLB) is notably the first federally-implemented neoliberal policy. NCLB increased testing, choice and accountability for schools with the intention of reducing racial and socioeconomic gaps in achievement. New York City implemented a set of reforms that were aligned with this new neoliberal agenda. Neoliberal reforms do not make schools accountable to parents in the exact way Chubb and Moe envisioned, because schools are still public entities under a public governance structure. Despite this deviation, neoliberal reforms have increased privatization and created competition between schools using choice and accountability systems.

In 2005, Mayor Bloomberg and Chancellor Joel Klein implemented a full high school choice program in New York City. Under this new system, 8th graders must rank their school preferences and an algorithm is used to match students to a school on their list. This choice system is intended to equalize access to high-quality schools, so that disadvantaged students are not relegated to the low-quality high schools in their neighborhoods. In 2015, approximately 48% of the 76,000 applicants were matched to their top choice, and over 75% were matched to one of their top three choices (Schoolbook, 2015).

In addition to matching students to the school of their choice, the Bloomberg administration sought to create a better system of schools to choose from. Large failing high schools were closed, and replaced by as many as nine small themed schools in the same building. These small themed schools were opened as partnerships with larger private organizations like the Bill and Melinda Gates Foundation and New Visions. By 2009, 200 small schools had been opened and 20 large comprehensive high schools were closed (Baker, 2013). This reform was intended to increase competition most amongst schools serving the most disadvantaged students. Most of the closed schools were in low-income neighborhoods in Brooklyn and the Bronx, and many of the new schools were created to serve low-performing minority students.

In addition, graduation requirements were increased during this reform era. In 2005, New York State increased high school graduation requirements by making the regents exams mandatory for graduation. The stated purpose of exit exams was to increase the labor market value and integrity of a New York State diploma. By requiring students to pass exams in a number of subjects, New York State attempts to insure that their high school graduates have mastered a specific set of skills. The exams are intended to improve achievement, attainment, and postsecondary outcomes. The scores on these exams are used to determine college course placement in the New York City university system (CUNY, 2016).

In 2007, Mayor Bloomberg and Chancellor Klein implemented an A-F accountability grading system for all schools. Each school is required to submit data about its progress, performance and quality. These data are then compiled to create a letter grade. Schools that receive an F or a C three times in a row are subject to accountability sanctions and support. These supports include professional development and supplemental services such as instructional and curricular coaches. Sanctions include replacing more than half of the entire staff, or closure. This reform is intended to hold schools accountable to the administration and to parents for improving student performance. This reform also creates a visible indicator of a school’s performance, which can be used by parents to choose schools.

Neoliberal policy assumes that choice and competition between schools will lead to reduced inequality. Neoliberal policies do not provide a direct mechanism for reducing inequalities between school outcomes or for reducing segregation. The assumption of neoliberalism is that if parents have information about which schools are best, they will avoid failing schools and these schools will either close or be forced to improve. This indirect strategy to reduce inequality
places the onus on families to insure that their children receive a high quality education. This research will examine whether this indirect method is effective. This research asks: has inequality between schools’ graduation rates and in segregation between schools improved or worsened during this reform era? Studies have found that increased graduation requirements and accountability pressure do not reduce inequality, but that small schools do have the potential to reduce inequality.

**Accountability**

Accountability systems are intended to create a measurable target and incentivize schools to meet it. Sanctions are applied when schools do not meet these targets. Research shows that schools may resort to gaming and other practices used to dishonestly boost accountability grades. To insure that schools perform well and meet accountability requirements, research finds that resources are channeled primarily toward the grades where students take standardized exams (Booher-Jennings, 2005; Diamond et al., 2004). These grades receive more money for books and other learning materials to pass exams. Within benchmark grades, schools target ‘bubble kids’ (Ho, 2008). These are the students who score right beneath the passing score. Rather than improving all schools, accountability systems may drive schools to prioritize students who are further beneath the cut-off, with the hopes that the school will meet accountability measures if they can get these kids over the passing threshold.

McNeil, Coppola, Radigan and Vasquez Heilig (2008) study dropouts in Texas high schools following the implementation of an accountability system that uses graduation rates as a metric. The authors find that disaggregating outcomes by subgroup did not lead to more equity – it identified students to be ‘pushed out’ in order to meet accountability standards. In Texas, waivers were granted to schools that allowed schools to hold a student back if they fail at least one class in 9th grade. This is done to avoid having those students counted in the 10th grade TAAS assessments. Instead of improving high school outcomes, accountability systems may result in gaming of the system in order to boost test scores. The authors found that dropout rates increased during this reform era, thus expanding educational inequalities.

Haney (2000) finds that GED rates rose following the implementation of an accountability system in Texas, and the number of students in special education doubled. The author finds that the improvement in test scores that Texas was famous for can actually be attributed to their referral of problematic students to special education and to GED programs. The positive intentions of accountability systems can cause schools to manipulate their student population in order to meet accountability standards. This research will examine schools’ response to the threat of accountability sanctions in New York City schools during this neoliberal era.

**Exit Exams**

Research indicates that while exit exams may have met their goal of increasing rigor, they have also led to a decline in graduation rates. Research has focused on how graduation rates change and for whom across New York State and in other states, but this research will examine the impact of exit exams in New York City while various neoliberal reforms were being implemented. Exit exams decreased graduation rates and increased dropout rates, especially for disadvantaged groups. Using Common Core Data, Dee and Jacob (2007) examine how statewide implementation of exit exams impacts attainment and labor market outcomes. The authors find that exit exams increase the dropout rate for black students, students in high poverty, high minority schools, and for students in urban or rural schools.
Gotbaum (2002) found that higher graduation requirements are leading to increased discharges in New York City. Discharges are students who leave school but do not graduate, yet are not counted as drop outs. Discharges may be students who leave the school system, attend another school, or attend a GED program. Schools use this categorization as a way to mask students who leave school, without a negative impact on their graduation or dropout rates. Gotbaum finds that problematic students are being encouraged to leave and not informed of their right to stay in school. Increasing graduation rates may have the unintended consequence of decreasing graduation rates, especially for disadvantaged student populations.

Small Schools of Choice

The small school movement was designed to provide better schooling options to all students. The small school of choice (SSC) movement in New York City has had a notably positive impact on graduation. This research will examine whether good schools become more diverse, and how small school status impacts the schools in this NYC sample over time. Bloom and Unterman (2012) do a random assignment study of small schools of choice (SSC) in New York City. The authors find that SSCs improved graduation rates across cohorts by a combined 8.6 percentage points. Enrollment in an SSC improves the graduation for all subgroups, and improves college readiness in English but not math. Stiefel et al. (2012) find that small schools are most likely to serve Hispanic and Asian students, as well as students with limited English proficiency. They also find that graduation, regents taking rates, and regents passing rates improved for all schools, but improved most for small schools.

The open high school choice policy has not had an equalizing impact. Nathanson, Corcoran, and Baker Smith (2013) examine the high school matching process. They find that low-performing black or Hispanic students tend to choose lower-performing schools than their high-performing peers. Low-performing students are also less likely to select a specialized high school. The high school match process does not appear to redirect disadvantaged students away from low-performing schools.

Segregation

Kucsera and Orfield (2014) find that segregation is on the rise, especially for Hispanics. Nationwide, the typical black student is now in a school where two-thirds of their classmates are low-income, nearly double the levels in schools of the typical white or Asian student. New York, Illinois, and Michigan are the most segregated states for black students (2014: 7). Orfield, Losen, Wald and Swanson (2004) find that Asians are least likely to be in school with other Asians and less likely to be around blacks and Hispanics. This research will examine trends in segregation to see if black, Hispanic and poor students continue to be isolated in the lowest-performing schools.

Neoliberal Education Reform and Inequality

This research adapts a critical perspective on the impact of neoliberal policy. I argue that neoliberal policy is not likely to reduce inequality because individuals have varying levels of power and capital. In addition, I argue that neoliberal policy does not include a direct mechanism for reducing inequality, and that the indirect methods are not likely to be effective.

Eduardo Bonilla Silva (2009) argues that ‘choice is based on the fallacy that racial groups have the same power in the American polity’ (p. 36). Neoliberalism assumes that everyone is a rational actor who makes the best decision for their self. This assumes that all people have equal knowledge.
to make the best decision and equal power to execute their choice. Bonilla Silva further argues that ‘because Whites have more power, their unfettered, so-called individual choices help reproduce a form of White supremacy in neighborhoods, schools, and in society in general’ (p. 36). White and wealthy parents have more political and economic power, and can achieve better results for their children.

Neoliberalism ignores structural inequalities in access and opportunity, and shifts responsibility for high-quality education from the state to the individual. Neoliberal policy creates an illusion of meritocracy, where all students are perceived to have equal access to a high-quality education. Given this perceived equality of opportunity, poor outcomes are attributed to individual decision-making and not the state or any existing racial or socioeconomic inequalities. Good outcomes are attributed to individual merit and hard work. The lifelong learning movement is another educational example of such policy. This movement advocates constant occupational training as a personal responsibility to remain employable. This movement shifts the responsibility of training employees from employers to the individual (Olssen, 2006). This type of policy also creates an illusion of meritocracy, where the most prepared individual is most employable. Individuals have unequal access to professional and workforce development, but the spread of lifelong learning policies will create a system where those with the most access to personal development excel, thus reproducing existing inequalities. In New York City, advantaged parents are more successful at advocating for their child, and at gaining admission to the best schools (Ravitch, 2013). Upper-class students also tend to live in neighborhoods with good schools and many K-8 schools privilege local residents in their admissions. A system of school choice can result in advantaged groups receiving the same advantages that they have had historically, rather than an equal playing field where all families have equal access to good schools.

Increased choice may work best for middle-class students. Middle-class parents tend to be more aggressive and knowledgeable when dealing with the school system. These parents tend to have more flexible hours and more time to visit schools, and they can also afford to travel long distances to take their children to school (Apple, 2001). This leads to a concentration of more advantaged students in the best-performing schools and the reproduction of inequality. Despite universal access to the best public high schools, middle-class students are still more likely to attend high-performing schools (Mead and Green, 2012). Choice policy that does not directly address racial and socioeconomic inequality can result in a perpetuation of inequality, where all students have access to better schools but advantaged groups are more able to secure spots in the best schools.

Scholars have argued that reforms using accountability and choice systems are an attempt by the middle class to alter the rules of competition in education, in order to provide an advantage for their children in the face of rising economic uncertainty (Henig, 1994; Darling-Hammond, 2000). Giroux and Schmidt (2004) argue that education is now a private good used to gain an advantage rather than a public benefit to be consumed by all. Constantly raising the bar and increasing exclusion from educational opportunity is a mechanism by which low income and minority students are continually denied access to the potential for social mobility that is afforded by increasing one’s educational attainment (Bourdieu, 1973).

While the rules surrounding school choice reflect an increase in required knowledge that benefits advantaged students, neoliberal reforms result in a decreased level of skills for disadvantaged students. Bowles and Gintis (2002) argue that schools do more than educate students, that they teach students how to think and how to see the world (also see Hill Collins, 2009: 33). Schools implicitly impart educational skills and ideas that reproduce social inequalities. Under neoliberal reforms, the prevalence of testing reshapes the curriculum in low-performing schools to focus primarily on basic skills, while students in better-performing schools are exposed to a wider variety of knowledge and critical thinking skills (Giroux, 2012).
In addition to creating citizens with unequal levels of knowledge, neoliberal policies have the harshest impact on the most disadvantaged schools. Blum (2015) argues that poorly resourced districts will experience more accountability pressure and have fewer resources to actually implement the data and measurement requirements that exist under neoliberal reforms. He argues that the marketization of schools creates winners and losers, and the losing schools are more likely to be in low-resourced areas with concentrated poverty and segregation, which is exacerbated by the choice system.

Market logic privileges those with higher levels of knowledge, material resources, and power (Apple, 2006). Lisa Delpit (1995) argues that in order to eliminate achievement gaps and social inequalities as they relate to education, we must address the ‘larger power differentials that exist in our society between schools and communities, between teachers and parents, between poor and well-to-do, between whites and people of color’ (p. 133). Neoliberal policies indirectly address the greater social inequalities that exist, and I argue that they are more likely to perpetuate these inequalities as they rely on decisions and knowledge that are most abundant among those in power.

Data and Methods

The data for this paper comes from the School-Level Master File (SCHMA) developed by the Research Alliance for New York City Schools at New York University. The SCHMA was created by compiling publicly available data from the New York City Department of Education (DOE) and the US Department of Education. The file is updated annually with new data. It includes data from the 1995–6 academic year through 2012–13.

This analysis will use data from the year 2000 until 2013, because the graduation rate is missing for most schools from 1996 to 1999. I excluded transfer and alternative schools because their students are not held to the same admissions requirements, and some are not seeking a traditional high school diploma. Students in these schools may be over traditional high school age, seeking a GED, or disabled.

Due to the nature of the reform, several schools are missing data. A large part of the missing data occurs because the school was not yet open or it has been closed within the time span under study. The dissimilarity index is designed to account for changing samples, and the estimate of segregation is not affected by missing data. Imputation methods were not used for the growth curve model because this assumes the data is missing at random. This data is suitable for growth curve modeling because there are no observable patterns in the missing data in terms of size, race, or graduation rates. The majority of schools have no missing data. The schools with missing data tend to be smaller, which makes sense because part of the reform was to implement new small schools. These schools do not have data for all of the years in which they were open. There is no substantial difference between the racial composition or graduation rate of schools with missing data and those without (Table 1).

The dissimilarity index is a measure of unevenness, as it measures the extent to which racial groups are unevenly distributed across schools. For this analysis, a dissimilarity index is created to measure black-white, Hispanic-white, and Asian-white unevenness within and across each performance third. The within index indicates the percentage of students in each school who would have to switch schools in order to achieve racial balance within that third. This index is created using the population of each racial group in each school in a given third and the total population of that racial group across the schools in that third. Racial balance is achieved when the proportion of a race group in each school is equal to the proportion of that group in the entire third.

The across third dissimilarity index is also calculated to measure the extent to which racial groups are attending schools of different quality. This index indicates the percentage of students
that would need to switch thirds in order to achieve the racial balance of the district as a whole. This index is created using the population of each racial group in each third and the total population of that racial group across the entire district (the NYC district includes all high schools). This index will equal zero when the proportion of a race group in each third is equal to their proportion district-wide. Together, these measures show how segregation has changed within and between performance thirds.

The dissimilarity index does not account for high or low proportions of a particular racial group in a third; it only measures if the proportion is the same across schools or thirds. If the proportion is not the same, the index indicates the proportion of students that would need to be redistributed. For example, an index of 36% means that 36% of black or white children would need to switch schools in order to achieve racial balance. The analysis of changes in the dissimilarity index shows us the extent to which students are segregated within and across performance categories, but it does not explain the extent to which attending a segregated school impacts graduation rates for those students.

A growth curve model is estimated to understand whether the impact of race and class on graduation rates declines over time as expected. Traditional regression models, such as Ordinary Least Squares (OLS), are not sufficient because there are repeated observations within each school and OLS does not account for these correlated error terms. If OLS was used for this analysis, the standard errors would be underestimated but the coefficients would be similar. Growth curve modeling is a type of Hierarchical Linear Modeling (HLM) that accounts for repeated observations by allowing each school to have its own intercept and coefficient (Singer and Willett, 2003). The coefficient of this model estimates the relationship between the initial status of graduation rates in 2000 and time, and with school composition measures and policy indicators.

This model uses a random slope for time. The indicator variables used in this model may have a different effect on graduation rates each year, as other reforms are being implemented or other factors are changing in the city or district. Using a random effect for year allows you to account for the systematic within-school variation. Random effects allow each school to have its own personal slope. A random slope is a deviation from the mean intercept for each school, resulting in a group of parallel regression lines for each school. Conversely, this model uses fixed effects for all other variables, where a population mean is used for all schools.

I model the growth in the average graduation rate and how racial composition, socioeconomic composition, and indicators of neoliberal reform affect this growth. To operationalize neoliberal reform I use indicators that reflect the implementation of neoliberal reforms, which include: an indicator for the year that exit exams were implemented, an indicator for having failed accountability, and an indicator for being a small school of choice. I also include a measure of Full-Time

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<th>Table 1. Analysis of missing graduation observations, 2000–2013.</th>
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Teacher Equivalency (FTE) to control for variations in school quality that are independent of the factors I am interested in (Vos, 1996). FTE is used as a measure of school quality under the theory that having teachers and adults in a school is a resource and those schools with a lower FTE are under-resourced.

The race variables are calculated from the total enrollments for black, Asian, Hispanic, and white students in each school in each year. I identify schools in which black and Hispanic students are over-represented. Black and Hispanic students are most likely to be over-represented in schools with low graduation rates, whereas Asians are more evenly distributed by performance and have similar outcomes as whites. Black and Hispanic enrollments are combined and converted to percentages. These percentages are then dichotomized. This variable is equal to one if a school’s percentage of black and Hispanic students exceeds the average percent of black and Hispanics across all schools for that year. The socioeconomic composition variable is equal to one when the school has above the average percent of students eligible for free and reduced lunch.

I measured racial and socioeconomic composition in this way to determine whether there are statistical differences between schools serving more and less than the average proportion of black, Hispanic and poor students. Overall these measures help to understand changes in segregation and inequality during a neoliberal reform era. I also include an interaction between race and socioeconomic status to understand the combined effect of being poor, black and Hispanic, which is quite likely. This variable is equal to one when a school has above the average percent of black and Hispanic students and above the average percent of students eligible for free and reduced lunch.

**Segregated High Schools and Unequal Graduation Rates under Neoliberal Reform**

Black and Hispanic students have historically been segregated in the schools with the worst outcomes. Neoliberal reforms should indirectly eliminate inequalities using choice, competition and accountability. The first analysis in this paper uses school level public data to measure whether racial segregation by school performance has persisted in NYC high schools. In the second analysis, I estimate whether racial and socioeconomic composition maintains a significant impact on graduation rates when accounting for the presence of neoliberal reforms.

Using high school graduation rate as a measure of school quality, I divided all schools into three equal groups based on their high school graduation. This creates high, medium/average, and low classifications for each year. The dissimilarity index will be used to understand the extent to which students are segregated by school quality. The median graduation rate for each third is displayed in Figure 1 to provide a sense of how different these performance thirds are from each other. There is about a 20 percentage-point gap between each third, and the lowest-performing schools have a median graduation rate of around 45%. This means that the lowest-performing schools are failing to graduate more than half of their incoming freshmen. The highest-performing schools graduate 80% or more of their freshmen, while the medium/average group graduates about two-thirds of their freshmen. Balfanz et al. (2014) find that black, Hispanic and poor students are most likely to be in the lowest performance category.

This research examines changes in school segregation during a neoliberal reform era. It asks whether black and Hispanic students continue to be segregated in the schools with the lowest graduation rates. Segregation can occur in two forms. First, black and Hispanic students may attend segregated schools within a given level of school quality. For example, in the worst performance category, black and Hispanic students may attend schools in which they are segregated from white and Asian students. Second, students may be segregated by performance such that black and
Hispanic schools attend schools that are of better or worse quality than those attended by white and Asian students. Both scenarios provide an understanding of whether increased choice and accountability impacts school segregation. In 2000, black and Hispanic students were most segregated from white and Asian students in the worst performing schools. By 2013, segregation was highest in the best performing schools. The degree to which black and Hispanic students are attending schools that are of a different quality than white and Asians has slightly decreased (see Figure 2).

In 2000, 28 percent of black and Hispanic students in the worst performance category would have to switch schools in order to achieve racial balance. Segregation declined consistently until it spiked in 2010. It is not clear why segregation increased in 2010, but it declined in 2012 and 2013 to 23%, for an overall decline of 15%. Students attending schools in the worst performance category experienced less segregated schools in 2013 than they would have in 2000.

There is variation in the average performance category but little net change. There is a net increase of 2 percentage points during this reform era (27% less 25%). In contrast to the sharp 2010 increase in the lowest category, the average category experiences a sharp decline in 2010. Students in this performance category are 7% less likely to attend a segregated school in 2013 than they were in 2000.
Segregation in the best performing schools has increased at a magnitude greater than the changes in the worst and average categories. In 2000, 16% of black and Hispanic students would have to switch schools in order to achieve racial balance. By 2013, this value increases by 59% to 25%. By 2013, one in four students in the city’s best high schools would have to switch schools to achieve racial balance. Enrollment in these schools grew more than any other performance group, but these admitted students are attending more segregated schools than they would have in the past.

While it is true that the best performing schools have become more segregated and the worst performing schools have become less segregated, there is convergence such that all performance categories have relatively equal levels of segregation in 2013 (see Figure 3). In 2013, students have a similar rate of segregation regardless of whether they attend a poor, average or high-performing school. Despite similar levels of segregation within performance categories, are black and Hispanic students attending different quality schools than their white and Asian peers?

In 2000, 17% of black and Hispanic students would have to switch performance categories (attend a school in a different third) in order to achieve racial balance. This number stays relatively stable, and begins to decline in 2005. This rate of segregation rises again to 15% in 2013 for a 2% overall decrease in segregation across categories. Students are slightly less likely to be segregated by performance during this reform era. These segregation levels are lower than those within categories. Black and Hispanic students are more likely to be segregated by school within a given quality category than they are to be segregated by quality category. In Table 2, I examine the impact of several policy indicators on graduation rates and I include a random effect of year to understand how these impacts change over time.

In Table 2 I use nested modeling to predict the impact of policy indicators on graduation rates. I begin with an empty model (model 1), which allows for the estimation of the average graduation rate across schools and years. I add my control variable of school quality in model 2. In models 3–8, I successively add indicators of race, school poverty, a race and poverty interaction, accountability, a small school indicator and an exit exam implementation indicator to see how each of these indicators cumulatively impacts graduation rates. I also provide a set of models that do not include the interaction term, to show the independent effect of each variable (see models 6b–8b). The random effect of year is listed in the bottom row and can be added for each additional year to understand how the impact varies from 2000 to 2013.

The positive coefficient of year shows that the graduation rate increases each year. The coefficient 3.27 in m2 shows that if school quality remains constant, the graduation gate will increase by 1.93 points each year (.327+1.6) and will continue to increase by 1.6 for each additional year. This
### Table 2. Growth curve model of graduation rate.

<table>
<thead>
<tr>
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<th>With Interactions</th>
<th>Without Interactions</th>
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<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td><strong>Year (Time)</strong></td>
<td>0.327*</td>
<td>0.349**</td>
</tr>
<tr>
<td></td>
<td>(0.13)</td>
<td>(0.13)</td>
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<tr>
<td></td>
<td>(27.21)</td>
<td>(27.15)</td>
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<tr>
<td><strong>Equivalency Teachers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(School Quality)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(1.45)</td>
<td>(1.45)</td>
</tr>
<tr>
<td>Above Average Free Lunch</td>
<td>-0.325</td>
<td>-3.201***</td>
</tr>
<tr>
<td>(School Poverty)</td>
<td>(0.48)</td>
<td>(0.78)</td>
</tr>
<tr>
<td>Race and Poverty Interaction</td>
<td>4.590***</td>
<td>4.516***</td>
</tr>
<tr>
<td></td>
<td>(0.98)</td>
<td>(0.98)</td>
</tr>
<tr>
<td>School Failed 2007–2010 (Accountability)</td>
<td>-6.021*</td>
<td>-5.545*</td>
</tr>
<tr>
<td></td>
<td>(2.63)</td>
<td>(2.63)</td>
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<tr>
<td>Small School Indicator</td>
<td></td>
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<tr>
<td></td>
<td>(1.11)</td>
<td>(1.09)</td>
</tr>
<tr>
<td>Post 2005 Indicator (Exit Exams)</td>
<td></td>
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<tr>
<td>Intercept</td>
<td>65.062***</td>
<td>62.046***</td>
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<tr>
<td></td>
<td>(1.05)</td>
<td>(2.23)</td>
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<tr>
<td>Random Effect of Year (Time)</td>
<td>1.6</td>
<td>1.579</td>
</tr>
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<td>(.133)</td>
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increase remains fairly steady as additional variables are added to the model, except for an increase to .687 in model m8b. We also see that the intercept increases as variables are added to the model. The intercept is the graduation rate if all other variables equal zero and the year is 2000. The control variable of school quality has no significant impact on graduation rates.

Model 4 shows the impact of race and poverty without the interaction variable. The effect of having above average black and Hispanic students has a significant negative impact on graduation rates. A school with above average minorities has a graduation rate that is 7.3 points lower than a school with below average minorities, if all other variables stay constant. Having above average free lunch does not have a significant impact on graduation rates in the absence of the interaction variable.

The race and poverty interaction effect is introduced in model 5, and it measures the impact on graduation rates when both the percent of minorities and school poverty are above average. The main effect of race in this model is the effect of race when poverty is equal to zero, meaning that it is below average. Likewise, the main effect of poverty is the effect of poverty when race is below average. Above average minorities has a significant negative effect when poverty is below average. Above average free lunch has a significant negative impact when a school does not have above average minority students (see models 5–8). The interaction term shows us that when a school has above average minorities and poverty the graduation rate will increase by about 4 percentage points (see models 5–8).

It is not intuitive that race and poverty have a negative effect on graduation independently but together they have a positive effect. One explanation may be that these schools are more likely to receive additional federal or local aid because they serve the most disadvantaged populations and that this aid leads to higher graduation rates. Models 6 through 8 add the policy indicators of accountability, small schools and exit exam implementation. The coefficients for these indicators are slightly higher in the models without the interactions (models 6b–8b), but generally similar. Failing school accountability has a significant negative effect on graduation rates. This negative effect becomes insignificant in the 8th model when the exit exam indicator is added. Failing accountability decreases graduation rates by 5 or 6 percentage points. This is the opposite intended impact of accountability systems.

There is a significant positive impact of being a small school. This supports the existing literature on the positive impact of small schools on graduation rates. Lastly, the implementation of exit exams in 2005 has a significant negative impact on graduation rates. This coefficient means that graduation rates drop by about 10 percentage points post-2005, as compared to pre-2005. This is an unintended consequence of exit exams. Making graduation requirements more difficult makes it harder to graduate, thus decreasing the graduation rate in the years following this increase.

**Conclusion**

In New York City and across the country, neoliberal education reforms have identified failing schools and created accountability systems to track the progress of these schools. Failing schools have received sanctions and many have been closed. In addition to accountability systems, which are intended to improve schools, a system of choice has been implemented so that families can choose the school that best suits their need. Neoliberal policy is believed to indirectly eliminate inequalities between students under the assumption that all families have the right to choose high quality schools. This research examines changes in inequality during a neoliberal reform era. This research examines changes in graduation rates and segregation during a neoliberal reform era. This research asks whether black, Hispanic and poor students continue to be segregated in the worst performing schools, as they have historically been. It also asks how school composition and
particular features of neoliberal reforms impact graduation rates, a key indicator of a high school’s quality. This research is descriptive, not causal, because there is no pre-reform period.

This research finds that segregation of students in the worst performing schools declines, and it increases in the best performing schools. The black and Hispanic population in the worst performing category declined during this reform era, and it increased in the best performance category. It seems that the segregation has shifted with this change. In the earlier years of this reform era, one in four black or Hispanic students was segregated in low-performing schools. Black and Hispanic students are now attending better performing schools but one in four is now segregated in the highest performance category. Whatever category black and Hispanic students may be in, they are likely to be segregated there. There is a systemic effort to avoid diverse schools, regardless of quality. A system of school choice makes this effort more feasible, as families can view racial composition as a deterrent when choosing schools.

Segregation has a negative impact on the educational experience of all students, especially black and Hispanic students. Despite receiving a better education, these students continue to lack the advantages afforded by diversity, such as exposure to different people and ways of life, and exposure to whites and Asians who they are likely to encounter and be unfamiliar with in their postsecondary life. Students of all races perform better when they attend diverse schools (Siegel-Hawley, 2014). As Lisa Delpit (1996) argues, this trend will not change until the broader societal inequalities are diminished and black and Hispanic spaces are no longer viewed as low quality or threatening.

Although black and Hispanic graduation rates have improved on average, and they are attending better schools, there is still a negative impact of having a high percentage of black and Hispanic students. There is also a negative impact of poverty. These facts point to the larger societal inequalities that exist, such as lower teacher quality, fewer resources, and lower expectations that exist in schools that serve primarily black, Hispanic or poor students. Neoliberal policies, excluding the creation of small schools, seem to exacerbate this negative impact by further decreasing graduation rates.

Anyon (2006) argues that policies to eliminate poverty and other societal issues are necessary if there is to be a true meritocracy with true equality of opportunity. Until this is the case, race and class will continue to disadvantage particular groups and result in achievement gaps. Lynch and Moran (2006) argue for a more substantive focus on how class operates within schools and neighborhoods and intersects with economic and social policies to reproduce inequalities.

Together these analyses show that despite a host of positive outcomes for black and Hispanic students, race still matters very much for the outcomes of students. While the magnitude of these differences is moderate, the persistence of historical racial and socioeconomic educational inequalities cannot be understated. Neoliberal reforms argue that choice and accountability will give families of all races equal access to a high-quality education, but this is not the case. Black and Hispanic students are still attending segregated schools, majority black and Hispanic schools still have the lowest outcomes, and minorities still attend schools that are different from their white and Asian peers. While neoliberal policies did allow some minority students to choose better schools, it did not impact the patterns on inequality that public schools have historically suffered from.

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**Notes**

1. In many districts, Asian students have outcomes similar to whites and the highest performing Asian students are likely to attend schools with mostly white students. For this reason, this analysis does not include Asians as racially disadvantaged along with blacks and Hispanics.
2. This analysis uses the New York State method to calculate graduation. This calculation includes all students who entered a school in the 9th grade cohort, not excluding self-contained classrooms and special district schools. Graduates are defined as those earning a Local or Regents diploma, excluding those who earn a special education diploma (IEP) or GED. This graduation rate is most often separated into June and August graduates and into four and six-year graduation rates, and I use the four-year rate.

3. To insure that I have a consistent sample, I ran my very last model with all variables in it and created a sample including only those cases and used that sample for all of my models. This sample includes 281 schools, 1634 observations with an average of 5.8 of 11 years of data.

References


Hill Collins P (2009) *Another Kind of Public Education: Race, Schools, the Media, and Democratic Possibilities*. Boston, MA: Simmonds College.


