# The Impact Of Globalization And Urban Decline On Buffalo And Its Public Schools: A Community's Response Brian Barrett, Ph.D.

This article investigates the impact of globalization – conceptualized in terms of the systemic effects of global economic and structural shifts from industrial to postindustrial modes of production – on the city of Buffalo, New York and its public school system. Federal, state, and local educational policy responses to these shifts are reviewed. Some of the processes by which these policy responses are negotiated by students and the broader community in Buffalo are placed within a social capital framework and investigated empirically. Findings suggest that, while social capital is a concept increasingly employed by those on both the political right and left as a potential antidote to the social exclusion and dislocation present in many urban areas and brought about largely by global shifts to a postindustrial economy, it is also a resource that is distributed unequally throughout schools and society.

The opening of the world market associated with globalization has signaled the rise of what has been termed a "postindustrial" era in the United States (Bell, 1973; Esping-Andersen, 1999). Companies in industrialized nations have increasingly been able to expand beyond national boundaries and to move modern facilities and state of the art machinery to almost anywhere in the world. Likewise, and with profit maximization as their goal, these companies have moved many of the relatively high-paying low- and mid-skill routine industrial jobs characteristic of the post-war West to countries and regions willing to provide cheaper and less regulated labor. Consequently, routine industrial workers and producers in the United States have for four decades been placed in direct competition with millions of routine producers in other nations. As former U.S. Secretary of Labor Robert Reich has famously noted: "Twelve thousand people are added to the world's population every hour, most of whom, eventually, will happily work for a fraction of the wages of routine producers in America" (1991, p. 209).

In the West, the shift to a postindustrial economy has placed institutions such as large industrial complexes, blue collar work, centralized bureaucracies for management, and national markets for cheap standardized goods under threat (Green, 2006). In the United States, this shift

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has led to a polarization of wealth and income, especially as formerly high-paying low- and midskill industrial and manufacturing jobs have tended to be replaced by either low-wage, low-skill jobs in the service sector or by unemployment and reliance on public assistance (which itself has been greatly reduced during the shift to a postindustrial economy) (Brown & Lauder, 2001; Saez, Kopczuk, & Song, 2010). Additionally, while a number of American cities and regions, such as the Silicon Valley near San Francisco or the "128 Belt" around Boston have thrived in an information- and technology-based postindustrial economy, Esser and Hirsch note that "imposing new types of technology and production concepts, with the radical change in the international division of labor which this entails, causes 'tertiarization' processes to be accelerated and accentuates the gulf between expanding 'global cities' [like San Francisco and Boston] and stagnating old industrial cities" (1994, p. 71). The case of the city of Buffalo, New York, the focus of this paper, has tended to align with the latter scenario here.

The related and combined effects of the movement of money, jobs, and the middle-class out of aging industrial cities characteristic of large scale systemic changes in the global labor market include high unemployment rates and correlate closely with an increase in poverty which, in the United States (Wilson, 2008, 2009), has become spatially more concentrated in urban areas. These effects can be particularly intense in older industrial cities, such as Buffalo, with large populations of people of color and high levels of racial and economic segregation. These cities are increasingly characterized by "weak labor force attachment" (McLanahan & Garfinkel, 1989) or joblessness reinforced by growing social isolation and decreased access to the information networks valuable for successfully navigating sectors such as the job market and the education system.

Crucially, the trends toward poverty, segregation, and social isolation described here can restrict opportunities for urban youth to access *social capital* by virtue of membership in social networks capable of providing resources (information, reinforcement of norms, etc.) instrumental in promoting educational success (Portes, 1998). In terms of broader possibilities for progressive systems change, student access to educationally instrumental social networks is critical. Meanwhile, a decline in access to educationally instrumental social networks and the social capital that inheres within them would not bode well for students in cities like Buffalo struggling with the systemic shift to post-industrialism. Accordingly, students' access to social capital serves as the empirical focus of this paper.

The specific impact that the global shifts described above have had on the city of Buffalo and its public school system are outlined next. Then, federal, state, and local educational policy responses to these shifts are considered and contrasted with the processes by which students and the broader community in Buffalo have negotiate them. Later, the paper presents empirical findings that draw attention to the potential value of social capital in fostering systems change by facilitating students' successful navigation of these policy responses and promoting educational success. However, the findings also reveal that while social capital can indeed serve as an effective tool in encouraging positive educational outcomes, it is also a resource that is currently distributed unequally throughout Buffalo's schools according to students' structural and economic positions in society. The paper concludes by arguing that governments, communities, and schools must work in the interest of progressive systems change to ensure that students' access to social capital does not continue to become polarized in a manner similar to the polarization of wealth and income taking place at global, national, and regional levels.

## Context

# Buffalo

One hundred years ago Buffalo was one of the world's most thriving cities. In 1901, its population of 352,387, growing briskly at an annual rate of 3.2 percent, made it the eighthlargest city in the United States. That year, Buffalo, the largest inland port in the country due to its location at the western terminus of the Erie Canal, hosted the Pan-American Exposition. While in attendance at the Exposition, Albert Shaw, President of the Canada Niagara Power Company, predicted that the Buffalo area would become the greatest manufacturing center in the world due to the availability of cheap hydropower generated by Niagara Falls, situated 16 miles away along the Niagara River. Forecasting a city of one million inhabitants by the turn of the century, Shaw commented that: "Nature has done everything to favor this locality. At last science and capital are taking advantage of these natural temptations" (Thomas, 1997, p. 2). The city, taking on the name "City of Light" after the success of the exhibition, looked to the future with a great sense of optimism.

Through the first half of the twentieth century, Buffalo developed into a premiere industrial city, attracting workers to its burgeoning automotive, aviation, and steel industries. The city reached a peak population of 580,132 residents in 1950. However, each census since then reveals a declining population, culminating in the loss of over 300,000 residents, more than half its population and a number that equals the size of entire cities like St. Louis and Pittsburgh. Today, the city's population stands at 261,310, making it the nation's 70<sup>th</sup> largest city (U.S. Bureau of the Census, 2010).

Population migration out of Buffalo has been driven by a number of factors among which race and racism figure prominently. Throughout the 1940s, Buffalo saw a massive influx of

African Americans from the rural south arrive to fill the manufacturing jobs described above. As European immigration was sharply reduced during the two World Wars, the city that in 1920 had been 99 percent white was undergoing a major change in its demographics. During this time, "thousands of nervous whites abandoned the city" (Thomas, 1997, p. 5) at a rate of 22 every day. By the end of the 1950s, more than 80,000 whites, 15 percent of the population, had left Buffalo at a rate considerably faster than anywhere else in the country (Goldman, 1990). In 2010, 54.4 percent of Buffalo's population was white (U.S. Bureau of the Census, 2010). This is down from 65 percent in 1990 (U.S. Bureau of the Census, 1990), spanning two decades of net population loss for the city and indicating that "white flight" remains a driving force behind Buffalo's continued population loss today. Accordingly, with a dissimilarity index score of 73.24 reflecting the percentage of people in the city who would have to move for races to be evenly distributed across it (a score of 100 signals complete segregation), Buffalo is now the sixth-most-segregated city in the United States (U.S. Bureau of the Census, 2010).

Additionally, just as Buffalo's population reached its peak in the 1950s, so too did its manufacturing industry, the source of 194,000 jobs in 1958 (Thomas, 1997). As a consequence of competition from manufacturers abroad and the relocation of "rust belt" factories to international destinations by companies attempting to maximize profits in the global postindustrial economy, American manufacturing has undergone a sharp decline. In Buffalo, one notable example of this was the movement of 13 divisions and 2,200 jobs from the Trico automotive plant to Mexico in 1995 following the signing of the North American Free Trade Agreement. While 300 jobs were left at what remained of the Buffalo plant, those still employed there were subject to significant pay cuts (Bernstein, 2000). The city, which was largely unaffected by the economic improvement that occurred throughout much of the United States in

the 1990s, continues to lose manufacturing employment at a rate higher than national averages while, at the same time, employment gains in its service and information-processing industries have not kept pace with the rest of the nation. Today, Buffalo is home to 47,500 manufacturing jobs (Thomas, 2011), less than a quarter of the same type of jobs available in 1958.

Consequently, Buffalo currently suffers from rates of unemployment that are much higher than national averages (for example, in July 2011 Buffalo's unemployment rate was 15.4 percent compared to an unemployment rate of 9.1 percent nationwide (U.S. Bureau of Labor Statistics, 2011)). Likewise, the percentage of Buffalonians living in poverty has more than doubled - to 28.6 percent, the third-highest poverty rate in the United States (U.S. Bureau of the Census, 2009) - since 1970. Meanwhile, the city's child poverty rate stands at 41.7 percent (ibid). Spatially, poverty is most densely concentrated on the city's central and lower east side. Approximately 90 percent of residents in the census tracts covering these areas of the city are African American and the poverty rates for these tracts range from a low of 25.5 percent to a high of 59.5 percent, averaging 37.9 percent (Kraus, 2004). Finally, poverty rates vary drastically by race in the city, as 17.7 percent of white residents, compared to 33.1 of black residents and 43.4 percent of Hispanic residents in Buffalo currently live in poverty (U.S. Bureau of the Census, 2009).

The cumulative effects of the employment loss and the departure of middle- and stable working-class families from the inner city described above have the potential to amount to the removal of what Wilson (1987) has termed a "social buffer" which could provide residents there with valuable social capital while acting as a shield against some of poverty's most nefarious effects. The extent to which this has indeed been the case for students in the Buffalo Public

Schools is examined later. The impact of the massive systemic structural and economic shifts detailed above on the city's school system is detailed next.

# **Buffalo Public Schools**

The systemic challenges facing the city of Buffalo are also evident within its public schools. Eighty-two percent of the children served by the public school district are eligible for free and reduced price lunches (New York State Education Department, 2009), while many of the city's wealthier pupils attend private and parochial schools. Twenty-two percent of Buffalo Public School students are identified as students with disabilities (ibid); this is the highest rate in the state (Maguire, 2004). The rate of transience in the school district is 54 percent, meaning that less than half of its students complete an academic year without changing schools.<sup>1</sup> More than half the students in Buffalo's public high schools (and 42 percent of students in kindergarten through 12<sup>th</sup> grade) were absent 18 or more days during the 2010-2011 school year and one third of Buffalo's public high school students missed more than seven full weeks (20 percent of the school year) of school (Pasciak, 2011a). Buffalo's four-year high school graduation rate is 47.4 percent; for African American males the rate drops to 25 percent (Warner and Pasciak, 2011). Only 26.9 percent of Buffalo public school students in grades three through eight recently scored at or above grade level on New York's state tests in English while 31 percent scored at or above grade level on state mathematics examinations (Warner, 2011).

Furthermore, Buffalo's dour economic situation, coupled with New York State law, makes it less able to provide adequate levels of funding to its schools and leaves the city heavily dependent on the state for education funding. In recognition of the economic challenges faced by

<sup>&</sup>lt;sup>1</sup> High rates of transience are a common feature of urban school districts. Coleman and Hoffer (1987) have found the number of times a student changes school to be the most influential factor in predicting educational failure. Brown and Lauder (2000) note that every time a child changes school, the parents or guardians of that child must re-establish networks providing access to social capital, a factor that can lead to academic difficulties for transient students.

its largest cities due largely to shifts from an industrial to a postindustrial economy, the state legislature created Section 2576 of Article 52 of the Education Law (hereafter referred to as "Section 2576") in 1972, making Buffalo and the state's four other largest school districts (New York City, Yonkers, Rochester, and Syracuse) "dependent." This means that these cities rely not on local property tax but on state aid in combination with whatever is available in the city budget (after essential public services like ambulances, garbage collection, and the police and fire departments, along with nonessential entities like museums and sports arenas are accounted for) for school funding. The state, then, is expected to cover most of the city districts' other costs, outside of any funding provided annually by the federal government. Due to the deteriorating financial situation in Buffalo, the state has become, by far, the primary provider of education funding for the city school district, contributing approximately 80 percent compared with city and federal contributions of roughly 10 percent each.

While it was created to ensure that, through additional state funding, New York's "big city" districts would be able to provide levels of per-pupil funding comparable to those that exist in "independent" districts throughout the state, Section 2576 has not proven a cure-all. Despite veritable "boom-times" in the late 1970s and early 1980s when state aid to the Buffalo schools was significantly increased in part as a reward for the perceived success of an innovative desegregation effort implemented in 1976, aid has been inconsistent.<sup>2</sup> During these "boom-

<sup>&</sup>lt;sup>2</sup> On April 30, 1976, U.S. District Court Judge John T. Curtin ruled in the case of *Arthur* v. *Nyquist* that the Buffalo Board of Education, in cooperation with the city and the State of New York was guilty of "creating, maintaining, permitting, condoning, and perpetuating racially segregated public schools in the city of Buffalo" (*Arthur* v. *Nyquist*, 573 F.2d 134, 2d Cir. 1976), and ordered the situation to be remedied. A four-step voluntary school desegregation plan was implemented, centered on the creation of a number of specialist "magnet" schools - tending to specialize in a particular area of study and often admitting students based on the results of an entrance examination - throughout the city. Soon, 35 percent of Buffalo students attended magnet schools, almost all students were in schools with substantially mixed populations, and the desegregation plan was deemed a success. The plan's implementation was especially renowned for lacking racial tension, differentiating it from the racial antagonism that existed in cities like Boston, New York, Cleveland, and Detroit during the implementation of their desegregation plans. However, with

times" for state aid, Buffalo's then-Mayor James D. Griffin substantially cut back on city aid to the district. However, levels of state aid vary from year to year and aid has at times been reduced or held level without regard for inflation. The city's worsening financial situation since the late 1970s prevents it from restoring previous levels of educational funding in response to periodic cutbacks in state aid.

One of the main negative features of Section 2576, then, is that the law, while preventing the "dependent" school districts from raising their own funds through taxation and making them instead dependent on aid from the federal, state, and city governments, did not give "the five...cities additional taxing authority to help pay for the added burden of funding education as well as municipal operations" (Scott & Linsky, 1998, p. 3) nor did it set a level of aid which was to be provided by the state from year-to-year. Therefore, "the ability of the Buffalo public school district to plan for anything is limited by the ability of its leaders to guess what revenues it will have" (ibid.) available for its budget each year. This has become especially clear following the 2001 attacks on New York's World Trade Center, which greatly exacerbated challenges to the current state of public education in Buffalo.

The events of September 11, 2001, which can be broadly considered as a hallmark of globalization, with roots in the global structural, economic, and cultural shifts developing in the aftermath of the "oil shocks" of the 1970s, brought the state's school funding problems, which had existed more "quietly" for years, to the fore. Almost immediately following the attacks on the World Trade Center, state funding which had been budgeted for schools was channeled to New York City in efforts to handle the disaster at the same time that federal aid to New York was redirected to the United States Defense Department. The state's education budget, which

continued "white flight" and economic marginalization, student intakes of the Buffalo Public Schools today bear little resemblance to those that were relatively ethnically balanced three decades ago.

notifies Buffalo and other "dependent" districts about incoming education funding and allows them to plan their individual budgets is due on April 1 each year. However, the state legislature has often been late in submitting this budget, leaving the "dependent" districts to run on anticipated funding. This was the case in 2001 when, on September 11, the education budget was already nearly six months overdue. As the state legislature searched for ways to finance responses to the disaster, the as-yet-undelivered education budget was targeted as a source for additional funding.

The combined effects of a late state budget and the events of September 11, 2001, "wreaked havoc on school budgets throughout the state and left a gaping hole in Buffalo's spending plan" (Simon, 2002a). The Buffalo schools abruptly lost \$28 million that had been earmarked for city schools by the state. Also, because the city schools had opened earlier that month on an anticipated budget that proceeded to fall through, the school board in Buffalo was forced to make massive mid-year cuts, laying off 303 district employees (including 195 classroom teachers) and reducing educational programming. The layoffs were made based almost entirely on seniority. This policy heavily affected many of the city's lowest-performing schools, which tended to have the highest percentage of less experienced teachers as a result of the primacy of seniority in the district's granting of teachers' transfer requests. In effect, then, many schools that could least afford staff losses were faced with the largest reductions during the 2001-2002 school year.

In the years immediately following the events of September 11, 2001, massive budget deficits resulted in \$21 million being cut from the budget for the 2002-2003 academic year, \$40 million for 2003-2004, \$5 million for 2004-2005, and \$10 million for 2005-2006. Combined, these cuts reduced the number of Buffalo public school teachers by nearly 1,000, and eliminated

substantial numbers of librarians, computer teachers, early intervention positions, school nurses and guidance counselors, teacher's aides and assistants, clerical and support staff, and administrators. In addition, five school buildings were closed, class sizes were increased, and extracurricular activities, including most non-varsity level district sports programs as well as before- and after-school programs for struggling students, were significantly reduced by the district.<sup>3</sup>

Respective increases of \$36 million and \$41 million in state aid for the 2006-2007 and 2007-2008 school years brought brief respite to Buffalo's school budgeting woes, allowing the district to avoid the sort of cuts implemented during the five previous academic years. However, while some after-school and sports programs, as well as the number of school nurses and attendance teachers, were partially restored within city schools, the aid increases of 2006-2007 and 2007-2008 did little to overturn the negative effects of previous budget cuts as the bulk of any gains in school funding served to finance rising pension and health care costs (as well as rising numbers of charter schools and charter school students in the district), which continue to increase despite declining student enrollment overall. Furthermore, the nation's financial meltdown in 2008, which was particularly hard felt in New York State, precipitated a new round of multi-million dollar deficit crises and budget cuts within the Buffalo Public Schools. Since 2008, the district has closed an additional seven schools and consolidated others, increased class sizes, eliminated many of the after school and sports programs that were reduced and then partially restored in the years after 2001, and laid off over 10 percent of its workforce (including

<sup>&</sup>lt;sup>3</sup> These cuts can be especially detrimental to the school-based formation of social capital as many close studentteacher and student-student relationships are "developed through interactions outside of normal academic or administrative routines, through participation in school organizations or clubs, athletic teams, formal extracurricular activities, remedial classes, after-school detention, or special elective courses" (Stanton-Salazar, 2001, p. 174).

104 teachers, 150 teachers aides and assistants, and roughly 150 other district staff positions just prior to the 2011-2012 school year).

In short, Buffalo and its public schools have suffered greatly as a result of the systemic macro-structural changes in the global economy and its national and regional manifestations. The particular impact of federal, state, and local educational policy responses to these changes on Buffalo's students are examined next. These policy responses are then contrasted with the process by which students and the broader community in Buffalo have worked to negotiate them.

#### **Educational Responses to Globalization**

# **Educational Policy Responses**

Many governments tend to perceive education as a cure-all for problems such as the poverty and increasing disparities in wealth (Tyack & Cuban, 1997; Baker & Le Tendre, 2007) characteristic of the shift to post-industrialism described above. Reflecting Horace Mann's (1848) conceptualization of schooling as the "great equalizer," this belief has led the United States to create one of the world's most comprehensive public school systems. However, "the Utopian tradition of social reform through schooling has often diverted attention from more costly and difficult societal reforms" (Tyack & Cuban, 1997, p. 21).

In recent years, neoliberal education reformers at both the national and the state level have argued that the social and economic contexts of post-industrialism demand fundamental systemic changes to the bureaucratic system of education characteristic of the post-war era. These changes include school choice and market competition between schools and the frequently associated imposition of accountability, most often through the introduction of high-stakes standardized testing regimes, and reforming school curriculum and pedagogy to focus on teaching students the skills and knowledge they need to be productive workers (Hursh, 2007).

Proponents of accountability-driven free market reform in education (cf. Chubb & Moe, 1990; Friedman, 1955, 1995) claim that it "levels the playing field" between rich and poor, broadening the base of students possessing the skills necessary to thrive in the global economy while simultaneously bolstering the nation's position within it. However, others contend that neoliberal education reform is in the interest of neither the majority of the nation's citizens nor its economy, arguing that market reforms may reinforce and even intensify social rigidities and inequalities which already exist in the United States (Hursh, 2007). Instead of doing away with a bureaucratic and stratified educational system which prepared members of the upper class for elite positions and the majority of the population for routine production jobs, free market reforms most often act as a covert way of preserving the privileges of those at the top of the social spectrum. Brown (1997) conceptualizes moves towards choice models, such as the one that currently exists in Buffalo, as the "rise of the parentocracy," arguing that, as a result of parental school choice, the education a child receives is attached not to his or her ability or effort, but to the wealth and desires of their parents.<sup>4</sup> Furthermore, a more thorough knowledge of "the system" and the reputations and missions of various schools often carried by middle-class parents can allow them to maximize the benefits accrued by their children in the education market (Ball, Bowe, & Gewirtz 1995; Ball 2003). Finally, the equity of the high-stakes testing, especially along racial, ethnic, and social class lines, has been called into question (Hursh, 2007; Darling-Hammond, 2010; Ravitch, 2010). However, since the release of the National Commission on Excellence in Education's A Nation at

<sup>&</sup>lt;sup>4</sup> Buffalo's school choice model divides the district into three zones. Parents and students are then able to pick from any elementary or charter school in the zone that they live in, to attempt to gain exam-based admittance into one of the city's higher-profile "exam schools," or to pay for education in a private or parochial school. School choice provisions have been implemented nationwide in accordance with No Child Left Behind legislation.

*Risk* report in 1983, and especially with the 2002 implementation of No Child Left Behind (NCLB) legislation, which for the first time mandated that states receiving federal education funding set specific targets for pass rates on standardized examinations for schools and impose penalties and sanctions for those not meeting them, the United States has nonetheless undergone a move towards an accountability-based education market.<sup>5</sup> This is evidenced, for example, by the Obama administration's Race to the Top initiative, which has effectively pushed forward many of NCLB's key tenets such as the marketization of education (mainly through the creation of charter schools and by tying teacher evaluations to their students' performance on standardized tests) while ignoring broader systemic issues like unequal school funding or the intense re-segregation occurring in American schools since the Reagan administration.

Driven by the conditions and legislation outlined above, and despite the criticisms detailed alongside them, New York State has implemented some of the most stringent testing standards in the United States. For example, Hursh notes that: "Previous to the passage of NCLB ... students initially confronted passing nine standardized exams in grades four through eight and passing five standardized exams for high school graduation - one each in English, math, science, U.S. history, and global studies. With the passage of NCLB, students now face twenty-one

<sup>&</sup>lt;sup>5</sup> NCLB mandates standardized testing in mathematics and reading to be conducted annually in grades three through eight and once during high school. Tests results, for each school (and for subgroups of students within them, delineated by gender, race, income, disability status and English language proficiency) must be reported and compared to state-determined targets for adequate yearly progress (AYP), designed to meet the law's requirement that all students reach 'proficiency' in each subject by 2014. Schools are subject to sanctions if any one subgroup of its students fails to meet these targets. If any one subgroup of a school's students fails to meet its AYP target, the entire school is labelled as failing. Schools that do not meet AYP for two consecutive years are designated as "in need of improvement" and students there are offered the option of transferring to another public school. If schools fail to meet AYP for a third consecutive year, students there are entitled to federally-funded tutoring and supplemental services such as after-school programs (all of which can be provided by state-approved private entities). Schools failing to meet AYP for four consecutive years must take "corrective action" such as the implementation of a new curriculum or the replacement of school staff "responsible for the continued failure to make AYP" (U.S. Department of Education, 2002; my emphasis). Finally, if a school fails to meet AYP for a fifth consecutive year, the school district must initiate plans for "fundamental restructuring," which may include "reopening the school as a charter school ... or turning over the operations ... to the state or ... a private company with a demonstrated record of effectiveness" (U.S. Department of Education 2002).

exams *before* they enter high school" (2007, p. 3, my emphasis). Some processes by which students and the broader community in Buffalo have negotiated the educational reforms and testing regimes detailed above are examined next.

## Social Capital and Students' Negotiation of Globalization's Educational Challenges

The 2000-2001 school year was the first in which New York State's high school seniors were required to pass standardized examinations in English and mathematics as a precondition for graduation. That year, more than 700 of the Buffalo public school district's roughly 2,100 seniors, one-third of the potential graduating class, had yet to pass one or both of these examinations with less than one month remaining in what would otherwise have been their final year of high school.

Confronted with the possibility of a severely reduced graduating class, the district's efforts to assist those in danger of failing were supplemented by volunteers from neighboring colleges and community groups, by teachers voluntarily offering help, and by city high school students who had already passed the exams. Local pastors were called on by the district to discuss tutorial sessions at church services and citywide informational meetings for parents were held in attempts to inform them about useful tools for helping their children succeed on the tests. Local religious institutions and Boys and Girls Clubs established evening and weekend tutorial sessions to help students prepare to re-take examinations that they had failed in the past. Finally, a group called Citizen Action and the Buffalo Employment and Training Center orchestrated efforts by the Buffalo Youth Opportunity Program and Catholic Charities to provide high school seniors who had yet to pass with eight hours of tutoring each week at area locations ranging from Friends of the Elderly to Hispanics United of Buffalo (Simon, 2002b). The broad base of support is noteworthy here, as is the fact that, that month, nearly 400 of these students passed the

required examinations in the final round of testing for the year. While the problems inherent in these standardized and high-stakes testing regimes have been detailed above, the overriding sensation was that, in the face of them, the efforts of these groups, acting together, were largely successful. These efforts are placed here within a social capital framework and serve as the basis for the empirical evidence presented subsequently.<sup>6</sup>

For nearly two decades, the term "social capital" has been increasingly drawn upon and ascribed growing importance by researchers in fields such as sociology, political science, economics, development studies, and education. Educational research utilizing social capital in its analysis most frequently draws on James Coleman's theorization of the concept (Lin, 2001). Coleman focuses mainly on more "positive" aspects of social capital arising functionally from social interaction not always specifically undertaken to create it. Theoretically, Coleman views social capital as relatively intangible but appearing in three forms: (a) level of trust, as evidenced by obligations and expectations; (b) information channels; and (c) norms and sanctions that promote the common good over self interest (Dika & Singh, 2002, p. 33). He believes the concept to be "defined by its function. It is not a single entity, but a variety of entities, with two elements in common: They all consist of some aspects of social structures, and they facilitate certain actions of others - whether persons or corporate actors - within that structure" (Coleman, 1997, p. 81). Coleman adds, importantly, that "like other forms of capital, social capital is productive, making possible the achievement of certain ends that in its absence would not be possible" (ibid).

<sup>&</sup>lt;sup>6</sup> The description above of the community's response in 2000-2001 is meant to serve heuristically as an example of the potential relationship between social capital and educational outcomes. It is certainly not the only contemporary instance of educationally instrumental social capital "at work" in the community. Most recently, for example, Buffalo's District Parent Coordinating Council, in cooperation with local churches and community groups, staged a direct action campaign that included a boycott of city schools on May 16, 2011, to protest unequal educational opportunities and outcomes in the district (Pasciak, 2011b). The boycott proved instrumental in subsequent calling of a stakeholder meeting including Buffalo city officials, parents, and the state education commissioner to create a plan for improving the city's nine lowest-performing schools.

However, some educational studies (McNeal, 1999; Horvat, Weininger, & Lareau, 2006) have begun to employ notions of social capital as conceptualized by Pierre Bourdieu. This represents an important development and informs this paper's investigation of the distribution of social capital, as Bourdieu's conceptualization stands in considerable tension with that provided by Coleman. Bourdieu defines social capital as: "The aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition - in other words, to membership in a group - which provides each of its members with the backing of collectively owned capital, a 'credential' which entitles them to credit, in the various senses of the word" (1997, p. 51). Bourdieu conceptualizes social capital from a standpoint emphasizing the structural advantage enjoyed by dominant classes in society and, while recognizing the necessity of agency for individual actors, adds that the amount of social capital possessed by an agent is dependent upon the size of the network connections the agent can effectively mobilize and on the volume of the various types of capital possessed in his or her own right by each of those to whom the agent is connected (ibid). Bourdieu sees social capital, then, as working in combination with other types of capital to play an instrumental role in the reproduction of social and educational inequality.

Recently, social capital has been demonstrated as leading to social outcomes (Coleman, 1997; Baron, Field, & Schuller, 2000; Stanton-Salazar, 2001) that, as posited above, would be more difficult or even impossible to achieve in its absence. Educationally, these outcomes include elevated levels of academic attainment and achievement (Dika & Singh, 2002; Barrett, 2006). More broadly, social capital has been hailed by those on both the political right and left as a potential antidote to social exclusion and dislocation resulting from the global macro-structural shifts outlined earlier. However, as mentioned, despite its contemporary "popularity" social

capital's distribution across, and relation to, the structure of society has been under-analyzed by educational researchers tending to work from theoretical perspectives offered by James Coleman (Lin, 2001). Also, little information exists on the influence of context on the ability of agents to access and activate social capital resources (Edwards & Foley, 1998).

Accordingly, this paper aims to examine the distribution of social capital across a representative sample of six public high schools in Buffalo and between sub-groups of students within them. While social capital is of potential value in students' successful navigation of educational policy responses to globalization as outlined above, the data presented next indicates that social capital is unequally distributed, at least across the Buffalo public school district and, likely, across many other urban school districts in the United States.

# Methods

The six schools at which students were surveyed include: Henry High School, a highachieving magnet school comprised mainly of a middle class student intake; Roosevelt Technical High School, a highly successful technical and vocational school with a student intake that is socio-economically and racially mixed; Grant High School, a neighborhood-based academic school with generally declining academic results and a student intake that is largely and increasingly low-income; Raymond School of Hospitality, a vocational high school with a hospitality and culinary focus that has posted rapidly improving academic results among its primarily low-income student population; Main High School, a low-performing neighborhoodbased academic school with a student intake that is predominantly low-income and African American; and Clinton High School, a low-performing neighborhood-based academic school with a student intake comprising large numbers of recent immigrants and students speaking English as a second language.

To accomplish the measurement of social capital among students across these six schools, a survey - a version of the Saguaro Seminar's (2002) short form Social Capital Community Benchmark Survey amended to enable its distribution in paper form to classrooms of high school seniors - was administered to a random sample of roughly 40 percent of the senior class at each school with the aim of reflecting the demographics of the district as a whole. The administration of the survey yielded a sample size of 306 students representing, overall, a 36 percent sample of seniors in these six schools.

		Sample count (and	Buffalo School
Sex	Female	percent of sample) 177 (58)	District (Percent) 52
	Male	129 (42)	48
Race	Black	129 (42)	58
	White	85 (28)	27
	Hispanic	35 (12)	12
	Other	57 (18)	3
Free/reduced price lunch		261 (85)	82
School type	Academic	155 (51)	45
	Vocational	98 (32)	32
	Magnet	53 (17)	23

Table 1: Demographics for survey sample and for Buffalo Public Schools

Student background variables established from the survey include students' sex, race, annual household income, number of siblings, the structure of his or her family (i.e. whether he or she has one or two parents living at home), and parents' highest level of educational attainment. Student educational outcomes were recorded according to students' self-reported grade point average.

Additionally, students' survey responses were used to create a scaled and standardized social capital index for mapping the distribution of social capital among individual respondents in the sample. The index - adapted from Putnam (2001, p. 68) to incorporate measures of parental educational involvement, which has consistently been identified as a valuable source of education-related social capital for students (see, for example, Desforges and Abouchaar (2003) for a review of such studies), and taking respondents' age into account - includes individual indicators of students' access to social capital resources captured in the survey across six categories. Measures of organizational life include the mean number of group memberships reported by the student, the mean number of club meetings the student attended in the last year, and whether or not the student served as an officer for or on the committee of a local or school organization in the last year. Measures of engagement in public affairs include indicators gauging the students' level of interest in politics and national affairs and also whether or not the student attended a public meeting on town or school affairs in the last year. Measures of volunteerism include indicators for the mean number of times the student worked on a community project in the last year and also the mean number of times the student undertook volunteer work in the last year. Measures of informal sociability include indicators for whether or not the student agrees that "I spend a lot of time visiting friends," and also the mean number of times the student entertained at home in the last year. Measures of social trust include

indicators for whether or not the student agrees that "Most people can be trusted" and also whether or not he or she agrees that "Most people are honest." Finally, measures of parental educational involvement include indicators for parental participation in a Parent-Teacher Association (PTA), for the frequency with which students talk with their parent(s) about their current school experience, and for the frequency with which the student receives educational help from his or her parents.

Following the completion of the survey by all students, quantitative analysis was conducted on the results to check for the validity of the index. Of the 91 possible bivariate correlations among the 14 indicators included in the social capital index, over half (47) were statistically significant at the .05 level. Additionally, *all* individual indicators within each component of the index (e.g. measures of parental educational involvement, etc.) were significantly correlated at, minimally, the .05 level. This indicates that, like Putnam's index (2001), the indicators in this adapted index combine to measure distinct but related facets of social capital.

In attempt to quantify and "map" the distribution of social capital across the sample, individual scores from student respondents on the social capital index (ranging from a low of 1 to a high of 51, out of a possible 57) were divided roughly evenly such that 33.3 percent of the sample were placed in a "low" range (social capital index scores of 1-19), 35.0 percent in an "average" range (social capital index scores of 20-28), and the final 31.7 percent into a "high" range (social capital index scores of 29-57). Of course, these scores are "low," "average," and "high" in relation only to the sample surveyed for this study and samples from, for example, a wealthier suburban district would likely have a different range of scores and (as the link between social capital and socioeconomic status in the sample becomes clear later) a larger percentage of

students scoring what would be considered "high" here. Still, establishing and stratifying these benchmark levels of social capital is useful in enabling comparisons (in terms of educational outcomes, socioeconomic status, etc.) between those with relatively little social capital as measured by the social capital index and those with "average" and "high" levels. Results of the attempt described here at measuring and exploring for patterns in the distribution of social capital that might emerge across a representative sample of six Buffalo public high schools and between subgroups of students within them are presented and discussed next.

# Results

It is important to note at the outset that if discriminant analysis is employed to predict students' academic achievement in terms of GPA using the demographic variables of students' sex, race, annual household income, number of siblings, the structure of his or her family (i.e. whether he or she has one or two parents living at home), and parents' highest level of educational attainment - in addition to social capital - as predictors, social capital is found to be the only variable that makes a significant contribution (25 percent) to the prediction. Grades "D" and "A," at "extreme" ends of the spectrum, can be predicted in 77.6 percent of cases (100 percent for "D" and 55.3 percent for "A") using only the social capital index score variable. Likewise, the relationship between social capital and GPA is clear, as the mean social capital score for each GPA category rises across the sample (Figure 1). The apparent impact of district and community efforts in Buffalo to increase the pass rate among graduating seniors in 2000-2001 and detailed above are reflected empirically here as social capital is shown to predict academic achievement and increased social capital is associated positively with higher grades.

However, across the six schools at which students were surveyed for this study, the distribution of social capital is clearly unequal (Figures 2 and 3), with results from a one way

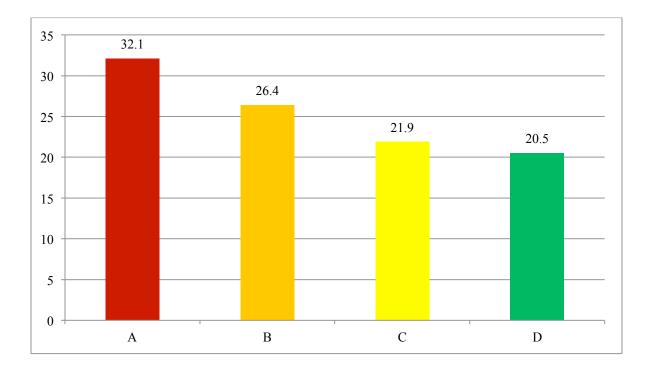
analysis of variance (ANOVA) revealing differences in students' social capital scores between schools in the sample to be statistically significant (F(5, 300) = 17.312, p < .01). Students at Henry High School, recognized nearly universally as the best public high school in Buffalo, combine for the highest aggregate mean social capital index score (32.1) of all schools in the sample. Post-hoc tests reveal this score to be significantly higher (p < .01) than the aggregate mean score for each of the other schools in the sample. Roosevelt Technical Vocational High School is next with an aggregate mean social capital index score of 26.4 for respondents across its sample. Post-hoc tests reveal this score to be significantly higher (p < .01) than the aggregate mean score for each school in the sample with the exception of Henry. Grant High School, though perceived to be a school "in decline," has the third highest aggregate mean score on the social capital index (21.9). Raymond School of Hospitality, perceived to be a school "on the rise," is next with an aggregate mean score of 20.5. Raymond, however, has a greater percentage of respondents with "high" scores on the index than Grant. Main High School and Clinton High School have the lowest aggregate mean social capital index scores, 20.3 and 18.9 respectively.

Henry, as a school, consists of a student body endowed with a vast supply of social capital as 69.8 percent of students randomly sampled there score "high" on the social capital index. Roosevelt Tech is again a clear-cut "second best" with 42.3 percent of its student respondents recording "high" scores. Raymond has the third-highest percentage of respondents with "high" scores on the index. However, its total of 20 percent in this category marks a significant decline from the levels recorded at Henry and Roosevelt Tech. Following a much smaller "drop-off," Grant, Clinton, and Main have, respectively, 18.5, 15.6, and 11.6 percent of students registering "high" scores on the social capital index.

In terms of race (Figures 4 and 5), white respondents (n = 90) in the sample have the highest aggregate mean social capital index score (29) and also the largest percentage of respondents scoring "high" on the index (51.1). Black respondents (n = 126) have an aggregate mean social capital index score (22.1) that is substantially lower and the percentage of Black respondents scoring "high" (27) on the index is roughly half that of white students in the sample. Finally, Hispanic respondents (n = 34) combine for both the lowest aggregate mean social capital index score (20.1) and the lowest percentage of "high" scores (11.8) in the sample. Independent samples t-tests reveal the aggregate mean social capital index score to be significantly higher for white students than for both black (t(214) = 1.95, p = .026) and Hispanic students (t(122) = 2.17, p = .016) in the sample.

In terms of students' annual household income, as a measure of socioeconomic status, there is an increase in the aggregate mean social capital index score and an increase in the percentage of respondents scoring "high" on the index for each increasingly wealthy income group in the sample (Figures 6 and 7). One-way ANOVA results reveal the difference in aggregate mean social capital index scores by socioeconomic status to be statistically significant (F(4, 248) = 12.904, p < .01). Meanwhile, post-hoc tests reveal that those respondents from households earning more than \$100,000 annually have significantly higher (p < .01) aggregate mean social capital index scores than all respondents in groups earning less than \$75,000 and that those with household incomes of more than \$75,000 annually have aggregate mean social capital index scores than all respondents in groups earning less than \$75,000 and that those with household incomes of more than \$75,000 annually have aggregate mean social capital index scores than \$75,000 annually have aggregate mean social capital index scores than \$75,000 annually have aggregate mean social capital index scores than \$75,000 annually have aggregate mean social capital index scores than \$75,000 annually have aggregate mean social capital index scores than \$75,000 annually have aggregate mean social capital index scores than \$75,000 annually have aggregate mean social capital index scores that are significantly higher (p < .01) than all respondents in groups earning less than \$50,000.





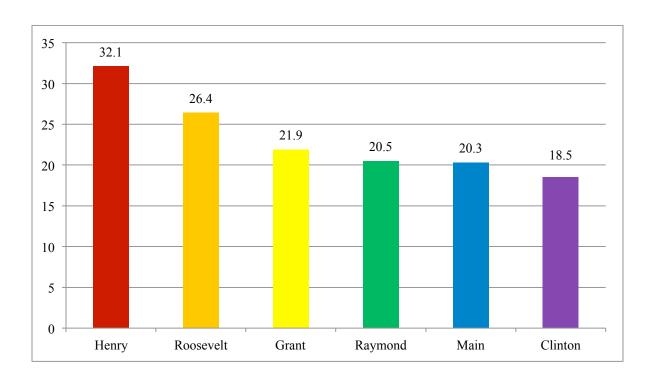


Figure 2: Aggregate mean social capital index score, by school

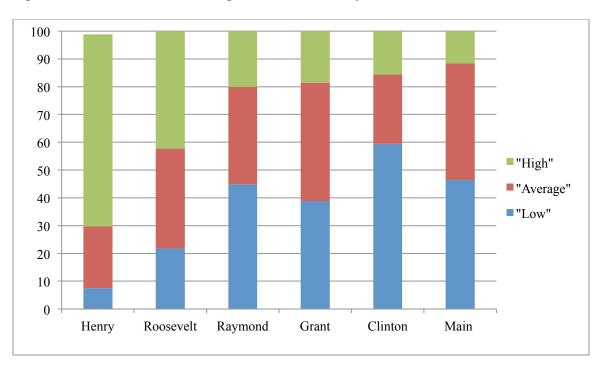


Figure 3: Distribution of social capital index scores, by school

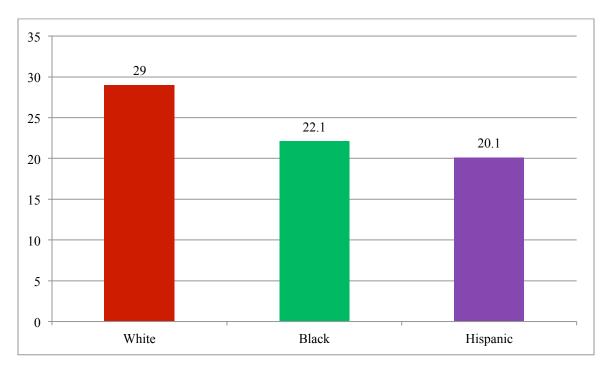
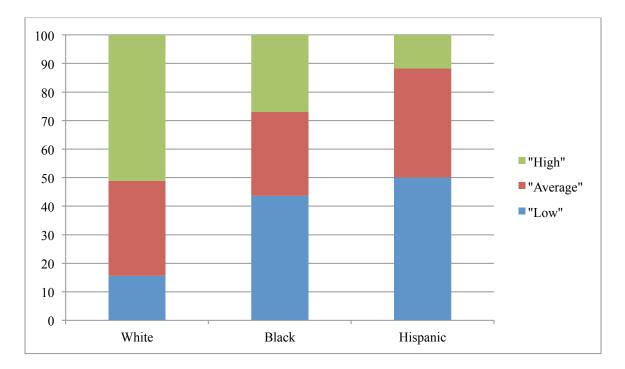


Figure 4: Aggregate mean social capital Index score, by race

#### Globalization and Urban Decline





In sum, the distribution of social capital, which has been demonstrated above to relate significantly to students' educational achievement, is clearly unequal across the sample. Importantly, however, when only those with "high" social capital index scores are included in multiple regression analyses, the statistically significant difference in GPA by socioeconomic status that exists across the sample overall (F (4, 219) = 2.469, p = .046) is no longer statistically significant (F (4, 81) = .969, p = .429).

# Discussion

The results presented above suggest that although many students, perhaps particularly those in urban districts like Buffalo, may be structurally constrained in their access to social capital, for those who *do* access it, social capital may have a significant (and equalizing) "booster effect" on educational achievement. Critically, for example, two low-income students - one with low levels of social capital and one with high levels - have significantly different odds for educational success depending in part on the social capital they possessWhile low-income students are ultimately much less likely than wealthier students to have access to the social capital resources which may prove instrumental in their educational success, efforts to enhance and equalize students' access to social capital, such as those of the school district and community in Buffalo when faced with the possibility of a drastically reduced graduating class in 2000-2001, have proven effective.

As such, social capital clearly should have a place in any discussion concerning the possibility for progressive systems change in education. A student's surrounding community can serve as a valuable educational resource outside the school. While it is recognized that high levels of social capital can help considerably in buffering the adverse educational challenges presented by factors such as poverty, segregation, and social isolation (White & Kaufman, 1997), this paper demonstrates that those faced with these challenges are significantly less likely than others to possess social capital in high levels. In examining the distribution of social capital across Buffalo high schools and between subgroups of students within them, this paper has also demonstrated systemic differences students' in access to educationally instrumental social capital depending on the school they attend, their race, and (most significantly in this study), their socioeconomic status. This draws emphasis back to Bourdieu's (1997) conceptualization of social capital and to Lin's (2001) "strength of position" proposition suggesting that an agent's position in the social structure often strongly conditions their ability to access social capital resources, which can prove instrumental in achieving positive educational outcomes.

Accordingly, those referencing social capital - which has been hailed by those on both the political right and left as a potential antidote to the growing levels of social exclusion and dislocation resulting largely from the macro-structural shifts associated with globalization and

detailed in this paper - are encouraged to think systemically, and to consider also the ramifications of an unequal distribution of social capital throughout society. Likewise, while a number of structurally marginalized students certainly are successful in accessing and activating social capital resources in achieving "against the odds" in the accountability-based educational free market established in the face of global structural and economic shifts towards a postindustrial economy, recent educational policy responses to these shifts appear most likely to reinforce social inequality and to exacerbate the academic challenges faced by these students, especially in the absence of broader efforts to address issues such as child poverty and increasing disparities in wealth and income across the nation, which, based on the results reported here, appear to be strongly linked to the distribution of social capital in schools and society.

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Brian Barrett is an Associate Professor at the State University of New York College at Cortland, in the Department of Foundations and Social Advocacy.