



THE CITY OF NEW YORK
INDEPENDENT BUDGET OFFICE

110 WILLIAM STREET, 14TH FLOOR
NEW YORK, NEW YORK 10038
(212) 442-0632 • FAX (212) 442-0350 • EMAIL: ibo@ibo.nyc.ny.us
<http://www.ibo.nyc.ny.us>

January 25, 2010

Council Member Robert Jackson
Chair, Education Committee
New York City Council
City Hall
New York, NY 10007

Dear Chairman Jackson:

Enclosed is a memorandum describing the findings of a comparison of schools slated for closure by the New York City Department of Education with other schools not facing closure. This analysis was undertaken in response to your request of December 18, 2009.

If you have further questions regarding this analysis, please contact George Sweeting, IBO's Deputy Director, who supervised the work (georges@ibo.nyc.ny.us , 212-442-8642).

Sincerely,

Ronnie Lowenstein

Memo

To: Ronnie Lowenstein
From: James Murphy
CC: George Sweeting
Date: 1/25/2010
Re: Comparisons between Schools Slated for Closing and All Other Schools

Introduction

In recent months, the New York City Department of Education (DOE) has articulated a new school closing policy targeting schools performing in the lowest decile of city schools—schools in the lowest 10 percent when ranked by performance measures—for closure. The list of proposed school phase outs for the 2010–2011 school year has raised the question of whether the schools proposed for closure are in fact performing in the lowest decile in measures adopted by DOE to evaluate schools. IBO has reviewed where the schools threatened with closure fall in the distribution of various measures. We have also compared some of the characteristics of these schools with other schools in the bottom deciles that were not included in this year’s list of schools to be closed.

The results may be summarized as followed:

- While the DOE does not rely solely on quantitative ranks, IBO found that 12 of 15 high schools proposed for closure are in the lowest decile for Progress Report scores, a measure of overall performance. However, there was notable variation in how consistently these high schools were ranked in the lowest decile on other, more narrow measures of school environment and academic achievement.
- All K–8 and middle schools proposed for closure fall in the lowest decile systemwide for Progress Report scores. These schools were also in the lowest 10 percent on school environment and academic achievement variables more consistently than high schools.
- Compared with other high schools in the lowest decile of Progress Report scores, schools proposed for closure generally performed relatively poorly on Progress Reports and academic achievement measures. However, they tended to perform comparably on school environment measures.
- Non-closing middle schools in the lowest decile of Progress Report scores typically outperformed their counterparts proposed for closure. Within the lowest deciles of various environmental and academic achievement variables, the closing group generally scored lower than the non-closing groups.

- On school environment variables P.S. 332, the only K–8 school proposed for closure, tended to perform at similar levels as non-closing K–8 schools in the lowest Progress Report decile, but performed more poorly on Progress Report scores and measures of academic achievement.
- For middle and high schools, levels of capacity utilization in schools proposed for closing are similar to levels of utilization in schools not slated to close. However P.S. 332, the only K–8 school proposed for closure, continues to be substantially further from full capacity than other K–8 schools although this gap has decreased over time.
- Closing high schools usually had greater concentrations of high needs students, students from low-income households and students living in temporary housing compared to the medians for non-closing schools in the same borough. The closing high schools also had more over age students than non-closing schools. For high schools, there was no consistent pattern of increasing shares of high needs students at the closing schools; although some closing schools did see sharp increases, particularly in Brooklyn.

Background

In a late November speech at the Center for American Progress in Washington, D.C., Mayor Bloomberg announced plans to close the lowest performing 10 percent of city schools within four years, reopening them under new leadership. In December DOE proposed the eventual closure of 20 schools¹ beginning in the 2010–2011 school year. Additionally, the department proposed the gradual removal of grades 6–8 at Frederick Douglass III Academy. As in prior rounds of school closings, DOE plans to phase out the affected schools over several years by no longer allowing new entering classes. The proposed changes in utilization will be voted on by the Panel for Education Policy on January 26, 2010.

Annual Progress Report scores are one of the most important factors used by DOE for evaluating schools and proposing closures. Progress Reports offer a letter grade (A to F) for a school’s overall performance based on its performance in three areas of measurement: school environment, student performance, and student progress. Schools also receive separate letter grades for each of the three areas. The letter grades are derived from numeric scores for each area which are calculated from the school’s performance on a set of variables relative to schools citywide and schools with similar student populations, its “peer group.” Particular weight is given to performance relative to each school’s peer group. An overall numeric score is then calculated as a weighted average of scores on the three individual areas. Student progress receives the most weight (60 percent of the overall score) followed by student achievement (25 percent) and school environment (15 percent). Letter grades are then assigned for overall performance, as well as the three areas that contribute to it, based on scores relative to cut scores established by DOE.

While DOE considers Progress Report scores an important tool for evaluating schools, the scores are not the only factor involved in identifying schools for closure. The department’s review covers several years of data from various sources. According to DOE Educational Impact Statements

¹ One school proposed for closing, New Day Academy, currently houses 6th through 12th grades. DOE publishes separate Progress Reports for grades 6 through 8 and grades 9 through 12. Middle school and high school grades are considered separately in the following analysis. On January 21 DOE announced a change to its original proposal to phase out Alfred E. Smith Career and Technical Education High School. Originally proposed for closure in its entirety, the school will maintain its automotive program while all other programs will be phased out. For the purposes of this report, Alfred E. Smith is considered a high school proposed for closing.

that are published for each proposed school closing, schools receiving a D or an F on their annual Progress Reports are subject to leadership change, restructuring, or closure if no improvement is made over time. Schools receiving C grades three years in a row are also subject to these measures. However, schools that do not meet these criteria may also face closure if “the Chancellor has determined [they] lack the necessary capacity to improve student performance.” Quality Review scores—an “experienced educator’s” evaluation of the school—do not contribute to Progress Report scores but are treated as a different, equally important indicator of school quality when identifying schools for closure.

Multiple other considerations may also influence the decision to propose a school for closing. DOE has cited such other factors as organizational behavior (e.g. budget management), history of prior attempts to reorganize the school, low demand for particular school services, negative community feedback, and the possibility of improving school performance through other means. Additionally, replacement options for the school also influence the decision to propose a school for closure.

In light of the various considerations involved in DOE’s decision-making process and that many do not lend themselves to quantification, the following analysis should not be considered an evaluation of the DOE’s school closing process and the current proposals. Instead, it is a snapshot of selected school characteristics for the schools proposed for closure across a set of metrics that are important but not the only possible measures of school performance.

Analysis of several of the performance variables adopted by DOE and the New York State Education Department show that while schools proposed for closure fall in the lowest decile on many variables, they vary in the consistency of their performance. Of the schools recommended for closure 12 out of 15 high schools and all K-8 and middle schools fall into the lowest decile of Progress Report scores. However, some of these schools fare better relative to other low-performing schools in the more narrow measures of school environment and academic achievement included in Progress Reports. Moreover, while schools proposed for closure most often perform more poorly than other schools in the lowest decile of Progress Reports, in some instances they perform as well or slightly better than others in that group.

To test whether there is a relationship between overcrowding and the identification of schools for closure we also examined trends in school utilization rates. Comparisons with utilization citywide and for schools within the lowest decile of Progress Report scores show that utilization rates of middle and high schools proposed for closure and their non-closing counterparts have converged since 2004-2005. However, P.S. 332’s utilization rate continues to trail those of non-closing K–8 schools.

Data

Data were drawn from DOE’s 2009 school Progress Reports and the State Education Department’s list of schools under registration review. While DOE’s Progress Reports offer a wide selection of measures potentially relevant to proposed closures, we limited consideration for this analysis to a relatively small set based on the department’s public explanations of the proposed closings. The variables selected for this analysis may be divided into three groups: overall measures of school performance, measures of school environment, and measures of student academic achievement and progress.

The first set of variables, overall accountability measures, include those designed to rate a school’s performance under city and state accountability systems. Based on measures of school environment and students’ academic achievement and progress, DOE Progress Reports assign a

numeric score from 0 to 100 to each school which is then converted to a letter grade ranging from F to A. A second measure, a school's Quality Review score, represents an "experienced educator's" evaluation of the school. Finally, state and federal differentiated accountability status reflects a school's performance under state standards and the federal No Child Left Behind Act. This status is used to identify schools requiring state intervention to improve student achievement. Neither Quality Review scores nor accountability statuses are incorporated into Progress Report scores. However, DOE claims that Quality Reviews and Progress Reports are equally important evaluation tools. Table 1 presents a more detailed overview of each overall accountability variable that we used in this analysis.

The second set of variables measures school environment. These variables include attendance rates and results of DOE's annual surveys of students, teachers, and parents and are intended to measure "pre-conditions for learning." Survey measures are divided into four groups: academic expectations, engagement, communication, and safety and respect. These variables are used for schools of all grade levels. Table 2 provides more detailed explanations of each environment variable that we used.

The third set of variables is intended to measure academic achievement and progress. For K-8 and middle schools, academic achievement is measured by the percentage of students attaining proficiency on state English and Language Arts (ELA) and math standardized tests administered annually to students in grades three through eight. For academic progress, we include the percentage of students who maintained or raised their proficiency level from one year to the next while scoring at least Level 2 on ELA and math standardized tests.

A different set of variables is used for high school academic achievement and progress. For academic achievement, we used both weighted and unweighted four and six year graduation rates. Academic progress variables measure schools' success moving students towards graduation. These variables include the percentage of first year students earning 10 or more credits, thus ending the year on-track to graduate in four years. Additionally, average Regents completion rate reflects the proportion of required Regents exams students were eligible for each year that were completed by the end of the year. Table 3 provides more detailed explanations of all academic achievement and progress measures included in this study.

While DOE school closing decisions are based on multiple years of data, the analysis presented below is based solely on data reported for the 2009 Progress Reports and the most recent accountability statuses. While this approach prevents a complete reconciliation of DOE's decisions, it is intended to provide the clearest picture of selected schools' *current* performance.

Where appropriate, we calculated percentile ranks for all schools for each of the selected variables. Percentile ranks reflect the rank of a school on a given measure relative to all other schools with values for that measure to determine whether schools slated for closure fall among the lowest 10 percent of schools in each selected measure. Schools were compared to those of the same type (e.g. high schools with other high schools). Although middle schools and kindergarten to eighth grade schools are treated as separate populations, they appear in the same table for systemwide comparisons because there is only one K-8 school proposed for closure.

Overall accountability measures were analyzed differently. Like environment and academic achievement variables, we calculated percentile ranks for each school's numeric score on its Progress Report. Because there are only four possible Quality Review scores and few schools in the system receive scores lower than proficient we instead calculate the percent of schools with equal or lower accountability scores in order to avoid underestimating a school's performance.

Data on school utilization are drawn from DOE's Enrollment, Capacity, and Utilization Reports from 2004-2005 through 2008-2009. The utilization rate measures a school's enrollment as a percentage of DOE's estimated capacity for the school.

Our analysis of the demographic characteristics of the student bodies used data from the DOE that spanned school years 2005-2006 through 2007-2008. As with other comparisons in this analysis, the number of comparison schools in the borough or district grew over time as the department opened new schools. The DOE data did not allow us to distinguish demographics by grade level in cases where only some grades will be phased out such as the Choir Academy of Harlem.

Results of Systemwide Comparisons

a) High Schools

Twelve of fifteen high schools were in the lowest decile of Progress Report scores. Paul Robeson High School barely escaped that group, falling in the 10th percentile, while Alfred E. Smith Career and Technical Education High School and Global Enterprise High School fell in the 21st and 24th percentiles, respectively. Quality Review performance was somewhat better with 10 of 15 schools deemed proficient, a status equal to or better than that of 57.4 percent of schools citywide. The other five had been judged “underdeveloped” or “underdeveloped with proficient features.” While high schools slated for closure generally perform poorly on DOE’s overall accountability measures, none is under registration review by the state. Table 4 displays schools’ ratings for each of the selected overall accountability measures.

Despite schools’ poor performance on overall accountability variables, few consistently performed in the lowest decile for all environment measures selected for this report. Only five schools fell in the lowest decile for three or more of the five variables. Four schools— Christopher Columbus High School, Global Enterprise High School, Jamaica High School, and Metropolitan Corporate Academy— did not fall in the lowest decile for any of the five environment measures. While schools proposed for closure often fell in the lowest decile for individual environment measures, most are not consistently in the lowest decile on each of the five. Table 5 presents percentile ranks for schools for each of the five measures.

A similar pattern emerges for academic achievement and progress. Once again five schools fall in the lowest decile for three or more of the six measures in this category. Three—Academy of Environmental Science, Choir Academy of Harlem, and Global Enterprise High School—ranked above the bottom decile on all six measures. Once again, while many fall in the lowest decile for individual measures, few consistently ranked that low across all measures in the category. Notably, only Norman Thomas High School was in the lowest decile on the majority of both our environmental and our academic achievement or progress variables. Using the same format as Table 5, Table 6 provides more detailed results for high schools’ academic achievement and progress rankings.

b) K-8 and Middle Schools

All six elementary and middle schools proposed for closure fell in the lowest decile of overall Progress Report scores. The highest scoring, Middle School for Academic and Social Excellence, was only in the third percentile among middle schools. Quality Review scores were better. Frederick Douglass Academy III, New Day Academy, and P.S. 332 were deemed proficient on their most recent Quality Reviews. This rating places Frederick Douglass and New Day equal to or better than 56.6 percent of middle schools and P.S. 332 equal to or better than 54.4 percent of K–8 schools. The remaining three schools were rated underdeveloped or underdeveloped with proficient features. As with high schools discussed above, none of the elementary or middle schools in question are under

registration review by the state. Table 7 displays data on selected overall accountability measures for all K-8 and middle schools proposed for closure.

As with high schools, fewer K-8 and middle schools consistently fell in the lowest 10 percent for individual variables. Three of the six schools performed in the lowest decile on three or more of the five school environment measures. Frederick Douglass Academy III, Middle School for Academic and Social Excellence, and P.S. 332 were exceptions. Neither Frederick Douglass nor Middle School for Social Excellence scored in the lowest decile for any variable while P.S. 332 was only in the lowest decile for two. In contrast, Academy of Collaborative Education and New Day Academy both fell in the lowest decile for all environment variables and Collaborative Education scored in the lowest (zero) percentile for four. Table 8 includes percentile ranks for schools on environment measures.

Turning to measures of academic achievement and progress among K-8 and middle schools facing closure, rankings were more consistently in the lowest decile. All the selected K-8 and middle schools fell in the lowest decile on two or more of the four measures. In sum, while three of six K-8 and middle schools proposed for closure had Quality Review scores equal to or greater than half of non-closing schools of the same types, the schools proposed for closure consistently ranked in the lowest decile for Progress Report scores and academic achievement and progress variables. However, these schools performed somewhat better on measures of school environment. Table 9 displays percentile ranks on academic achievement and progress variables for K-8 and middle schools proposed for closure.

c) Summary of Systemwide Comparisons

While schools proposed for closure are generally in the lowest decile for overall accountability measures, their performance on individual measures of school environment and academic achievement were sometimes better. While many scored in the lowest decile for at least one variable, few consistently fell in the lowest 10 percent for many of the variables. Only 3 of the 15 high schools performed in the lowest decile for three or more of the five environment variables while five did so for three or more of the six academic achievement variables. K-8 and middle schools facing closure performed more poorly. Three of six were in the lowest decile in three or more of the five environmental variables while all performed in the lowest 10 percent for two or more of the academic achievement and progress variables.

Comparisons within Lowest Decile of Progress Reports

To ascertain the relative performance of the schools proposed for closure to other low-performing schools, we compared their performance on selected measures to other schools in the lowest decile of Progress Report scores. As with the systemwide comparison, high schools slated for closure tended to perform more poorly than other high schools. Middle schools proposed for closure almost uniformly performed substantially worse than other schools in the lowest decile of Progress Reports. P.S. 332, the only K-8 school proposed for closure, performed on par with its non-closing counterparts on most school environment variables but more poorly on Progress Reports and academic achievement variables.

High schools proposed for closure and in the lowest decile for Progress Report scores tended to perform substantially worse on measures of academic achievement and progress relative to other schools in the lowest decile but performed comparably on school environment measures. The median value for Progress Report scores of high schools proposed for closure and in the lowest decile of this measure was 41.1, somewhat lower than the median value of other schools in the lowest decile

(43.1). While non-closing schools performed somewhat better on attendance, the two groups are very similar on such other measures of school environment as academic expectations, communication, and engagement.

In contrast, high schools proposed for closure and in the lowest Progress Report decile generally had substantially lower median values on most measures of academic achievement. The biggest differences occurred for four-year diploma rates and the percent of first year students earning 10 or more credits. For the former variable, high schools proposed for closure and in the lowest decile of Progress Reports had a median four-year diploma rate of 47.0 percent, 10.4 percentage points lower than non-closing schools in the lowest decile. Similarly, the median share of students earning 10 or more credits was 52.9 percent in schools proposed for closure compared to 63.6 percent in schools that are not recommended for closure. Average Regents completion rate is an exception to this trend. Non-closing schools had a median value of 24.7 percent, only slightly higher than the median value for schools proposed for closing (24.4 percent). Table 10 displays a more detailed comparison between closing and non-closing high schools in the lowest decile of Progress Report scores.

Moving to K-8 and middle schools in the lowest decile of Progress Reports, middle schools recommended for closure consistently performed worse than other low-performing schools. Non-closing middle schools had a median Progress Report score of 58.4 while schools proposed for closing had a median score of 45.3. Results were similar for school environment variables. Non-closing middle schools had a median attendance rate 3.7 percentage points higher than middle schools proposed for closure. They also outperformed those proposed for closure on survey measures with advantages ranging from 0.35 to 0.8 percentage points.

Non-closing middle schools in the lowest decile of Progress Report scores also outperformed their counterparts proposed for closure on measures of academic achievement and progress. Although the median percentage of students making ELA Progress in middle schools proposed for closure (55.3 percent) was only 1.5 percentage points lower than the median for non-closing middle schools (56.8 percent), non-closing schools' advantage ranged from 8.2 to 29.4 percentage points on the other academic variables. Table 11 provides more detailed comparisons for middle schools within the lowest decile of Progress Report scores.

P.S. 332, the only K-8 school slated for closure, generally performed as well as low-performing schools not recommended for closure on most survey measures of school environment. In contrast, its Progress Report score, attendance rate, and most measures of academic achievement fell short of other schools that are not closing. P.S. 332 had a Progress Report score of 50.9, 6.9 percentage points lower than the median value for non-closing K-8 schools. Likewise, P.S. 332 fell short of the median values for non-closing K-8 schools (anywhere from 10.2 to 20.5 percentage points) on 3 of 4 academic measures. However, it slightly outperformed its comparison group on ELA Progress (63.0 percent to 60.4 percent). Turning to environment variables, non-closing K-8 schools had a median attendance rate of 94.1 percent, 5.4 percentage points higher than P.S. 332's attendance rate. However, P.S. 332 fared better relative to its comparison group on survey measures, scoring substantially lower only on safety. Table 12 provides more detailed comparisons between P.S. 332 and other K-8 schools in the lowest decile of Progress Report scores.

In summary, schools proposed for closure and in the lowest decile of Progress Report scores generally performed more poorly than non-closing schools in the lowest decile. Non-closing high schools in the lowest decile of Progress Report scores tended to outperform their counterparts on academic achievement variables. However, the two groups of high schools had roughly comparable scores on school environment variables. K-8 and middle schools proposed for closure had more uniformly poor results. Non-closing middle schools in the lowest decile of Progress Report scores typically outperformed their counterparts proposed for closure. However, P.S. 332, the only K-8

school slated for closure, was on par with other low-performing K–8 schools on three of five school environment measures.

School Utilization among Closing and Non-closing Schools

Examination of school overcrowding and underutilization using utilization rates from 2004–2005 to 2008–2009 school years shows that schools proposed for closing tend to have similar utilization rates when compared with schools systemwide and other schools in the lowest decile of Progress Report scores². Moreover, initial differences in groups' median utilization rates have decreased over time. These results suggest that, at least for middle and high schools, the level of overcrowding or underutilization tends to be no greater in schools proposed for closure than non-closing schools.

a) High Schools

While initial gaps in utilization existed between high schools proposed for closure and all other city high schools, these gaps have decreased over the last five years leaving utilization rates for both groups nearly identical today. Figure 1 displays median utilization rates for both types of schools between school year 2004–2005 and school year 2008–2009. While schools slated for closure had a median utilization rate 16 percentage points higher than other schools in the system in 2004–2005, this gap has narrowed and currently sits at 4 percentage points. Similarly, the gap has closed between high schools proposed for closure and in the lowest decile of Progress Report scores and non-closing schools in the lowest decile. Figure 2 shows that an initial gap of 9 percentage points has decreased to less than 1 percentage point for 2008–2009. High schools proposed for closure appear to no more likely to experience over or underutilization than either non-closing low-performing schools or non-closing city high schools in general.

b) K-8 and Middle Schools

While utilization rates for middle schools slated to close are similar to rates for schools that are not closing, large differences persist between P.S. 332, the only K–8 school proposed for closure, and other K-8 schools. Figure 3 shows that in contrast to high schools, middle schools proposed for closure had a median utilization rate 7 percentage points less than that of non-closing middle schools in 2004–2005, systemwide. Over time, however, the utilization rate of non-closing middle schools has decreased while that of schools proposed for closure has increased. The gap between capacity utilization in P.S. 332 and non-closing K–8 schools is substantially larger. While the gap has decreased from 32 percentage points in 2004–2005, non-closing schools still have a median rate 26 percentage points greater than P.S. 332's utilization rate.

A similar pattern emerges when comparing capacity utilization rates for K-8 and middle schools proposed for closure with other schools in the lowest decile of Progress Report scores. In 2004–2005 the median utilization rate of non-closing middle schools in the lowest Progress Report decile was 8 percentage points greater than closing middle schools' median rate. Figure 4 illustrates that by 2008–2009 this gap had been all but eliminated. P.S. 332's utilization rate, however, was 39 percentage points less than the median rate of other K-8 schools in the lowest decile in 2004–2005. While the gap had narrowed by 2008–2009, it is still a substantial 24 percentage points. Although utilization rates for middle schools proposed for closure and non-closing schools have converged, P.S.

² Closing and non-closing comparison groups refer only to schools that appear in DOE's 2008–2009 Progress Report measures dataset. Schools already phased out are not included.

332 appears to be substantially underutilized compared to non-closing schools both systemwide and within the lowest decile of Progress Report scores.

Review of Demographic Characteristics of Schools

IBO reviewed some of the demographic measures of the schools proposed for closure and compared them with the same measures for schools not facing closure. The set of comparison schools was based on community school districts for the middle schools and K-8 schools, and based on boroughs for the high schools. We also looked at these comparisons over the last three years of data in order to see if there were significant changes in the types of students enrolled, particularly at those schools proposed for closure.

The DOE system of progress reporting takes into account some demographic characteristics of a school by comparing school performance to a peer group of schools with similar demographic makeup. Thus, the presence of large numbers of academically challenged students does not automatically lead to selection for school closure, providing the school's students are achieving educational progress relative to those at similar schools.

IBO found that on nearly every measure the closing high schools had greater concentrations of high needs students, students from low-income households, and students living in temporary housing compared to other schools in the same borough. The closing high schools also had more over age students than non-closing schools. For high schools, there was no consistent pattern of increasing shares of high needs students at the closing schools; although some closing schools did see sharp increases, particularly in Brooklyn, in other boroughs the picture was more mixed. For middle schools and K-8 schools, closing schools tended to have smaller shares of their students with high academic needs, from low-income households, and in temporary housing arrangements than did the non-closing schools in their districts.

IBO also examined some ethnic characteristics for closing and non-closing schools. In Brooklyn and Queens, high schools slated for closure tended to have greater concentrations of black or African-American students (the DOE data treats these categories as synonymous) than the medians for non-closing schools in those boroughs. For Manhattan and Bronx high schools the differences were much smaller. Middle schools saw higher shares for closing schools in three of the four districts with affected schools.

a) High School Comparisons

We examined the prevalence of two types of student populations who face additional academic challenges. The first were those identified as English Language Learners (ELLs) which also included students in transitional bilingual programs, dual language programs, and those in English as a Second Language programs. The second group was students receiving special education services. Here our measure excluded special education students in collaborative team teaching settings which combine a small general education class and a small special education class in the same classroom with two or more teachers.

The percentage of students identified as English Language Learners at the closing schools generally exceeded the median for the non-closing high schools in the comparable borough, with some of the biggest differences occurring among schools in Manhattan, the Bronx, and at Jamaica High School in Queens.(Table 13) Although some closing schools did show an increase from 2006 to 2008 in the share of students classified as ELLs, there were other closing schools in which the share declined and many showed little change at all. As with ELLs, the share of special education students in closing schools generally exceeded the share for non-closing schools in the same borough. Over time

the share of special education students has been rising for 10 of the 12 closing schools in Manhattan, the Bronx, and Brooklyn. The shares among the Queens high schools were steadier.

A second set of indicators provide some evidence of the socio-economic status of students. The share qualifying for free lunch—which is means tested under federal guidelines—is often used as a proxy for the poverty status of a student’s household. The share of students living in temporary housing can be an indicator of how many students are arriving at school from uncertain housing arrangements. Temporary housing can include not only homeless shelters but other situations including temporary doubling up and transitional housing.

A majority of students in the New York City public schools qualify for free lunch. In most cases the closing schools have significantly higher shares who qualify than the non-closing schools in their boroughs, with the exception of Queens, where 2 of the 3 closing schools (Jamaica and Business, Computer Applications and Entrepreneurship High School) have significantly lower shares receiving free lunch than the median for the non-closing schools elsewhere in the borough. (Table 14) The changes between 2005-2006 and 2007-2008 are mixed with some increases and some decreases. The shares in temporary housing were very small at both closing and non-closing high schools, although again, the closing schools tended to have higher shares than at the non-closing schools in the same borough.

Another indicator of whether a school is facing additional instructional challenges is the share of students over age. A student is considered over age if he or she is older than the normal age for starting a grade, such as a 16-year old starting 9th grade. Again, we see that most of the closing schools have a higher share of over age students than the median share for non-closing schools elsewhere in the same borough, with 13 out of 15 exceeding their borough’s median share. (Table 15) Some of the sharpest differences are at Norman Thomas, Christopher Columbus, Paul Robeson, Maxwell, and Jamaica high schools. Although there is a small upward trend in the shares over time, in most cases there are not large increases in the share of overage students from 2005-2006 to 2007-2008.

Our measure of the ethnic makeup of each school’s student body used the DOE categories which treat black or African-American and Hispanic as mutually exclusive, a practice at variance with the U.S. Census, which treats Hispanic origin as a separate dimension from race. The schools facing closure in Brooklyn and Queens had much higher shares of their student bodies identified as black than the median shares for non-closing schools in those boroughs and conversely, they tended to have smaller shares of Hispanic students. (Table 16) There were smaller differences between schools facing closure and the median share for those not facing closure in Manhattan and the Bronx. There was little evidence of systematic changes in the ethnic shares in any of the schools between 2005-2006 and 2007-2008.

b) Middle School and K-8 Comparisons

In general, the comparisons are less clear in the middle schools. In contrast with the high schools facing closure, only one of the five middle schools facing closure, plus PS 332 (the lone K-8 school facing closure) had a higher share of ELLs than the median for non-closing schools in their district. (Table 17) There were large increases in the ELLs share from 2005-2006 to 2007-2008 at New Day Academy and Fredrick Douglass Academy. The Middle School for Social and Academic Excellence was the only middle school facing closure in which the share of ELLs significantly exceeded the median for its non-closing counterparts in its district. In general special education shares were up from 2005-2006 to 2007-2008, not only at the schools facing closure, but also in the median shares for the non-closing schools.

As for students qualifying for free lunch, there was little difference between the shares at the closing schools and the district medians for non-closing schools. For students living in temporary

housing, the share in the non-closing schools exceeded the district median share for non-closing schools in three out of the five middle schools as well as for PS 332. (Table 18) There was no evidence of consistent growth in the shares for these two socio-economic measures at the closing schools from 2005-2006 to 2007-2008.

As was the case with the high schools facing closure, the middle schools identified to be closed also included some with substantially larger shares of black students than the median district share for non-closing schools. This was true in Districts 5, 9, and 12. PS 332 in District 23 had a substantially lower share of black students but a much higher share of Hispanic students than the district medians. There was no consistent pattern of change in the share of students identified as Black and Hispanic over time.

Table 1. Selected Overall School Accountability Measures

Variable	Description
Progress Reports	
Numeric Score	0 to 100 grade based on all measures of school environment, student performance, and student achievement in Department of Education Progress Reports. Includes extra credit schools received for “exemplary student progress” with particular groups of students.
Letter Grade	A, B, C, D, or F grade based on school’s numeric score relative to cutoff points established by Department of Education.
Percentile Rank	Percentage of eligible schools receiving lower numeric scores.
Quality Review Score	“Experienced educator’s” evaluation of “the quality of efforts taking place at the school to track the capacities and needs of each students, to plan and set rigorous goals for each student’s improved learning, to focus the school’s academic practices and leadership development around the achievement of those goals, and to evaluate the effectiveness of plans and practices constantly and revise them as needed to ensure success.” Rated on a 4-point scale, Quality Reviews do not factor in Progress Report grades but are considered a different, equally important indicator. Because not all schools receive a Quality Review each year, we report the most recent.
% of Schools with Equal or Lower QR	Percentage of eligible schools that had the same or lower Quality Review score.
State/Federal Accountability Status	Reflects a school’s performance under state standards and the federal No Child Left behind Act. This status is used to identify schools requiring state intervention to improve student achievement. Schools move from “In Good Standing” to “Improvement,” “Corrective Action,” and “Restructuring” as the number of years they fail to make Adequate Yearly Progress (AYP) on state accountability measures increases. Within the latter three categories, the number of measures and students groups not making AYP determines whether a school is categorized, from best to worst, as “Basic” (Improvement schools only), “Focused,” or “Comprehensive.” ¹

SOURCES: New York City Department of Education, New York State Education Department

¹ More detailed definitions of statuses under the differentiated accountability system may be found in [“New York State Education Department Proposal to Participate in the NCLB Differentiated Accountability Pilot Proposal Memo.”](http://www.emsc.nysed.gov/nyc/APA/Differentiated_Accountability/DA_home.html) http://www.emsc.nysed.gov/nyc/APA/Differentiated_Accountability/DA_home.html

Table 2. Selected School Environment Measures

Variable	Description
Attendance Rate	Total number of days attended by all students divided by total number of days on school's register for all students
Academic Expectations	"Degree to which a school encourages students to do their best and develop rigorous and meaningful academic goals." 0 to 10 score based on Department of Education survey questions to students, parents, and teachers.
Communication	"Degree to which a school effectively communicates its educational goals and requirements, listens to community members, and provides appropriate feedback on each student's learning outcomes." 0 to 10 score based on Department of Education survey questions.
Engagement	"Degree to which a school involves students, parents, and educators in a partnership to promote student learning." 0 to 10 score based on Department of Education survey questions.
Safety	"Degree to which a school provides a physically and emotionally secure environment for learning." 0 to 10 score based on Department of Education survey questions.

SOURCE: New York City Department of Education

Table 3. Selected Academic Achievement and Progress Measures

Variable	Description
<i>High Schools</i>	
4-Year Diploma Rate	Percentage of students in the 2005 cohort year active in or last assigned to the school and were not discharged from cohort that graduated with a Regents or Local Diploma
6-Year Diploma Rate	Percentage of students who began high school in 2003 cohort that graduated with a Regents or Local Diploma.
Weighted 4-year Diploma Rate	4-year diploma rate weighted by type of diploma attained.
Weighted 6-Year Diploma Rate	6-year diploma rate weighted by type of diploma attained.
Percent of 1 st Year Students Earning 10 + Credits	Percentage of students who accumulated 10 or more credits in their first year.
Average Remaining Regents Completion Rate	Proportion of Regents English, Math, Science, U.S. History, and Global History tests that students were eligible to pass at the beginning of the school year that they passed by the end of the school year. Students were considered eligible if they had not yet received a passing score on the test.
<i>K-8 and Middle Schools</i>	
Percent ELA Level 3/4	Percentage of students scoring at Level 3 (“proficient”) or Level 4 (“advanced”) on state standardized English Language Arts tests.
Percent Math Level 3/4	Percentage of students scoring at Level 3 (“proficient”) or Level 4 (“advanced”) on state standardized Math tests.
Percent ELA Progress	Percentage of students achieving at least Level 2 and matching or exceeding previous year’s performance on state standardized English Language Arts tests.
Percent Math Progress	Percentage of students achieving at least Level 2 and matching or exceeding previous year’s performance on state standardized Math tests.

SOURCE: New York City Department of Education

Table 4. Selected Overall Accountability Measures for High Schools Proposed for Closing

2009 Progress Reports						
	Numeric Score	Letter Grade	Percentile Rank	Quality Review (QR) Score	Percent of Schools with Equal or Lower QR	State/Federal Accountability Status 2009-2010
Academy of Environmental Science	41.6	D	3 rd	Underdeveloped w/ Proficient Features	7.38	Improvement (Year 2)-Comprehensive
Alfred E. Smith Career/Technical Education High school	52.4	C	21 st	Proficient	57.39	Restructuring (Year 2)-Comprehensive
Beach Channel HS	38.1	D	0 th	Proficient	57.39	Restructuring (Advanced)-Comprehensive
Business, Computer Applications, & Entrepreneurship High School	38.8	D	1 st	Underdeveloped w/ Proficient Features	7.39	In Good Standing
Choir Academy of Harlem	39.1	D	1 st	Proficient	57.39	Improvement (Year 2)-Comprehensive
Christopher Columbus High School	39.3	D	1 st	Proficient	57.39	Restructuring (Advanced)-Comprehensive
Global Enterprise HS	53.4	C	24 th	Underdeveloped w/ Proficient Features	7.38	Improvement (Year 2)-Comprehensive
Jamaica High School	41.7	D	3 rd	Proficient	57.39	Restructuring (Advanced)-Comprehensive
Metropolitan Corporate Academy	43.1	D	6 th	Underdeveloped	1.7	Restructuring (Year 2)-Comprehensive
Monroe Academy for Business/Law	40.5	D	2 nd	Underdeveloped	1.7	Improvement (Year 1)-Basic
New Day Academy	42.3	D	5 th	Proficient	57.39	In Good Standing
Norman Thomas High School	36	D	0 th	Proficient	57.39	Restructuring (Advanced)-Comprehensive
Paul Robeson High School	45.8	C	10 th	Proficient	57.39	Restructuring (Year 1)-Comprehensive
School for Community Research/Learning	44.1	C	7 th	Proficient	57.39	Improvement (Year 1)-Comprehensive
W.H. Maxwell Career/Technical Education High School	42.7	D	5 th	Proficient	57.39	Restructuring (Advanced)-Comprehensive
N	310	310	310	352	352	

SOURCES: IBO; New York City Department of Education; New York State Education Department

NOTE: N is the total number of schools that have a value in the first five variables of the chart.

Table 5. School Environment Measures for High Schools Proposed for Closure (Percentile Ranks)

	Attendance Rate	Academic Expectations	Communication	Engagement	Safety
Academy of Environmental Science	30 th	2nd	2nd	1st	2nd
Alfred E. Smith Career/Technical Education High School	5th	13 th	10 th	9th	8th
Beach Channel High School	11 th	10 th	14 th	14 th	1st
Business, Computer Applications, & Entrepreneurship High School	48 th	1st	7th	6th	0th
Choir Academy of Harlem	23 th	2nd	10 th	6th	11 th
Christopher Columbus High School	27 th	19 th	31 st	24 th	14 th
Global Enterprise High School	20 th	31 st	50 th	30 th	20 th
Jamaica High School	19 th	31 st	24 th	30 th	41 st
Metropolitan Corporate Academy	11 th	25 th	24 th	37 th	41 st
Monroe Academy for Business/Law	7th	10 th	20 th	14 th	11 th
New Day Academy	3rd	4th	14 th	14 th	2nd
Norman Thomas High School	3rd	13 th	20 th	9th	5th
Paul Robeson High School	0th	13 th	14 th	20 th	3rd
School for Community Research/Learning	8th	52 nd	56 th	44 th	41 st
W.H. Maxwell Career/Technical Education High School	2nd	38 th	50 th	24 th	11 th
N	395	395	395	395	395

SOURCES: IBO, New York City Department of Education

NOTE: N is the total number of schools that have values for the variables.

Table 6. Academic Achievement and Progress Measures for High Schools Proposed for Closure (Percentile Ranks)

	4-Year Diploma Rate	6-Year Diploma Rate	Weighted 4-Year Diploma Rate	Weighted 6-Year Diploma Rate	Percent of 1 st Year Students Earning 10+ Credits	Average Remaining Regents Completion
Academy of Environmental Science	13 th	37 th	10 th	36 th	16 th	10 th
Alfred E. Smith Career/Technical Education High School	5 th	13 th	34 th	59 th	9 th	10 th
Beach Channel High School	7 th	18 th	16 th	37 th	4 th	24 th
Business, Computer Applications, & Entrepreneurship High School	23 rd	28 th	22 nd	26 th	4 th	16 th
Choir Academy of Harlem	24 th	71 st	11 th	28 th	14 th	26 th
Christopher Columbus High School	2 nd	10 th	2 nd	9 th	2 nd	8 th
Global Enterprise High School	13 th	51 st	17 th	22 nd	18 th	17 th
Jamaica High School	6 th	17 th	15 th	39 th	1 st	17 th
Metropolitan Corporate Academy	7 th	29 th	13 th	13 th	30 th	22 nd
Monroe Academy for Business/Law	14 th	11 th	24 th	15 th	2 nd	6 th
New Day Academy	20 th	NA	40 th	NA	7 th	NA
Norman Thomas High School	3 rd	7 th	6 th	22 nd	6 th	16 th
Paul Robeson High School	2 nd	39 th	0 th	22 nd	11 th	5 th
School for Community Research/Learning	4 th	15 th	3 rd	7 th	6 th	9 th
W.H. Maxwell Career/Technical Education high School	4 th	4 th	2 nd	4 th	23 rd	1 st
N	325	246	325	246	382	347

SOURCES: IBO, New York City Department of Education

NOTE: N is the total number of schools that have values for the variables.

Table 7. Selected Overall Accountability Measures for K-8 and Middle Schools Proposed for Closing

2009 Progress Reports						
	Numeric Score	Letter Grade	Percentile Rank	Quality Review (QR) Score	Percent of Schools with Equal or Lower QR	Under Registration Review?
Academy of Collaborative Education	35.7	D	<i>0th</i>	Underdeveloped	0.92	No
Frederick Douglass Academy III	45.3	C	<i>1st</i>	Proficient	56.57	No
KAPPA II	37.8	D	<i>0th</i>	Underdeveloped w/ Proficient Features	7.34	No
Middle School for Academic /Social Excellence	53.2	C	<i>3rd</i>	Underdeveloped w/ Proficient Features	7.34	No
New Day Academy	52.7	C	<i>2nd</i>	Proficient	56.57	No
P.S. 332 (K to 8)	50.9	C	<i>0th</i>	Proficient	54.4	No
N for MS (K to 8)	329 (118)	329 (118)	329 (118)	327 (125)	327 (125)	

SOURCES: IBO; New York City Department of Education; New York State Education Department

NOTE: N is the total number of schools that have values for the variables.

Table 8. School Environment Measures for K-8 and Middle Schools Proposed for Closure (Percentile Ranks)

	Attendance Rate	Academic Expectations	Communication	Engagement	Safety
Academy of Collaborative Education	2nd	0th	0th	0th	0th
Frederick Douglass Academy III	39 th	38 th	58 th	47 th	51 st
Kappa II	27 th	0th	0th	0th	0th
Middle School for Academic/Social Excellence	11 th	15 th	29 th	35 th	12 th
New Day Academy	8th	1st	8th	8th	1st
P.S. 332 (K to 8)	1st	14 th	29 th	28 th	4th
N for MS (K to 8)	364 (141)	364 (141)	364 (141)	364 (141)	364 (141)

SOURCES: IBO; New York City Department of Education

NOTE: N is the total number of schools that have values for the variables.

Table 9. Academic Achievement and Progress Measures for K to 8 and Middle Schools Proposed for Closure (Percentile Ranks)

	Percent ELA Level 3/4	Percent Math Level 3/4	Percent ELA Progress	Percent Math Progress
Academy of Collaborative Education	6th	4th	11 th	1st
Frederick Douglass Academy III	27th	36th	2 nd	3rd
KAPPA II	13 th	9th	10th	4th
Middle School for Academic/Social Excellence	1st	1st	38 th	13 th
New Day Academy	10 th	0th	23 rd	3rd
P.S. 332 (K to 8)	10 th	2nd	25 th	0th
N for MS (K to 8)	363 (141)	364 (141)	363 (141)	364 (141)

SOURCES: IBO; New York City Department of Education

NOTE: N is the total number of schools that have values for the variables.

Table 10. Closing and Non-closing High Schools in Lowest Decile of Progress Report Scores

Median Values on Selected Measures

	Closing	Non-Closing
Progress Report Numeric Score	41.1	43.1
School Environment		
Attendance	79.15%	83.4%
Academic Expectations	6.8	6.9
Communication	6.0	5.9
Engagement	6.1	6.2
Safety	6.4	6.7
Academic Achievement And Progress		
4-Year Diploma Rate	47.0%	57.4%
6-Year Diploma Rate	57.8%	65.9%
Weighted 4-Year Diploma Rate	89.4%	103.3%
Weighted 6-Year Diploma Rate	100.4%	110.4%
Percent of 1 st Year Students Earning 10+ Credits	52.9%	63.6%
Average Remaining Regents Completion Rate	24.4%	24.7%
N	12	19

SOURCES: IBO, New York City Department of Education

Note: N represents the number of schools reported in each column. Some schools may not have values for all statistics reported in each row. Schools without values for a particular statistic were not included in percentile rank calculations.

Table 11. Closing and Non-closing Middle Schools in Lowest Decile of Progress Report Scores
Median Values on Selected Measures

	Closing	Non-Closing
Progress Report Numeric Score	45.3	58.4
School Environment		
Attendance	89.5%	93.2%
Academic Expectations	6.5	7.3
Communication	5.9	6.25
Engagement	6.1	6.5
Safety	6	6.8
Academic Achievement And Progress		
Percent ELA Level 3/4	40.8	62.5
Percent Math Level 3/4	47.0	76.4
ELA Progress	55.3%	56.8
Math Progress	44.9	53.1
N	5	28

SOURCES: IBO; New York City Department of Education

Note: N represents the number of schools reported in each column. Some schools may not have values for all statistics reported in each row. Schools without values for a particular statistic were not included in percentile rank calculations.

Table 12. P.S. 332 and Non-closing K to 8 Schools in Lowest Decile of Progress Report Scores

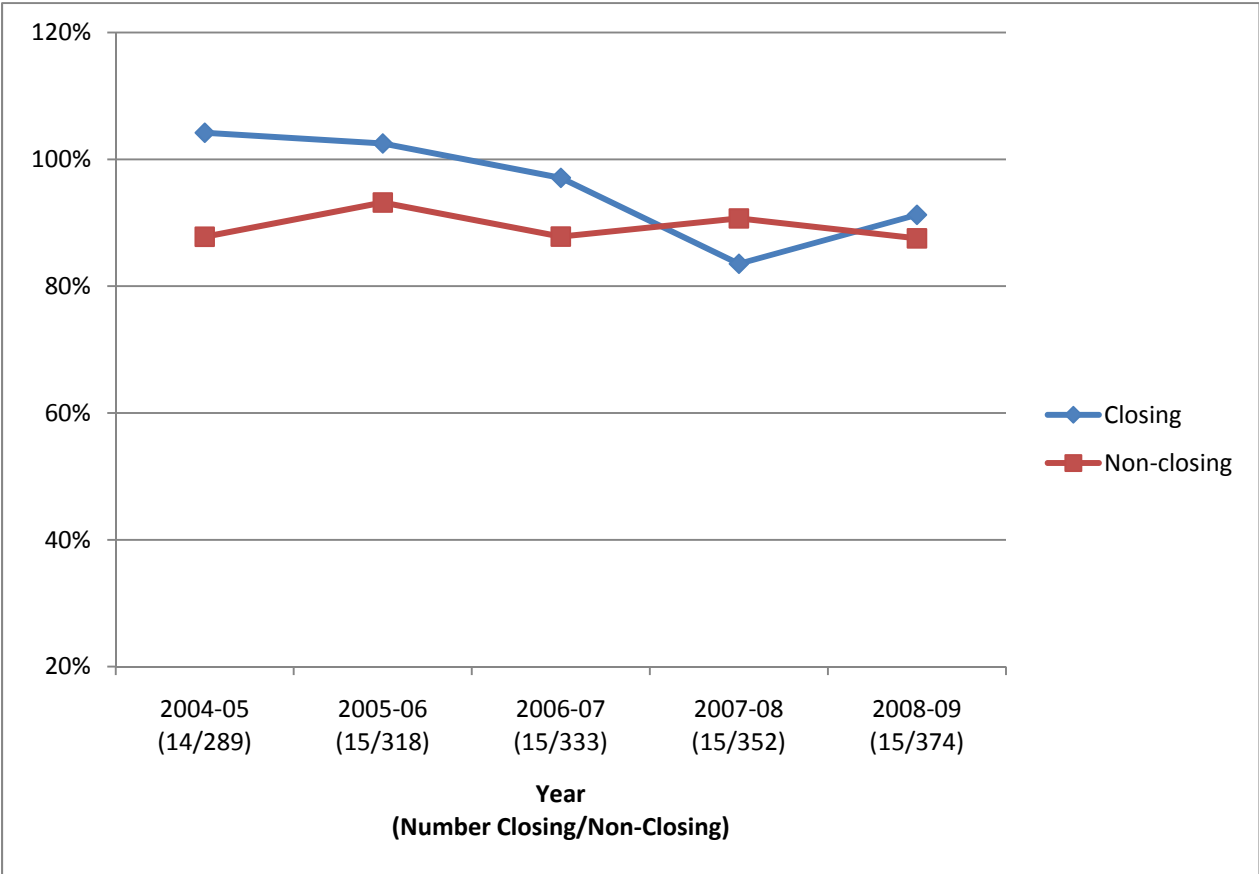
Selected Measures (Median Values for Non-Closing)

	P.S. 332	Non-Closing
Progress Report Numeric Score	50.9	57.8
School Environment		
Attendance	88.7%	94.1%
Academic Expectations	7.3	7.4
Communication	6.6	6.6
Engagement	6.8	6.7
Safety	6.5	7.4
Academic Achievement And Progress		
Percent ELA Level 3/4	51.8%	67.8
Percent Math Level 3/4	61.2%	81.7%
ELA Progress	63.0%	60.4%
Math Progress	47.0%	57.2%
N		13

SOURCES: IBO; New York City Department of Education

Note: N represents the number of schools reported in each column. Some schools may not have values for all statistics reported in each row. Schools without values for a particular statistic were not included in percentile rank calculations.

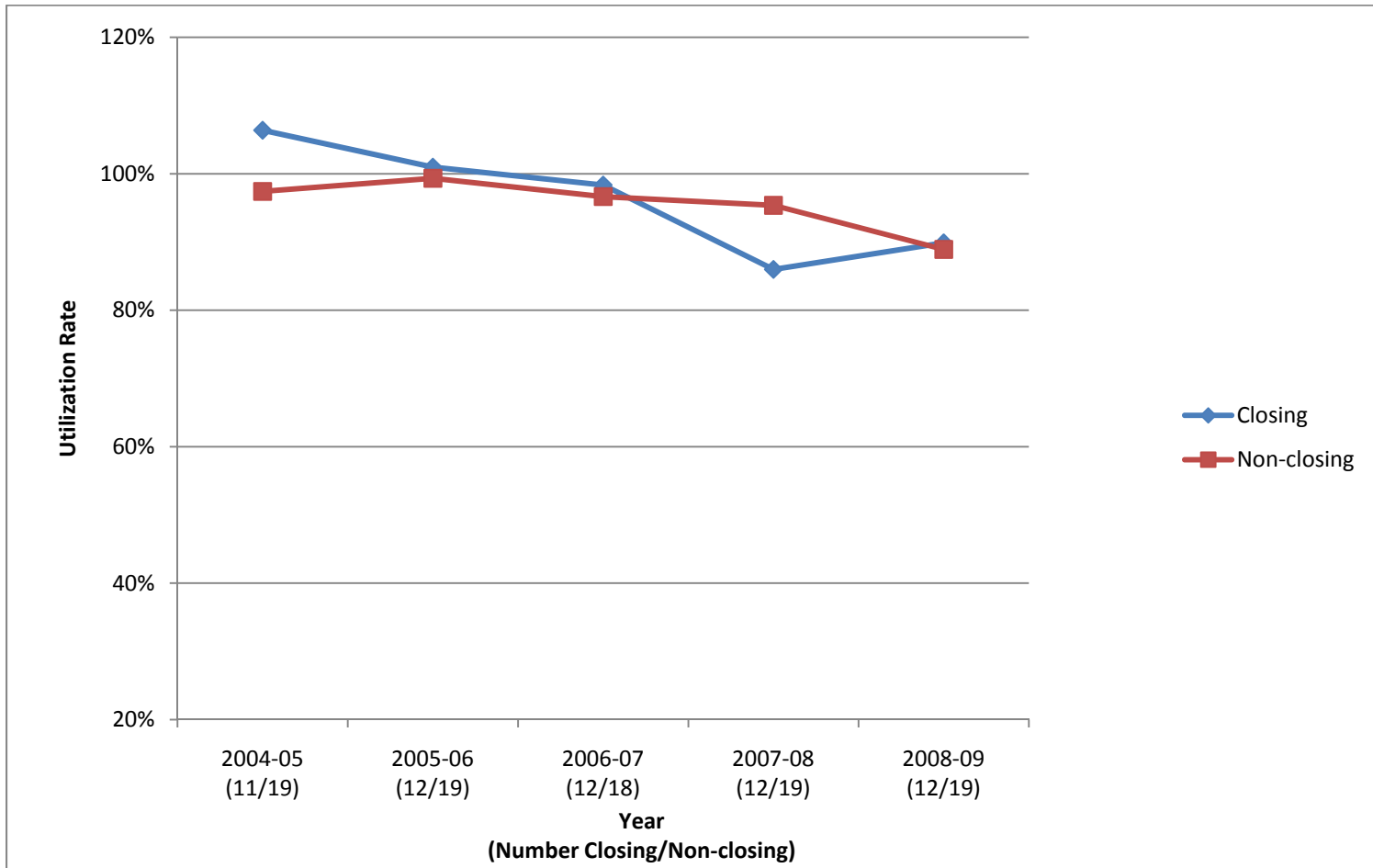
Figure 1. Median School Utilization Rates of Closing and Non-Closing High Schools System-wide
2004–2005 to 2008–2009



SOURCES: IBO; New York City Department of Education

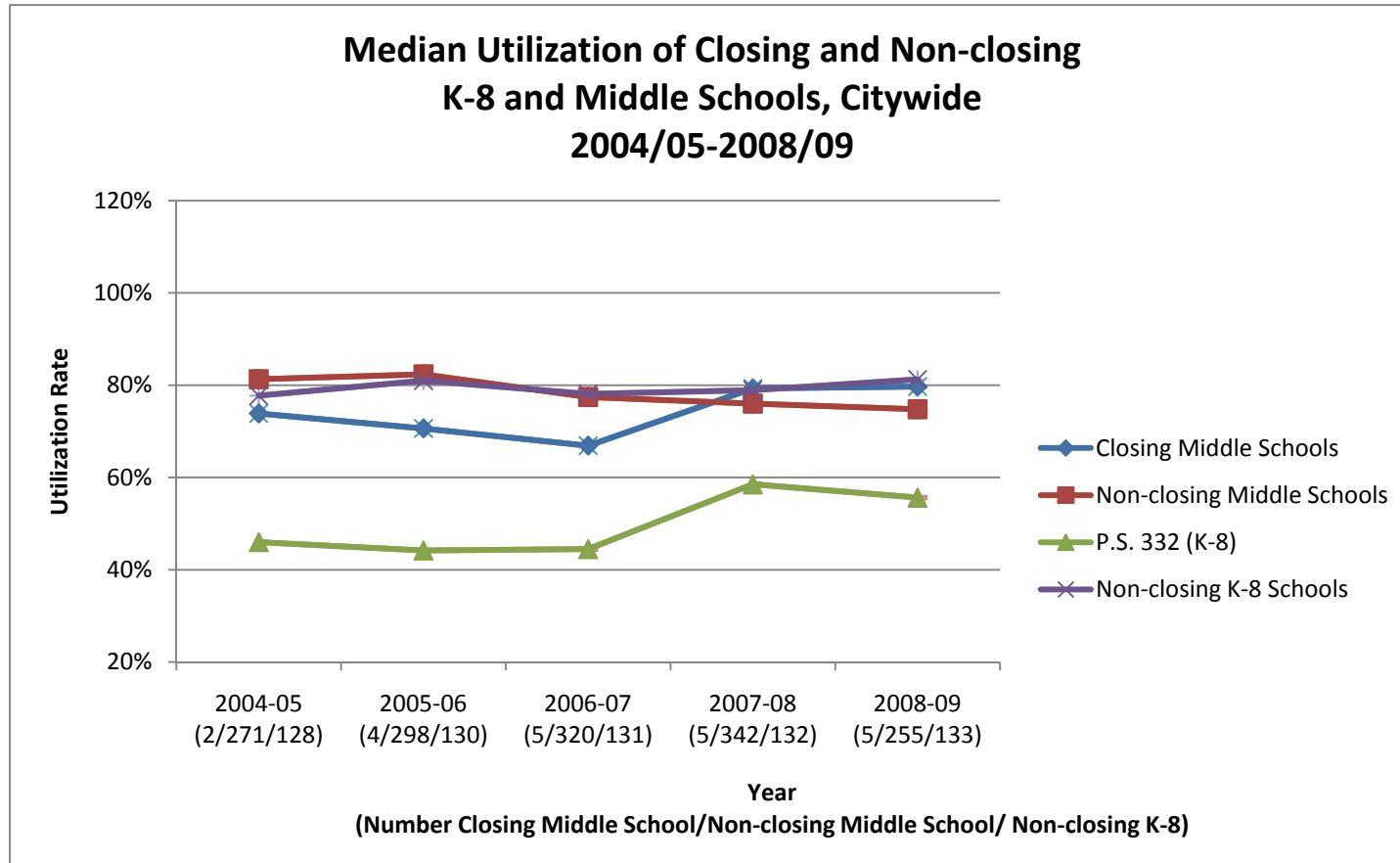
Figure 2. Median School Utilization Rates of Closing and Non-Closing High Schools in Lowest Progress Report Decile

2004–2005 to 2008–2009



SOURCES: IBO; New York City Department of Education

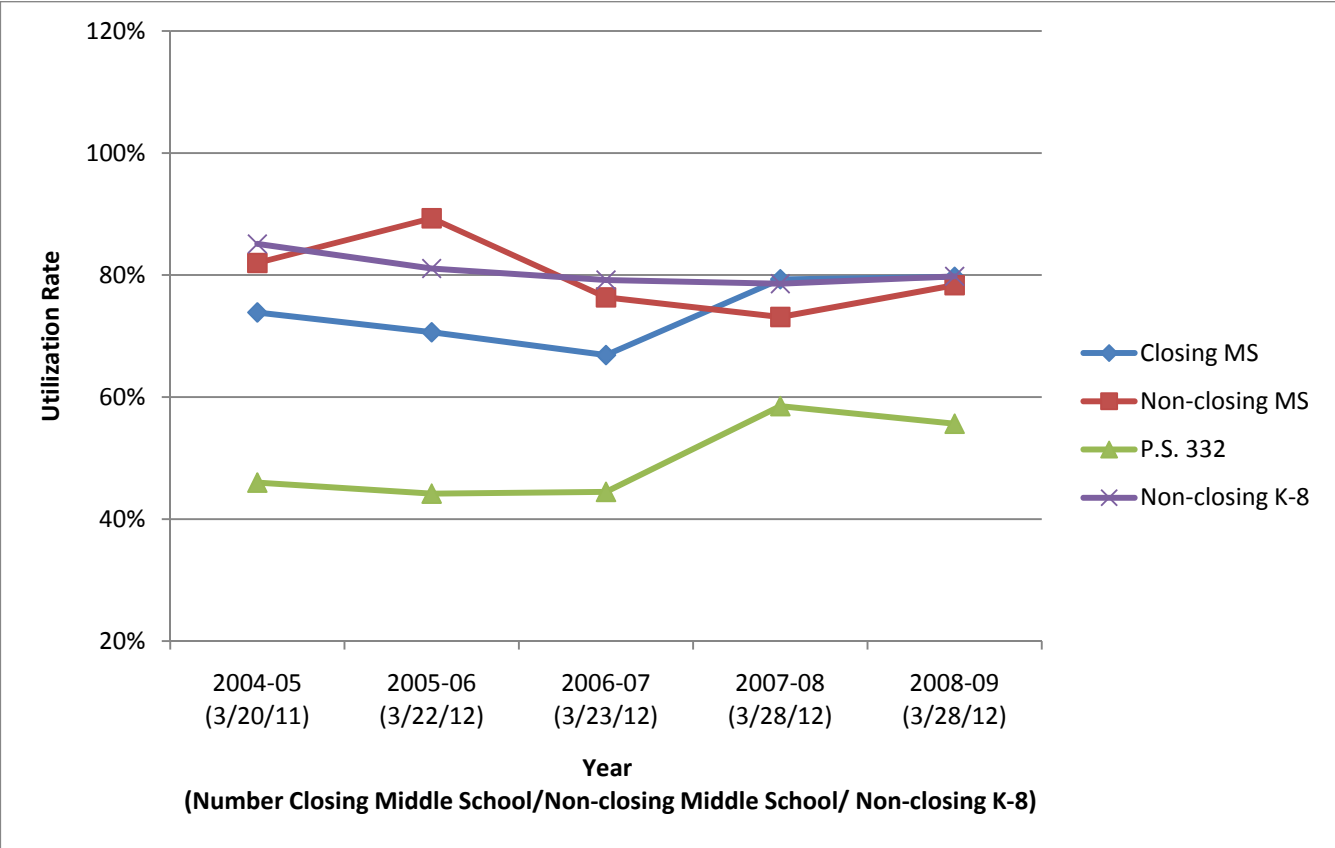
Figure 3. Median School Utilization Rates of Closing and Non-Closing Middle and K-8 Schools System-wide
2004–2005 to 2008–2009



SOURCES: IBO; New York City Department of Education

Figure 4. Median School Utilization Rates of Closing and Non-Closing Middle and K-8 Schools in Lowest Progress Report Decile

2004–2005 to 2008–2009



SOURCES: IBO; New York City Department of Education

Table 13 Students with Additional Academic Needs

	Percent ELL		Percent Special Ed	
	2006	2008	2006	2008
Manhattan				
Academy of Environmental Science	5.1%	6.2%	13.5%	18.3%
Choir Academy of Harlem	1.3	0.0	2.4	7.7
Norman Thomas High School	19.9	16.7	12.8	13.5
Borough Median (Non-closing)	5.6	5.5	7.7	8.0
Bronx				
Alfred E. Smith Career and Technical Ed HS	9.5%	10.3%	15.9%	20.0%
Christopher Columbus High School	17.6	16.4	16.9	19.9
Global Enterprise High School	9.1	15.6	7.2	9.4
Monroe Academy for Business/Law	10.5	9.8	21.0	16.2
New Day Academy	6.8	11.7	6.2	7.7
School for Community Research and Learning	10.1	12.2	10.8	5.1
Borough Median (Non-closing)	9.2	8.9	6.2	8.5
Brooklyn				
Metropolitan Corporate Academy High School	0.0%	2.3%	5.9%	11.8%
Paul Robeson High School	2.6	3.4	3.9	5.0
W. H. Maxwell Career and Technical Ed HS	3.2	4.5	13.9	18.6
Borough Median (Non-closing)	4.3	4.0	6.8	7.0
Queens				
Beach Channel High School	4.1%	3.8%	14.4%	10.9%
Business, Computer Applications & Entrepreneurship	2.7	3.4	13.9	13.4
Jamaica High School	11.2	14.1	9.0	8.3
Borough Median (Non-closing)	5.6	4.8	7.5	6.5

SOURCES: IBO; New York City Department of Education

Table 14 Socio-Economic Indicators

	Percent Free Lunch		Percent in Temp Housing	
	2006	2008	2006	2008
Manhattan				
Academy of Environmental Science	91.0%	68.2%	0.6%	0.9%
Choir Academy of Harlem	63.8	63.8	1.0	0.2
Norman Thomas High School	82.6	68.5	0.7	0.8
Borough Median (Non-closing)	66.1	65.5	0.6	0.5
Bronx				
Alfred E. Smith Career and Technical Ed HS	95.6%	78.1%	0.4%	0.3%
Christopher Columbus High School	63.9	62.3	0.4	1.8
Global Enterprise High School	69.2	88.3	0.3	0.7
Monroe Academy for Business/Law	83.1	85.1	2.0	0.5
New Day Academy	60.0	85.2	2.1	0.9
School for Community Research and Learning	58.6	77.4	1.4	0.5
Borough Median (Non-closing)	74.0	74.6	1.0	0.6
Brooklyn				
Metropolitan Corporate Academy High School	67.8%	68.2%	0.5%	0.5%
Paul Robeson High School	81.6	83.3	0.7	1.2
W. H. Maxwell Career and Technical Ed HS	69.6	79.0	1.0	0.4
Borough Median (Non-closing)	65.4	62.7	0.7	0.5
Queens				
Beach Channel High School	80.1%	65.5%	0.6%	0.4%
Business, Computer Applications & Entrepreneurship	15.8	24.5	0.4	1.0
Jamaica High School	22.2	24.4	0.6	0.7
Borough Median (Non-closing)	40.3	42.9	0.2	0.3

SOURCES: IBO; New York City Department of Education

Table 15 Student Body		
	Percent Overage	
	2006	2008
Manhattan		
Academy of Environmental Science	2.0%	3.2%
Choir Academy of Harlem	0.6	3.5
Norman Thomas High School	9.2	10.6
Borough Median (Non-closing)	1.4	2.0
Bronx		
Alfred E. Smith Career and Technical Education High School	4.5%	5.0%
Christopher Columbus High School	11.2	12.2
Global Enterprise High School	1.3	1.0
Monroe Academy for Business/Law	10.8	8.8
New Day Academy	2.1	2.6
School for Community Research and Learning	3.1	5.9
Borough Median (Non-closing)	1.7	2.6
Brooklyn		
Metropolitan Corporate Academy High School	2.4%	6.8%
Paul Robeson High School	9.2	9.8
W. H. Maxwell Career and Technical Education High School	9.7	11.0
Borough Median (Non-closing)	2.2	2.5
Queens		
Beach Channel High School	9.7%	8.3%
Business, Computer Applications & Entrepreneurship	7.9	4.7
Jamaica High School	9.1	10.6
Borough Median (Non-closing)	1.5	2.1

SOURCES: IBO; New York City Department of Education

Table 16 Student Ethnicity

	Percent Black		Percent Hispanic	
	2006	2008	2006	2008
Manhattan				
Academy of Environmental Science	30.6%	32.6%	66.8%	65.3%
Choir Academy of Harlem	81.9	79.1	15.8	19.5
Norman Thomas High School	21.9	23.2	72.3	72.8
Borough Median (Non-closing)	27.5	29.1	52.9	54.6
Bronx				
Alfred E. Smith Career and Technical Ed HS	32.6%	33.8%	63.9%	63.2%
Christopher Columbus High School	31.4	35.2	51.8	48.5
Global Enterprise High School	38.2	37.7	57.7	57.4
Monroe Academy for Business/Law	32.1	30.2	64.1	67.6
New Day Academy	49.3	46.2	48.6	52.4
School for Community Research and Learning	36.8	37.2	60.8	59.4
Borough Median (Non-closing)	35.1	34.9	59.6	61.0
Brooklyn				
Metropolitan Corporate Academy High School	83.8%	83.8%	12.5%	12.8%
Paul Robeson High School	88.1	88.6	10.0	9.0
W. H. Maxwell Career and Technical Ed HS	66.5	69.3	30.4	27.4
Borough Median (Non-closing)	64.6	65.2	20.6	20.0
Queens				
Beach Channel High School	54.0%	53.1%	27.5%	31.8%
Business, Computer Applications & Entrepreneurship	84.2	82.6	9.0	10.1
Jamaica High School	59.8	61.6	17.6	17.5
Borough Median (Non-closing)	18.1	15.7	24.6	26.1

SOURCES: IBO; New York City Department of Education

Table 17 Students with Additional Academic Needs - Middle Schools

	Percent ELL		Percent Special Ed		
	2006	2008	2006	2008	
	District 5				
	Kappa II	1.0%	2.6%	0.5%	7.7%
	Academy of Collaborative Education		3.2		10.0
	District Median (Non-closing)	7.4	4.6	3.5	7.7
District 9					
	Frederick Douglass Academy III	0.0%		2.0%	2.6%
	Secondary		5.6%		
	District Median (Non-closing)	19.6	20.1	11.0	13.9
District 12					
	New Day Academy	6.8%	11.7%	6.2%	7.7%
	District Median (Non-closing)	11.3	12.6	9.2	10.1
District 17					
	Middle School for Academic and	5.1%	5.6%	11.4%	17.9%
	Social Excellence				
	District Median (Non-closing)	3.7	3.3	6.7	9.2
Students with Additional Academic Needs - K-8 Schools					
	Percent ELL		Percent Special Ed		
	2006	2008	2006	2008	
District 23					
	P.S. 332 Charles H. Houston	6.0%	6.5%	12.8%	15.8%
	District Median (Non-closing)	3.4	3.2	11.7	12.9

SOURCES: IBO; New York City Department of Education

Table 18 Socio-Economic Indicators - Middle Schools

	Percent Free Lunch		Percent Temp Housing		
	2006	2008	2006	2008	
	District 5				
	Kappa II Academy of Collaborative Education	7.7%	62.7%	3.4%	1.0%
			72.7		4.1
	District Median (Non-closing)	70.9	65.2	1.2	0.4
District 9					
	Frederick Douglass Academy III Secondary	62.7%	73.1%	1.6%	0.6%
	District Median (Non-closing)	82.5	80.6	1.8	1.5
District 12					
	New Day Academy	60.0%	85.2%	2.1%	2.8%
	District Median (Non-closing)	78.2	77.6	1.2	0.8
District 17					
	Middle School for Academic and Social Excellence	77.7%	72.0%	1.3%	2.8%
	District Median (Non-closing)	76.5	76.4	1.2	0.9
Socio-Economic Indicators - K-8 Schools					
	Percent Free Lunch		Percent Temp Housing		
	2006	2008	2006	2008	
	District 23				
	P.S. 332 Charles H. Houston	96.0%	77.6%	2.8%	4.0%
	District Median (Non-closing)	86.7	87.3	2.6	2.5

SOURCES: IBO; New York City Department of Education

Table 19 Student Ethnicity - Middle Schools

		Percent Black		Percent Hispanic	
		2006	2008	2006	2008
District 5	Kappa II	80.7%	76.9%	17.9%	20.0%
	Academy of Collaborative Education		74.7		22.6
	District Median (Non-closing)	67.2	60.1	30.7	37.3
District 9	Frederick Douglass Academy III	55.6%		41.8%	41.0%
	Secondary		57.6%		
	District Median (Non-closing)	34.6	35.7	63.5	60.9
District 12	New Day Academy	49.3%	46.2%	48.6%	52.4%
	District Median (Non-closing)	31.0	32.0	64.7	65.4
District 17	Middle School for Academic and Social Excellence	81.0%	87.7%	15.2%	9.9%
	District Median (Non-closing)	89.7	89.9	7.3	7.3
Student Ethnicity - K-8 Schools					
		Percent Black		Percent Hispanic	
		2006	2008	2006	2008
District 23	P.S. 332 Charles H. Houston	62.3%	64.0%	36.9%	34.2%
	District Median (Non-closing)	85.0	83.1	13.8	15.0

SOURCES: IBO; New York City Department of Education