## BREAKING THE LINK

## SECOND ANNUAL REPORT

MAY 2019


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## INTRODUCTION

In the inaugural Breaking the Link report, released in February 2018, we presented data and information to provide a present-day analysis of an historical problem. As with the first report, we suggest that these data are best seen in a historical context to be fully understood.

Nationally, we have grappled for decades with the idea of equity. In a discussion of the landmark legal decision rendered in Brown v. Board of Education of Topeka, Richard Rothstein, a researcher and historian, articulated the significance of the United States Supreme Court's decision: ${ }^{1}$

It is too easy to forget that the Brown decision was propelled not merely by a principled objection to the idea of "separate but equal," but by Southern states' unrestrained contempt for the "equal" part of the formula. Black students were not only segregated but wholly denied meaningful educational opportunity. Schools 60 years ago were separate but not equal. In Clarendon, South Carolina, the school system at the heart of the Brown collection of cases, per-pupil spending in schools for whites was more than four times the rate in schools for blacks. The capital value of schools for whites was nine times the value of shacks for blacks. The pupil-teacher ratio in schools attended by whites was 28 -to-1, for those attended by blacks it was 47-to-1. There were flush toilets in schools for whites and outhouses at schools for blacks; buses transported white students to school while black students walked; schools for whites had janitors while schools for blacks were cleaned by teachers and students themselves. High school vocational programs for whites included typing and bookkeeping, but high school vocational programs for blacks consisted of agriculture and home economics. And so on.

It is against this stark backdrop of inequity that contemporary efforts for educational equity were born. For such disparate conditions produced disparate outcomes. Over time, differences in outcomes became predictably correlated with a student's race and/or income, with students of color (on average) performing consistently lower than their white peers. It is this predictive link we seek to break.

Locally, grappling with inequality has followed a unique and noteworthy journey. In Charlotte, our community's trailblazing path began after Brown. Dorothy Counts ${ }^{2}$ took those first steps for our community in her attempt to integrate Harding High School. Vera and Darius Swann ${ }^{3}$ continued in Counts' footsteps, as did Julius Chambers, their attorney, and Judge James (Jim) McMillan in ruling for the plaintiffs in Swann v. Charlotte-Mecklenburg Board of Education, a ruling that was upheld by the court. The court decision launched a shift in the purposes of busing in Charlotte-Mecklenburg Schools (CMS) from maintaining segregation to creating integration. During that time, District leaders such as Elizabeth "Libby" Randolph, Chris Folk, and Jay Robinson provided needed leadership, stability, and courage.

[^0]CMS became a national example of the possibilities and successes of integration. But challenges and shortcomings remained. At the conclusion of court-ordered busing in Charlotte-Mecklenburg,

More than 80 percent of the black juniors who took [state competency tests to graduate high school], twice the number of whites, failed either the math or the reading components...The problem was simple in its broadest sense: there were still - after all the turmoil and noble hopes of desegregation - too many students who were not being taught. ${ }^{4}$

Though performance rose dramatically and gaps closed slightly, many people were still disappointed by the academic gains. Some 30 years after the initial Swann decision, CMS still had "...a handful of schools in the system that were clearly second class, depressingly inferior to their predominately white counterparts across town". ${ }^{5}$ It is in the shadow of these accomplishments and opportunities that we find ourselves.

## OUR CHARGE:

## EQUITY AND EXCELLENCE

As we continue our efforts to create and foster equity in our school district, we must also maintain an equally zealous pursuit of excellence. To combine the ideas of Adam Urbanski, Rick Hess, and Linda Darling Hammond, excellence without equity is elitism, and equity without excellence produces mediocrity.

As an example, consider measurements and tests taken as students approach the end of their K-12 careers. In 11th grade, all students in North Carolina take the ACT and the vast majority of students go on to graduate the following year. We can look at the percentage of students who earn the minimum ACT composite score to be considered for admission into a North Carolina state college (a score of 17 out of 36) in 2016-2017 and the percentage of students who graduated the following school year, in 2017-2018. In 2016-2017, the percentage of 11th graders who achieved a score of 17 out of 36 on the ACT was $56 \%$. In 2017-2018, the CMS four-year cohort graduation rate was $85 \%$. That gap - though not a perfect apples-to-apples comparison reflects the distance we must travel to achieve both equity and excellence. The gap of 29 percentage points between the minimum proficiency on the ACT and the graduation rate makes clear that we are not producing equitable outcomes for our students.


This distance increases substantially when viewed through the lens of race. In 2017-2018, 93\% of white students graduated in four years, and the year prior, $85 \%$ of white 11th-graders scored an ACT composite score of at least 17, a difference of 8 percentage points. ${ }^{6}$ For black and Hispanic students, this difference is far greater. In 2017-2018, 85\% of black students graduated in four years, and $74 \%$ of Hispanic students graduated in four years, while only $37 \%$ and $42 \%$ of black and Hispanic 11th-graders, respectively, scored an ACT composite score of at least 17 on the ACT the prior year (2016-2017). These differences in graduation rate and proficiency on the ACT of 48 and 32 percentage points, respectively, are considerably larger than those of their white peers.

These data points make clear that we are still grappling with equity and excellence. It is our charge as a school system to provide the conditions and outcomes that both break the predictive link and produce the equity and excellence that our students need and deserve.

The CMS Board of Education defined equity as "providing the opportunities, support, environment, high expectations, and resources that every student needs to achieve educational success, feel valued, and contribute to a thriving community." ${ }^{7}$

Zaretta Hammond ${ }^{8}$ outlines an equity agenda in her work on culturally responsive teaching. We embrace that agenda, seeking to:

- Reduce the predictability of who succeeds academically;
- Interrupt organizational practices that create, sustain, and/or reproduce disparities; and
- Cultivate the unique gifts and talents of every student.

[^1]We assert that, when the consistent underachievement of any subgroup becomes expected, predictable, or normalized, then choices, strategies, and efforts to reverse such trends are often eschewed and necessary investments disregarded. Antithetical to such apathy and inaction, this 2017-2018 report seeks to influence the acquisition and direction of resources - time, people, money, and energy in order to achieve our stated ends.

## KEY LEVERS

In the inaugural Breaking the Link report, we identified three key levers that research indicates can break the predictive link between student demographics and academic outcomes: great teachers, time, and access to advanced coursework. For this report, we will again focus on these three.

## GREAT TEACHERS

An important lever for improving student performance is a great teacher. Access to a highly effective teacher for several consecutive years, particularly in mathematics, can move a student's performance from below-grade-level to above-grade-level. Likewise, a highly effective teacher can take a student from grade-level performance to even higher levels of performance and achievement. ${ }^{9}$ In education, people matter. Thus, ensuring students' access to great teachers is a key lever within our district strategy to improve the performance of schools.

The unquestionable value of a great teacher is what that teacher does. It is not just a great teacher, but great teaching that counts. In October 2018, TNTP ${ }^{10}$ released a report that outlined the elements of great teaching. In classrooms that offered high-quality academic experiences, researchers found that students had access to or experienced:

- Consistent opportunities to work on assignments aligned with state standards;
- Strong instruction that let students do most of the thinking in the lesson;
- Deep engagement in what they're learning; and
- High expectations and a belief they could meet gradelevel standards.

TNTP found that specific behaviors and expectations were associated with learning above the typical level. Specifically:

> In classrooms where students had greater access to gradeappropriate assignments, they gained nearly two months of additional learning compared to their peers. Classrooms with higher levels of engagement gained about two-and-a-half months of learning. In classrooms where teachers held higher expectations, students gained more than four months. The relationships between the resources and student outcomes were even stronger in classrooms where students started the year off behind. When students who started the year behind grade level had access to stronger instruction, for example, they closed gaps with their peers by six months; in classrooms with more grade-appropriate assignments, those gaps closed by more than seven months. ${ }^{11}$

Indeed, those same students, when in classrooms with higher expectations, gained nearly eight months of additional learning when compared to their peers, closing prior gaps.

It was not surprising that high teacher expectations aligned with grade-level standards were related to student growth in the study. Teachers who agreed that their students could meet grade-level standards tended to offer stronger assignments and instruction. Teachers who held the lowest expectations tended to offer lower-quality assignments. In short, these expectations demonstrate that great teaching matters greatly.

## TIME

Research shows that time - instructional hours - used well is correlated with improved school performance and increased student test scores. ${ }^{12}$ Each state sets its own minimum time requirements for schools. Most require between 175 and 180 days of school and/or between 900 and 1,200 hours of instructional time per year, depending on the grade level. North Carolina requires 185 days or 1,025 hours of instruction. ${ }^{13}$ Studies of how countries, states, school districts, and different types of schools (i.e., traditional and charter) use their allocated time reveal disparities between the amount of time in school that groups of students experience, based on where they live and the school they attend. ${ }^{14}$ In addition, students in some schools and school systems experience substantially fewer instructional hours annually due to suspensions or absences.

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9 Sanders & Rivers, 1996.
10 TNTP, 2018.
11 TNTP, 2018, p. 5.
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[^2]The impact of such lost instructional time can change a student's educational trajectory. Research findings show that:

> As early as pre-kindergarten, students who are chronically absent are less likely to read proficiently by the end of third grade and more likely to be retained in later grades. Chronically absent kindergartners are also less likely to develop the social skills needed to persist in school. The problems multiply for students who are chronically absent several years in a row. By sixth grade, absenteeism is one of three early warning indicators that influence whether students will graduate from high school. By ninth grade, it's a better predictor of graduation than eighth grade test scores. And, even if they manage to graduate, high school students with a history of chronic absences are less likely to enroll and persist in college.

However, the effects of chronic absenteeism can be reversed. Connonly and Olson ${ }^{16}$ found that students who are chronically absent in kindergarten but then improve their attendance can close the achievement gap in later grades. A study by Ready ${ }^{17}$ found that good attendance among disadvantaged students can help close the achievement gap, starting in early grades. These research findings have have caught the attention of states and urban school districts. As part of the federal Every Student Succeeds Act (ESSA), the U.S. Department of Education (US DOE) was tasked with informing and approving states' ESSA accountability plans. In 2017-2018, 36 states and the District of Columbia submitted ESSA plans that included chronic absenteeism or a similar attendance measure as an indicator of school quality.


## ACCESS TO ADVANCED COURSEWORK

Just as time used well and great teachers are levers for breaking the link, access to rigorous coursework is vital for post-secondary academic success. Every year, millions of students graduate from high school bound for college, employment, or military service. However, as the number of students pursuing a two- or four-year college degree increases nationally, college remediation rates continue to soar, particularly for black and Hispanic students attending two-year colleges.

Research has demonstrated that the power of a student's course of study in high school outweighs the predictive power of demographic variables (i.e., gender, race, and socioeconomic status) in relation to college attendance and successful college completion. ${ }^{18}$ One example of rigorous coursework in high school is Advanced Placement (AP) courses. Mattern, Marini, and Shaw ${ }^{19}$ found that students taking AP courses and the corresponding exams, regardless of the score earned on the AP exam(s), were more likely to graduate within four years than students who did not take any AP exams.

Such findings have prompted school districts across the country to ramp up AP course offerings. One analysis showed that $74 \%$ of all urban high schools nationally had an AP program, $76 \%$ of all high schools offered an AP class in at least three different disciplines, and $58 \%$ of U.S. high schools offered an AP program that included at least one AP course in English, math, science, or social studies. ${ }^{20}$

Despite what appears to be relatively widespread access to AP courses, only a small percentage of high school students actually take them. Nationally, 12\% of all high school students who are enrolled in a school which offers AP courses participate in those classes. Among this small minority of high school students across the country, racial and income gaps are apparent. At schools offering these courses, about $16 \%$ of non-low-income students enrolled in an AP course, compared to less than six percent of their low-income peers. Six percent of all black students and $9 \%$ of all Hispanic students at these schools enrolled in an AP course, while their white classmates enrolled at a rate of $12 \%$, matching the national average. ${ }^{21}$ Closing gaps in AP course-taking rates can help break the link between student demographic characteristics and later college success.

We seek to use these three levers, as well as others, as a means to achieve a more equitable school district that provides an equitable learning experience for every child, in every school, every day.

[^3]Adelman, 1999; 2006.
Mattern, Marini, \& Shaw, 2013
20 Theokas \& Saaris, 2013.


## MEASURING SUCCESS

Measures of equity for schools and school districts have evolved over time. Post-Brown efforts nationally and locally emphasized the measurement and equalization of inputs. Most agree that any analysis of inputs would be incomplete without an examination of outcomes. Thus, the primary measure of outcomes for school districts is academic performance. Indicators of academic performance outlined in this Breaking the Link report include:

- End-of-Grade (EOG) exam performance;
- End-of-Course (EOC) exam performance;
- Educator Value-Added Assessment System (EVAAS) growth ratings;
- ACT test performance;
- Advanced Placement (AP) course enrollment;
- AP exam performance;
- Four-year cohort graduation rates; and
- Attainment of graduation endorsements.

These outcome measures, with the exception of those relating to advanced courses and graduation endorsements, are part of North Carolina's school accountability model and school grading system. While these are primarily test scores, the emphasis of these measures is not intended to imply or endorse the idea that school quality should only be measured by students' performance on standardized assessments. The measures are included for their ease of access based on current state and federal requirements, and for the public acknowledgment that student and school performance on these measures matters to our community. Our continued reporting on these outcome measures also provides continuity of analysis from year to year.

## STRATEGIC PLAN 2024 EQUITY COMMITMENTS

In response to the findings shared in our inaugural report, as well as analyses of additional data, feedback from our community, and his observations, Superintendent Dr. Clayton Wilcox released Strategic Plan 2024 - What Matters Most in September 2018. The plan, noted for its simplicity and clarity, identified three systemic goals:

1. Every student graduates with meaningful employment or higher education opportunities;
2. Every student has access to a rich, diverse, and rigorous curriculum; and
3. Every student has access to more social-emotional support.

Embedded within the plan is an explicit commitment to equity. To operationalize that commitment, Dr. Wilcox created the district's first equity department, staffed with three associate superintendents for elementary, middle, and high school grades, as well as a team of specialists, all led by a chief equity officer.

In support of Strategic Plan 2024's goals, a set of targets and indicators has been identified overall and for each racial subgroup. In pursuit of those goals and targets, and in acknowledgment of the key levers identified, our district's equity department has developed a set of commitments to:

- Ensure equitable access to high-quality teaching and academic experiences;
- Increase access to advanced coursework in the middle and high school grades;
- Decrease chronic absenteeism;
- Reduce racial disproportionality in out-of-school suspensions; and
- Provide graduates with a meaningful diploma and pathways to college and/or career preparedness.

In spring 2019, an annual operating budget proposal with specific initiatives and investments aligned with the superintendent's goals and these commitments was presented to the Charlotte-Mecklenburg Board of Education, the Mecklenburg Board of County Commissioners, our public, and partners. Among the planned investments are:

- New standards-aligned curriculum in targeted grades and subjects;
- Summer equity institutes to deliver on the guarantee of a viable curriculum;
- Continued investments in alternatives to suspensions and discipline such as restorative circles;
- Increased supports for emotional wellness in the middle grades to reduce disproportionality in out-of-school suspensions;
- Re-investment in cultural proficiency training for administrators and staff;
- Expansion of targeted teacher recruitment efforts to hire and onboard the highest-quality teacher force available that reflects the cultures and backgrounds of our students; and
- Expanded access to Advanced Placement and dual enrollment courses.

Collectively, these investments (and others) will help us to increase equity and break the predictive links that are the impetus for this report.


## ORGANIZATION OF THE REPORT

This report is, by design, a consolidated version of the inaugural report, with only selected measures and findings reported here. More information, including graphs of the measures from the inaugural report, can be found on the CMS Performance Dashboard at www.cms.k12.nc.us/cmsdepartments/ accountability/Pages/PerformanceDashboard.aspx.

It should be noted that the outcomes outlined in this report were compiled just three to four months after the release of the inaugural report. Therefore, it is not a reasonable expectation that the results are different than those presented in the inaugural report. We are presenting them to keep a running record of our performance over time.

Three broad questions guided this analysis, as well as the inaugural one:

## 1 What are the racial and income demographics of CMS schools?

We will continue to examine the differences in the income and racial/ethnic demographics of our schools over time, monitoring for changes in school demographics as our overall district demographics continue to evolve.

## 2 How do key levers linked to outcomes vary across CMS schools?

We will continue to examine the differences in resource allocation or access between groups of schools on key levers that can break the predictive link between a student's demographics and academic outcomes.

## 3 What are CMS school outcomes?

We will continue to examine how students have performed academically on a set of outcome measures aligned with our state's accountability system.

These outcome areas will be analyzed through two complementary lenses: race and school poverty.

The three broad questions noted above are the organizing framework for the report. The first section of the report focuses on school demographics, looking at both racial demographics and school poverty across the grade spans (i.e., K-5, 6-8, and 9-12). The second section outlines school performance by grade span on the specified academic outcome measures. The third section examines the key levers, providing a snapshot of access to highly effective teachers, lost instructional time, and college-level course-taking and exam passing rates. The report concludes with a summary of work to date and priorities and initiatives moving forward.

## INTERPRETING THE GRAPHS

In alignment with best practices in data visualization, ${ }^{22}$ we have modified the graphs in this report. Material previously presented in two graphs has been consolidated into a single graph. Here is an example of the type of graphs found in this report and how to interpret them.

Figure \#: Figure Title



School Poverty category is based on the school's identified student percentage. ( $0-24.5 \%$ is Low Poverty; $25-50 \%$; is Moderate Poverty; $50.1 \%+$ is High Poverty)

The number within and at the end of the bar represent the percentage of students. (For example, the percentage who achieved College and Career Ready status on an End-of-Grade assessment)

This number represents the overall group average for the school poverty level.

This line is drawn at the point on the scale that corresponds with the school poverty level average.

The color of the bar in the graph corresponds to the race of the students, as shown in the legend.


## SUMMARY OF FINDINGS

Results in 2017-2018 closely resemble those in 2016-2017. Specifically:

- For all grade spans, low-poverty schools were composed of mostly white students, whereas in high-poverty schools, the majority of students were black and Hispanic. Moderate-poverty schools' composition was somewhat more balanced between black, Hispanic, and white students.
- On End-of-Grade and End-of-Course standardized state tests, the percentage of students who were College and Career Ready decreased as the level of poverty increased. For reading, math, and science EOGs and Math I, English II, and biology EOCs, at low-poverty schools, students of each race had higher rates of College and Career Readiness than students of the same race at moderate-poverty schools, and in particular, at high-poverty schools.
- On the ACT, students reaching a composite score of 17 (the minimum required for entrance into UNC system colleges) were more commonly found in high schools classified as low poverty.
- Nearly half of CMS graduates took a college-level course, defined as an Advanced Placement (AP), International Baccalaureate (IB), Cambridge, or dual enrollment (DE) course, during high school. In low-poverty schools, on average, $71 \%$ of graduates completed a college-level course, whereas in moderate-poverty schools, this percentage was $42 \%{ }^{23}$
- On Advanced Placement (AP) exams, scores of 3, 4, or 5 are considered passing. Students at low-poverty schools had an AP exam pass rate nearly 10 times higher than students at high-poverty schools.
- In 2018, the four-year cohort graduation rate (the percentage of students graduating from high school in four years or fewer) was $85.4 \%$. Changes in the calculation of the cohort graduation rate in 2017-2018 by the North Carolina Department of Public Instruction led to some changes in the percentage of students graduating by school.
- The percentage of students who were chronically absent (missing more than $10 \%$ of the days they are enrolled) was greater among high-poverty schools, followed by moderate-poverty, and lowest among low-poverty schools, for all grade spans. The percentage of chronically absent students in grades 9-12 at high-poverty schools is particularly concerning, especially when compared to students in the same grades at low-poverty schools.
- High-poverty schools had a greater percentage of students with one or more out-of-school suspension, particularly in grades 6-8. In low-poverty schools, all grade spans had a similar percentage of students with one or more suspensions (overall averages were $<5 \%$ ), whereas, in high-poverty schools, there is a steep increase in the average rates between grades K-5 and the subsequent grade spans (6-8, 9-12).
- The percentage of teachers with an EVAAS rating of Exceeds Expected Growth and who were retained was relatively similar in schools across poverty levels (equal to or greater than $80 \%$ ).

All of these patterns are similar to the patterns seen in the 2016-2017 Breaking the Link report. It is important to note that this work will take time. We cannot undo in one year what has occurred in American society over centuries. These findings, and others contained in this report, will enable us to track over time our district's progress in closing the substantial gaps we currently see.

[^4]

## DEMOGRAPHIC INFORMATION ON CMS SCHOOLS

In 2017-2018, 147,359 students were enrolled in CMS in grades K-12 on the 20th day of school, the official tally used by the state. Approximately $38 \%$ were black, $28 \%$ were white, $24 \%$ were Hispanic, $7 \%$ were Asian, $3 \%$ were multi-racial, and $0.4 \%$ were Native American. Students came from 186 countries and spoke 205 languages other than English. ${ }^{24}$ More than 19,000 students were English Learners and 13,000 were Exceptional Children. ${ }^{25}$

In this report, we examine how poverty concentration and race converge in the student demographics of our schools. This intersection of school poverty and race frames the remaining analyses presented in this report.

## Distribution of Schools

## by Poverty Status and Race

Beginning in 2014-2015, schools in CMS could take part in the Community Eligibility Provision (CEP) program, a federal program that enables high-poverty schools to offer breakfast and lunch to all students at no charge. In order to qualify, schools must meet a certain threshold of poverty as indicated by their identified student percentage (ISP; 40\% or greater). In this report, schools were coded as low-poverty, moderatepoverty, or high-poverty based on the identified student percentage from the CEP program.

Based on this measurement, of the 176 schools in CMS in 2017-2018, 54 schools are considered low-poverty schools (those with an ISP less than 25\%), 56 are considered moderatepoverty schools (those with an ISP between $25 \%$ and $50 \%$, inclusive), and 66 are considered high-poverty schools (those with an ISP greater than or equal to $50.1 \%$ ). ${ }^{26}$ The poverty categorizations are shown in Figure 2. For more information on the Community Eligibility Provision, see Appendix A.


Figure 1: Geographic Distribution of School Poverty Level from 2017-2018 based on the Community Eligibility Provision's Identified Student Percentage.

$\Delta$ Low Poverty $\Delta$ Moderate Poverty $\Delta$ High Poverty

Please note that all graphs included in this report represent data from the 2017-2018 school year. ${ }^{27}$ Also, please note that the data presented in this report are aggregates of the individual students who attended each school; all of those students' scores are averaged for each group of schools (that is, low-, moderate-, or high-poverty schools). See Appendix B for details on the calculation for each measure.

The data in Figure 1 show the geographic distribution of CMS schools within Mecklenburg County, with colors indicating school poverty classification as defined in this report. Similar to the distribution in 2016-2017, in 2017-2018, high-poverty schools are concentrated in the east, west, center, and in areas slightly north of uptown Charlotte. Low-poverty schools are concentrated in the south, southeast, and far north, with a few schools near the city center and towards the county edges.

[^5][^6]Figure 2: Distribution of Schools based on the Identified Student Percentage (ISP) of Students in Poverty - 2017-2018

Schools (each bar represents one school)

## Enrollment by Poverty Status and Race

CMS schools vary in size and student body composition. The majority of elementary schools serve between 500 and 1,000 students, while middle schools typically serve 1,000+ students and high schools typically serve 1,500 to 3,000 students.

## In 2017-2018 there were:

- 96 elementary schools (grades K-5 or K-6);
- 27 middle schools (grades 6-8);
- 32 high schools (grades 9-12 or 11-13);
- 14 K-8 schools;
- 3 6-12 schools;
- 3 Special Program/Alternative schools; and
- 1 K-12 school.

In this report, schools with non-traditional configurations were broken out by grade. ${ }^{28}$

Among all students, regardless of race, $34 \%$ attended a low-poverty school, $36 \%$ attended a moderate-poverty school, and $31 \%$ attended a high-poverty school. ${ }^{29}$ These rates become more disproportionate when we examine the proportions by race. Of all black students in 2017-2018, 16\% attended a low-poverty school, $44 \%$ attended a moderatepoverty school, and $40 \%$ attended a high-poverty school. Of all Hispanic students in 2017-2018, 17\% attended a low-poverty school, $36 \%$ attended a moderate-poverty school, and $47 \%$ attended a high-poverty school. Of all white students in 2017-2018, 68\% attended a low-poverty school, 26\% attended a moderate-poverty school, and just 6\% attended a high-poverty school.

When we further break down the data by school poverty status and race, additional trends emerge. In 2017-2018, in grades K-5 (see Figure 3a), low-poverty schools were composed of mostly white students (59\%), whereas in high-poverty schools, the majority of students ( $87 \%$ ) are black and Hispanic and only $5 \%$ of students are white. In other words, as school poverty level increases, the percentage of black and Hispanic students increases.

Grades 6-8 look similar to K-5 (see Figure 3b). On average, approximately half of students enrolled in low-poverty schools in grades 6-8 were white students (53\%), whereas in high-poverty schools, $88 \%$ of students are black and Hispanic, and only $5 \%$ of students are white. Again, as in K-5, as overall poverty level increases, the percentage of black and Hispanic students enrolled also increases.

Grades 9-12 also look similar. On average, in grades 9-12 (see Figure 3c), low-poverty schools' enrollment is just over
half white (54\%), whereas in high-poverty schools, $90 \%$ of students are black and Hispanic, and only $3 \%$ of students are white. That is, the percentage of black and Hispanic students increases from low-poverty schools (34\%) to moderatepoverty schools (71\%) to high-poverty (90\%). However, the percentage of white students decreases from $54 \%$ in low-poverty schools to $20 \%$ in moderate-poverty schools to $3 \%$ in high-poverty schools.

As shown in Figures 3a-c, the proportions of students by racial group attending each group of schools has not changed substantially since 2016-2017.

In sum, in high-poverty schools, nearly nine of every 10 students are black or Hispanic, whereas low- and moderatepoverty schools are more likely to reflect the racial diversity of our community. Overall, and for the second year that CMS is reporting data in this way, the data reveal locally what is also true nationally. CMS enrolls students from various backgrounds, as do urban school districts across the country. Black, white, and Hispanic students make up the three largest racial subgroups in CMS. As poverty increases in CMS schools, so does the concentration of black and Hispanic students. The result is high-poverty schools that are primarily composed of black and Hispanic students. Indeed, not even $6 \%$ of students at any grade span in high-poverty schools are white. ${ }^{30}$

CMS continues to seek ways of reducing the concentrations of poverty in CMS schools and address segregation and racial isolation. One such example is the district's expansion of school options (e.g., magnet programs) over the last several years. Additionally, following the 2017-2018 school year, the district's learning communities were reconfigured, schools were reassigned, and some schools were merged (e.g., Dilworth Elementary and Sedgefield Elementary). Future analysis will tell if these changes have helped to reduce concentrations of poverty and increase diversity among schools.


[^7]30 Hispanic is one of the options for race that parents may choose when enrolling a child in CMS. Ethnicity options are also given (Hispanic, non-Hispanic) but ethnicity was not used as a variable for this report. In acknowledgement that the majority of CMS students are black, white, or Hispanic, only these three largest racial subgroups (by proportion of total students district-wide) are included in subsequent figures.

Figure 3a: Enrollment By Race and School Poverty Level - Grades K-5


Figure 3b: Enrollment By Race and School Poverty Level - Grades 6-8


Figure 3c: Enrollment By Race and School Poverty Level - Grades 9-12



## WHAT ARE CMS SCHOOLOUTCOMES?

## CMS School Outcomes

In this section, we examine performance on End-of-Grade (grades 3-8) and End-of-Course tests, ACT performance, and the four-year cohort graduation rate by school poverty level and race.

## Student Achievement and College and Career Readiness

## EOG - Reading, Math, and Science

End-of-Grade (EOG) assessments measure students' proficiency on the North Carolina Standard Course of Study (NCSCOS) for English language arts, mathematics, and science adopted by the North Carolina State Board of Education in June 2010. Assessment results are used for school and district accountability under the READY North Carolina Accountability Model and for federal reporting purposes.

From looking at the average values for each poverty level shown in Figures 4a-f, it is clear that the percentage of students who are College and Career Ready (CCR; Achievement Levels 4 and 5) in all subjects decreases from low-poverty to moderate-poverty to high-poverty schools. In 2017-2018, for example, the average rate for CCR in reading grades 3-5 was $66 \%$ in low-poverty schools, $43 \%$ in moderate-poverty schools, and $26 \%$ in high-poverty schools.

Figures 4a-f also show College and Career Readiness rates by school poverty level and race. At low-poverty schools, students of each race have higher rates of Reading College and Career Readiness than students of the same race at moderate-poverty schools and in particular, at high-poverty schools. This is true for reading, math, and science. On average, white students at each school poverty level perform substantially better than other racial subgroups in all subjects and grade spans.

Please note, it is not recommended to draw conclusions based on similarities or differences in percentages across school years because some schools belong to a different poverty category in 2017-2018 than they did in 2016-2017 and because there were new schools added in 2017-2018.

READING

Figure 4a: Average Reading College and Career Readiness Rates by School Poverty Level and Race - Grades 3-5


## MATH

Figure 4c: Average Math College and Career Readiness Rates by School Poverty Level and Race - Grades 3-5


100

## SCIENCE

Figure 4e: Average Science College and Career Readiness Rates by School Poverty Level and Race - Grade 5


100

Figure 4b: Average Reading College and Career Readiness Rates by School Poverty Level and Race - Grades 6-8


Figure 4d: Average Math College and Career Readiness Rates by School Poverty Level and Race - Grades 6-8


Figure 4f: Average Science College and Career Readiness Rates by School Poverty Level and Race - Grade 8


Black ■ Hispanic White


## End-of-Course Tests: English II, Math I, and Biology

End-of-Course (EOC) tests are given to students at the completion of the English II, Math I, and Biology courses to measure students' performance against the North Carolina Standard Course of Study (NCSCOS) for each subject. Assessment results are used for school and district accountability under the North Carolina READY Accountability Model and for federal reporting purposes.

Figures 5a-c show that the percentage of students who are College and Career Ready (CCR; Achievement Levels 4 and 5) decreases as the overall concentration of poverty increases. This trend of decline from low-poverty to moderate-poverty to high-poverty schools is evident on each of the EOC tests. For example, in Math I in grades $9-12^{31}$ (see Figure $5 b$ ), the percentage of students who are CCR in low-poverty schools is $75 \%$ versus $44 \%$ in moderate-poverty schools and $21 \%$ in high-poverty schools.

In reviewing the EOC performance of racial subgroups at different poverty levels, there are notable differences. At low-poverty schools, students of each race have higher rates of College and Career Readiness on all tests than students of the same race at moderate-poverty schools, and in particular, at high-poverty schools. On all EOC exams, white students have a much higher CCR rate than their black and Hispanic counterparts within the same school poverty level.

Figure 5a. Average English II College and Career Readiness Rates by School Poverty Level and Race


Figure 5b. Average Math I (Grades 9-12) College and Career Readiness Rates by School Poverty Level and Race


Figure 5c. Average Biology College and Career Readiness Rates by School Poverty Level and Race


[^8]
## ACT Performance

The ACT is given to all 11th grade students in North Carolina as a part of the North Carolina READY Accountability Model. ${ }^{32}$ The ACT is a content-based, multiple-choice test with English, math, reading, and science subject tests, and a writing section. ${ }^{33}$ The ACT is also used as a college admissions test measuring what a student learned in high school to determine academic readiness for college. Scores range from 1-36 in each subject. A composite (overall) score consisting of the average of the four subject scores is reported.


## ACT Minimum Composite Score of 17

One way to examine ACT scores is to compare the percentage of 11th grade students at each school who reach the minimum composite score of 17 required for entrance into UNC system colleges. The CMS overall percentage of students attaining at least a 17 ACT composite score was 56\% ${ }^{\mathrm{D}}$ in both 2016-2017 and 2017-2018.

Figure 6 shows the data grouped by school poverty level and race. Reviewing poverty level overall, we see that students reaching a composite score of at least 17 are more common in low-poverty high schools. Indeed, at low-poverty schools, on average, more than three-quarters (80\%) of students achieve a composite score of 17 or greater. The decline in the percentage of students reaching a composite score of at least 17 is steep as school poverty level increases, from $80 \%$ to $48 \%$ at moderate-poverty schools to $16 \%$ at high-poverty schools.

On average, and similar to the pattern in 2016-2017, white students reach the UNC minimum admission score at a much higher rate than do black or Hispanic students of the same poverty group. These differences in 2017-2018 are 31 percentage points or more. Moving from low-poverty to moderate-poverty to high-poverty schools, the rates of students of all races reaching this standard drop notably. On average, black and Hispanic students in low-poverty schools are at least 3.5 times as likely to reach an ACT composite score of 17 than are students of the same race in high-poverty schools.

Figure 6. Average Percentage of Students Reaching the UNC Admissions Minimum ACT Composite Score of 17



32 In December 2011, the NC State Board of Education approved the ACT to become part of North Carolina's READY Accountability Model. Each year since then, all high school juniors in CMS have taken the ACT at no charge, increasing college accessibility for all students and particularly for low-income students. For more information, please see the NCDPI resources available at http://www.ncpublicschools.org/ accountability/act. The rates reported here include only data from the state-administered ACT.

33 The writing section asks students to write a short essay in response to an open-ended question. The writing section is optional on other administrations of the ACT, but is required on the ACT administration given by the state for accountability purposes.

D The superscript D indicates that the percentage it follows is a district average, rolled up from all individual students' data. If available, these numbers match those that have been publicly reported.


## Graduation Rate

The four-year cohort graduation rate (CGR) is the percentage of students graduating from high school in four years or fewer and is computed at the school and district levels. In 2018, the district cohort graduation rate was $85.4 \%^{\mathrm{D}}$. Students included in the 2018 graduation cohort were first-time ninth-graders in the 2014-2015 school year.

It is important to note there were changes in 2017-2018 to the method that the North Carolina Department of Public Instruction used to calculate the graduation rate. Specifically, the four-year cohort graduation rate calculation was changed to include students who transferred into high schools off-track, whereas in prior years, these students were excluded. The calculation for English Learners (EL), students with disabilities (EC or SWD), homeless students, and students in foster care also changed to include students in the cohort who had exited each status after entering ninth grade.

Cohort graduation rates for each high school ranged from $57.6 \%$ to greater than $95 \%^{34}$ in 2017-2018. In 2016-2017, the lowest graduation rate was $75.8 \%$. Much, but not all, of the changes in school graduation rates can be attributed to the state's change in calculation.

In low-poverty schools overall, 93\% of first-time ninth-graders in 2014-2015 graduated on time in 2018 (that is, in four years or fewer). High-poverty schools had an average cohort graduation rate of $65 \%$, more than 20 percentage points below the district average and nearly 30 percentage points below low-poverty schools.


Figure 7. School Average Four-Year Cohort Graduation Rate


[^9]

Whereas in 2016-2017, on average, black students in CMS moderate- and high-poverty schools had the highest graduation rates of the three racial groups reported here, this is no longer the case. In 2017-2018, white students at low-poverty schools had greater graduation rates by at least 8 percentage points ( $96 \%$ vs. $88 \%$ for black students and $86 \%$ for Hispanic students) and by at least 3 percentage points in moderate-poverty schools ( $90 \%$ vs. $87 \%$ for black students and $79 \%$ for Hispanic students). However, in high-poverty schools in 2017-2018, black students, on average, had a graduation rate more than 20 points higher than their Hispanic and white peers ( $73 \%$ vs. $52 \%$ for white students and $47 \%$ for Hispanic students). As in 2016-2017, graduation outcomes were distinctly less positive for Hispanic and white students as school poverty increases.

In low-poverty schools in CMS, 88\% of black students and 96\% of white students graduated on time. Although the Hispanic cohort graduation rate at these schools is lower, at $86 \%$ on average, nearly nine out of 10 Hispanic students at low-poverty schools still graduated on time. Black students in low- and moderate-poverty schools were more likely to graduate on time than black students in high-poverty schools.

In high-poverty schools, graduation rates for students of all races were substantially lower than for their counterparts at low-poverty schools. Seventy-three percent of first-time ninth-grade black students graduated in four years or fewer. However, less than two-thirds of Hispanic and white students graduated in four years or fewer at high-poverty schools. While
white students make up a very small proportion of enrolled students in high-poverty schools, Hispanic students make up a substantial proportion of the population in such schools. CMS recognizes the need to pay attention to all students' needs at high-poverty high schools, but especially those of Hispanic students since their rates drop dramatically.

Despite this, this is one of the only areas in which the discrepancies by poverty level and race are not as severe as those in the other measures of performance. In summary, on average, across all of the above measures with the possible exception of graduation rate, there are wide differences in performance between low-, moderate-, and high-poverty schools. The gaps are largest when comparing low- and high-poverty schools, with gaps in College and Career Readiness rates on EOGs and EOCs as large as 30 or more percentage points.

Differences are also evident in the disaggregation of the data by race. White students within each school poverty level outperform their black and Hispanic peers in every subject on the EOGs and EOCs. Frequently, the largest performance gaps are between white students in low-poverty schools and black students in high-poverty schools. For example, on the measure of an ACT composite score of 17 or greater, the gap between white students in low-poverty schools and black students in high-poverty schools is 77 percentage points. Collectively, these data demonstrate that, on average, the predictive link continues to prevail across every performance measure.


## VARIATION OF KEY LEVERS LINKED TO OUTCOMES



## VARIATION OF KEY LEVERS LINKED TO OUTCOMES

Despite the many factors beyond a school's control that influence student performance, there are key levers, or resources, within our influence that can break the predictive link between student demographics and student achievement. Among them are great teachers, time in school, and access to advanced coursework. These are by no means a panacea, nor are they the only levers that can make a difference for students.
"Effective teachers facilitate their classroom like a symphony conductor who brings out the best performance from each musician to make a beautiful sound. In the case of the classroom, each student is achieving instructional goals in a positive classroom environment that is supportive, challenging, and nurturing of those goals" (Stronge, 2018).

## Great Teachers

All students benefit from learning from great teachers. Both empirical research and field knowledge establish that teachers matter. If a student has a highly effective teacher multiple years in a row, he or she or can make tremendous academic gains over time. Studies estimate ${ }^{35}$ that differences in teacher quality within schools account for about 12-14\% of student achievement gains in math and about $7 \%$ of achievement gains in reading at the elementary school level.

A fundamental challenge of acting on the finding that great teachers make a great difference is reliably identifying the highly effective teachers.

Great (i.e., highly effective) teaching gives students daily access to standards-aligned instruction, exemplifying high expectations in the instructional tasks given to students. Great teachers let students do most of the thinking, know each student's strengths, know when a student is having difficulty, and are able to target support to fill gaps and expand skills. They use a variety of formal and informal measures to monitor their pupils' mastery of a concept or skill. Communication with parents and instructional partners is also an important aspect of great teaching. ${ }^{36}$

[^10]A sizable body of literature documents inequities in the distribution of highly effective teachers. Effective teaching is usually associated with several years of teaching experience. ${ }^{37}$ Students in high-poverty schools tend to have less experienced teachers than teachers in low-poverty schools. ${ }^{38}$ A study conducted in North Carolina found that black students were much more likely to be in a classroom with a novice teacher than their white peers. Specifically, black seventh graders were $54 \%$ more likely to have a novice teacher in math and $38 \%$ more likely to have a novice teacher in English than their white peers. ${ }^{39}$

This evidence shows that students are not getting equal, much less equitable, access to high quality and effective teachers, whether measured by observable credentials or effects on student achievement. ${ }^{40}$ Nationwide, these findings are driving efforts to improve teacher effectiveness as a means of reducing educational and economic inequality.

While access to effective teachers varies from one school to the next, our goal as a district is to develop and retain effective teachers throughout all our schools. Identifying and retaining effective teachers is essential for the success of each of our students. The absence of an effective teacher is a tremendous missed opportunity for every student in that classroom. Moreover, we know that effective teachers have the largest positive impacts on students from disadvantaged backgrounds. ${ }^{41}$ Students who are experiencing poverty and structural racism stand to gain the most from highly effective teaching. This is truly a key lever for the success of public education for all students in Mecklenburg County. Yet, as a district, we have not successfully established conditions that meet this need in all schools.

Figure 8. Average Percentage of Teachers Who Exceeded Expected Growth and Were Retained from 2016-2017 to 2017-2018


100


## Retention of Teachers Exceeding Expected Growth

In order to best serve and educate students, schools must retain the highly effective teachers on staff from year to year. In North Carolina, teachers who teach in grades or courses that require standardized tests at the end of the year participate in the Education Value-Added Assessment System (EVAAS). Those teachers in tested grades and subjects receive one of three ratings indicating the amount of academic growth their students experienced in their classrooms: Does Not Meet Expected Growth, Meets Expected Growth, or Exceeds Expected Growth. ${ }^{42}$

Figure 8 shows the distribution of teachers rated as Exceeds Expected Growth who were retained at each school from 2016-2017 to 2017-2018. The CMS district-wide retention rate of these highly effective teachers was $87 \%$. Across the district, several schools were able to retain 100\% of their teachers rated as Exceeds Expected Growth, whereas some schools retained less than half. Again, only teachers in tested grades and subjects are eligible to receive an EVAAS rating. Seven new schools that opened in 2017-2018 were excluded from this calculation.

On average, low- and moderate-poverty schools retained the same percentage of teachers who Exceeded Expected Growth ( $89 \%$ ), whereas high-poverty schools retained $80 \%$ of these teachers.

Overall, schools are retaining their best-performing teachers at high rates (equal to or greater than $80 \%$, on average). A next step for CMS is ensuring that a greater proportion of teachers exceed expected growth and are recognized for their achievement.

37 Kini \& Podolsky, 2016.
38 Sass, Hannaway, Xu, Figlio, \& Feng, 2012.
39 Clotfelter, Ladd, \& Vigdor, 2005.
40 Goldhaber, Lavery, \& Theobald, 2015; Mansfield, 2015; Sass, Hannaway, Xu, Figlio, \& Feng, 2012.
41 Isenberg et al., 2013.

42 In North Carolina, Accountability Growth composites are computed by SAS using an Education Value-Added Assessment System (EVAAS) score to represent growth at the school level as measured by EOG and EOC assessments. Teachers and schools that receive an index value between -2 and +2 are classified as meeting expected growth. For a teacher or school to exceed expected growth, there must be significant evidence that the school's students made more progress than the growth standard, represented by an index value of +2 or greater. For a school to not meet expected growth, there must be significant evidence that the school's students made less progress than the growth standard, represented by an index value less than -2. For more information, see the NC Department of Public Instruction's EVAAS resources at http://www.ncpublicschools.org/ effectiveness-model/evaas/.

BRIGHT SPOT:
RETENTION OF HIGHLY EFFECTIVE TEACHERS

Whitewater Middle School, Principal Beth Thompson


Under the leadership of Principal Beth Thompson, Whitewater Middle School retained all of its teachers who exceeded expected growth from 2016-2017 to 2017-2018; yet teacher retention is not the end goal, per se, for the school. The principal indicated that her ultimate goals are that ALL adults are treated professionally; that administrators ensure that all adults feel respected, heard, mentored, and coached; and that conversations involve deep discussion about why they have chosen their particular careers and how the current position and their performance in that position reflects those reasons. Conversations are based on bravely engaging in a personal journey in order to bring adults'
best selves to those around them. Sometimes those conversations lead to adults choosing other professions. Sometimes those conversations lead to continued coaching and work on improving teaching.

Beginning in January of each school year, Principal Thompson and leadership teams begin reflecting upon what the school has been doing and its impact, and establishing the vision for the subsequent school year.

For many high-performing teachers, this thoughtful progression is an incentive for staff to continue working at the school. Knowing what to expect and that the principal has a track record of delivering on her vision leads

people to stay. Last year, the principal met individually with top performers to ask if they see their role staying the same or changing in the upcoming school year. Many teachers said that they wanted to stay on for the 2018-2019 school year to be part of the launches of the school's Innovation Lab and the Environmental STEM magnet. The 2018-2019 school year was conceptualized by the principal as moving from a school turnaround mindset to a sustainability mindset.

Conversations with teachers also involved some people with a track record of success taking on teaching new content areas or grade levels. For instance, one new teacher reflected on his personal growth and desired next steps after two years of incredibly high growth in his content area and grade level. He and Principal Thompson engaged in a discussion of the critical nature of 8th grade to prepare students for high school. This teacher decided to take on a role teaching 8th grade, moving from of a place of comfort, security, and assuredness to a place of risk and uncertainty. Not only did he excel in teaching the new grade level, but he also opened the door for other staff members to bravely take on the risk of trying new things, ultimately spreading their expertise and leadership to other areas.


43 Balfanz \& Byrnes, 2012.
44 Ginsburg, Jordan, \& Chang, 2014
45 Gottfried, 2009; Lehr, Hansen, Sinclair, \& Christenson, 2004; Steward, Steward, Blair, Jo, \& Hill, 2008.

## Time in School

In order to succeed in school, children must be present every day. Yet each year, an estimated $10 \%$ of U.S. students, or 7.5 million students, miss nearly a month of school. ${ }^{43}$ This leads to serious detrimental effects. Lost instructional time leads to high school dropouts and achievement gaps, undermines the benefits of early education, and interrupts efforts for reading proficiency by the end of third grade. ${ }^{44}$ Thus, one of the main threats to academic success is poor attendance. Poor attendance is negatively associated with measures of success in schools, including academic achievement, promotion, high school completion, and future employment opportunities. ${ }^{45}$ Students with higher rates of absenteeism have, on average, lower scores on national standardized tests. ${ }^{46}$ Moreover, the educational ramifications of missing school are exacerbated for students from urban school districts. ${ }^{47}$ Studies have also found that an emphasis on building character skills increases student attendance and that the students of more experienced teachers have fewer absences. ${ }^{48}$ Research shows that improving the attendance habits of disadvantaged children will likely foster socioeconomic mobility and social inclusion and increase the returns of subsequent educational attainment. ${ }^{49}$

This growing body of research confirms the association between school attendance and subsequent student achievement and graduation outcomes. It also underscores the importance of intervening as soon as absences begin to add up, whether the student is in elementary, middle, or high school. In this section, we examine student attendance and suspension rates to provide a more nuanced look at instructional time in school.

[^11]CMS defines chronic absenteeism as missing more than $10 \%$ of school days for which a student is enrolled. Please note that out-of-school suspension (OSS) days are counted as days absent. Over the past four years in CMS, chronic absenteeism rates among K-12 students have been rising. In some years, chronic absenteeism rates have increased even as out-of-school suspension rates have decreased.

As shown in Figures 9a-c, students in grades K-5 have the lowest rates of chronic absenteeism, followed by grades 6-8, and then by grades 9-12. Overall, 13\% ${ }^{\text {, }}$, ${ }^{0}$ of CMS students in grades K-12 missed more than $10 \%$ of school days, which is consistent with the national average. However, a closer look reveals that the percentage of students who are chronically absent is greatest among high-poverty schools, followed by moderatepoverty schools, and then low-poverty schools. In short, as school poverty level increases, chronic absenteeism increases sharply. This is true for all grade spans. For example, in grades $9-12,10 \%$ of students in low-poverty schools are chronically absent, while $19 \%$ of students in moderate-poverty and $34 \%$ of students in high-poverty schools are chronically absent. As in 2016-2017, the percentage of chronically absent students in grades 9-12 at high-poverty schools is particularly concerning, especially when compared to the percentage of students in the same grades at low-poverty schools.

When looking at chronic absenteeism by school poverty level and race, we see variation, with rates increasing from low- to moderate- to high-poverty schools for all races, as in 2016-2017. In particular, chronic absenteeism rates are highest at high-poverty schools for all races in all grades. In the elementary grades, chronic absenteeism rates quickly escalate as school poverty level increases. In grades 6-8, chronic absenteeism climbs from low- to moderate- to high-poverty schools, reaching $25 \%$ for black students and $28 \%$ for white students in high-poverty schools. Likewise, in grades 9-12, chronic absenteeism is highest in high-poverty schools, reaching 36\% for black students, $31 \%$ for Hispanic students, and $34 \%$ for white students. This amounts to more than one in three students in high-poverty high schools being absent more than $10 \%$ of the time. Absenteeism at this level can disrupt instructional continuity for the students missing school as well as for those students who are present, ${ }^{51}$ and leaves many chronically absent students scrambling to catch up.

Figure 9a. Percentage of Chronically Absent Students by School Poverty Level and Race - Grades K-5


100

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\squareBlack ■Hispanic ■ White
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Figure 9b. Percentage of Chronically Absent Students by School Poverty Level and Race - Grades 6-8



Figure 9c. Percentage of Chronically Absent Students by School Poverty Level and Race - Grades 9-12


50 Based on the Strategic Plan result for the district from 2017-2018.
51 Gottfried, 2011; 2014.


## BRIGHT SPOT: CHRONIC ABSENTEEISM

Randolph IB Middle School, Principal Brian Bambauer

According to Principal Brian Bambauer, a reduction in chronic absenteeism from 2016-2017 to 2017-2018 for the three largest racial groups at Randolph IB can be credited in part to an extremely diligent attendance secretary and support team. The attendance secretary meets with the school's collaborative student services team (CSST) every other week. CCST is a pre-intervention team which includes the school principal, nurse, all three counselors, and the school psychologist. The group discusses attendance issues, which the counselors then address directly with the student and/or family. In addition, the attendance secretary sends out unexcused absence letters after a student has missed 3,5 , and 10 days of school. The attendance secretary ensures that, daily, each teacher takes attendance in PowerSchool, follows up with an
email, assists substitutes with taking attendance, and monitors late buses and tardy students. The thoroughness of this team ensures completeness and accuracy and allows early intervention and support in circumstances that could interfere with students' school attendance before too much instructional time is lost.


Principal Brian Bambauer, Randolph IB Middle School

## Out-of-school Suspensions

In addition to absenteeism, out-of-school suspensions (OSS) can reduce access to instructional time. Within CMS, a student can be suspended from school for infractions of the Code of Student Conduct. The use of OSS is reserved as a consequence for student conduct where other documented options either have not been effective or, in the judgment of the principal, will not serve to protect other students and staff at the school or will not preserve an orderly school environment.

District-wide, most incidents (and most incidents that result in OSS) are coded as Unacceptable Behavior (UB) Acts. These types of acts account for $97 \%$ of all incidents district-wide. The top five UB codes reported from 2017-2018 were disruptive behavior, aggressive behavior, insubordination, inappropriate language/disrespect, and fighting. These five categories made up $75 \%$ of all reported incidents in 2017-2018. The following figures and text refer to OSS resulting from UB incidents only (that is, "discretionary suspensions").

The percentages of CMS students by school poverty level and race who were suspended from school at least once during the school year are presented in Figures 10a-c. It is evident that high-poverty schools have a greater percentage of students with one or more discretionary suspensions, particularly in grades 6-8 (18\%) and 9-12 (16\%). In low-poverty schools, students in grades K-5 have the lowest rate of students with one or more discretionary suspensions (1\%). Low-poverty schools in grades 6-8 and 9-12 have very similar suspension rates ( $5 \%$ and $4 \%$, respectively). In high-poverty schools, suspension rates are three to four times higher than in low-poverty schools in each grade span.

When looking at suspensions through the lens of school poverty level and race, further trends emerge. In all grade spans, it is evident that the percentage of black students with one or more discretionary suspensions is substantially higher than each other race. This is the case in all three poverty levels. In fact, in each poverty level and grade span, the percentage of black students with one or more discretionary suspensions is at least one and a half times higher than the next highest racial subgroup.

Figure 10a. Percentage of Students with One or More Discretionary Suspensions - Grades K-5


0
100
Black $\square$ Hispanic White

Figure 10b. Percentage of Students with One or More Discretionary Suspensions - Grades 6-8


0

Figure 10c. Percentage of Students with One or More Discretionary Suspensions - Grades 9-12


In sum, racial disparities in suspension rates are evident in every grade span and every school poverty level. When coupled with data on chronic absenteeism, the potential lack of parity in time between schools becomes clear. Though all schools (with the exception of those following a continuous-learning calendar) receive the same number of instructional hours annually, high-poverty schools appear to have greater obstacles to actualizing that time. High suspension rates in high-poverty schools (particularly in grades 6-8 and 9-12
for black students) and high chronic absenteeism in every grade span in high-poverty schools (but particularly in grades 9-12) combine to erode instructional time at these schools. Though allocations are equal, what is
experienced by students is not. Differences in rates of chronic absenteeism and OSS are pronounced, increasing progressively as school poverty increases.

## BRIGHT SPOT:

OUT-OF-SCHOOL SUSPENSIONS

Reid Park Academy,
Principal James Garvin

According to Principal James Garvin, the reduction in the percentage of students with one or more out-ofschool suspensions from 2016-2017 to 2017-2018 represents a culmination of efforts in multiple years to ensure that all students remain in school and receive a quality education despite behavioral challenges.
These efforts are systematic and rooted in the implementation of School-wide Positive Behavior Supports (SWPBS) and related to evidence/research-based strategies to support all students.

All students:

1. Recite the Reid Park Academy RAMS Pledge and the RAMS Creed each morning.

Reid Park Academy
RAMS Pledge
R-I respect myself and others
A - I achieve
M - I make good choices
S-I stay safe
2. Learn what type of behavior is appropriate and are held accountable for their behavior in classrooms, hallways, restrooms, the cafeteria, on playgrounds, and on buses.
3. Have the opportunity to earn RAM Bucks, which are awarded to students individually by teachers and administrators, and Character Counts, which are awarded to an entire class for displaying RAMS positive behaviors and character traits. RAM Buck posters are displayed prominently throughout the school and indicate the current rewards available to students. As a part of the school's monthly Character Education Assembly and Celebration, classes that earn five or more Character Counts receive recognition and rewards.

The community-building app, ClassDojo, is used in every classroom to promote, track, and share progress toward positive behavior with parents and teachers.

To manage inappropriate behaviors, disciplinary referrals and suspension data are analyzed at the beginning of, and throughout, the school year. Students who need additional support are identified, using referrals and suspension data, and assigned to appropriate support staff (e.g., social workers) to work on their skills. The
progress of students who receive these supports is continuously monitored by referral and suspension data and is discussed weekly during various gradelevel and departmental professional learning community (PLC) meetings. Students who need additional support receive appropriate referrals.

Reid Park has seen a substantial reduction in referrals and suspensions for students. Numerous students come to Principal Garvin's mind when considering the impact that tools such as behavior trackers and social skills instruction have had on promoting positive behavior, which leads to academic progress.


Principal James Garvin, Reid Park Academy


## Advanced Coursework

Access to rigorous coursework in high school is a third key lever in breaking the predictive link between a student's background and the outcome of college completion. ${ }^{52}$ Each CMS high school offers at least one college-level course option. Successfully completing one or more of these courses is an indicator that a student is ready for college-level coursework. Access to rigorous coursework in high school can benefit all students, including students who intend to pursue direct entry into careers or military service, by helping them develop study skills, increasing engagement, and providing exposure to especially challenging and engaging course materials. ${ }^{53}$ In this report, we define college-level coursework as Advanced Placement, International Baccalaureate, Cambridge International School, or dual enrollment courses.

The Advanced Placement (AP) Program was designed to provide students a means to earn college credit for learning college-level material while still in high school. Historically, AP courses were confined to a small group of highly prepared students across the nation. Some high schools excluded all but their top students from taking those courses. More recently, participation in AP courses has expanded, as selective colleges consider students' AP course experiences in admissions decisions and as incentive programs have been introduced to encourage a broader student population to take AP courses and exams. Studies show that low-income students who take AP courses in high school graduate from college at a greater rate. ${ }^{54}$ Similarly, studies show that AP exam scores are a strong predictor of grades for college sophomores. ${ }^{55}$

AP courses are available at all high schools in the district, although the specific courses offered at each school differ. AP courses offer students quality points towards their grade point average (they are weighted more heavily), but students can only receive college credit if they pass the AP exam.

The International Baccalaureate Program (IB), in contrast to the AP collection of individual courses, is a pre-university program of study. Originating in Europe, the program's initial goal was to standardize secondary programs across international school settings, producing a set of examinations and qualifications that could be taken and would be recognized in any part of the world. IB students are expected to complete a course of study that follows specific requirements and includes studying both the humanities and sciences. This is a holistic approach to secondary studies that includes an emphasis on metacognitive aspects of learning. In other words, the focus of IB is on acquiring skills such as learning how to learn, how to analyze, and how to reach logical conclusions about people, their languages and literature, and the scientific forces of the environment.

IB programs are available, for qualifying students, at five high schools in CMS: Myers Park, East Mecklenburg, Harding University, West Charlotte, and North Mecklenburg. Students may earn an IB diploma or an IB certificate.

The third type of college-level coursework is the Cambridge International School program. Cambridge is an accelerated method of academic study offered through the University of Cambridge Assessment International Education, part of the University of Cambridge. Cambridge Assessment International Education is the world's largest provider of K-12 international education programs. Cambridge includes more

52 Adelman, 1999; 2006
53 U.S. Department of Education, 2004; Quint, Thompson \& Bald, 2008.

[^12]than 10,000 schools in 160 different countries. Through a challenging program emphasizing critical thinking, analysis, and performance, it helps students develop into global citizens ready to handle the challenges of life. Cambridge is flexible and allows students to determine which courses to take. They can take one class, a series of classes, or take enough classes to earn an International Diploma. As it does for AP and IB exams, the state pays the Cambridge exam fees for students. The Cambridge program is available at Hopewell High School. ${ }^{56}$

The fourth type is dual-enrollment coursework, which enables students to take college courses while enrolled in high school. Dual-enrollment programs allow eligible North Carolina high school students to enroll in college classes tuition-free at North Carolina community colleges and universities through their high schools. Central Piedmont Community College and the University of North Carolina at Charlotte are key partners in this work. CMS students can earn dual credit by meeting high school graduation requirements and simultaneously earning college credit for successful completion of these courses.

Taking AP, IB, Cambridge, or dual-enrollment courses in high school gives students a competitive edge in the college admission process and can be particularly important for aspiring first-generation college students. Each of these programs aids students by preparing them for the workload that they will have in college and increasing college access. Success in these courses can allow students to complete a bachelor's or associate's degree more quickly, thus reducing tuition costs. In the next section, we look at the rates at which CMS graduates earn credit for at least one of these types of college-level courses.

## Advanced Placement, International Baccalaureate, Cambridge, and Dual Enrollment

As noted, each CMS high school offers at least one college-level option. The percentage of students completing at least one college-level course before graduation varies by school poverty level and race (see Figure 11). In low-poverty schools, on average, $71 \%$ of graduates completed a collegelevel course, whereas, in moderate-poverty schools, the rate was 42\%.

Within and across school poverty levels, there is a clear pattern by student race: at low- and moderate-poverty schools, there is a difference of at least 30 points between the percentages of white and black graduates completing at least one college-level course, with average rates for Hispanic students slightly above the rates for black students. While $21 \%$ of black graduates of high-poverty schools have completed a college-level course, only $21 \%$ of white graduates of low-poverty schools have not completed a college-level course.

> While $21 \%$ of black graduates of high-poverty schools have completed a college-level course, only $21 \%$ of white graduates of low-poverty schools have not completed a college-level course.

Figure 11. Percentage of Graduates Completing at Least One College-Level* Course by School Poverty Level and Race


Note: The number of white students in high-poverty schools is too small to report; therefore, the average for high-poverty schools is not included. See Appendix B for more information.

[^13]
## Advanced Placement Exams

Students enrolled in Advanced Placement courses have the opportunity to take an exam in the corresponding subject area. These exams are given by the College Board. Currently, there are 33 AP subject exams administered in CMS. Scores for each exam range from 1 to 5 , with scores of 3,4 , and 5 considered passing. Students who earn AP exam scores of 3 or above typically receive credit for a corresponding college course. ${ }^{57}$ Most students taking an AP exam have completed the related AP course, although that is not required in order to take the exam. As shown in Figure 12, high-poverty schools have a pass rate dramatically lower than moderate- and low-poverty schools. In 2017-2018, students at low-poverty schools passed, on average, $69 \%$ of AP exams taken, whereas, in moderatepoverty schools, only $42 \%$ of exams were passed, and at high-poverty schools, only $7 \%$ of AP exams taken were passed. On average, AP exams taken at low-poverty schools are passed at a rate nearly 10 times higher than at high-poverty schools. These large gaps in AP exam pass rates by school poverty level indicate that students who are taking college-level coursework at high-poverty schools achieve content mastery at lower rates and leave high school with less college credit than their peers at lower-poverty schools.


Figure 12. Average Percentage of Passing AP Scores by High School Poverty Level



[^14]
## BRIGHT SPOT: ADVANCED PLACEMENT

East Mecklenburg High School, Principal Rick Parker

Under the leadership of Principal Rick Parker, from 2016-2017 to 2017-2018, East Mecklenburg High School increased the number of students taking Advanced Placement (AP) exams and their passing rates. School leaders credit these improvements to enhanced marketing strategies during Back-to-School Curriculum Night and more thoroughly educating students and parents about the differences between AP and International Baccalaureate (IB) Diploma Program (DP) classes. The school held gradelevel onboarding meetings for parents, and the meetings were customized to parents' particular concerns and questions. In addition, the testing coordinator and IB coordinator visited English classes to explain the expectations of AP and IB DP exams. The school staff used AP

Potential (which is based on students' PSAT scores) as an identifier to recruit students into courses based on their demonstrated readiness. Finally, all teachers who taught AP courses in 2017-2018 had previously taught the course, so they had experience in the subject matter.

Furthermore, there are additional strategies in place in the 2018-2019 school year. East Meck became an Equal Opportunity School and has increased AP enrollment for 2018-2019 through this program to reach more first-time AP students who have the motivation to take an AP class. Students are recommended by their teachers, and parents are invited to an official assembly to recognize students taking an upper-level class for the first time. The school will do
this again in the 2019-2020 school year. In addition, East Meck started using the AVID program in 2018-2019 with one ninth-grade class and one 11th-grade class. The 11th-grade class is paired with first-time AP students to help provide extra support. School leaders plan to expand next year with more classes. Finally, the school is offering two school-wide AVID strategies this year: focused note taking with summary statements and organizational skills. These skills will help all students prepare for advanced and rigorous courses.

Also see this article: https://www. wfae.org/post/east-mecklenburg-high-school-successful-enrolling-more-students-color-advancedclasses\#stream/0.


## Graduation Endorsements

Students in North Carolina public schools may receive one or more endorsement on their high school diploma. These endorsements indicate that students have completed specific course concentrations preparing them to be ready for college or careers. ${ }^{58}$ Students may qualify for and earn one or more of the five endorsement types:

1. Career Endorsement indicates completion of a rigorous course of study that includes a Career and Technical Education concentration;
2. College Endorsement indicates readiness for entry into community colleges;
3. College/UNC Endorsement indicates readiness for entry into a four-year university in the University of North Carolina system;
4. NC Academic Scholars Endorsement indicates completion of a balanced and academically rigorous high school program in preparation for post-secondary education.
5. Global Languages Endorsement indicates proficiency in one or more languages in addition to English.

Again, we see a stark difference by school poverty level. At low-poverty schools, 78\% have earned one or more endorsements, whereas at moderate-poverty and high-poverty schools, the percentages are 63\% and $45 \%$, respectively. We also see differences by race, with white students outpacing black and Hispanic students by approximately 20 to 30 percentage points at each poverty level.


Figure 13. Percentage of Graduates Earning One or More Graduation Endorsements


At low-poverty schools, 78\% have earned one or more endorsements, whereas at moderatepoverty and high-poverty schools, the percentages are $63 \%$ and $45 \%$, respectively.


58 This is a new measure included in this report that was not included in the inaugural Breaking the Link report.


## WHERE DO WE GO FROM HERE?

CMS is not where we want to be or need to be to achieve equity for every student. However, we have been taking and will continue to take actions to address issues of equity. These actions are broad, covering a wide range of school, staff, and student needs. We have a strategic plan, What Matters Most, that is simple, thoughtful, and points the way to specific actions for CMS. Though the current state of our district is sobering, our emphasis is on where we go from here. Within Strategic Plan 2024: What Matters Most are goals and strategies to improve and reduce disparities. We deliberately say, "reduce" rather than "eliminate," noting that the road to equity and excellence will take longer than the plan's duration. Embedded within the plan is a two-fold acknowledgment. First, we acknowledge that we must address longstanding inequities and persistent obstacles which require focused, intentional, and organization-wide efforts. Second, we acknowledge that the tools required to make needed progress are within our influence. It will certainly take partnerships between schools, families, and our entire community to be fully successful. Still, research shows that there are tools at CMS's disposal that can foster equity and excellence.

The following are some of the areas of work underway.

## DECREASING LOSS OF INSTRUCTIONAL TIME TO SUSPENSIONS AND ABSENTEEISM

We have updated systems and processes for administering out-of-school suspensions (OSS), creating a process that requires a strict review by the superintendent of every out-of-school suspension of a student in grades K-2. We have expanded access to alternatives to OSS, while understanding that, in pursuit of equity and excellence, we cannot compromise the safety or climate of our schools. We have focused on raising awareness of and reducing implicit bias by continuing cultural competency training for administrators and teaching staff. Thus far, more than 3,000 teachers have been trained to recognize and eliminate implicit and cultural biases. An additional 1,500 teachers are receiving similar training in 2018-2019, which includes critical, thought-provoking conversations about implicit bias and privilege.

## STRENGTHENING SOCIAL-EMOTIONAL SUPPORTS

To complement these initiatives moving forward, we will be making investments to strengthen our social-emotional supports and learning opportunities for students. In spring 2019, CMS partnered with the Collaborative for Academic, Social, and Emotional Learning (CASEL) to conduct an independent assessment of our district-wide capabilities for social-emotional learning (SEL) that will also include recommendations for district capacity-building. CASEL identifies five core intrapersonal, interpersonal, and cognitive competencies that are interrelated and reflect the cognitive, affective, and behavioral domains of social-emotional learning. ${ }^{59}$

The five core components are:

1. Self-awareness involves the ability to identify and recognize one's own emotions and thoughts, and their influences on behavior. It includes the ability to recognize one's own strengths, challenges, goals, and values. High levels of self-awareness require recognizing how thoughts, feelings, and actions are interconnected.
2. Self-management entails the ability to regulate one's emotions, thoughts, and behaviors effectively, which includes stress management, impulse control, motivating oneself, and working towards achieving personal and academic goals. High levels of self-management require self-monitoring, self-evaluation, and self-reinforcement.
3. Social awareness is the ability to take the perspective of others. This includes those who come from a different background and culture, and the ability to empathize with others; understand social and ethical norms; and to recognize resources and supports in the family, school, and community.
4. Relationship skills provide students with the tools to form and maintain positive and healthy relationships. High levels of relationship skills require clear communication, active listening, cooperation and constructive negotiation during conflict, and offering and seeking help when needed.
5. Responsible decision-making skills equip students with the ability to make constructive and respectful choices about their own behavior and social interactions while taking into account safety concerns, ethical standards, social and behavioral norms, consequences, and the well-being of self and others. ${ }^{60}$

Research shows that social-emotional learning not only improves academic achievement by an average of 11 percentile points, but it also increases pro-social behaviors, such as kindness, sharing, and empathy; improves student attitudes toward school; and reduces depression and stress among students. ${ }^{61}$ Other benefits of SEL include more positive attitudes toward oneself, others, and tasks; and enhanced self-efficacy; confidence; persistence; empathy; connection and commitment to school; and a sense of purpose. ${ }^{62}$ It is our expectation that investments in social-emotional learning, particularly in the middle grades, will decrease the loss of instructional time attributed to absenteeism and suspensions, as well as improve academic performance.

## INCREASING OPPORTUNITIES TO TAKE ADVANCED COURSES

We are expanding access to advanced courses (Advanced Placement, International Baccalaureate, Cambridge, and dual enrollment) through multiple efforts. We have made provisions to ensure that in 2019-2020, every high school will offer at least 10 AP courses, more than doubling the number of AP courses offered at our high-poverty high schools. We have worked to ensure that our high schools have active College and Career Programs, creating access to college courses locally while in high school.

We have also broadened our definition of readiness for advanced courses, strategically identifying students ready for extra challenges and actively recruiting them to take advantage of those opportunities. These broadened selection and recruitment efforts are now underway in a third of our high schools. As a result of these efforts, in 2017-2018, approximately 560 additional students were identified, recruited, and enrolled in AP courses. Additionally, the district has introduced Discover CTE, an outreach program for Career and Technical Education. Discover CTE offers 19 distinct career pathways to prepare students for college, the military, or a career after high school. CMS has intentionally put more focus on career readiness for our graduates and the results are apparent: The number of students who have earned an industry certification has gone from 500 to 2,000 in three years.

Moving forward, the efforts to identify and recruit students into AP courses will be expanded to additional high schools. The methodology employed will be extended to the middle grades to increase Math I course-taking by eighth grade. We expect these collective efforts to substantially increase the number of students taking college-level courses.

60 CASEL, 2013.

[^15]
## PROVIDING RIGOR AND RAISED EXPECTATIONS IN EVERY CLASSROOM

The focus of Strategic Plan 2024 is improving the quality of teaching, placing a laser focus on raising the expectations for our students by increasing access to 1) a rigorous, consistently-implemented curriculum, 2) high-quality, culturally responsive teaching of that curriculum, and 3) engagement of students in that curriculum, allowing them to do most of the thinking in their lessons.

In the spring and summer of 2019, we will be taking major steps toward delivering on the guarantee laid out in Strategic Plan 2024. In grades K-3, 6, 8, and 9, new curricula will be purchased in English language arts and mathematics. These purchases will begin a multi-year curriculum acquisition for grades K-8 in all core content areas, and targeted areas in grades 9-12.

The introduction of new curricula will be supported by summer professional development complemented by job-embedded professional development throughout the school year. Across the district, instructional facilitators, coaches, and multi-classroom leaders will be deployed in schools to continue working with teachers to strengthen teaching quality. Approximately 400 positions are allocated for such purposes in a variety of areas. These individuals, most having been hired from among our strongest teachers,
will lead and facilitate job-embedded learning for teachers, central office content area specialists, and curriculum coordinators. They will work to raise teachers' expectations for students. We will continue to monitor the level of alignment between NCSCOS standards and assigned work in classrooms.

Our focus on teaching quality will be further supported by shifts in the Human Resources department to refine and enhance efforts to recruit and hire the best teachers - those who have the skills and disposition to teach the diverse student body we are privileged to serve. Our staff has undertaken efforts to strategically schedule students so that the weakest students are paired with the strongest teachers in each school, based on our knowledge that a great teacher can make all of the difference. Strategic Plan 2024: What Matters Most will guide our work. Our investments and priorities for 2019-2020 are reflective of the charge outlined in our plan.

## FUTURE REPORTS

We will continue to release an annual Breaking the Link report. Much of the data shown here, as well as additional data, will be available in the interactive Performance Dashboard on the district website. We intend to publish a comprehensive report every three years. In the intervening years, an interim report (such as this one) will be released.


## Key Terms

| Chronic absenteeism | A student is considered chronically absent if he or she misses more than $10 \%$ of days enrolled for any reason. <br> In order to take into account all lost instructional time, unexcused absences, excused absences, and out-of- <br> school suspensions (OSS) are all included as absences in the calculation of chronic absenteeism. |
| ---: | :--- |
| Cohort graduation rate |  |
|  | The percentage of students in the four-year graduation cohort who graduate in four years or fewer. In the <br> 2017-2018 graduation cohort, for the first time, students entering a high school "off track" remain in the <br> denominator for the school and the district. |
| College and Career Readiness |  |
| (CCR) | Achievement Levels 4 and 5 (of 5 levels) on End-of-Grade and End-of-Course exams, according to the <br> methodology used by the State Board of Education since 2013-2014 for determining achievement levels. |
| College-level course | Academically rigorous coursework offered in high school, most often as preparation for higher education. <br> For the purposes of this report, college-level courses are defined as Advanced Placement, International |
|  | Baccalaureate, Cambridge International, or dual-enrollment courses. |
| The overall purpose of the Community Eligibility Provision (CEP) of the U.S. Department of Agriculture (USDA) |  |

## Key Terms

North Carolina READY Accountability Model

Out-of-school suspension (OSS) A required absence from school as a consequence for a serious infraction of the Code of Student Conduct.

Social-emotional learning (SEL)
2017-2018 was the sixth year under North Carolina's READY accountability model. The READY initiative has three components:
(1) A Standard Course of Study focused on the most critical knowledge and skills that students need to be successful at the next grade level and after high school; (2) End-of-Grade and End-of-Course assessments with rigorous open-ended questions and real-world applications that require students to express their ideas clearly with supporting facts; and (3) an accountability model that measures how well schools are doing to ensure that students are career and college ready upon high school graduation. For more information, see http://www. ncpublicschools.org/accountability/reporting/. The use of out-of-school suspension (OSS) is reserved as a consequence for student conduct where other documented options either have not been effective or, in the judgment of the principal, will not serve to protect other students and staff at the school or will not preserve an orderly school environment. "Discretionary" refers to OSS resulting from Unacceptable Behavior incidents only (as opposed to other incident types, such as Reportable Offenses, for which school administrators do not have discretion in the type and severity of disciplinary response).

Social-emotional learning (SEL) is the process through which children learn and apply the knowledge, attitudes, and skills needed to work with other people and understand and manage emotions. These interpersonal skills are necessary in addition to academic knowledge for a student to succeed in school. In 2013, the Collaborative for Academic, Social, and Emotional Learning (CASEL) identified five core intrapersonal, interpersonal, and cognitive competences that are interrelated and reflect the cognitive, affective, and behavioral domains of SEL. The five core components are self-awareness, self-management, social awareness, relationship skills, and responsible decision making.

## REFERENCES

Aaronson, D., Barrow, L., \& Sander, W. (2007). Teacher and student achievement in the Chicago public high schools. Journal of Labor Economics, 25 (1), 95-135.
Adelman, \& Clifford. (n.d.). Archived - Answers in the tool box: Academic intensity, attendance patterns, and Bachelor's degree attainment cultivating ACRES, the academic resources index. Retrieved from https://www2.ed.gov/pubs/Toolbox/ Part1.html

Adelman, C. (2006). The toolbox revisited: Paths to degree completion from high school through college. Washington, D.C.: U.S. Department of Education. Retrieved from www.ed.gov/rschstat/research/pubs/toolboxrevisit/index.html

Attendance Works (2016). Chronic Absence: Our top pick for the ESSA school quality or student success indicator. Retrieved from https://attendanceworks.org/wp-content/uploads/2017/08/ESSA-Brief_083016-revised.pdf
Balfanz, R., \& Byrnes, V. (2012). Chronic absenteeism: summarizing what we know from nationally available data. Baltimore: Johns Hopkins University Center for Social Organization of Schools.
Balfanz, R., \& Legters, N. (2004). Locating the dropout crisis. Baltimore, MD: Johns Hopkins University.
CASEL. (2013). 2013 CASEL Guide: Effective social and emotional learning programs. Retrieved from https://casel.org/ wp-content/uploads/2016/01/2013-casel-guide-1.pdf

Charlotte-Mecklenburg Schools. (2017). English learner fast facts - 2017-2018. Retrieved from http://www.cms.k12.nc.us/ cmsdepartments/ci/els/Documents/EL_Fast\%20Facts_2017-18.pdf

Charlotte-Mecklenburg Schools. (2018). CMS equity policy outline. Retrieved from http://www.cms.k12.nc.us/boe/Documents/ Draft\%20Equity\%20Policy\%20-\%209.21.18.pdf
Clotfelter, C. T., Ladd, H. F., \& Vigdor, J. (2005). Who teaches whom? Race and the distribution of novice teachers. Economics of Education review, 24(4), 377-392.

Connolly, F., \& Olson, L.S. (2012). Early elementary performance and attendance in Baltimore City Schools' pre-kindergarten and kindergarten. Retrieved from ERIC database. (ED535768).

Dougherty, C., Mellor, L. and Jian, S. (2006) The relationship between advanced placement and college graduation. Retrieved from ERIC database. (ED519365).

Durlak, J.A., Weissberg, R.P., Dymnicki, A.B, Taylor, R.D. \& Schellinger, K.B. (2011). The impact of enhancing students' social and emotional learning: a meta-analysis of school-based universal interventions. Child Development, 82(1), 403-432.
Evergreen, S.D.H. (2017). Effective data visualization: The right chart for the right data. Thousand Oaks, CA: Sage Publications.
Evergreen, S.D.H. (2018). Presenting data effectively: Communicating your findings for maximum impact (2nd ed.). Sage Publications: Thousand Oaks, CA.

Gaillard, F. (2006). The dream long deferred: The landmark Struggle for desegregation in Charlotte, North Carolina. Columbia: University of South Carolina Press.

Geiser, S., \& Santelices, V. (2004). The Role of Advanced Placement and Honors Courses in College Admissions. Retrieved from https://escholarship.org/uc/item/3ft1g8rz\#main

General Assembly of North Carolina Session 2011. (2011). Session Law 2012-145, Senate Bill 187. Retrieved from https://www. ncleg.net/Sessions/2011/Bills/Senate/PDF/S187v7.pdf

Gershenson, S. (2016) Linking teacher quality, student attendance, and student achievement. Education Finance and Policy, 11(2), 125-149.

Ginsburg, A., Jordan, P., \& Chang, H. (2014). Absences add up: How school attendance influences student success. Retrieved from http://www.attendanceworks.org/wordpress/wp-content/uploads/2014/09/Absenses-Add-Up_090114-1-1.pdf
Goldhaber, D., Lavery, L., \& Theobald, R. (2015). Uneven playing field? Assessing the teacher quality gap between advantaged and disadvantaged students. Educational Researcher, 44, 293-307.
Gottfried, M. A. (2009). Excused versus unexcused: How student absences in elementary school affect academic achievement. Educational Evaluation and Policy Analysis, 31, 392-419.
Gottfried, M. A. (2011). Absent peers in elementary years: The negative classroom effects of unexcused absences on standardized testing outcomes. Teachers College Record, 113(8), 1597-1632.

## REFERENCES

Gottfried, M. A. (2014). Chronic absenteeism and its effects on students' academic and socioemotional outcomes. Journal of Education for Students Placed at Risk, 19, 53-75.

Hammond, Z. (2015). Culturally responsive teaching and the brain: promoting authentic engagement and rigor among culturally and linguistically diverse students. Thousand Oaks, California: Corwin, a SAGE Company.

Heckman, J. J., \& Kautz, T. (2013). Fostering and measuring skills: Interventions that improve character and cognition (Publication No. w19656). Retrieved from https://www.nber.org/papers/w19656

Henderson, B. (2017, September 1). Classmates screamed and spat at her. Sixty years later, she talks of forgiveness. The Charlotte Observer. https://www.charlotteobserver.com/news/local/article170707557.html

Hoxby, C.M., Murarka, S., \& Kang, J. (2009). How New York City's charter schools affect achievement. Cambridge, MA: New York City Charter Schools Evaluation Project.
Isenberg, E., Max, J., Gleason, P., Potamites, L., Santillano, R., Hock, H., \& Hansen, M. (2013). Access to effective teaching for disadvantaged students. Retrieved from ERIC database. (ED544345).

Kini, T., \& Podolsky, A. (2016). Does teaching experience increase teacher effectiveness? A review of the research. Retrieved from https://learningpolicyinstitute.org/sites/default/files/product-files/Teaching_Experience_Report_June_2016.pdf

Lehr, C. A., Hansen, A., Sinclair, M. F., \& Christenson, S. L. (2004). Moving beyond dropout towards school completion: An integrative review of data-based interventions. School Psychology Review, 32, 342-364.

Mansfield, R. K. (2015). Teacher quality and student inequality. Journal of Labor Economics, 33 (3), 751-788.
Mattern, K.D, Marini, J.P., \& Shaw, E.J. (2013). Are $A P ®$ students more likely to graduate from college on time? Research report 2013-5. Retrieved from ERIC database. (ED556464).

Orfield, G., \& Kornhaber, M. L. (2001). Raisings standards or raising barriers? Inequality and high-stakes testing in public education. New York, NY: Century Foundation Press.

Patall, E.A., Cooper, H., \& Batts Allen, A. (2010). Extending the school day or school year: A systematic review of research (19852009). Review of Educational Research, 80(3), 401-436.

Ready, D. D. (2010). Socioeconomic disadvantage, school attendance, and early cognitive development: The Differential effects of school exposure. Sociology of Education, 83(4), 271-286
Quint, J., Thompson, S. L., \& Bald, M. (2008). Relationships, rigor and readiness. Strategies for improving high schools. Retrieved from ERIC database. (ED502973).

Rivkin, S. G., Hanushek, E. A., \& Kain, J. F. (2005). Teachers, schools and academic achievement. Econometrica, 73 (2), 417-458.
Rothstein, R. (2014). Brown v. Board at 60: Why have we been so disappointed? What have we learned? Retrieved from https:// www.epi.org/publication/brown-at-60-why-have-we-been-so-disappointed-what-have-we-learned/Sanders, W.L. \& Rivers, J.C. (1996). Cumulative and residual effects of teachers on future student academic achievement. Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center.

Sass, T. R., Hannaway, J., Xu, Z., Figlio, D. N., \& Feng, L. (2012). Value added of teachers in high poverty schools and lower poverty schools. Journal of Urban Economics, 72, 104-122.

Smith, C. (2016, October 3) The desegregation and resegregation of Charlotte's schools. The New Yorker. https://www. newyorker.com/news/news-desk/the-desegregation-and-resegregation-of-charlottes-schools

Steward, R. J., Steward, A. D., Blair, J., Jo, H., \& Hill, M. F. (2008). School attendance revisited: A study of urban African American Students' grade point averages and coping strategies. Urban Education, 43, 519-536.

Stronge, J. H. (2018). Qualities of effective teachers. Alexandria, VA: ASCD.
Theokas, C., \& Saaris, R. (2013). Finding America's missing AP and IB students. Retrieved from https://edtrust.org/resource/ finding-americas-missing-ap-and-ib-students/

TNTP (2018). The opportunity myth. Retrieved from https://tntp.org/publications/view/student-experiences/ the-opportunity-myth
U.S. Department of Education (2004). Achieving diversity: Race-neutral alternatives in American education. Retrieved from ERIC database. (ED486351).

## Appendix A. Community Eligibility Provision Details and List of Schools by Poverty Status Category in 2017-2018.

## COMMUNITY ELIGIBILITY PROVISION

Section 104(a) of the Healthy, Hunger Free Kids Act of 2010 amended the National School Lunch Act to provide an alternative to household eligibility applications for free and reduced price meals in high poverty local educational agencies (LEAs, or districts) and schools. The overall purpose of the Community Eligibility Provision (CEP) of the U.S. Department of Agriculture (USDA) is to improve access to nutritious meals for students in high-poverty areas by providing meals to all students at no cost to the student or family.

CEP is available to LEAs and schools with 40 percent or more "identified students" as of the most recent April 1. To determine the Identified Student Percentage (ISP), LEAs and schools divide the number of identified students as of April 1 by the number of enrolled students as of April 1, and then multiply by 100.
Students can be directly certified through (1) Participation in Assistance Programs: a child (or any member of the child's household) receives benefits from the Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), or Food Distribution Program on Indian Reservations (FDPIR), as determined through direct certification; (2) Receipt of Medicaid and have familial income at or below 133 percent of the Federal poverty level as determined by Medicaid; or (3) Enrollment in a Federally-funded Head Start or comparable State-funded Head Start or pre-kindergarten program, or is a homeless, runaway, migrant, or foster child.
Identified students are a subset of the students who would qualify for free or reduced-price school meals if their families completed a school meal application.
Each year states are required to publish a list of schools and school districts that were eligible or near-eligible for community eligibility in the following school year. The Food Research \& Action Center, in partnership with the U.S. Department of Agriculture, compiled these lists and made them available in a searchable database: http://frac.org/community-eligibilitydatabase/. You can find a fact sheet here: https://www.fns.usda.gov/sites/default/files/cn/CEPfactsheet.pdf

| School | Identified Student Percentage (ISP) | Poverty Status Category | Notes |
| :---: | :---: | :---: | :---: |
| Providence Spring Elementary | 2.2\% | Low Poverty |  |
| Polo Ridge Elementary | 2.2\% | Low Poverty |  |
| Elon Park Elementary | 3.6\% | Low Poverty |  |
| Park Rd Elementary | 3.9\% | Low Poverty |  |
| Providence High | 4.7\% | Low Poverty |  |
| JM Robinson Middle | 4.7\% | Low Poverty |  |
| JT Williams Secondary Montessori | 4.8\% | Low Poverty | New School in 2017-18 |
| Ardrey Kell High | 5.2\% | Low Poverty |  |
| Elizabeth Lane Elementary | 5.2\% | Low Poverty |  |
| Merancas Middle College | 5.5\% | Low Poverty | New School in 2017-18 |
| Hawk Ridge Elementary | 6.8\% | Low Poverty |  |
| South Charlotte Middle | 7.5\% | Low Poverty |  |
| Chantilly Elementary | 8.2\% | Low Poverty |  |
| Community House Middle | 8.4\% | Low Poverty |  |
| Hough High | 9.2\% | Low Poverty |  |
| Beverly Woods Elementary | 9.2\% | Low Poverty |  |
| Grand Oak Elementary | 9.3\% | Low Poverty |  |
| McKee Road | 9.3\% | Low Poverty |  |
| Ballantyne Elementary | 9.4\% | Low Poverty |  |
| Selwyn Elementary | 10.1\% | Low Poverty |  |
| Sharon Elementary | 10.6\% | Low Poverty |  |
| Olde Providence Elementary | 10.8\% | Low Poverty |  |
| Trillium Springs Montessori | 11.0\% | Low Poverty |  |
| Bailey Middle | 11.2\% | Low Poverty |  |
| Davidson Elementary | 11.7\% | Low Poverty |  |
| McAlpine Elementary | 12.8\% | Low Poverty |  |


| JV Washam Elementary | 12.9\% | Low Poverty |  |
| :---: | :---: | :---: | :---: |
| Harper Middle College | 13.9\% | Low Poverty |  |
| Crestdale Middle | 14.0\% | Low Poverty |  |
| Levine Middle College | 14.0\% | Low Poverty |  |
| Irwin Academic Center | 14.0\% | Low Poverty |  |
| Cato Middle College | 14.3\% | Low Poverty |  |
| Torrence Creek Elementary | 14.4\% | Low Poverty |  |
| Highland Mill Montessori | 14.5\% | Low Poverty |  |
| Bain Elementary | 15.0\% | Low Poverty |  |
| EE Waddell Language Academy | 15.8\% | Low Poverty |  |
| Highland Creek Elementary | 16.9\% | Low Poverty |  |
| Barnette Elementary | 17.2\% | Low Poverty |  |
| Cornelius Elementary | 17.8\% | Low Poverty |  |
| Huntersville Elementary | 18.2\% | Low Poverty |  |
| Bradley Middle | 18.7\% | Low Poverty |  |
| Dilworth Elementary | 18.9\% | Low Poverty |  |
| Endhaven Lane Elementary | 19.3\% | Low Poverty |  |
| Olympic High-Math Eng. Tech Science | 19.4\% | Low Poverty |  |
| Piedmont Middle | 20.8\% | Low Poverty |  |
| Randolph Middle | 21.2\% | Low Poverty |  |
| Eastover Elementary | 21.3\% | Low Poverty |  |
| Winget Park Elementary | 22.7\% | Low Poverty |  |
| Matthews Elementary | 22.9\% | Low Poverty |  |
| Myers Park High | 23.2\% | Low Poverty |  |
| Alexander Graham Middle | 23.7\% | Low Poverty | Change from Moderate Poverty in 2016-17 |
| Olympic High - Renaissance | 23.9\% | Low Poverty |  |
| Palisades Park Elementary | 24.2\% | Low Poverty |  |
| Olympic High - Biotech Health Pub Admin | 24.5\% | Low Poverty |  |
| Mint Hill Middle | 24.6\% | Moderate Poverty | Change from Low Poverty in 2016-17 |
| Butler High | 24.6\% | Moderate Poverty | Change from Low Poverty in 2016-17 |
| South Mecklenburg High | 25.4\% | Moderate Poverty | Change from Low Poverty in 2016-17 |
| Carmel Middle | 25.5\% | Moderate Poverty |  |
| River Gate Elementary | 25.6\% | Moderate Poverty | Change from Low Poverty in 2016-17 |
| JM Alexander Middle | 26.6\% | Moderate Poverty |  |
| Collinswood Language Academy | 26.9\% | Moderate Poverty |  |
| Mallard Creek High | 27.0\% | Moderate Poverty |  |
| Northwest School of the Arts | 27.4\% | Moderate Poverty |  |
| UNCC - Epic | 27.8\% | Moderate Poverty |  |
| eLearning Academy | 27.8\% | Moderate Poverty |  |
| Blythe Elementary | 28.0\% | Moderate Poverty |  |
| Lansdowne Elementary | 28.0\% | Moderate Poverty |  |
| Charlotte Teacher Early College | 28.8\% | Moderate Poverty | New School in 2017-18 |
| Morehead STEM Academy | 29.1\% | Moderate Poverty |  |
| Smithfield Elementary | 29.3\% | Moderate Poverty |  |
| Cotswold Elementary | 29.5\% | Moderate Poverty |  |
| Hopewell High | 30.0\% | Moderate Poverty |  |
| Olympic High - TEAM | 30.1\% | Moderate Poverty | Change from Low Poverty in 2016-17 |
| Croft Community School | 30.1\% | Moderate Poverty |  |
| Myers Park Elementary | 30.5\% | Moderate Poverty |  |
| Long Creek Elementary | 30.6\% | Moderate Poverty |  |


| Berewick Elementary | 30.9\% | Moderate Poverty |  |
| :---: | :---: | :---: | :---: |
| Southwest Middle | 31.4\% | Moderate Poverty |  |
| North Mecklenburg High | 32.4\% | Moderate Poverty |  |
| Kennedy Middle | 33.0\% | Moderate Poverty |  |
| Dorothy J Vaughan Academy | 33.2\% | Moderate Poverty | New School in 2017-18 |
| Ridge Road Middle | 33.3\% | Moderate Poverty |  |
| Olympic High-Leadership and Development | 33.6\% | Moderate Poverty |  |
| Clear Creek Elementary | 33.9\% | Moderate Poverty |  |
| Mallard Creek Elementary | 34.4\% | Moderate Poverty |  |
| Independence High | 34.7\% | Moderate Poverty |  |
| Crown Point Elementary | 34.8\% | Moderate Poverty |  |
| Parkside Elementary | 34.8\% | Moderate Poverty | Change from Low Poverty in 2016-17 |
| Phillip 0. Berry High | 35.9\% | Moderate Poverty |  |
| Elizabeth Traditional | 37.1\% | Moderate Poverty |  |
| East Mecklenburg High | 39.1\% | Moderate Poverty |  |
| Rocky River High | 39.4\% | Moderate Poverty |  |
| Lake Wylie Elementary | 40.5\% | Moderate Poverty |  |
| Quail Hollow Middle | 40.8\% | Moderate Poverty |  |
| Mountain Island Academy | 42.7\% | Moderate Poverty |  |
| Pineville Elementary | 43.3\% | Moderate Poverty |  |
| Oaklawn Elementary | 43.9\% | Moderate Poverty |  |
| Steele Creek Elementary | 44.4\% | Moderate Poverty |  |
| Hawthorne High | 44.6\% | Moderate Poverty |  |
| Reedy Creek Elementary | 45.0\% | Moderate Poverty |  |
| Metro School | 45.6\% | Moderate Poverty |  |
| Stoney Creek Elementary | 46.4\% | Moderate Poverty |  |
| River Oaks Academy | 46.7\% | Moderate Poverty |  |
| Vance High | 47.3\% | Moderate Poverty |  |
| Northeast Middle | 48.1\% | Moderate Poverty |  |
| Marie G Davis 9-12 | 48.1\% | Moderate Poverty | New School in 2017-18 |
| University Meadows | 48.2\% | Moderate Poverty |  |
| Northridge Middle | 48.6\% | Moderate Poverty |  |
| Barringer Elementary | 48.7\% | Moderate Poverty |  |
| West Mecklenburg High | 50.3\% | Moderate Poverty |  |
| Performance Learning Center | 51.0\% | High Poverty | Change from Moderate Poverty in 2016-17 |
| Marie G Davis K-8 | 51.3\% | High Poverty | New School in 2017-18 |
| McClintock Middle | 51.8\% | High Poverty |  |
| David Cox Elementary | 52.0\% | High Poverty | Change from Moderate Poverty in 2016-17 |
| James Martin Middle | 52.7\% | High Poverty | Change from Moderate Poverty in 2016-17 |
| Coulwood STEM Academy | 53.0\% | High Poverty | Change from Moderate Poverty in 2016-17 |
| Shamrock Gardens Elementary | 53.4\% | High Poverty |  |
| Sedgefield Middle | 54.4\% | High Poverty |  |
| Lebanon Road Elementary | 55.3\% | High Poverty |  |
| Oakhurst STEAM Academy | 55.3\% | High Poverty | Change from Moderate Poverty in 2016-17 |
| JW Grier Elementary | 55.9\% | High Poverty |  |
| Huntingtowne Farms Elementary | 55.9\% | High Poverty |  |
| Greenway Park Elementary | 56.4\% | High Poverty |  |
| Starmount Academy of Excellence | 56.5\% | High Poverty | Change from Moderate Poverty in 2016-17 |
| Garinger High | 56.6\% | High Poverty |  |
| Piney Grove Elementary | 56.8\% | High Poverty |  |


| Montclaire Elementary | 57.3\% | High Poverty |  |
| :---: | :---: | :---: | :---: |
| JH Gunn Elementary | 57.6\% | High Poverty |  |
| Idlewild Elementary | 57.6\% | High Poverty |  |
| First Ward Academy | 57.9\% | High Poverty |  |
| Paw Creek Elementary | 58.3\% | High Poverty |  |
| Berryhill School | 58.3\% | High Poverty |  |
| Hornets Nest Elementary | 58.7\% | High Poverty | Change from Moderate Poverty in 2016-17 |
| Pinewood Elementary | 59.0\% | High Poverty |  |
| Tuckaseegee Elementary | 59.6\% | High Poverty |  |
| Whitewater Academy | 59.8\% | High Poverty |  |
| Windsor Park Elementary | 60.0\% | High Poverty |  |
| Albemarle Rd Middle | 60.0\% | High Poverty |  |
| Harding High | 60.8\% | High Poverty |  |
| Ranson Middle | 61.1\% | High Poverty |  |
| Winding Springs Elementary | 61.4\% | High Poverty |  |
| Oakdale Elementary | 62.0\% | High Poverty |  |
| Cochrane Collegiate Academy | 62.4\% | High Poverty |  |
| Nathaniel Alexander Elementary | 62.6\% | High Poverty |  |
| Newell Elementary | 63.0\% | High Poverty |  |
| Lincoln Heights Academy | 63.0\% | High Poverty |  |
| Whitewater Middle | 64.2\% | High Poverty |  |
| Sterling Elementary | 64.2\% | High Poverty |  |
| Eastway Middle | 64.6\% | High Poverty |  |
| Lawrence Orr Elementary | 64.8\% | High Poverty | Change from Moderate Poverty in 2016-17 |
| Rama Rd Elementary | 65.2\% | High Poverty |  |
| Martin Luther King, Jr. Middle | 66.6\% | High Poverty |  |
| Nations Ford Elementary | 66.9\% | High Poverty |  |
| Hickory Grove Elementary | 67.5\% | High Poverty |  |
| Albemarle Road Elementary | 68.2\% | High Poverty |  |
| Highland Renaissance | 68.3\% | High Poverty |  |
| Statesville Rd Elem Elementary | 68.6\% | High Poverty |  |
| University Park | 68.8\% | High Poverty |  |
| Briarwood Elementary | 69.8\% | High Poverty |  |
| West Charlotte High | 70.2\% | High Poverty |  |
| Merry Oaks Elementary | 71.0\% | High Poverty |  |
| Winterfield Elementary | 71.7\% | High Poverty |  |
| Turning Point | 73.3\% | High Poverty |  |
| Devonshire Elementary | 74.4\% | High Poverty |  |
| Hidden Valley Elementary | 75.8\% | High Poverty |  |
| Thomasboro Academy | 78.9\% | High Poverty |  |
| Renaissance West STEAM Academy | 79.5\% | High Poverty | New School in 2017-18 |
| Allenbrook Elementary | 80.1\% | High Poverty |  |
| Westerly Hills | 81.8\% | High Poverty |  |
| Ashley Park PK-8 | 82.1\% | High Poverty |  |
| Sedgefield Elementary | 82.4\% | High Poverty |  |
| Reid Park Academy | 84.6\% | High Poverty |  |
| Bruns Academy | 85.3\% | High Poverty |  |
| Druid Hills Academy | 87.7\% | High Poverty |  |
| Billingsville Elementary | 87.9\% | High Poverty |  |
| Walter G. Byers | 89.1\% | High Poverty |  |

## Appendix B. Measure Definitions and Notes.

| Measure | Figure | Definition/Notes | Disaggregation |
| :---: | :---: | :---: | :---: |
| ISP | 1 | Identified Student Percentage (see Appendix A). Includes all schools. | None - distribution |
| Geography of ISP | 2 | Identified Student Percentage (see Appendix A). Includes all schools. | None <br> - distribution |
| Enrollment: K-5 | 3 a с | Average daily enrollment for 2017-2018. Grade span refers to the student's grade level regardless of the grade span configuration of their school. Includes all students in Grades K-5, 6-8, 9-12, respectively. | Poverty and Race |
| Enrollment: 6-8 |  |  |  |
| Enrollment: 9-12 |  |  |  |
| EOG Reading CCR 3-5 | 4a-f | Official 2017-2018 end-of-grade scores reported for the school of enrollment by NCDPI. Includes students in the relevant tested grades (but excludes students enrolled at Lincoln Heights, Turning Point, and Metro School). | Poverty and Race |
| EOG Reading CCR 6-8 |  |  |  |
| EOG Math CCR 3-5 |  |  |  |
| EOG Math CCR 6-8 |  |  |  |
| EOG Science CCR 5 |  |  |  |
| EOG Science CCR 8 |  |  |  |
| EOC Math 16-8 | $5 \mathrm{a}-\mathrm{d}$ | Official 2017-2018 end-of-course scores reported for the school of enrollment by NCDPI. Includes students in the relevant tested grades (but excludes students enrolled at Lincoln Heights, Turning Point, and Metro School). | Poverty and Race |
| EOC Math 19-12 |  |  |  |
| EOC English II |  |  |  |
| EOC Biology |  |  |  |
| ACT Benchmark of 17 | 6 | Percentage of 11th grade students who reached a composite ACT score of 17 , the minimum composite score required for admission to University of North Carolina system schools. Includes 11th grade students who took the ACT (but excludes students enrolled at Lincoln Heights, Turning Point, and Metro School). | Poverty and Race |
| Cohort Graduation Rate | 7 | The percentage of students in the graduation cohort who graduate in four years or fewer. See http://www.ncpublicschools.org/ accountability/reporting/cohortgradrate. Includes 31 schools with a graduation rate (but excludes Lincoln Heights, Turning Point, and Metro School). |  |
| EVAAS: Exceeded Growth and Retained | 8 | Percentage of the K-12 teachers who exceeded growth (EVAAS composite) in 2016-2017 that were retained at the same school for 2017-2018 (still employed and assigned to students as of August 30, 2016). Teachers on leave on August 30 but still employed at the school on that date are counted as retained. Denominator is only those teachers who had EVAAS ratings and exceeded expected growth in 2016-2017. Differs from March-to-March teacher retention measures used in other forms of retention reporting. This measure excludes seven schools that were new in 2017-2018: JT Williams Secondary Montessori, Merancas Middle College, Charlotte Teacher Early College, Dorothy J Vaughan Academy, Marie G Davis 9-12, Marie G Davis K-8, and Renaissance West STEAM Academy. Also excludes Lincoln Heights, Turning Point, and Metro School. | Poverty and Race |


| Measure | Figure | Definition/Notes | Disaggregation |
| :---: | :---: | :---: | :---: |
| Chronic Absenteeism: <br> Average School <br> Percentage K-5 | $9 \mathrm{a}-\mathrm{c}$ | Percentage of students absent more than 10\% of days enrolled at that school. When calculating Chronic Absenteeism, OSS days are tallied as absences because the student was not present for the instructional day. <br> Includes students in the relevant grades (but excludes students enrolled at Lincoln Heights, Turning Point, and Metro School). | Poverty and Race |
| Chronic Absenteeism: <br> Average School <br> Percentage 6-8 |  |  |  |
| Chronic Absenteeism: <br> Average School <br> Percentage 9-12 |  |  |  |
| OSS: Average School Percentage 1+ OSS K-5 | 10a-c | Discretionary suspensions are out-of-school suspensions (OSS) resulting from unacceptable behavior (UB) incidents, as opposed to other incident types such as reportable offense or persistently dangerous. OSS are counted at the school at which the student was enrolled at the time the suspension was served. <br> Includes students in the relevant grades (but excludes students enrolled at Lincoln Heights, Turning Point, and Metro School). | Poverty and Race |
| OSS: Average School <br> Percentage 1+ OSS 6-8 |  |  |  |
| OSS: Average School Percentage 1+ OSS 9-12 |  |  |  |
| Graduates Completing College-Level Courses | 11 | Percentage of graduates who had completed (enrolled in and received a passing grade for) a college-level course (Advanced Placement, International Baccalaureate, Cambridge exam-bearing, or Dual Enrollment; excludes Lincoln Heights, Turning Point, and Metro School). The school where the student is counted is the school of graduation, not necessarily where the student took the course. The number of White students in high-poverty schools is too small to report. This is because the numerator for high-poverty White students is 10 or fewer and the overall group denominator is 20 or fewer students. | Poverty and Race |
| AP Exam Pass Rate | 12 | Percentage of Advanced Placement (AP) exams with scores of 3,4 , or 5 . At 31 schools, at least one AP exam was taken. Excludes Lincoln Heights, Turning Point, and Metro School. <br> The denominator is the total number of AP exams taken. | Poverty |
| Graduation <br> Endorsements | 13 | Percentage of cohort graduates earning one or more graduation endorsement. The denominator is the total number of members of the 2017-18 graduation cohort who graduated during or before the 2017-18 school year ("on time" in four years or fewer). Excludes Lincoln Heights, Turning Point, and Metro School. | Poverty and Race |



## CLAYTON M. WILCOX

Superintendent

# Breaking the Link Project Team 

FRANK BARNES

Chief Equity Officer

LINDSAY MESSINGER
Director, Research, Evaluation, and Analytics

MELORA COUGHRAN
Senior Analyst, Research, Evaluation, and Analytics

## REBECCA SCHELL

Senior Analyst, Research, Evaluation, and Analytics

EMAN AL-TAHER<br>Analyst, Research, Evaluation, and Analytics

SUSAN FREIJE<br>Accountability Coordinator<br>COREY BELDEN<br>Enterprise Data Architect<br>DANIELLE MILLER<br>Executive Director, Accountability<br>CHARLES MUMPOWER<br>Executive Director, Data Quality

Other departments in Charlotte-Mecklenburg Schools that contributed to this report are Communications, Human Resources, English Learner Services/Translation, and Child Nutrition.

## 5 <br> OFFICE OF ACCOUNTABILITY

CHARLOTTE-MECKLENBURG SCHOOLS


[^0]:    1 Rothstein, 2014.
    2 See Henderson, 2017.
    3 See Smith, 2016.

[^1]:    4 Gaillard, 2006, p. 134.
    7 CMS Board of Education, 2018.
    Gaillard, 2006, p. 165.
    8 Hammond, 2015.

[^2]:    12 Patall, Cooper, \& Batts, 2010.
    13 General Assembly of North Carolina, Session 2011, 2011.
    14 Hoxby, Murarka, \& Kang, 2009.

[^3]:    5 Attendance Works, 2016.
    Connonly \& Olson, 2012.
    Ready, 2010.

[^4]:    The number of one group of students in high-poverty schools is too small to report, so the average for high-poverty schools is not presented.

[^5]:    24 CMS EL Fast Facts, 2017-2018.
    5 Report to the North Carolina General Assembly, 2017.
    26 In the analyses that follow, two schools that serve Exceptional Children (Lincoln Heights and Metro School) and one alternative school (Turning Point) are included only in district enrollment data and in district averages.

[^6]:    Thus, the numbers presented in these analyses may vary from the data presented in the Performance Dashboard on the CMS website. See Appendix B for more information about each measure.
    27 The data sources for this report include Community Eligibility Provision, North Carolina Department of Public Instruction, PowerSchool, and College Board.

[^7]:    28 For example, students in grade 7 are listed in the grades 6-8 category, regardless of the grade span configuration of their school.
    29 Numbers may not add to 100 due to rounding. The numbers in this paragraph are based on total enrollment in CMS and are not presented in Figure 3.

[^8]:    31 Starting in 2017-2018, Grade 8 students took the test for the course they were enrolled in: either Math 1 EOC or Grade 8 Math EOG, but not both. In 2017-2018, 3-8 Math includes the Math I EOC for Grade 8 students who took it as their math exam. Figure 4b includes data from only students in Grades 9-12 who took the Math I EOC.

[^9]:    34 Graduation rates equal or greater than $95 \%$ are masked to ensure confidentiality of individual student data.

[^10]:    35
    Aaronson, Barrow, \& Sander, 2007; Rivkin, Hanushek, \& Kain, 2005.
    36 Stronge, 2018.

[^11]:    46 Ginsburg, Jordan, \& Chang, 2014; Gottfried, 2009.
    47 Balfanz \& Legters, 2004; Orfield \& Kornhaber, 2001.
    48 Gershenson, 2016.
    49 Heckman \& Kautz, 2013.

[^12]:    54 Dougherty, Mellor \& Shuling, 2006.
    55 Geiser \& Santelices, 2004.

[^13]:    56 Several other schools in CMS offer the Cambridge program, but Hopewell is the only high school.

[^14]:    57 Some highly competitive universities require higher scores for certain AP exams.

[^15]:    61 Durlak, Weissberg, Dymnicki, Taylor, \& Schellinger, 2011.
    62 Durlak, Weissberg, Dymnicki, Taylor, \& Schellinger, 2011.

