

MEMORANDUM

March 14, 2013

TO: Education Committee

FROM: Elaine Bonner-Tompkins, ^{GBT} Senior Legislative Analyst
Office of Legislative Oversight

SUBJECT: **Worksession on OLO Report 2013-4: *The Achievement Gap in Montgomery County – A FY 2013 Update***

On March 18, the Education Committee will hold a worksession on Office of Legislative Oversight Report 2013-4, which the Council received and released on March 12, 2013. Councilmembers are asked to bring their copies of this report to the worksession. Extra copies of the full report are available in LIS. This report is also accessible on-line at www.montgomertcountymd.gov/olo.

Staff recommends the following worksession agenda:

- Overview of the report by OLO staff;
- Comments from Montgomery County Public School representatives; and
- Committee worksession on issues identified for discussion.

The Executive Summary of OLO's report is attached on © 1. Written comments received from the Superintendent on the final draft of the report are attached on © 5.

The following representatives of Montgomery County Public Schools will attend the Education Committee worksession:

- Chris Barclay, Board of Education President
- Phil Kauffman, Board of Education Vice President
- Shirley Brandman, Board of Education Member
- Joshua Starr, Superintendent
- Kimberly Statham, Deputy Superintendent for Teaching, Learning and Programs
- Beth Schiavino-Narvaez, Deputy Superintendent of School Support and Improvement

And the following MCPS staff will also be in the audience and available to address questions:

- Susan Marks, Acting Associate Superintendent, Office of Shared Accountability
- Brian Edwards, Chief of Staff
- Laura Steinberg, Staff Assistant to Board of Education
- Juan Cardenas, Assistant to the Associate Superintendent for the Office of Shared Accountability
- Kecia Addison-Scott, Supervisor, Office of Shared Accountability

1. Project Background, Purpose and Methodology

MCPS has focused on narrowing the achievement gap by race, ethnicity, and service group status for a number of years. The “achievement gap” refers to the national phenomenon of disparities in achievement between high- and low-performing student groups. On most measures, white, Asian, and higher income students, as well as students ineligible for special services such as ESOL perform better on average than black, Latino, and lower-income students and students eligible for special education and ESOL services.

In 2008, OLO completed its initial study of the achievement gap in the county (OLO Report 2008-2) to describe the schools system’s progress in narrowing the achievement gap over a five year period. At time, OLO found that MCPS had made progress in narrowing the achievement gap on standardized measures of grade level performance and achieved mixed progress in narrowing the gap on many above grade level measures. OLO also found that the school system had lost ground on several non-standardized measures of grade-level performance that are referred to as at-risk measures in the 2013 report (e.g. suspension rates).

The Council requested this current project to further the Council’s understanding of the achievement gap in MCPS and to enhance the Council’s review and oversight of MCPS’ budget requests targeted at closing the gap. This current OLO report updates the 2008 report to describe data on the current magnitude of the achievement gap in the County and the progress that has been achieved in narrowing the gap since the original OLO report. The current OLO report also describes changes to policy framework aimed at narrowing the achievement gap since 2008 and synthesizes the research on best practices for narrowing the achievement gap.

OLO worked with MCPS staff to develop a set of 11 student performance measures to reflect the current magnitude of the achievement gap and MCPS’ progress in narrowing the gap. Exhibit 1 on © 14 lists the measures reviewed by OLO.

2. Project Findings

A review of the most currently available data indicates that MCPS’ achievement gaps are narrowest on grade level measures (e.g. MSA proficiency and graduation rates), wider on above grade level measures (e.g. MSA advanced scores), and widest on at-risk measures (e.g. suspensions and academic ineligibility).

A review of trend data on the 11 sets of measures also shows that MCPS has achieved progress in narrowing the gap among five measures of grade level and at-risk performance and mixed progress on two measures of grade level and at-risk performance. However, the achievement gap has widened among each of the four above grade level measures of performance reviewed that align with MCPS’ Seven Keys to College and Career Readiness and expectations for student performance under the Common Core State Standards (CCSS).

Finally, this current OLO study finds that MCPS’ goals for narrowing the achievement gap continue to exceed federal and state goals for narrowing the gap, but that MCPS’ difficulties in narrowing the gap on above grade level measures suggests that the achievement gap on state assessments will widen once CCSS aligned assessments are implemented in two years.

A summary of OLO's key findings is attached on © 2- 3; the full chapter of findings is attached, beginning at © 15.

3. Recommended Discussion Issues

Both the persistence of the achievement gap in Montgomery County and a widening of the gap among several measures of above grade level expectations suggest that any serious local effort to close the achievement gap will require a long-term, broad-based commitment and a working partnership among policy makers, elected officials, and administrators both within and outside of the school system. It will also require an ongoing public dialogue that is willing to examine complex data and address difficult policy and funding choices.

Based on these findings, OLO recommends three specific issues for Council discussion with representatives of MCPS, Montgomery County Government, and other organizations whose efforts collectively can best impact the achievement gap. Several of these issues were also recommended for Council discussion in OLO's original achievement gap report.

Issue #1: Discuss with MCPS representatives how the school system establishes its funding priorities for closing the achievement gap and how MCPS' FY14 budget request reflects these priorities.

Our Call to Action, the school system's strategic plan, articulates dozens of goals focused on narrowing the achievement gap. Examples of MCPS' specific goals include:

- Narrowing the gap in graduation rates,
- Improving performance on state assessments, and
- Eliminating disproportionate representation in suspensions and in AP and honors courses.

MCPS' *Seven Keys* also sets specific goals for narrowing the achievement gap by race, ethnicity, and service group among several measures of college and career readiness, including SAT/ACT performance among graduates, and Algebra 1 completion by Grade 8 with a C or better.

As evidenced in this report, MCPS has made progress and narrowed the achievement gap on five measures of performance, it has achieved mixed progress on two measures, and at the same time, the gap has widened on four measures. Generally, MCPS has achieved greater progress in narrowing the gap among grade level and at-risk measures of student performance than among above grade level measures of performance.

OLO recommends the Council discuss with MCPS how the school system establishes its funding priorities for narrowing the achievement gap. Further, the Council should discuss with MCPS how the school system's base budget and FY14 budget request reflects its priorities and whether the school system intends to reallocate resources within the school system's current budget to narrow the achievement gap.

Recommended questions for discussion include:

- What are MCPS' priorities for narrowing the gap at the elementary, middle, and high school levels? How does the current funding of MCPS programs and allocation of funds reflect the school systems' priorities for narrowing the gap?
- At what school level has MCPS' initiatives to close the achievement gap worked best? Which initiatives are most effective at narrowing the gap? Where do the most promising or most challenging opportunities for improvement exist?
- What resources beyond the \$3.5 million requested for middle school improvement in the FY14 budget does MCPS plan to commit to reducing the achievement gap? Will current resources be reallocated?

Issue #2: Ask MCPS representatives to describe the school system's explicit expectations for achieving progress in closing the achievement gap based on current trends and planned investments.

Articulating the specific investments MCPS has made toward narrowing the achievement gap was beyond the scope of this OLO project. Nonetheless, MCPS has made investments aimed at narrowing the achievement gap by race, ethnicity, and service group status. Beyond articulating its goals to narrow the achievement gap in Board of Education actions, policies, and statements, MCPS has implemented specific initiatives toward this end to comply with policy goals. These include the use of M-stat teams to narrow the achievement gap in out of school suspensions.

Superintendent Starr has indicated that MCPS will focus on professional development, interventions, and community engagement to further enhance student performance and MCPS' implementation of Curriculum 2.0 and the Common Core State Standards. The Council needs to understand the Superintendent's priorities for MCPS in greater detail to understand their respective roles in narrowing the achievement gap and their potential budgetary implications.

OLO recommends that the Council discuss with MCPS the short term and long term progress the school system anticipates it will make to close the achievement gap based on its current trends and planned investments. In particular, OLO recommends the Council ask MCPS to outline the school system's vision for continued progress on priority goals related to closing the achievement gap by race, ethnicity, and service group status and the specific role of Curriculum 2.0 toward this end.

Recommended questions include:

- Beyond Curriculum 2.0, what specific strategies and/or initiatives does MCPS currently employ or plan to employ to narrow the achievement gap? What are the budget implications of these strategies?
- What progress does MCPS anticipate in the short term and the long term in narrowing the achievement gap by race, ethnicity, and service group based on these investments?
- How will MCPS use data and evaluation to determine the efficacy of its efforts to narrow the achievement gap?

Issue #3: Discuss with representatives of MCPS, Montgomery County Government, and community-based groups how they envision their roles working together to eliminate the achievement gap.

Researchers often recognize that even when effective schooling exists, other socioeconomic factors can contribute to the achievement gap. For example, poverty can limit access to high quality preschools or summer learning opportunities for older students; the gaps created by the lack of access to these opportunities can also spill over to the classroom and school environment. Others note that differences in parenting practices by race, ethnicity, and income may also contribute to the achievement gap; differences in access to health care and health outcomes can impact it, as well.

The broad, socioeconomic correlates of the achievement gap suggest that a multi-pronged agency and community based approach are necessary to achieve further progress in narrowing the gap. Locally, this suggests a partnership between MCPS, Montgomery County Government, and agencies and organizations supporting families aimed at collectively addressing the school and beyond school factors that contribute to the achievement gap.

To encourage more collaboration and better coordination, OLO recommends the Council ask agency and community representatives to describe their collective efforts to close the gap. OLO recommends beginning this discussion with representatives of MCPS and then expanding this conversation at a future worksession to include other agency and organizational representatives.

Specific questions for discussion can include:

- How does MCPS work with other agencies and directly with parents to address the beyond school correlates of the achievement gap?
- How does Montgomery County Government work with community-based groups to narrow the beyond school gaps that correlate with the achievement gap, such as access to high quality preschool programs?
- What are the perspectives of community-based groups on how MCPS, MCG, and other entities can work together to help narrow the achievement gap by race, ethnicity, and service group status?

ATTACHMENTS	BEGINS AT:
Executive Summary of OLO Report 2013-4	© 1
Comments from the Superintendent Joshua Starr, March 8, 3013	© 5
Chapter I: Authority, Scope, and Organization of Report	© 11
Exhibit 1: Project Measures, Data Sources, and Data Years	© 14
Chapter IX: Summary of Findings	© 15

THE ACHIEVEMENT GAP IN MONTGOMERY COUNTY – A FY 2013 UPDATE
OFFICE OF LEGISLATIVE OVERSIGHT REPORT 2013-4

THE ASSIGNMENT

The County Council asked OLO to update its 2008 achievement gap report to further its understanding of the achievement gap in MCPS and to enhance its review and oversight of the Board of Education's budget requests targeting the achievement gap. Specifically, the Council asked OLO to prepare a report that: explains the different ways the term "achievement gap" is defined and used; describes federal and state laws designed to close the achievement gap; and summarizes select measures that show the magnitude and nature of the gaps in MCPS.

This report finds that since 2008 MCPS has made progress, but significant achievement gaps remain, particularly among measures of at-risk academic performance. Over the same period, MCPS also lost ground in narrowing the achievement gap among several measures of above grade level performance that align with MCPS' *Seven Keys* initiative and the Common Core State Standards.

WHAT IS THE ACHIEVEMENT GAP?

The "achievement gap" refers to disparities in educational performance between high and low performing student groups, known as subgroups. Measures of the achievement gap typically compare performance differences between white, Asian, and higher income students to black, Latino, and lower income students. The gap also refers to gaps in performance by English language proficiency and disability status.

The achievement gap is a long-standing, national challenge. Effectively closing the gap requires improving the performance of all students while accelerating the performance of low performing subgroups so they catch up to their higher performing peers. Researchers find that a variety of school, community, economic, and familial factors that correlate with the achievement gap, but views are mixed on how to narrow the gap. Over the past decade, federal, state, and local policies have made the closing of the achievement gap a top priority.

SELECTED MEASURES OF STUDENT PERFORMANCE

OLO and MCPS jointly identified 11 MCPS and Maryland State Department of Education measures for review in this report. The measures below, selected from a larger pool, reflect how many students met grade level expectations or above grade level expectations or were academically at-risk over a 3 to 5 year period since 2007 or 2010.

Grade Level Measures:

- **School Readiness** – Percent of kindergarteners demonstrating full readiness for school
- **MSA Proficiency** – Percent of Grade 3, 5, & 8 students meeting grade level standards in math & reading
- **Graduation Rate** – Percent of high school students who graduate with their 4-year cohort
- **Completion of USM/CTE Program** – Percent of graduates who meet University System of Maryland (USM) or Career and Technology Education (CTE) program requirements

Above Grade Level Measures:

- **MSA Advanced Scores** – Percent of Grade 3, 5, & 8 students meeting above grade level standards
- **Algebra 1 by Grade 8 with C or Higher** – Percent of students completing Algebra 1 by the end of Grade 8 with a course grade of C or above (Key 4 of *Seven Keys*)
- **AP/IB Performance** – Percent of graduates earning a 3 or above on an AP exam or a 4 or above on an IB exam (Key 6 of *Seven Keys*)
- **SAT/ACT Performance** – Percent of graduates earning a 1,650 or above on the SAT or a 24 or above on the ACT (Key 7 of *Seven Keys*)

At-Risk Measures:

- **Suspensions** – Percent of elementary, middle, & high school students suspended out of school
- **Academic Ineligibility** – Percent of middle & high school students academically ineligible to participate in extra curricular activities for 3 or 4 quarters due to grade point averages below 2.0 or failing a course
- **Dropout Rate** – Percent of high school students who dropout within four year cohort

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MAGNITUDE OF MCPS' CURRENT ACHIEVEMENT GAPS

OLO used two sets of performance ratios to compare low performing subgroups to high performing subgroups and determine the magnitude of the achievement gaps in MCPS. Race and ethnicity performance ratios usually compare black and Latino students to white students; service group ratios, by contrast, compare students who receive special education, English for Speakers of Other Languages, or free and/or reduced priced meals to students who do not receive these services, or to all students.

OLO used the most currently available data to calculate performance ratios for the 11 measures on page v. OLO's analysis found that **the four measures of grade level performance showed the narrowest achievement gaps among MCPS students and the four measures of above grade level performance and three measures of at-risk performance showed the widest gaps.** Low performing subgroups were often only half as likely or less as high performing subgroups to meet above grade level benchmarks and more than twice as likely to experience at-risk outcomes. More specifically:

Among the four grade level measures, including MSA proficiency and graduation rates –

- Black students were 66-93% as likely as white students to meet these benchmarks;
- Latino students were 65-94% as likely as white students to meet these benchmarks;
- Students with disabilities were 56-83% as likely as regular education/all students to meet these benchmarks;
- Students receiving ESOL services were 51-86% as likely as English proficient/all students to meet these benchmarks; and
- Students receiving FARMS were 62-91% as likely as non-FARMS/all students to meet these benchmarks.

Among the four above grade level measures, including MSA advanced scores and SAT/ACT performance –

- Black students were 22-57% as likely as white students to meet these benchmarks;
- Latino students were 25-56% as likely as white students to meet these benchmarks;
- Students with disabilities were 24-46% as likely as regular education/all students to meet these benchmarks;
- Students receiving ESOL services were 9-56% as likely as English proficient/all students to meet these benchmarks; and
- Students receiving FARMS were 20-57% as likely as non-FARMS/all students to meet these benchmarks.

Among the three at-risk measures, including suspension and dropout rates –

- Black students were 303-633% (or 3 to 6 times) as likely as white students to experience these outcomes;
- Latino students were 150-667% (or 1.5 to 7 times) as likely as white students to experience these outcomes;
- Students with disabilities were 185-383% (or 1.9 to 4 times) as likely as regular education/all students to experience these outcomes;
- Students receiving ESOL services were 83-455% (or 0.8 to 4.5 times) as likely as English proficient/all students to experience these outcomes; and
- Students receiving FARMS were 183-231% (or 1.8 to 2.3 times) as likely as non-FARMS/all students to experience these outcomes.

MCPS' FY13 ACHIEVEMENT GAP PROGRESS REPORT

OLO's analysis of the data finds that since 2007, MCPS has: achieved progress in narrowing the achievement gap on five measures of grade level and at-risk performance; achieved mixed progress on two measures reflecting grade level and at-risk measures; and lost ground in narrowing the gap on four measures of above grade level performance that align with MCPS' *Seven Keys* and the Common Core State Standards.

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MEASURES WHERE THE ACHIEVEMENT GAP NARROWED

MCPS narrowed the achievement gap across five measures: **school readiness, MSA proficiency, suspensions, academic ineligibility, and graduation rates**. These gaps narrowed by increasing the performance of most subgroups while accelerating the performance of the lowest performing subgroups. More specifically:

- The School Readiness Gap narrowed by 35-39% by race and ethnicity, and by 29-42% by LEP and FARMS status from 2007 to 2012, but increased by 24% by disability status.
- The MSA Proficiency Gaps in Grade 3 narrowed by 7-45% by race, ethnicity, and service group from 2007 to 2012; the Grade 5 gaps narrowed by 2-77%; and the Grade 8 gaps narrowed by 8-40%.
- The Suspension Gap among elementary students narrowed by 38-78% by race, ethnicity, and service group from 2007 to 2011, the gap among middle school students narrowed by 14-83%; and the gap among high school students narrowed by 22-52%.
- The Academic Ineligibility Gap at the middle school level narrowed by 44-61% by race, ethnicity and service group status from 2007 to 2011 while the gap at the high school level narrowed by 11-24% by race, ethnicity, FARMS, and special education status. However, the ineligibility gap in high school increased by 11% by ESOL status over the same period.
- The Graduation Gap among four year cohorts of students narrowed by 11-25% by race and ethnicity and by 8-12% by special education and FARMS status between 2010 and 2012, but increased by 2% by ESOL status.

MEASURES WHERE THE ACHIEVEMENT GAP GENERATED MIXED RESULTS

MCPS achieved mixed or no progress in narrowing the gap on two measures: **dropout rates and completion of USM or CTE program requirements among graduates**. For these two measures, MCPS tended to narrow the gap by race and ethnicity, but did not achieve the same progress among service groups. More specifically:

- The Dropout Gap among four year cohorts narrowed by 0-18% by race and ethnicity from 2010 to 2012 and by 12% by FARMS status, but widened by 2-8% by ESOL and disability status.
- The USM/CTE Program Completion Gap narrowed by 9-20% by race, ethnicity, and income from 2007 to 2010, remained unchanged by ESOL status, and increased by 27% by disability status.

MEASURES WHERE THE ACHIEVEMENT GAP WIDENED

MCPS' achievement gap widened across four measures: **MSA advanced scores, Algebra 1 completion by Grade 8 with C or higher, AP/IB performance, and SAT/ACT performance**. Among these four measures of above grade level performance that align with MCPS' *Seven Keys*, high performing subgroups made greater gains on these benchmarks than low performing subgroups, thus widening the gap. More specifically:

- The MSA Advanced Gaps in Grade 3 narrowed across most subgroups for reading by 2-7% but widened for math by 5-33% from 2007 to 2012; the Grade 5 gaps narrowed across most subgroups for reading by 2-16% but widened for math by 3-37%, and the Grade 8 gaps widened for both reading and math by 9-56%.
- The Algebra 1 by Grade 8 with C or Higher Gap widened by 7-19% by race, ethnicity, special education, and FARMS status from 2010 to 2012, but narrowed by 7% by ESOL status.
- The AP/IB Performance Gap among graduates widened by 6-37% by race, ethnicity, and service group status from 2007 to 2012.
- The SAT/ACT Performance Gap among graduates held constant by special education and ESOL status from 2010 to 2012, but increased by race, ethnicity, and income by 3-6%.

RECOMMENDED DISCUSSION ISSUES

OLO recommends three discussion issues to enhance the Council's review and oversight of MCPS budget requests targeted at closing the achievement gap.

Issue #1: How does MCPS establish funding priorities for closing the achievement gap and how does MCPS' FY14 operating budget request reflect these priorities?

Education policy continues to prioritize the closing of the achievement gap. MCPS' goals for closing the gap exceed federal and state policy mandates because they focus on narrowing the gap in above grade level performance. Yet, the achievement gap has widened since over the past three to five years among the four above grade level measures of student performance reviewed in this report. OLO recommends the Council discuss with MCPS how the school system establishes its funding priorities for narrowing the achievement gap. Recommended questions include:

- What are MCPS' priorities for narrowing the gap at the elementary, middle, and high school levels? How does the current funding of MCPS programs reflect the school systems' priorities for narrowing the gap?
- At what school level (elementary, middle, or high school) do MCPS' initiatives to close the achievement gap work best? Which initiatives are most effective at narrowing the gap? Where do the most promising and most challenging opportunities for improvement exist?
- What resources beyond the \$3.5 million requested for middle school improvement in the FY14 budget does MCPS plan to commit to reducing the achievement gap? Will current resources be reallocated?

Issue #2: What are MCPS' explicit expectations for achieving progress in closing the achievement gap based on current trends and planned investments?

MCPS has implemented specific initiatives to narrow the achievement gap, including the use of M-stat teams to narrow the gap in suspensions. Superintendent Starr has indicated that MCPS will focus on professional development, interventions, and community engagement to further enhance student performance and implementation of Curriculum 2.0 and the Common Core State Standards. OLO recommends that the Council discuss with MCPS the short term and long term progress the school system anticipates it will make to close the achievement gap based on its current trends and planned investments. Recommended questions include:

- Beyond Curriculum 2.0, what specific strategies and/or initiatives does MCPS currently employ or plan to employ to narrow the achievement gap? What are the budget implications of these strategies?
- What progress does MCPS anticipate in the short term and the long term in narrowing the achievement gap by race, ethnicity, and service group status based on these investments?
- How will MCPS use data and evaluation to determine the efficacy of its efforts to narrow the gap?

Issue #3: How do MCPS, Montgomery County Government, and community-based groups work together to eliminate the achievement gap?

Research suggests that school, community, socioeconomic, and familial factors contribute to the achievement gap. This broad array of risk factors suggests that a multi-agency, community-based approach to close the gap is needed. To encourage more collaboration and better coordination, OLO recommends the Council ask agency and community representatives to describe their collective efforts to close the gap. Specific questions include:

- How does MCPS work with other agencies and directly with parents to address the beyond school correlates of the achievement gap?
- How does Montgomery County Government work with community-based groups to narrow the beyond school gaps that correlate with the achievement gap, such as access to high quality preschool programs?
- What are the perspectives of community-based groups on how MCPS, MCG, and other entities can work together to help narrow the achievement gap by race, ethnicity, and service group status?

For a complete copy of OLO-Report 2013-4, go to: www.montgomerycountymd.gov/olo



MONTGOMERY COUNTY PUBLIC SCHOOLS

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MARYLAND

March 8, 2013



Dr. Chris Cihlar, Director
Dr. Elaine Bonner-Tompkins, Senior Legislative Analyst
Montgomery County Office of Legislative Oversight
Stella B. Werner Council Office Building
100 Maryland Avenue
Rockville, Maryland 20850

Dear Dr. Cihlar and Dr. Bonner-Tompkins:

Thank you for providing Montgomery County Public Schools (MCPS) staff members with the opportunity to review and provide comments on the draft Office of Legislative Oversight (OLO) report, *The Achievement Gap in Montgomery County—A FY 2013 Update*. MCPS staff members who participated in this review appreciate the collaborative process used throughout the study and review of the report. Many comments and suggestions provided by MCPS staff members during the technical review were valued and incorporated.

We are in general agreement with the findings provided in the OLO report, as they are consistent with the multiple analyses and reports MCPS has undertaken over the past decade to quantify the achievement gap and assess the success of strategies aimed at narrowing the gap. Ever since the adoption of the district's strategic plan—*Our Call to Action: Pursuit of Excellence*—MCPS has been working to narrow the achievement gap while raising the performance of all students. As the OLO report correctly concludes, we have had some successes and there are areas where the gaps have been more persistent and, in fact, have grown. Certainly this is not a challenge unique to MCPS, but as a district—and a county—dedicated to equity and social justice, we are committed to the work necessary to narrow and close the achievement gaps in all areas for all students.

The leadership and staff of MCPS and the members of the Montgomery County Board of Education are frequently engaged in strategic conversations about the achievement gap, what is working to narrow the gaps and what is not working. These conversations happen at Board meetings and Executive Leadership Team meetings, during gatherings of school staff and Professional Learning Communities, and in discussions with parents and community members throughout the county. In the past several months alone, the achievement gap—and our district's strategies for narrowing it—has been topic of several high profile discussions and strategy sessions. For example:

- The Board of Education discussed the achievement gap at length during two of its recent business meetings. The first discussion took place on December 11, 2012, when the Board received an update on the school district's progress on the Seven Keys to College

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and Career Readiness and the annual report on the strategic plan. More recently, on February 12, 2013, the Board received an update on the district's systematic approaches to narrowing the achievement gap;

- The achievement gap has been raised and discussed at nearly every public forum I have held since becoming superintendent on July 1, 2011. This includes 17 Listen and Learn events with community members and staff in 2011; four spring forums in 2012; and, thus far, four town hall meetings with the community this school year;
- On March 2, 2013, approximately 200 parents, staff, students and community members attended a Community Dialogue event to discuss the achievement of African American students and how we can narrow gaps that have persisted over the years;
- Narrowing the gap has also been a consistent topic during meetings about revisions of the strategic plan.

We also are reorganizing the Office of School Support and Improvement to better support schools at elementary, middle and high school levels. By targeting specific support to each school, we believe we can make significant progress in helping all children succeed. Most notably, the budget I recommended to the Board of Education in December 2012 will enable us to reenergize our efforts to narrow the achievement gap. The budget was endorsed by our employees and parents and was, ultimately, adopted by the Board of Education, with minimal changes, on February 25, 2013. The budget seeks approximately \$10 million—about 0.7 percent—above the mandatory state funding floor and most of these resources would go toward positions and programs aimed at narrowing the gap and supporting the success of our students in the future. Among the investments are:

- Funds for 30 focus teachers in middle and high schools—where our greatest gaps are seen—to help reduce mathematics and English class sizes in schools in which students are struggling in these core areas;
- Money that would be used in partnership with reallocated funds to improve mathematics instruction throughout the county and provide students with more robust learning options;
- An increase of more than \$3 million for professional development that would allow our teachers to more effectively deliver the Common Core State Standards (CCSS) and Curriculum 2.0 and prepare our students for more rigorous assessments;
- Sixty additional positions to serve students who receive English for Speakers of Other Languages and more than 100 positions to increase individualized services for special education students;
- Restorations and enhancements, including teaching positions, school psychologists, and counselors, who will support the delivery of timely, comprehensive interventions for students who are struggling. In addition, we will have a dedicated supervisor to oversee and coordinate our strategic interventions work.

This budget is now before the county executive and the County Council, who clearly share our commitment to narrowing the achievement gap. It is my hope that the Board's budget will be fully funded so we can engage in this important work together.

Over the course of many years, MCPS has employed a focused strategy of dismantling institutional barriers to rigorous coursework, disaggregating and analyzing data, and initiating conversations about ensuring equity. We have engaged in intentional—sometimes difficult—conversations about race, ethnicity and poverty. The work has yielded results, but there is much work left to be done. As the landscape is shifting, the demands on students, teachers, and schools have increased the amount of work that remains to be done and it is more important than ever that we are successful.

The OLO report is a welcome addition to the broad compendium of analyses done by MCPS staff and will contribute to our efforts to narrow the gap. While we generally concur with the findings, we do offer the following comments upon final review:

- Finding one outlines the descriptive analysis of the data performed by the OLO team. This methodology is based on a subset of data that MCPS regularly provides to parents, students, staff members, and the community. We do caution the reader to carefully consider the context to which the researcher's methodology is applied. As stated in the report, due to data limitations, OLO could not test for statistical significance in the analysis of data for this study. We believe that there is a need to determine the significance of the differences between the average scores of the groups and the associated effect sizes. In addition, when the percentages of groups are compared, the estimated standard error should be taken into account; consider both the size of the differences and the standard errors. This method has been used by the National Center for Education Statistics in their study of achievement gaps [Vanneman, A., Hamilton, L., Baldwin Anderson, J., and Rahman, T. (2009). *Achievement Gaps: How Black and White Students in Public Schools Perform in Mathematics and Reading on the National Assessment of Educational Progress*, (NCES 2009-455). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.] and is a more statistically sound method of examining the achievement gap. In addition to presenting the gap in numerical form, it also would be beneficial to portray the gap using a graph or diagram so that changes across all years may be viewed.

In addition we appreciate the definitions of the data points that are used in the OLO report, however, we want to caution the use of performance ratios, which can be misleading to the reader. It would be better to consistently report numbers instead of percentages. For example, Group A is three times more likely to be ready for school than Group B or Group B is just as likely as Group A to be ready for school.

In the report, the analysis of the data concludes that the rate of change in any particular measure is constant over time, which is an oversimplification. The number of years calculated to close the achievement gap does not take into account students in lower performing groups who are increasing performance at faster rates than those at the top. Thus, the estimate of the number of years to close the gap is not reliable. Additionally, this conclusion does not take into account various interventions and curricular initiatives that are implemented that increase the rate of achievement for African American and Hispanic students.

- Findings two, three, four, and five also are based on a subset of data that MCPS regularly provides to parents, students, staff members, and the community. These findings outline how MCPS has narrowed the gap on various measures. We appreciate that the report highlights MCPS efforts to look at benchmarks that exceed current grade level measures. Our alignment to CCSS, Curriculum 2.0, and the Seven Keys to College and Career Readiness indicates our commitment to closing the achievement gap compared to international standards and underscores that the MCPS commitment to this work is based on our deeply held beliefs rather than federal or state mandates. Additionally, in areas such as school readiness, proficiency on the Maryland School Assessments (MSAs), suspensions, academic ineligibility and four-year cohort graduation rates, a majority of each subgroup reached the benchmark targets. While the report identifies achievement measures that have widened among advanced measures, it should be noted that on Advanced Placement/International Baccalaureate (AP/IB) and SAT/ACT performance MCPS African American and Hispanic students significantly outperform students in the state and nation. Although we celebrate these achievements in many areas, we continue to strive to eliminate the gap in all areas of academic performance
- Finding six notes that MCPS will be transitioning from the requirements of the original *Elementary and Secondary Education Act* (ESEA) to those defined by the Maryland ESEA Waiver granted in 2012. Although there will be changes in how schools are identified by their results on state testing, it is important to remember that, as a system, MCPS remains committed to its current accountability efforts to ensure both student and school success, eliminate the achievement gap, and have a rigorous instructional program in place for every child.
- In finding seven, we believe it is premature to speculate that the gap will widen because of the implementation of the Partnership for Assessments for College and Careers (PARCC) assessments in 2014–2015. We do expect achievement to be different for all students in the early implementation of these assessments, which are replacing the current MSAs, but we are working to ensure that our students are well-prepared for these new tests. MCPS has been deliberate in its rollout of Curriculum 2.0 in anticipation of CCSS. The new curriculum is more rigorous than the previous curriculum and includes explicit

instruction in thinking and academic success skills that were not part of our previous curriculum. In addition, MCPS has expanded its investment in professional development for teachers to help them ensure that our students thrive under the new curriculum.

- In finding eight, we concur that the research base on best practices is thin and that the achievement is and has been a persistent issue for school districts across the nation. This is an area of constant focus for us as we work to learn from and replicate successful practices internally and those we can adopt externally. MCPS has become a national leader in the study and implementation of best practices. Initial groundwork has begun to review and revise our current system of accountability. This is a critical step needed to measure the effectiveness of our progress toward closing the achievement gap. Broader measures of student social-emotional learning and 21st century skills—as well as knowledge of the arts, world languages, science, and civic engagement—will provide a more complete picture of how prepared our students are for the complex world in which they live. The improved system of accountability will set the course to tell us how well our schools and our communities are doing in providing students the knowledge and skills they need to become outstanding citizens.
- MCPS continues its focus on the core competencies in which we may make a difference in addressing the achievement gap. Finding nine's focus is at the heart of where our success depends on the collaboration of the community, public and private organizations, and individuals. Our commitment is strengthened through the creation of the Office of Community Engagement and Partnerships. Through collaborative programs, such as the Judy Center Grant Partnership Programs and Linkages to Learning, comprehensive early childhood services may be provided to highly impacted families, including those with disabilities. Support for families is enhanced by these efforts. MCPS continues to collaborate with county agencies and organizations, both public and private, to strengthen programs and resources to support young children's development in all domains. Our collaboration is defined by integrating services across agencies, including community engagement, corrections, health and human services, housing, police, libraries, recreation, transportation, and others.

The school system now is poised to capitalize on our past successes and hard won lessons. Building on the systemic and cultural changes resulting from our earlier work, MCPS is shifting the equity lens from the broad focus on system and school-level data to a specific focus on each and every student. Our intent is to facilitate change at the school level, in every classroom, and for every student. Continued use and refining of such tools as the Honors/Advanced Placement Identification Tool (HAPIT), will yield important data for our continuing effort. However, there are limitations to research and data; they help us ask better questions, but knowing and meeting the needs of each and every student is key to improving student results and closing the achievement gap.

Dr. Chris Cihlar
Dr. Elaine Bonner-Tompkins

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March 8, 2013

A greater focus will be placed on students' educational experience—what happens while they are in the classroom. This focus on instruction will add one of the missing links in our efforts to close the achievement gap. In addition, building a systemic continuum of interventions and supports for our students will create an educational environment conducive to equitable outcomes. These two components are critical; however, unless there is an additional element that places the school, classroom, and child within the context of the community, the effects will be muted. With a stronger engaged community committed to the well-being of every child, MCPS will move closer toward the ultimate goal of the elimination of the achievement gap.

Thank you again for the opportunity to review the draft report and discussion topics. I believe the collaborative work between MCPS and OLO will result in a productive dialogue on our collective efforts to address this important issue in Montgomery County.

Sincerely,



Joshua P. Starr, Ed.D.
Superintendent of Schools

JPS:slh

Copy to:
Members of the Board of Education
Executive Staff
Mr. Leggett
Mrs. Navarro

Chapter I: Authority, Scope, and Organization of Report

A. Authority

Council Resolution 17-517, *FY 2013 Work Program for Office of Legislative Oversight*, adopted July 31, 2012.

B. Purpose and Scope

The “achievement gap” refers to disparities in educational performance between higher- and lower-performing student groups, known as student subgroups. Typically, measures of the achievement gap in the United States compare performance differences between white, Asian, and higher income students and black, Latino, and lower income students. The gap can also refer to differences in student performance by English language proficiency and disability status.

Achievement gaps by race, ethnicity, and service group status are long-standing, national challenges. The achievement gap is also an emerging global challenge, given the lower ranking of U.S. students on international math and science comparisons.

In 2007, the County Council asked OLO to describe MCPS’ achievement gaps and report MCPS’ progress in narrowing these gaps since 2002. OLO Report 2008-2 examined differences between high- and low-performing MCPS students by race, ethnicity, and service group status including both grade level and above grade level performance measures. Between 2002 and 2007, OLO found:

- Progress narrowing the gaps was greater for grade level than for above grade level measures;
- Significant gaps persisted in rates of suspension, disability, and giftedness classification; and
- Some achievement gaps among subgroups had widened.

To understand MCPS’ progress in narrowing the achievement gap since 2007, this year the County Council asked OLO to update its 2008 report. Recently, Superintendent Joshua Starr has also requested a \$3.5 million increase in the FY14 operating budget to help narrow the achievement gap in the middle grades.¹

To complete the current study, OLO and MCPS staff jointly identified the 11 measures reviewed in this report. To provide context for MCPS’ current performance, this report synthesizes the current research about the factors that correlate with the achievement gap, key policies at the federal, state, and local level aimed at closing the gap, and best practices for narrowing the achievement gap. A review of whether specific MCPS programs intended to narrow the achievement gap are effective was beyond the scope of this project.

The County Council also asked OLO to update another 2008 report that describes the performance of MCPS’ High School Consortia (OLO Report 2009-4). OLO’s examination of the achievement gaps among consortia and non-consortia MCPS high schools will be released as a separate memorandum report in 2013.

¹ The Superintendent’s FY14 Operating Budget Request includes \$2.0 million for additional focus teachers and \$1.5 million for staff development teachers for middle schools aimed at narrowing the achievement gap. See <http://www.montgomeryschoolsmd.org/uploadedFiles/departments/budget/fy2014/budget-and-complement-full.pdf>

Methodology: OLO Senior Legislative Analyst Elaine Bonner-Tompkins prepared this report with assistance from Senior Legislative Analyst Sue Richards, Research Associate Carl Scruggs, and Administrative Specialist Kelli Robinson. OLO’s method for developing this report was to:

- Consult with key MCPS staff;
- Review the original OLO achievement gap report;
- Compile and analyze relevant performance data on student achievement among student subgroups by race, ethnicity, and service group status;
- Review federal, state, and local documents describing changes in policy drivers for addressing the achievement gap; and
- Synthesize the research literature on determinants of the achievement gap and best practices for narrowing the achievement gap.

C. Organization of the Report

Chapter II, Background, describes in more detail what is meant by the term achievement gap, the factors that contribute to it, and other “gaps” in achievement relative to the performance of U.S. students in international comparisons and regarding 21st century skills.

Chapter III, Methods for Reviewing Data, provides an overview of OLO’s research methods to identify and analyze data for the 11 measures of achievement reviewed in this report.

Chapter IV, Measures Where the Gap Narrowed, describes MCPS’ progress in narrowing the achievement gap across five of the 11 measures reviewed: school readiness, proficiency on the Maryland School Assessments (MSAs), suspensions, academic ineligibility, and graduation.

Chapter V, Measures Where Progress Was Mixed, describes MCPS’ mixed progress in narrowing the achievement gap across two of the 11 measures reviewed: dropout rates, and completion of college and career readiness requirements.

Chapter VI, Measures Where the Gap Widened, describes four of 11 measures reviewed where MCPS’ achievement gap widened: advanced MSA performance, Algebra 1 completion by Grade 8 with C or higher, AP/IB performance, and SAT/ACT performance.

Chapter VII, Policy Context, describes key changes in federal, state, and local policies that impact MCPS’ efforts to narrow the achievement gap.

Chapter VIII, Promising Practices, synthesizes the research base to identify promising school and beyond school practices for narrowing the achievement gap.

Chapter IX, Summary of Findings, presents a summary of OLO’s key project findings.

Chapter X, Recommended Discussion Issues, concludes this report with a set of recommended discussion issues aimed at improving the Council’s oversight of funds appropriated to MCPS.

Chapter XI, Agency Comments, provides the MCPS Superintendent’s comments on the final draft of this report.

The **Appendix** provides data tables for each of the achievement measures in this report plus other relevant information.

D. Acknowledgements

OLO received a high level of cooperation from everyone involved in this study. In particular, OLO appreciates the assistance of Dr. Kimberly Statham, Deputy Superintendent of Teaching, Learning, and Programs for MCPS. We also acknowledge the MCPS staff below who provided invaluable assistance:

- Dr. Susan Marks, Acting Associate Superintendent, Office of Shared Accountability
- Ms. Stephanie Williams, Director of Policy, Office of Shared Accountability
- Dr. Kecia Addison-Scott, Supervisor of Applied Research, Office of Shared Accountability
- Mrs. Suzanne Woertz, Supervisor, Testing Unit, Office of Shared Accountability
- Mr. Juan Cardenas, Assistant to the Associate Superintendent, Office of Shared Accountability
- Dr. Shahpar Modarresi, Supervisor of Program Evaluation, Office of Shared Accountability
- Ms. Lori-Christina Webb, Executive Director to the Deputy Superintendent
- Mr. Sherwin Collette, Chief Technology Officer
- Dr. Erick Lang, Associate Superintendent, Curriculum and Instruction
- Ms. Jeannie Franklin, Director of Consortia Choice and Application Program Services

E. Key Terms and Definitions

OLO used the following terminology in this report to describe subgroups of students by race, ethnicity, and service group status.

- **Asian** refers to students who refer to themselves as Asian or Asian American.
- **Black** refers to students who refer to themselves as black/Non-Hispanic or African American.
- **Latino** refers to students who refer to themselves as either Latino or Hispanic. Latino students can be of any race (e.g., white, black, or Asian).
- **White** refers to students who refer to themselves as white/Non-Hispanic or Caucasian.
- **Multiracial** refers to students who identify themselves as having a multi-racial background.
- **Students receiving free and reduced price meals (FARMS)** are students who are currently receiving free and reduced price meals. These students are also referred to as “low-income” students in the report.
- **English language learners** are students with limited English proficiency currently enrolled in English for Speakers or Other Languages (ESOL) courses.
- **Students with disabilities** are students with individualized education plans that receive special education services.

Exhibit 1: Project Measures, Data Sources, and Data Years

#	Measure or Indicator	Total Sets of Measures	Data Source		Data Available for School Years						Notes
			MSDE	MCPS	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	
Grade Level Measures											
1	School readiness among MCPS kindergarteners	1	✓		✓	✓	✓	✓	✓	✓	
2	Proficiency on Maryland School Assessments (MSA) in reading and mathematics in Grades 3, 5, and 8	6	✓		✓	✓	✓	✓	✓	✓	
3	Graduation rates (four year cohort)	1	✓					✓	✓	✓	This measure differs from the leaver rate previously tracked.
4	College and career readiness among graduates (i.e. meeting USM or CTE program requirements, or both)	1		✓	✓	✓	✓	✓			Measure categorized as grade level measure because 80% of graduates meet this benchmark.
Above Grade Level Measures											
5	MSA advanced scores in reading and mathematics in Grades 3, 5, and 8	6	✓		✓	✓	✓	✓	✓	✓	
6	Completion of Algebra 1 by Grade 8 with a Grade of C or higher	1						✓	✓	✓	From 2007-10, MCPS tracked completion of Algebra 1 by Grade 8 with a grade of D or higher instead of this measure.
7	Passing score on AP (3) or IB exams (4) among graduates	1		✓				✓	✓	✓	
8	SAT performance of 1,650 or above or ACT score of 24 or above among graduates	1		✓	✓	✓	✓	✓	✓	✓	
At Risk Indicators											
9	Suspension rates by school level	3	✓	✓	✓	✓	✓	✓	✓	✓	2012 data incomplete due to privacy restrictions.
10	Academic ineligibility rates (3 or 4 quarters) among middle and high school students	2		✓	✓	✓	✓	✓	✓	✓	
11	Dropout rates (four year cohort)	1	✓					✓	✓	✓	This measure differs from the annual dropout rate previously tracked.
Initial Measures Later Excluded											
	Completion of Algebra 2 by Grade 11			✓					✓	✓	Excluded: only two years of data.
	Career and technology education pathway completers			✓	✓	✓	✓	✓			Excluded: data incomplete due to privacy restrictions substituted #8.
Total # of Measures		24									

Chapter IX: Summary of Findings

The “achievement gap” refers to disparities in educational performance among different student subgroups. Achievement gap studies typically report differences between high performing subgroups (e.g., whites, Asians, and high income students) and low performing subgroups (e.g., blacks, Latinos, and low income students). Some studies also compare differences by students’ disability status and English language proficiency.

This Office of Legislative Oversight (OLO) report tracks differences between high and low performing students in Montgomery County Public Schools by race, ethnicity, and service group¹⁰³ across 11 measures of student achievement.

Measures of MCPS’ progress in narrowing the gap are based on descriptive side by side comparisons of particular student cohorts at two points in time (e.g., 3rd graders in 2007 compared to 3rd graders in 2012) rather than longitudinal data that describes the progress of the same set of students overtime (e.g., 3rd graders in 2007 compared to 7th graders in 2012) or statistical testing to determine if descriptive changes in performance among subgroups are statistically significant.

The County Council asked OLO to update its 2008 achievement gap report to further the Council’s understanding of the achievement gap in MCPS and enhance the Council’s review and oversight of MCPS budget requests targeted at closing the achievement gap. Specifically, the Council asked OLO to prepare a report that:

- Explains the different ways the term “achievement gap” is defined and used;
- Describes federal and state laws related to closing the achievement gap;
- Reviews best practices for closing the achievement gap; and
- Summarizes student performance data that describes the magnitude and nature of the achievement gap in MCPS.

This chapter presents nine key project findings in three parts as summarized below:

- A. Methodology and Results** explains the measures and analysis that form the basis for OLO’s review; describes the size and pattern of MCPS’ current achievement gaps; and reports on the measures where MCPS narrowed the gap (five measures), achieved mixed progress (two measures) or lost ground (four measures).
- B. Policy Alignment and Effects** addresses how MCPS’ goals for narrowing the achievement gap align with federal and state policy goals and how implementation of the Common Core State Standards might affect MCPS’ efforts to close the achievement gap in the future.
- C. Research** describes the research about what works to close the achievement gap and the implications of this for MCPS and Montgomery County.

¹⁰³ Service group refers to students receiving special education, English for Speakers of Other Languages, and/or free and reduced price meals.

A. Methodology and Results Findings

Finding 1: Eleven performance measures that encompass three levels of student performance form the basis for OLO’s current review of the achievement gaps that exist among MCPS students and how these gaps have changed over the past three to five years.

OLO’s review of MCPS’ achievement gaps provides multiple perspectives on two questions:

- Where do MCPS achievement gaps exist in 2012?
- How has the size of MCPS’ achievement gaps changed over the past three to five years?

This review creates two profiles of MCPS’ achievement gaps, using two sets of student subgroup data. One profile shows gaps in student performance based on a student’s race and ethnicity and the other shows gaps based on a student’s service group status (i.e. receives special education, English for Speakers of Other Languages, and/or free or reduced price meals).

Eleven performance measures form the building blocks of this descriptive analysis of available data. Since some of the measures report data for two or more tests (i.e. reading and math) and/or report data for multiple grade levels, these 11 measures yield a set of 24 sub-measures. Exhibit 1 in Chapter III describes these measures which are grouped as follows:

- Four sets of measures assess **grade level** student performance;
- Four sets of measures assess **above grade level** student performance; and
- Three sets of measures track **at-risk** student performance.

Due to data limitations, OLO could not test for statistical significance in the analysis of data for this study. Instead, OLO calculated four data points for each measure to determine the size of the gaps in student performance among different subgroups and whether the gaps had narrowed, widened or stayed the same over the past three to five years. Specifically,

- **Current performance** shows the percentage of students who met the benchmark by subgroup to show overall levels of achievement.
- **Performance ratios** compare the relative performance of low and high performing subgroups to a reference group to show the magnitude of current achievement gaps.
- **Percent change in performance** describes the rate of change in the percentage of students meeting a performance benchmark over a three to five-year period.¹⁰⁴
- **Percent change in the achievement gap** describes the rate of change in the achievement gap between low and high performing student groups over a three to five-year period.¹⁰⁵

The rest of this section describes MCPS’ current achievement gaps (Finding 2) and highlights where MCPS has and has not made progress in closing the gaps (Findings 3, 4, and 5). See Chapters III – VI and the appendix of the report for more details and data for each individual measure.

¹⁰⁴ Depending on the years of data available, percent change in performance is typically calculated as the difference in student performance between 2007 and 2012, divided by student performance in 2007.

¹⁰⁵ Depending on the years of data available, percent change in the achievement gap is typically calculated as the difference in the achievement gap between 2007 and 2012, divided by the achievement gap in 2007.

Finding 2: MCPS’ achievement gap is narrowest on grade level measures and widest on measures of above grade level and at-risk performance.

Table 9-1 describes the current performance of MCPS subgroups by race, ethnicity, and service group across the 11 sets of measures reviewed in this report based on the most recent data available.

Table 9-1: Current MCPS Performance by Measure and Subgroup

Measures and Indicators	Performance by Race and Ethnicity				Performance by Service Group Status			
	White*	Asian*	Black	Latino	All Students	Special Ed.	ESOL	FARMS
Grade Level Measures								
School Readiness	88%	86%	77%	71%	81%	52%	71%	71%
MSA Prof.- Reading, Grade 3	95%	95%	79%	83%	89%	72%	79%	78%
MSA Prof. – Math, Grade 3	95%	95%	80%	84%	90%	64%	81%	80%
MSA Prof. – Reading, Grade 5	95%	95%	88%	90%	94%	78%	80%	86%
MSA Prof. – Math, Grade 5	95%	95%	77%	79%	88%	66%	65%	75%
MSA Prof.- Reading, Grade 8	95%	95%	79%	78%	88%	66%	46%	74%
MSA Prof. – Math, Grade 8	91%	94%	60%	60%	77%	45%	45%	54%
Graduation (4 Yr. Cohort Rate)	94%	95%	82%	77%	87%	63%	53%	77%
College and/or Career Readiness (USM/CTE)	85%	83%	64%	64%	81%	48%	44%	67%
Above Grade Level Measures								
MSA Adv.– Reading, Grade 3	39%	39%	12%	10%	26%	9%	5%	9%
MSA Adv. – Math, Grade 3	61%	65%	24%	24%	44%	16%	16%	21%
MSA Adv. – Reading, Grade 5	81%	79%	47%	46%	65%	32%	20%	40%
MSA Adv. – Math, Grade 5	54%	63%	18%	20%	39%	11%	9%	15%
MSA Adv.– Reading, Grade 8	74%	74%	38%	34%	56%	20%	11%	28%
MSA Adv. – Math, Grade 8	63%	69%	19%	18%	43%	11%	14%	14%
Algebra 1 by Grade 8 with C or above	79%	83%	44%	40%	62%	20%	22%	35%
AP/IB Performance	70%	72%	25%	40%	53%	16%	30%	26%
SAT/ACT Performance	63%	62%	14%	16%	41%	12%	4%	8%
At-Risk Indicators								
Suspensions – Elementary	0.2%	0.2%	1.3%	0.6%	0.6%	2.3%	0.5%	1.1%
Suspensions – Middle	1.7%	1.4%	8.8%	4.8%	4.1%	10.8%	4.2%	8.3%
Suspensions – High	2.1%	0.9%	9.8%	5.0%	4.4%	9.6%	5.0%	8.5%
Ineligibility - Middle	1.5%	0.9%	9.5%	10.0%	5.2%	13.5%	10.2%	12.0%
Ineligibility - High	5.0%	4.6%	21.4%	26.5%	13.4%	25.1%	22.2%	27.6%
Dropouts (4 Yr. Cohort Rate)	3.1%	3.0%	9.4%	13.9%	6.8%	11.6%	26.2%	11.1%
* MSDE does not report subgroup scores above 95% or below 3%, so actual values are above or below these estimates for MSA proficiency, graduation rates, and dropout rates.								

To describe the magnitude of the current achievement gap across the 11 measures reviewed, OLO used performance ratios to compare the performance of lower performing subgroups (e.g. students with disabilities) to their higher performing peers (e.g. regular education students or all students).

Performance ratios describe the relative performance of each subgroup to a reference group by describing how likely each subgroup achieves at the same level as the reference group. For example, if the performance ratio is 100% between Latino and white students, this means that Latino students are just as likely as white students to meet the benchmark. If the ratio is 20%, Latino students are only one-fifth as likely as white students to meet the benchmark; if the ratio is 200%, Latino students are twice (two times) as likely as white students to meet the benchmark.

Table 9-2 on the next page describes performance ratios by race, ethnicity and service group status for each of the 11 sets of measures considered. Using the most current data available, the performance of Asian, black, and Latino students are compared to their white peers using performance ratios; and, depending on the measure, the performance of students receiving special education, ESOL, and FARMS are compared to peers not receiving these services or all students.¹⁰⁶

Overall, the magnitude of the achievement gap is narrowest among grade level measures of performance where a majority of students meet the benchmark. For example, 88% and 90% of black and Latino 5th graders demonstrated proficiency in reading on the MSAs in 2012 compared to 95% of white 5th graders as noted in Table 9-1. In turn, Table 9-2 notes that black and Latino students were 93-94% as likely as their white peers to demonstrate proficiency on this measure and students receiving special education, ESOL, or FARMS were 83-91% as likely as their non-service peers to reach this benchmark. Overall, the achievement gap among grade level measures is relatively narrow with low performing subgroups being on average 80-90% as likely as their higher performing peers to reach these benchmarks.

Conversely, the magnitude of the achievement gap is higher on measures where only a minority of students meets the benchmark. For example, black and Latino graduates were only 22-25% as likely as their white peers to score 1,650 or above on the SAT or 24 or above on the ACT; students receiving special education, ESOL, or FARMS were 9-29% as likely as all students to reach this benchmark. As such, the achievement gap for above grade level measures is larger than the gap for grade level measures, with lower performing subgroups often being less than half as likely as their higher performing peers to reach above grade level benchmarks of performance.

Finally, for the at-risk measures, the achievement gap is larger among these indicators than among grade level metrics. The higher prevalence rate of low performing subgroups demonstrating at-risk outcomes is reflected by their performance ratios exceeding 100% compared to the high performing subgroups. For example, black and Latino students were 2 to 4 times as likely as their white peers to have been suspended in middle school, and students receiving special education or FARMS were 1 to 1.5 times more likely than all students to have been suspended. Generally, for the at-risk measures, low performing subgroups are often more than twice as likely as their higher performing peers to demonstrate these outcomes.

¹⁰⁶ More specifically, service group comparisons for school readiness, the Maryland School Assessments, and graduation and dropout rates compare students who receive services to those who do not, while for all of the other measures, performance is compared between students receiving services and all students.

Table 9-2: Magnitude of Current MCPS Achievement Gaps by Measure

Measures and Indicators	Performance Ratios by Race and Ethnicity (1)			Performance Ratios by Service Group Status (2)		
	Asian	Black	Latino	Special Ed.	ESOL	FARMS
Grade Level Measures						
School Readiness (3)	98%	88%	81%	63%	83%	83%
MSA Proficiency- Reading, Grade 3	100%	83%	87%	80%	87%	83%
MSA Proficiency – Math, Grade 3	100%	84%	89%	69%	87%	85%
MSA Proficiency – Reading, Grade 5	100%	93%	94%	83%	84%	91%
MSA Proficiency – Math, Grade 5	100%	81%	83%	73%	86%	80%
MSA Proficiency- Reading, Grade 8	100%	83%	82%	73%	51%	79%
MSA Proficiency – Math, Grade 8	103%	66%	65%	56%	57%	62%
Graduation (4 Year Cohort Rate)	101%	87%	82%	70%	59%	84%
College and/or Career Readiness (meets USM and/or CTE requirements)	97%	75%	75%	60%	55%	83%
Above Grade Level Measures						
MSA Advanced – Reading, Grade 3	99%	30%	26%	33%	16%	24%
MSA Advanced – Math, Grade 3	108%	40%	39%	33%	31%	38%
MSA Advanced – Reading, Grade 5	97%	57%	56%	46%	29%	52%
MSA Advanced – Math, Grade 5	117%	33%	37%	26%	21%	30%
MSA Advanced – Reading, Grade 8	99%	51%	46%	34%	19%	42%
MSA Advanced – Math, Grade 8	110%	30%	28%	24%	31%	25%
Algebra 1 by Grade 8 with C or above	105%	56%	50%	32%	36%	57%
AP/IB Performance	103%	35%	57%	30%	56%	49%
SAT/ACT Performance	99%	22%	25%	29%	9%	20%
At-Risk Indicators						
Suspensions – Elementary	25%	375%	150%	383%	83%	183%
Suspensions – Middle	75%	506%	275%	257%	97%	203%
Suspensions – High	55%	465%	245%	240%	114%	195%
Ineligibility - Middle	60%	633%	667%	260%	196%	231%
Ineligibility - High	92%	428%	530%	187%	166%	206%
Dropouts (4 Year Cohort Rate)	97%	303%	449%	185%	455%	205%
Notes: (1) compares the performance of each ethnic group to white students; (2) compares the performance of each service group to students not receiving services (school readiness, MSA, graduation and dropout rates) or to all students (all other measures); (3) the performance ratio of 98% for Asian students on the school readiness measure means that this subgroup was 98% as likely as white kindergarteners to demonstrate full readiness for school.						

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Finding 3: MCPS narrowed the achievement gap in school readiness, MSA proficiency, suspensions, academic ineligibility, and graduation rates although large gaps persist for suspensions and academic ineligibility rates by subgroup.

OLO’s analysis of performance data across 11 measures demonstrates that MCPS has achieved progress in narrowing the achievement gap across five sets of measures:

- School readiness
- Proficiency on the Maryland School Assessments (MSAs)
- Suspensions
- Academic ineligibility (three or four quarters)
- Graduation rates

Together, these measures reflect markers of at-risk student performance (suspensions and academic ineligibility) and grade level expectations of student performance (school readiness, MSA proficiency, and on-time graduation). While sizable achievement gaps remain for the at-risk indicators (see Finding 2), across all five of these measures, a majority of each subgroup reached the desired benchmark on each measure, and the performance of every subgroup improved over a three to five year period. Table 9-3 describes these trends.

Table 9-3: Measures Where the Gap Narrowed

Measures	Achievement Gap Trends
School Readiness	From 2007 to 2012, the School Readiness gap: <ul style="list-style-type: none"> • Narrowed by 35-39% by race and ethnicity, and by 29-42% by ESOL and FARMS status compared to all students, but • Increased by 24% by disability status compared to all students.
Proficiency on Maryland School Assessments (MSAs) in Grades 3, 5 and 8	From 2007 to 2012, the MSA proficiency gap narrowed in: <ul style="list-style-type: none"> • Grade 3 by 21-45% by race and ethnicity, and by 7-43% by service group; • Grade 5 by 20-77% by race and ethnicity, and by 2-66% by service group; and • Grade 8 by 8-39% by race and ethnicity, and by 11-40% by service group.
Suspensions	From 2007 and 2011, MCPS narrowed the gap in suspension rates: <ul style="list-style-type: none"> • In elementary schools by 58-78% by race and ethnicity, and by 38-61% by service subgroup compared to all students; • In middle schools by 40-50% by race and ethnicity and by 14-83% by service subgroup compared to all students; and • In high schools by 22-52% by race and ethnicity, and by 32-50% by service subgroup compared to all students.

Table 9-3: Measures Where the Gap Narrowed, Continued

Measures	Achievement Gap Trends
Academic Ineligibility	From 2007 to 2011, MCPS narrowed the academic ineligibility gap: <ul style="list-style-type: none"> • In middle schools by 44-49% by race and ethnicity, and by 4-47% by service subgroup compared to all students; and • In high schools by 11-17% by race and ethnicity, 11% by FARMS status compared to all students, and 24% by special education status compared to all students. • However, at the high school level, the academic ineligibility gap increased by 11% between students receiving ESOL and all students.
Graduation Rate (Four Year Cohort Rate)	From 2010 to 2012, MCPS' on-time graduate gap: <ul style="list-style-type: none"> • Narrowed by race and ethnicity by 11-25%; • Narrowed by special education and FARMS status by 8-12%; and • Increased by ESOL status by 2%.

Finding 4: MCPS achieved mixed progress in narrowing the achievement gap on two measures – dropout rates, and completion of USM/CTE program requirements among graduates.

OLO's analysis of performance data for MCPS students across 11 measures demonstrates that MCPS has achieved mixed progress since 2007 in narrowing the achievement gap across two measures: high school dropout rates and completion of University System of Maryland or Career and Technology Education program requirements for graduates. Together, these benchmarks reflect a mix of grade level and at-risk performance measures. Generally, MCPS achieved greater progress in narrowing the achievement gap by race and ethnicity on these two measures than by service group status. Table 9-4 describes these trends.

Table 9-4: Measures Where the Gap Stagnated or Generated Mixed Results

Measures	Achievement Gap Trends
Dropout Rates	From 2010 to 2012, the gap in four year cohort dropout rates: <ul style="list-style-type: none"> • Remained unchanged between white and Latino students • Narrowed by 18% between white and black students and by 12% by FARM status, but • Widened by 2-8% by ESOL and special education status
Completion of USM or CTE Requirements among Graduates	Between 2007 and 2010, the gap among graduates who met USM/CTE program requirements for graduation: <ul style="list-style-type: none"> • Remained unchanged by ESOL status compared to all students, • Narrowed by race, ethnicity, and income by 9-20%, and • Increased by disability status by 27%.

Finding 5: The MCPS achievement gap widened across four sets of measures - advanced MSA performance, Algebra 1 completion by Grade 8 with a C or better, AP/IB performance among graduates, and SAT/ACT performance among graduates.

OLO’s analysis of performance data for MCPS students across 11 measures demonstrates that MCPS has lost ground in narrowing the achievement gap across four measures:

- Advanced MSA scores
- Algebra 1 completion by Grade 8 with a C or better
- AP/IB performance among graduates
- SAT/ACT performance among grades

These four measures reflect markers of above grade level expectations and align with MCPS’ *Seven Keys*. Generally, each MCPS subgroup achieved progress on these measures over time. However, the highest performing subgroups – white and Asian students and students not receiving special education, ESOL, or FARMS – often achieved the greatest performance gains, thus widening the gaps over time by race, ethnicity, and service group status. Table 9-5 describes these trends.

Table 9-5: Measures Where the Gap Widened

Measures	Achievement Gap Trends
Advanced Maryland State Assessment (MSA) Scores in Grades 3, 5 and 8	<p>From 2007 to 2012, the achievement gap in advanced MSA scores:</p> <ul style="list-style-type: none"> • Narrowed among advanced reading scores in Grade 3 by 2-7% across most subgroups but widened by 14% by ESOL status; • Widened among advanced Grade 3 math scores by 5-33% by race, ethnicity, and service group status; • Narrowed among advanced Grade 5 reading scores by race, ethnicity, and income by 2-16%, but widened by special education and LEP status by 21-25%; • Widened among advanced Grade 5 math scores by 3-6% by race and ethnicity and by 16-37% by service group status; • Widened among advanced Grade 8 reading scores by 9% by race and ethnicity and by 27-56% by service group status; and • Widened among advanced Grade 8 math scores by 14-24% by race, ethnicity, and service group status.
Algebra 1 Completion by Grade 8 with C or higher	<p>From 2010 to 2012, the gap in the percentage of students who completed Algebra 1 by the end of Grade 8 with a course grade of C or higher:</p> <ul style="list-style-type: none"> • Widened by 14-39% by race and ethnicity; • Widened by 7% by special education and FARMS status compared to all students, but • Narrowed by ESOL status by 7% compared to all students.

Table 9-5: Measures Where the Gap Widened, Continued

Measures	Achievement Gap Trends
AP/IB Performance among Graduates	From 2007 to 2012, the gap in AP/IB performance measured by the percentage of graduates who earned qualifying scores on either an AP or IB exam: <ul style="list-style-type: none"> • Widened by race and ethnicity by 17-37%; and • Widened by service group status compared to all students by 6-26%.
SAT/ACT Performance among Graduates	From 2010 to 2012, the SAT/ACT performance gap among graduates: <ul style="list-style-type: none"> • Widened by race, ethnicity, and income by 3-6%; and • Held constant by special education and ESOL status.

B. Policy Alignment and Effects Findings

Finding 6: Significant federal and state policy changes have weakened the policy imperative for closing the achievement gap. Locally, however, MCPS goals for narrowing the achievement gap continue to exceed federal and state policy mandates.

Since 2008, significant changes to federal and state policy have weakened the local imperative for closing the achievement gap. At the federal level, the Maryland waiver from No Child Left Behind both diminished the federal requirement for Maryland school systems to close the achievement gap and lessened the consequences for schools not meeting annual performance goals.

At the state level, Maryland’s implementation of the Common Core State Standards reflects changes in federal and state policy that raise academic achievement goals and set the expectation that all students will meet benchmarks of college and career readiness instead of the previous NCLB benchmarks of grade level proficiency on math, reading, and science standards.

Locally, MCPS’ strategic plan, *Our Call to Action*, and its *Seven Keys for College and Career Readiness* focus on narrowing the achievement gap among several above grade level measures of student performance like SAT scores above 1,650 among graduates. Table 9-6 on the next page provides a summary of the *Seven Key* measures that MCPS tracks to help ensure that its students are prepared for college and entry-level careers upon graduation. Recently, MCPS has indicated that the *Seven Keys* will be updated with measures to reflect 21st century standards of college and career readiness, such as critical thinking and problem solving.

Despite the higher academic expectations for student performance exemplified under Maryland’s adoption of the Common Core State Standards, OLO finds that MCPS’ goals for narrowing the achievement gap continue to exceed federal and state policy goals because they maintain a focus on narrowing the gap in both grade level and above grade level measures of student performance.

Table 9-6: MCPS’ Seven Keys to College and Career Readiness

Seven Keys	Data Points
1. Advanced Reading K-2	MCPS Assessment in Primary Reading; Terra Nova 2 in Grade 2
2. Advanced Reading MSA	Maryland School Assessments (MSA)
3. Advanced Math by Grade 5	Advanced Mathematics in Grade 5 Proficiency
4. Algebra 1 by Grade 8	Algebra 1 Completion by the end of Grade 8 with C or higher
5. Algebra 2 by Grade 11	Algebra 2 Completion by the end of Grade 11 with a C or higher
6. 3 on AP/4 on IB	AP/IB Exams Participation and Performance
7. 1,650 on SAT, 24 on ACT	SAT/ACT Participation and Performance

Finding 7: Challenges in narrowing the gap among above grade level measures suggest that the MCPS achievement gap on statewide assessments will widen with the full implementation of the Common Core State Standards.

In 2010, Maryland adopted the Common Core State Standards and committed to revising the state curriculum to align with the CCSS. Generally, the CCSS are viewed as more rigorous than Maryland’s current voluntary curriculum because they emphasize college and career readiness rather than only grade-level proficiency in mathematics, reading, and science. In implementing the CCSS, Maryland intends to replace its current Maryland School Assessments (MSA) with the CCSS aligned Partnership for Assessments for College and Careers (PARCC) in 2014-15.

MCPS began implementing the CCSS three years ago with the implementation of the Integrated Elementary Curriculum, now termed Curriculum 2.0. Currently, Curriculum 2.0 is being implemented in Grades K-3; next year, it is scheduled to expand to Grades 4 and 5. MCPS is currently aligning its middle and high school curriculum to the CCSS as well.

When Maryland implements the PARCC assessments, it will join 23 other states that have committed to using the PARCC to monitor their progress in achieving the CCSS. Given the more challenging standards associated with the PARCC compared to current state assessments, it is widely perceived that states’ achievement gaps will widen with this new assessment.

Locally, MCPS’ current student performance data shows more sizable achievement gaps in above grade level measures (e.g. advanced MSA scores) that better align with measures of college and career readiness than grade level measures (e.g. proficient MSA scores). This suggests that MCPS’ future achievement gaps on state assessments will widen when the more rigorous CCSS aligned PARCC assessments are implemented in two years.

C. Research Findings

Finding 8: The research base on best practices for narrowing the achievement gap is thin.

OLO's review of the research identified two sets of promising and best practices for narrowing the achievement gap. The first set of practices focuses on addressing school and classroom-based factors that can impact the achievement gap such as class size, teacher quality, funding, and high expectations. The second set of practices addresses factors beyond school that can impact the achievement gap such as poverty, early childhood education, and parenting practices.

OLO's review overall, however, finds that the research base on best practices for narrowing the achievement gap is thin. While empirical research on best practices for increasing individual student achievement exists, this outcome alone is not the same as reducing the achievement gap. To narrow the achievement gap, interventions have to accelerate the performance of black, Latino, and service group students (i.e. students eligible for special education, ESOL, or FARMS) relative to their peers.

Further, researchers note that focusing on reform strategies that improve achievement among all students will not ameliorate the achievement gap and that most school policies impacting test scores impact all racial groups in a similar matter, without redistributing benefits across groups.¹⁰⁷ As such, more research is needed to understand which practices and approaches are most effective at narrowing the achievement gap.

Finding 9: The socioeconomic correlates of the achievement gap suggest that coordination among MCPS, Montgomery County Government, and other agencies and community-based groups is necessary to make progress in narrowing the achievement gap.

Researchers note that school, community, socioeconomic, and familial factors correlate with the achievement gap. Barton and Coley's synthesis of the achievement gap research identifies 16 factors related to life experiences and conditions that are correlated with cognitive development and academic achievement and thus contribute to the achievement gap:¹⁰⁸

- Curriculum rigor (e.g. participation in AP courses)
- Teacher preparation (e.g. teacher certification or teaching outside of certification area)
- Teacher experience
- Teacher absence and turnover
- Class size
- Availability of instructional technology
- Fear and safety at school
- Parent participation
- Frequent changing of schools
- Low birth weight
- Environmental damage (e.g. exposure to lead or mercury)
- Hunger and nutrition
- Talking and reading to babies and young children

¹⁰⁷ See Murphy, 2009, p. 11 and Bali and Alvarez, 2003, p. 485, cited by Murphy, 2009

¹⁰⁸ Barton and Coley, 2009

- Excessive television watching
- Parent-pupil ratio
- Summer achievement gain/loss

A majority of these factors (9 of 16 factors) reflect home and community based-factors that are typically beyond the control of any school system. Locally, Montgomery County Government rather than MCPS serves as the lead on health and child welfare correlates of the achievement gap (e.g. low birth weight and environmental damage). Similarly, local community-based organizations are probably better suited to assist families in enhancing their parenting practices (e.g. reading to children, limiting television) relative to narrowing the achievement gap.

The broad, socioeconomic correlates of the achievement gap suggest that a multi-pronged agency and community based approach will be necessary to achieve further progress in narrowing the gap. Locally, this suggests a partnership between MCPS, Montgomery County Government, and agencies and organizations supporting families aimed at collectively addressing the school and beyond school factors that contribute to the achievement gap.