

# Middle School Magnet Consortium

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## Overview

MCPS operates one middle school consortium—the Middle School Magnet Consortium (MSMC)—which was created in 2006 with support from a federal MSAP grant. The MSMC is the district’s most recent model for choice and special programs, and as such, it has benefitted from lessons learned in the other models. The MSMC was developed in response to increasing school enrollments and the need to re-open the previously closed Belt Jr. HS (to be re-named A. Mario Loiederman MS). It was designed to develop academic programs of high-interest to students; promote racial, ethnic, and socioeconomic diversity; and increase student achievement across the three participating schools, which were among the lowest achieving and most racially- and economically-isolated schools in the district. The consortium comprises three schools, each of which offers a theme-based magnet program with no academic selection criteria. Each school follows a block schedule which offers an 8<sup>th</sup> period for additional elective classes.

- **Argyle MS for Digital Design and Development** focuses on the development and application of information technology. All students take at least one technology course or elective each year; students with a special interest can take additional technology electives in subjects such as web development, programming, digital art, or media literacy. Students can earn high school credit for select electives.
- **A. Mario Loiederman MS of Creative and Performing Arts** provides opportunities for students to take multiple electives in the arts, including visual art, dance, film, theater, band, and music. Students can also extend their arts education through school-wide clubs; dance, instrumental, or choral groups; and outreach opportunities provided by professional artists. Students can earn high school credits for select arts electives.
- **Parkland MS for Aerospace Technology** provides an enriched and accelerated science program with a focus on aerospace technology. Students enroll in two science courses each year, allowing them to take Honors Physics for high school credit or Investigations in Earth Space Systems in Grade 8. Electives are also offered in astronomy, robotics, engineering, and programming. Parkland MS is also the only middle school in the state of Maryland to offer Civil Air Patrol through the U.S. Air Force Auxiliary.

In the MSMC, students are assigned to a school through a lottery process in which student preferences, as well as demographic factors, are considered. Unlike the high school consortia, the MSMC does not have base areas. No preference is given based on the geographic proximity of a school to a student’s home, but students can receive a preference if they have a sibling who attends one of the schools. In addition, each of the three schools in the MSMC accepts up to 100 out-of-consortium students each year, and approximately 60-70 of accepted students enroll. Factors that are considered for out-of-consortium applicants include: number of available seats,

number of applicants, choice ranking, socioeconomic (eligibility for FARMS) profile of applicants, and proportion of FARMS students at the applicant's home school. The last factor is designed to minimize the impact on sending schools and promote socioeconomic diversity in the MSMC. It should be noted that some of the reasons why invited out-of-consortium students may not accept invitations to the MSMC include: they receive invitations to selective middle school magnet programs; the MSMC does not provide transportation for out-of-consortium students; and MCPS does not currently offer high schools where students have a guarantee or preference to continue in the theme.

Students who do not receive their first choice school during the lottery and new students can participate in a second round of the lottery. Students who do not receive their first choice in either of the two rounds of the lottery can appeal their assignment to DCCAPS. All in-consortium students are provided transportation. Initially, transportation was provided for out-of-consortium students; however it was discontinued due to budget constraints. Maps of the regional consortia are included in Appendix E.

Outreach for the MSMC is similar to strategies conducted for the high school consortia. DCCAPS mails information to all Grade 5 students in feeder elementary schools located within the MSMC about evening informational meetings and the magnet programs offered in each MSMC school. The evening informational meetings are held in the fall and conducted in English and Spanish for all families. In addition, each school conducts an Open House in the fall to showcase the magnet program and provide student presentations of theme-based work. DCCAPS also works with elementary school counselors to share information about the magnet programs. All Grade 5 students in MSMC feeder schools are given a Choice form to complete; follow-up is conducted with students who do not return the form. In 2013–14, 99.0% of students completed and returned the form. Students who do not make a selection are assigned to a school based on school capacity.

## Program-Level Findings

### I. Choice lottery participants

**Almost nine in 10 students who participated in the MSMC lottery received their first choice school.** For the 2013–14 school year, 1,383 students participated in the MSMC choice lottery, including 750 out-of-consortium applicants and 633 in-consortium applicants. All (100%) of in-consortium applicants and 40.8% of out-of-consortium applicants received a placement in one of the three MSMC schools. Among students who were given a placement in the choice lottery, a large majority (85.4%) was assigned to their first choice school; the remaining 14.6% were assigned to their second choice school.

As shown in Exhibit 41, there were some differences by subgroup in the proportions of students who received their first choice. For example, 84.3% of Black/African American students, 83.8%

of Hispanic/Latino students, and 85.7% of White students received their first choice, compared with 90% of Asian students. Additionally, students who were eligible for FARMS were less likely to receive their first choice school (81.8%) than non-eligible students (90.4%).

**Exhibit 41: MSMC—Percentage of Students Assigned by Choice, by Subgroup (2013–14)<sup>1</sup>**

	First Choice		Second Choice	
	N	%	N	%
<b>Total†</b>	<b>732</b>	<b>85.4%</b>	<b>125</b>	<b>14.6%</b>
<b>Race/ethnicity</b>				
American Indian	-	-	-	-
Asian	117	90.0%	13	10.0%
Black/African American	198	84.3%	37	15.7%
Hispanic/Latino	294	83.8%	57	16.2%
Multi-Ethnic	-	-	-	-
Pacific Islander	-	-	-	-
White	90	85.7%	15	14.3%
<b>Special education status</b>				
General education	621	85.5%	105	14.5%
Special education*	111	84.7%	20	15.2%
<b>Gender</b>				
Female	376	84.9%	67	15.1%
Male	356	86.0%	58	14.0%
<b>Limited English Proficiency (LEP)</b>				
Not LEP	553	86.8%	84	13.2%
LEP	179	81.4%	41	18.6%
<b>Eligibility for free and reduced price meals (FARMS)</b>				
Not Current FARMS	322	90.4%	34	9.6%
Current FARMS	410	81.8%	91	18.2%
NOT ever FARMS	299	90.9%	30	9.1%
Ever FARMS	433	82.0%	95	18.0%

<sup>1</sup> All (100%) students received their first or second choice in the lottery.

\*Includes students with 504s.

†Data are not presented when N ≤ 10.

**Siblings accounted for 3.5% of out-of-consortium invitations and 12.5% of in-consortium assignments.** As shown in Exhibit 42, among the 750 out-of-consortium applicants, only 26 students (3.5%) received an invitation due to sibling link. The proportions were less than 6% across all three schools. Among in-consortium students in the MSMC lottery, 79 of the 633 students received their first choice due to sibling link, accounting for 12.5% of the assignments. The proportion of students who received their first choice school due to sibling link was lowest at Argyle MS (7.1%) and highest at Loiederman MS (15.8%), with Parkland MS in the middle (12.7%).

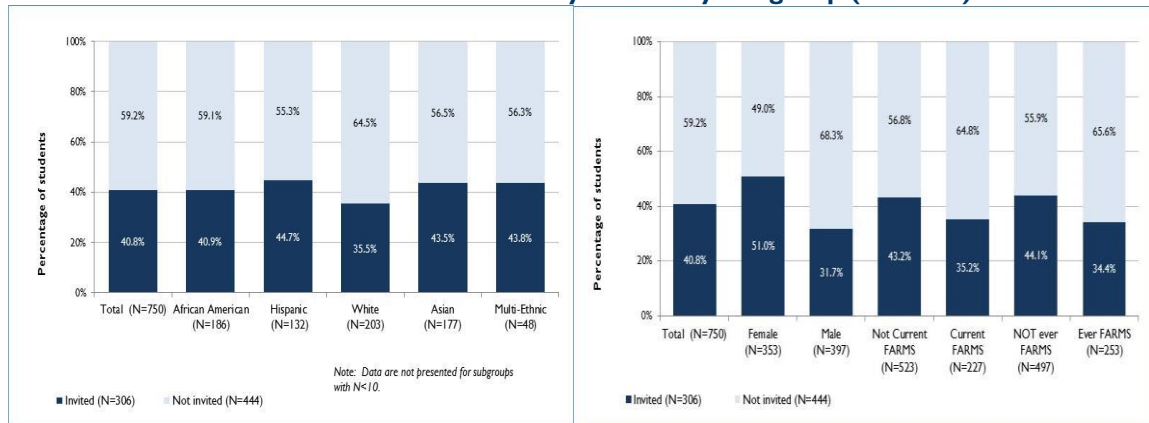
**Exhibit 42: MSMC Lottery Results—Invitations/Assignments Due to Sibling Priority, In-Consortium and Out-of-Consortium, by School (2013–14)**

	Out-of-Consortium Applicants			In-Consortium Students		
	Total N	Sibling <sup>†</sup>		Total N	Sibling	
		N	%		N	%
MSMC	750	26	3.5%	633	79	12.5%
Argyle MS (first choice)	230	13	5.7%	156	11	7.1%
Loiederman MS (first choice)	210	≤10	-	240	38	15.8%
Parkland MS (first choice)	310	≤10	-	237	30	12.7%

<sup>†</sup>Data are not presented when N≤10.

**Among the 750 out-of-consortium applicants, only 40.8% were given a seat through the lottery—indicating very high demand for the MSMC programs and limited seat capacity.** As shown in Exhibit 43, the overall acceptance rate for out-of-consortium students into MSMC magnet programs for the 2013–14 school year was 40.8%. The rates were slightly higher for Hispanic/Latino (44.7%), Asian (43.5%), and multi-ethnic (43.8%) students, and slightly lower for White students (35.5%). The proportion of Black/African American students who were invited was 40.7%. When the data were disaggregated by gender and FARMS, they show that female students (51.0%) had higher acceptance rates than male students (31.7%); and students who were not currently eligible for FARMS (43.2%) were more likely to be invited than students who were eligible for FARMS (35.2%). The same pattern is seen when examining the data for students who were ever eligible for FARMS. The discrepancy in invitation rates by FARMS-eligibility results at least in part from consideration in the lottery process of socioeconomic status and limitations within the process on the number of students who are accepted from schools with high proportions of FARMS-eligible students.

**Exhibit 43: MSMC Out-of-Consortium Lottery Results by Subgroup (2013–14)**



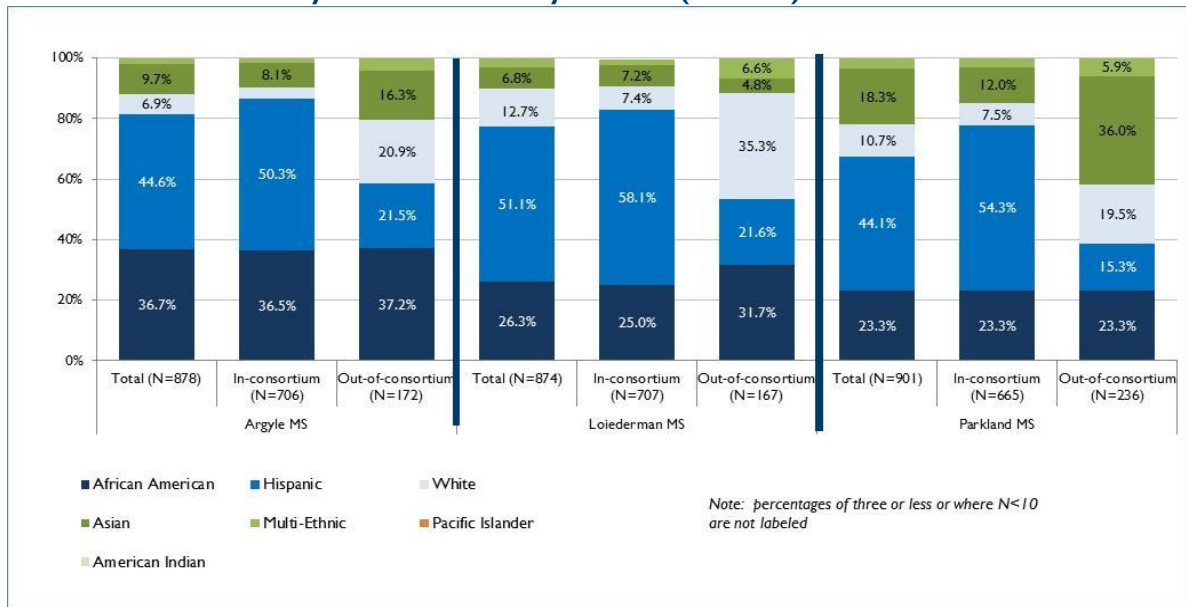
**MSMC families expressed high levels of satisfaction with the choice process.** Each year, DCCAPS includes a short survey of families participating in the MSMC choice process to

measure their levels of satisfaction with the process and the amount of information they received. For the 2013–14 school year, high proportions of in-consortium and out-of-consortium families expressed satisfaction with the process. Among in-consortium families, 87% of families reported that they *had enough information to rank schools in order*, 81% indicated that *in general, we see benefits to the choice process*, and 78% reported that *the program’s offerings influenced our decision*. Satisfaction was even higher among out-of-consortium families: 90% reported that they *had enough information to rank schools in order*, 92% indicated that *in general, we see benefits to the choice process* and that *the program’s offerings influenced our decision*.

## 2. Profile of students enrolled in the MSMC

**The out-of-consortium applicant pool has been the key factor in achieving greater diversity; the pool contains higher levels of racial and ethnic diversity than the in-consortium choice pool.** Across each of the MSMC schools, the out-of-consortium student population in 2013-2014 included higher proportions of White and Asian students and lower proportions of Hispanic/Latino students than the in-consortium populations. These differences impacted enrollment by creating more diverse enrollments by student race/ethnicity (Exhibit 44).

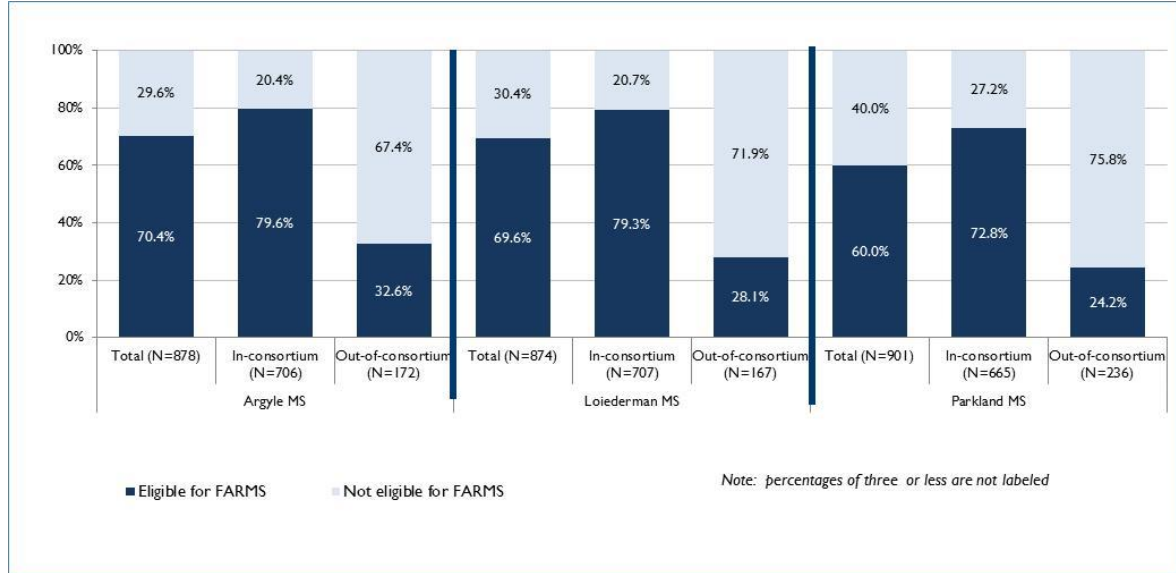
**Exhibit 44: Enrollment by Race and Ethnicity—MSMC (2013–14)**



The differences between the two populations in terms of income level were more apparent. As shown in Exhibit 45, across all three schools, the proportion of students who were eligible for FARMS was much lower among out-of-consortium students than among in-consortium students. As a result, the addition of out-of-consortium students has produced lower overall FARMS rates in each school than the school would have with only in-consortium students:

by -9.2 percentage points at Argyle MS, by -9.7 points at Loiederman MS, and by -12.8 points at Parkland MS.

**Exhibit 45: Enrollment by Eligibility for FARMS—MSMC (2013–14)**



**Just under half of out-of-consortium students articulated to a high school within the DCC in 2013–14.** Out-of-consortium students, while not zoned to attend a high school within the DCC based on their residence, can articulate to one of the five high schools by graduating from one of the MSMC schools, all of which are feeders to the DCC high schools. In 2013–14, 70 of the 152 out-of-consortium graduates (46.1%) articulated to a DCC high school, while the remaining 82 (53.9%) attended a non-DCC high school. The largest number of students enrolled in Wheaton HS (24 students), followed by Albert Einstein HS (20 students), Kennedy HS (12 students), Northwood HS (9 students), and Montgomery Blair HS (5 students).

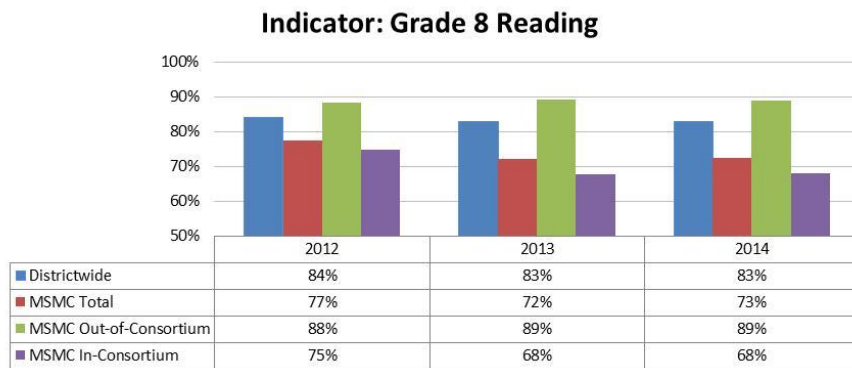
### 3. Academic outcomes of students in the MSMC

**Achievement levels for in-consortium MSMC students on MCPS milestones are lower than district levels and have decreased over the past three years, consistent with broader district trends.** An analysis of data from the Grade 8 reading and Algebra I by Grade 8 milestones indicated that the proportion of in-consortium students across the MSMC schools who achieved the milestone was lower than the district average, and the differences were statistically significant.<sup>191</sup>

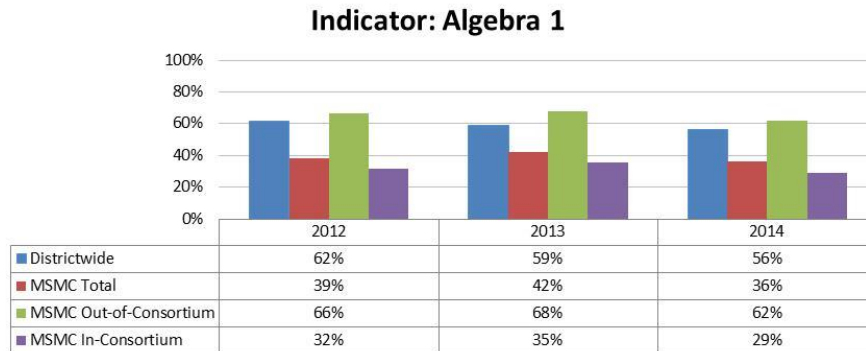
<sup>191</sup> Grade 8 reading: MSMC total to district average ( $p < .05$ ; Pearson's Chi-Square = 64.146); Algebra I: MSMC total to district average ( $p < .05$ ; Pearson's Chi-Square = 138.106).

Furthermore, the analysis shows that within the MSMC schools, the proportion of all students meeting each of the milestones has declined over the past three years—by 4 percentage points on the Grade 8 reading milestone (a statistically significant difference) and by 3 percentage points on the Algebra I by Grade 8 milestone (not statistically significant). It should be noted that declines were also observed districtwide—by 1 percentage point in Grade 8 reading and by 6 percentage points in Algebra I by Grade 8 (statistically significant decline). These data are presented in Exhibits 46 and 47, respectively.

**Exhibit 46: MCPS Grade 8 Reading Data—Percentage of Students Meeting the Milestone—Districtwide and MSMC (2013–14)**



**Exhibit 47: MCPS Algebra I by Grade 8 Data—Percentage of Students Meeting the Milestone—Districtwide and MSMC (2013–14)**



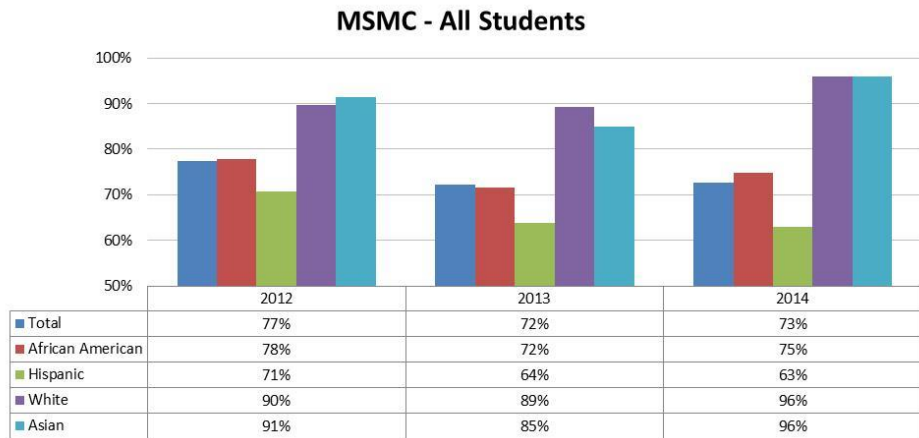
**Although there are no academic requirements for entry into the MSMC, out-of-consortium students demonstrated higher levels of academic achievement on MCPS milestones than in-consortium students and have outscored districtwide averages.** As also shown above in Exhibits 46 and 47, a higher proportion of out-of-consortium students than in-consortium



students met each milestone, and the differences were statistically significant.<sup>192</sup> For example, in 2013-14, 89% of out-of-consortium students met the Grade 8 reading milestone compared to 68% of in-consortium students. A similar difference was observed for the Algebra I by Grade milestone—in 2013-14, 62% of out-of-consortium and 29% of in-consortium students met this milestone. Additionally, the proportions of out-of-consortium students who met the milestones were higher than districtwide averages. The difference on the Grade 8 reading milestone was statistically significant.<sup>193</sup>

**Over the past three years, the performance of Hispanic/Latino MSMC students on the Grade 8 reading milestone declined, while performance of all other groups did not show significant differences.** Grade 8 reading milestone data disaggregated by student race/ethnicity are presented in Exhibit 48. As shown, the proportion of Hispanic/Latino students who met the Grade 8 reading milestone declined from 71% in 2012 to 63% in 2014 and the difference was statistically significant. It should be noted that the overall Hispanic/Latino population has increased both within the MSMC and across the district. Changes for all other racial/ethnic subgroups over the three years were not statistically significant.<sup>194</sup>

**Exhibit 48: MCPS Grade 8 Reading Data—Percentage of Students by Race/Ethnicity Meeting the Milestone (2013–14)**



<sup>192</sup> Grade 8 reading: Out-of-consortium to in-consortium ( $p < .05$ ; Pearson's Chi-Square = 28.288); Algebra I: Out-of-consortium to in-consortium ( $p < .05$ ; Pearson's Chi-Square = 61.749).

<sup>193</sup> Grade 8 reading: Out-of-consortium to district average ( $p = .41$ ; Pearson's Chi-Square = 4.184).

<sup>194</sup> Grade 8 reading: Hispanic/Latino students in 2012 to 2014 ( $p = .025$ ; Pearson's Chi Square = 5.050).



#### 4. Perceptions of parents, students, and staff

**Parents, staff, and students indicate that the MSMC provides unique opportunities for in- and out-of-consortium students that they would not receive in other middle schools.** Across focus groups, respondents reported that the MSMC programs provide beneficial academic experiences and opportunities for students to focus on areas of interest and earn high school credits in those areas. For example, at Loiederman MS, students can take multiple arts electives and earn high school arts credits, as well as participate in dance teams, jazz band, National Junior Thespians Society, morning news crew, and other theme-related extracurricular activities to expand their exposure to the arts. A Loiederman student provided the following quote about his experience in the school: *“I don’t think I would be able to express myself the same way through music as the way I do here. For me, expressing myself is through performing arts.”*

At Parkland MS for Aerospace Technology, all students complete the required middle school science courses by the end of Grade 7, making them eligible to take honors Physics for high school credit in Grade 8, and students can participate in physics club, Great Adventure Club, and Lego robotics, among other activities. A Parkland student remarked, *“Parkland teaches you more about preparing for the future.”* Argyle MS for Digital Design and Development also provides unique experiences for all students through technology electives and integration of technology throughout the curriculum. Argyle MS has 14 teachers in its technology department who offer a variety of technology electives, such as programming and web design. As a student noted, *“In the future, everything is going to be technology; by learning about it now, we are getting a jump start.”*

**According to focus groups participants, the magnet themes are an important factor for out-of-consortium students in applying to the schools, but they are less important across the in-consortium population.** During focus groups with students and parents, many of the out-of-consortium families indicated that the magnet theme and academic programs were important factors in their decision to apply to the MSMC. Many of the parents were looking for a more rigorous academic program than was offered in their home schools. One out-of-consortium parent remarked, *“The class options, even beyond the arts, are so far beyond at [name of non-MSMC school], it doesn’t matter what you do for a living, arts make you see things in a different way. It is very valuable.”* Another parent agreed, stating, *“Because you have something that they like going on at school, whether it is robotics, dance, or theater, it encourages them to do well in the classes because they see the integration.”*

In-consortium families, however, were more likely to report during focus groups that the proximity of the school to their home and the choices of their children’s friends were more important than the school theme. This is not to say that the themes were irrelevant to in-consortium families, but that they also wanted their children to attend school in their neighborhood. As one in-consortium parent stated, *“Living in the Argyle area, this is not a choice to me. It is a choice for people like you who are coming from Wootton. I chose the neighborhood school because I didn’t see a difference between the three schools and Argyle is the closest.”*

**Parents, students, and staff within MSMC schools strongly agreed that MCPS should provide more opportunities for whole-school magnet programs, such as those in the MSMC, in order to expand access and provide opportunities for students to focus on areas of interest.** A

majority of the parent and student focus group participants were highly satisfied with the theme-based electives, the block schedule, and the extra 8<sup>th</sup> period class to help expose students to the theme in greater depth. They added that the themes worked to engage students in learning and provided opportunities for rigorous and accelerated instruction. Additionally, they agreed that the whole-school model provides equal opportunities for all students to participate in the magnet programs and benefit from the thematic offerings. Furthermore, when asked if MCPS should offer more, fewer, or the same number of programs like the MSMC magnets, almost all respondents said *more*. Some comments on this topic included:

*“When kids are able to choose, they are going to feel more empowered and be able to reflect on why they made those choices.” – MCPS staff*

*“There should be more programs like Parkland because there are students who come a long way from home to go there because they really like the program.” – MCPS student*

*“Because of the [MSMC] choice program, it is the reason why I continue to let my child be in the Montgomery County schools. Choice is the gem of the system.” – MCPS parent in MSMC*

*“Definitely more. If you all go to the same exact type of school, it will be boring. Everyone will learn the same thing. If they go to different schools, they can do different things in the future.” – MCPS student*

**MSMC parents and students expressed concerns that the absence of transportation for out-of-consortium students and the geographic location of the programs are barriers to access.**

Parents reported that they have worked with other families and school staff to set up carpools; however, these have not solved transportation problems for all out-of-consortium families. They added that low-income families and families with two working parents do not have the same level of access because they cannot get their child to an MSMC school from outside of the consortium area. As one parent stated, *“I’m lucky, I’m only 15 minutes away [from the school]. If we lived someplace else in the county, he would probably not get the opportunity that he is getting, to take the electives that he wants to be taking. For our family, it is all about geography.”* This sentiment was echoed by other parents; for example, one stated: *“Distance does not make sense for some parents. If we had to drive all the way to school and couldn’t connect to a bus or a carpool, we couldn’t do it. When they [district] took transportation away, it discouraged some families. Schools are trying to coordinate carpools; they are not paid for this. It is not their job, it is the county’s [job], but they are not doing it.”* A student also commented, *“Spread out the programs and provide transportation. Some kids want to come here but they can’t because of transportation.”*

## 5. Impact on sending schools

**MSMC schools attracted students who were zoned to each of the other 35 middle schools in MCPS.** In 2013–14, there were out-of-consortium students attending an MSMC school who were drawn from each of the other 35 middle school in MCPS. These numbers include students at all grade levels, not just incoming Grade 6 students. The school from which the largest number of students was drawn was Col. E. Brooke Lee MS (57 students), followed by Earle B. Wood MS (37 students), Briggs Chaney MS (34 students), Benjamin Banneker MS (31 students), Julius West MS (26 students), Rocky Hill and Newport Mill MS (each with 25 students), William H. Farquhar MS and Silver Spring International MS (each with 23 students), Francis Scott Key MS (22 students), and Forest Oak MS (20 students). Additionally, the following schools sent between 11 and 19 students: Lakelands Park MS, Redland MS, Neelsville HS, Rosa Parks MS, White Oak MS, Eastern MS, Gaithersburg MS, Sligo MS, MLK Jr. MS, Westland MS, Kingsview MS, Tilden MS, and John T. Baker MS. All other schools sent less than 10 students.

## 6. Impact on schools in which the programs are located

**The whole-school model used in the MSMC magnets is successful in creating integrated learning environments.** All three magnets in the MSMC are whole-school programs—that is, all students, including out-of-consortium students who were admitted through the magnet lottery and in-consortium students who live within the MSMC home boundaries, benefit from the unique educational opportunities. This model provides opportunities for all students, not just high achieving students, to participate in rigorous and thematic instruction and to earn high school credits while in middle school. In addition, all students are magnet students; therefore there are no labels and no separation of students within the school. During focus groups with students, many of them were not aware of the terms “in-consortium” or “out-of-consortium.” When asked, the principal had to help them determine this by asking them what elementary school they attended. Comments from parents on this topic included:

*“I would have chosen any of these three schools over any other options. I like that the whole school is a magnet. At some schools, there are schools within schools. If you put a tiered system within a middle school, it creates a difficult air or dynamic among students.” – MCPS parent*

*“There is a vast difference between the highly gifted programs and these programs in terms of challenge. But there are fewer opportunities for students to develop a superiority complex. There is so much division between the groups [in other magnets]. Her son’s friends in the highly gifted program tried to convince him that it would not be a good choice [to attend MSMC] because then he would be with the ‘normals’.” – MCPS parent*

## 7. Staffing and transportation costs for MSMC

According to data provided by MCPS, the additional incremental costs for staffing and transportation associated with MSMC for the current school year (2015–16) total approximately \$1,491,891. MCPS budgeted \$298,255 at the district-level for staff and resources, including portions of the salaries of program directors, supervisors, instructional specialist, a data management coordinator, and site-based administrative staff to support program enrollment and to conduct the lottery, as well resources to support membership in recognized associations to support school signatures, office supplies (to support lottery process), and local travel to support program implementation. Each of the three MSMC schools received a 1.0 FTE in additional incremental staffing to support a coordinator position, which equaled about \$503,636 in total school-based staffing allocations. In addition, about \$690,000 is used for additional incremental transportation costs for 14 bus routes to transport in-consortium students throughout the MSMC, including budgets for staff, fuel, equipment, and repairs.

## 8. Research and benchmarking

**Research suggests that whole-school magnet programs can be more effective than programs within schools at promoting diversity among students.** As discussed in the high school consortia section, MCPS's consortia models grew out of a comprehensive analysis of choice models, including research on controlled choice which accounts for socioeconomic status in student assignment. The MSMC model is different from the high school choice model in that it follows the controlled choice model more closely—there are no attendance or base areas zones for the participating schools. The lottery process takes into consideration only student choice and demographic factors. Furthermore, in MCPS, the MSMC program model is unique because the schools offer whole-school magnet programs that are based on student interest and do not use academically selective admissions criteria. The whole-school model was selected for the MSMC based on extensive research on magnet programs.

Research on magnet programs generally focuses on two types of programs: whole school magnets in which all students in the building participate in the magnet program, and programs within schools that offer magnet curricula to some but not all of the students in the school. Research shows that whole school models have been more effective in promoting diversity and achieving desegregation goals, while programs within schools tend to struggle with issues of within-school segregation since magnet and home school students are not integrated for instruction.<sup>195</sup> In addition, whole school magnets are more effective than programs within

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<sup>195</sup> Steele, L. & Eaton, M. (1996). *Reducing, Eliminating, and Preventing Minority Isolation in American Schools: The Impact of the Magnet Schools Assistance Program*. American Institutes for Research, U.S. Dept. of Ed., Office of the Under Secretary, Washington, D.C.

schools at providing equitable access to the quality educational offerings. Programs within schools, on the other hand, have often produced racially-isolated classrooms.<sup>196</sup>

Furthermore, whole school magnet programs have been effectively implemented as a turnaround strategy for low-performing schools by increasing socioeconomic diversity with the student population. For example, in the 1980s, Wake County Public School System (WCPSS) developed special magnet themes in many of its schools to provide attractive options to families and help reduce the impact of “White flight” from inner city schools. The themes served to attract economically and racially diverse student populations, which in turn had positive impacts on the academic achievement levels of all students in the schools. In fact, data showed that the district’s low-income, minority and White students outperformed comparable students in other large districts in the state.<sup>197</sup> Other districts that have effectively implemented whole school magnets to help turnaround low performing schools include Clark County School District (CCSD) and Hamilton County Public Schools in Tennessee.<sup>198</sup>

Many of the benchmark districts use the whole school magnet model to provide broad opportunities for all students to participate in special programs. As stated earlier in the section on secondary magnets and other application programs, most of the districts used to benchmark MCPS’s practices offer some whole school magnets at the secondary level, including Baltimore County Public Schools (BCPS), Houston Independent School District (HISD), Wake County Public School System (WCPSS), Clark County School District (CCSD), and Hillsborough County Public Schools (HCPS). These programs are designed to attract out-of-boundary students into magnet programs based on student interest in a theme, while providing enhanced academic opportunities for students in the home school populations. The model serves to increase diversity by attracting new students to the magnet and integrating them with the home school population in magnet and core classes.

**Research also highlights the importance of integrating students of different backgrounds and ability levels at the classroom level in helping to decrease achievement gaps.** Magnet schools that effectively integrate students at the classroom level, as well as at the school level, provide opportunities for students from various backgrounds to learn together, which help break down socioeconomic barriers and allow students to benefit from one another academically which can

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<sup>196</sup> Pootinath, Pornpat & Walsh, Nathan (2011, December 6). Desegregated Schools with Segregated Classrooms. *The Cities, Suburbs & Schools Project*. Retrieved from <http://commons.trincoll.edu/cssp/2011/12/06/pornpat-and-nathan-temporary-title/>.

<sup>197</sup> Kahlenberg, Richard (2009). *Turnaround Schools That Work: Moving Beyond Separate but Equal*. Washington: The Century Foundation.

<sup>198</sup> [http://school-diversity.org/pdf/NCSD\\_SIG\\_Proposal\\_withcoverletter\\_10-31-14.pdf](http://school-diversity.org/pdf/NCSD_SIG_Proposal_withcoverletter_10-31-14.pdf).

help to diminish preconceptions and stereotypes about other groups.<sup>199</sup> Research also suggests that strategies to integrate students within classrooms, such as through cooperative learning, benefit achievement of low-income students because all students have equal opportunities to participate in rigorous academic work. Conversely, ability grouping or tracking can serve to diminish the benefits of socioeconomically-integrated schools because students do not have opportunities to interact with different groups of students in meaningful learning experiences. This can actually widen the achievement gap between high- and low- performing students over time.”<sup>200</sup>

Yet, some argue that integrating students of mixed ability levels within classrooms may negatively impact outcomes of high achieving students.<sup>201</sup> However, schools have effectively achieved integration at the school and classroom level using methods such as small group pull-out services for enrichment or differentiation. Additionally, at the secondary level, schools offer classes with an honors option, so that students who can and are interested in pursuing higher level instruction can do so by completing extra assignments and classwork. These strategies allow high achieving students to receive rigorous instruction within integrated class environments.<sup>202</sup>

## Conclusion and Program-Level Recommendations

Findings from the study of the MSMC produced the following overarching findings:

- Families who participate in the MSMC choice process are generally very satisfied with the magnet program offerings and the lottery process. Overall, close to 90% of students are placed in their first choice school.
- There is a high demand for MSMC programs. For the 2013–14 school year, approximately 750 out-of-consortium students applied for 300 available seats; only about 40% of the applicants were admitted due to limited number of seats. The admission of out-of-consortium students to the magnet programs is a key factor in the MSMC’s success in increasing racial and socioeconomic diversity across the schools. The

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<sup>199</sup> Pootinath, Pornpat & Walsh, Nathan (2011, December 6). Desegregated Schools with Segregated Classrooms. *The Cities, Suburbs & Schools Project*. Retrieved from <http://commons.trincoll.edu/cssp/2011/12/06/pornpat-and-nathan-temporary-title/>.

<sup>200</sup> Hawley, W. D. (2007). Designing schools that use student diversity. In E. Frankenberg & G. Orfield (Eds.) *Lessons in integration: Realizing the promise of racial diversity in American schools* (pp. 31–56). Charlottesville, VA: University of Virginia Press.

<sup>201</sup> Brewer, D. J., Rees, D. I., & Argys, L. M. (1995). Detracking America's schools: The reform without cost? *Phi Delta Kappan*, 77(3), 210–212, 214–215.

<sup>202</sup> Ibid.

admission of out-of-consortium students has led to a decrease in each school's overall FARMS rate by nine or more percentage points.

- MSMC utilizes a non-selective, whole-school magnet model that was developed based on lessons learned from MCPS's other choice and special academic program models. Unlike other secondary magnet programs in MCPS, the MSMC programs do not use selective academic criteria. However, similar to other magnet programs, the MSMC provides important educational opportunities—for all students in the school. Furthermore, the whole-school model has promoted integration of students by race, ethnicity, and socioeconomic status by mixing out-of-consortium and in-consortium students in academic and extracurricular activities using the whole school magnet programs.
- Out-of-consortium students in MSMC schools thrive academically: their overall achievement levels exceed district averages, even though there are no academic criteria for admission to the programs. In-consortium students, however, do not perform as well and have overall achievement levels that are lower than the districtwide average. Among these students, there are also achievement gaps between students by race, ethnicity, and socioeconomic status.
- The additional incremental costs for staffing and transportation associated with MSMC for the 2015–16 school year total approximately \$1,491,891. This includes district-level for staff and resources, support for the lottery, membership in recognized associations to support school signature programs, office supplies, local travel to support program implementation, and additional incremental transportation costs for 14 bus routes to transport in-consortium students throughout the MSMC.
- Data from the research and benchmarking suggests that whole-school magnet programs can be more effective than programs within schools at promoting diversity among students. This model is a key component why the MSMC programs have been effective in promoting socioeconomic diversity in MCPS. Research additionally highlights the importance of integrating students of different backgrounds and ability levels at the classroom level in helping to decrease achievement gaps.

In light of these findings, MCPS should consider the following recommendation for the MSMC programs:

- Consider expanding the MSMC program model:
  - (a) MCPS should consider expanding out-of-consortium seats, provided there is sufficient capacity, in order to keep up with demand and increasing district enrollments; and/or



- (b) To the extent that the MSMC schools do not have available capacity, MCPS should consider expanding the whole-school magnet model to other MCPS middle schools to keep up with demand for non-selective, theme-based programs and increasing district enrollment.