### Language Immersion Programs

### Overview

MCPS offers Spanish, French, and Chinese language immersion programs in seven elementary and four middle schools.66 These programs are lottery-based and have no academic criteria for admissions at the primary entry points in kindergarten and Grade 1. As discussed in the history and context section, the elementary immersion programs had their origins in the implementation of Board Policy ACD to promote voluntary student transfers to support racial and ethnic diversity in target schools; and they, along with the middle school programs, subsequently evolved as part of MCPS's broader world languages program.

The language immersion programs follow MCPS curricula and are designed to address the same standards and pacing as other MCPS schools and classes. The primary

### Timeline of elementary language immersion programs in MCPS:

- 1974: MCPS's first immersion program in French opens at Four Corners ES
- 1977: Spanish immersion program opens at Rock Creek Forest ES
- 1982: French Immersion program moves from Four Corners ES to Oak View ES
- 1983: Spanish immersion program opens at Oak View ES
- 1985: Spanish immersion program moves from Oak View ES to Rolling Terrace ES
- 1992: French Immersion program moves from Oak View ES to Maryvale ES
- 1993: Dual language program in Spanish opens at Burnt Mills ES
- 1996: The first Mandarin Chinese Immersion program opens at Potomac ES, initially for local students only
- 1999: French Immersion program opens at Sligo Creek ES
- 2005: MCPS's second Chinese Immersion program opens at College Gardens ES
- 2006: Dual language program at Burnt Mills ES Spanish immersion program starts (previously operated as a dual language program)

differences are the language of curriculum delivery and exposure to different cultures through enrichment, guest speakers, clubs or special field trips.

**Elementary programs** include total (or full) immersion programs in Spanish at Rock Creek Forest ES and in French at Maryvale ES and Sligo Creek ES. In these programs, students learn *all* core subject areas—reading, writing, mathematics, social studies, and science—in the target

<sup>&</sup>lt;sup>66</sup> Information in the text box from: Memorandum to the Board of Education from Jerry Weast, Superintendent of Schools re: Dialogue on Foreign Language Offerings (October 27, 2008).

language. Partial immersion programs are offered in Spanish at Burnt Mills ES and Rolling Terrace ES and in Chinese at College Gardens ES and Potomac ES. These programs include instruction of *a portion* of the curriculum in the target language, with the remaining portion taught in English. Since 2007, MCPS also has offered a dual language program in Spanish at Kemp Mill ES which only serves the home student population, and therefore was not included in the study.

A random lottery process is conducted to select students to fill the available kindergarten seats per school per year (as presented in Exhibit 3), as well as any Grade 1 seats that may become available. Students who want to enter a program starting in Grades 2 through 5 must pass a test to ensure that they have the required language proficiency to enter the program in those grades.

MCPS offers a sibling link for applicants with an older sibling currently attending the program in Grades K-4, which provides automatic admission to the program. In addition, the programs at Burnt Mills ES, Potomac ES, and Rolling Terrace ES give preference to students in the home school population and accept other students when there are available seats. Transportation is provided for elementary language immersion students through centralized bus stops, with the exception of Burnt Mills ES for which no transportation is provided outside the attendance area.

Program	Number of seats available	Geographic area(s) served
Rock Creek Forest ES: Spanish (total)	52 /grade	Countywide
Rolling Terrace ES: Spanish (partial)	52 /grade	Local then countywide <sup>†</sup>
Burnt Mills ES: Spanish (partial)	26 /grade	Local then countywide <sup>†</sup>
Maryvale ES: French (total)	52 /grade	Regional^
Sligo Creek ES: French (total)	52 /grade	Regional ^^
College Gardens ES: Chinese (partial)	26 /grade	Countywide
Potomac ES: Chinese (partial)	26 /grade	Local then countywide <sup>†</sup>
Total	286/grade	

Exhibit 3: Number of Seats and Geographic Areas Served by Elementary Language Immersion Program

<sup>†</sup>Open to other students based on space availability.

<sup>A</sup> Open to students in following high school clusters: Blake, Paint Branch, and Springbrook (based on address); Churchill; Damascus; Gaithersburg; Magruder; Richard Montgomery; Northwest; Poolesville; Quince Orchard; Rockville; Seneca Valley; Sherwood; Watkins Mills; Wheaton; and Wootton.

^ Open to students in following high school clusters: Blake, Paint Branch, and Springbrook (based on address); Blair, Bethesda-Chevy Chase, Einstein, Walter Johnson, Kennedy; Northwood; and Whitman.

The lottery for elementary language immersion programs is conducted in the spring of each year for rising kindergarten students and for any Grade 1 slots that become available. Prospective families must complete an interest form which is available on the district's website and at all elementary schools. Open houses and information meetings are hosted by schools that house language immersion programs from October through April of each year. Information about the programs is also included in the district's *Options* booklet and is posted on the district website.

Middle school programs. Students who attend elementary school language immersion programs are permitted to articulate into programs at designated middle schools if they submit a request for continuation.67 In 2013-14, middle school language immersion programs were offered in Spanish at Westland MS and Silver Spring International (SSI) MS; in French at Gaithersburg MS and SSI MS; and in Chinese at Herbert Hoover MS. These programs are designed to offer a vertical articulation pattern for elementary immersion students. Additionally, a limited number of slots are available for students who have not attended an elementary school immersion program to test into the middle school programs. Middle schools programs provide

# Timeline of middle school language immersion programs in MCPS:

- 1978: French immersion program opens at Eastern MS
- 1983: Spanish immersion program opens at Westland MS
- 1988: Spanish immersion program begins at Eastern MS
- 1999: French and Spanish immersion
- programs move from Eastern MS to Silver Spring International MS
- 2001: Chinese immersion program opens at Herbert Hoover MS
- 2001: French immersion program opens at Gaithersburg MS

partial immersion in which students in Grades 6 and 7 enroll in two periods of language instruction in the target language, which is taught similarly to a middle school English class, and in a World Studies course taught in the target language. In Grade 8, students take one language class in the target language. Transportation is not provided for middle school immersion students who live outside of the school's boundary. MCPS does not currently offer language immersion programs at the high school level, although immersion students can continue in higher level world language courses in certain high schools.

### **Program-Level Findings**

### I. Number of seats and applicants

**Applications to elementary language immersion programs outpace the supply of seats.** For the 2013–14 school year, 619 rising kindergarten students applied for admission to elementary language immersion programs. Approximately 60% of applicants (N=369) were selected through the lottery to attend a program. Students who were not selected were placed on waitlists. The high demand for the programs is also demonstrated in the proportion of applicants (49.3%) who applied to multiple programs. Most of these students (N=108) applied to two programs; 82

<sup>&</sup>lt;sup>67</sup> Information in the text box from: Memorandum to the Board of Education from Jerry Weast, Superintendent of Schools re: Dialogue on Foreign Language Offerings (October 27, 2008).

students applied to three programs; 43 applied to four programs; 43 applied to five or six; and 29 students applied to all seven programs.

Applicants to elementary language immersion programs were most likely to be White and not to be identified as eligible for FARMS during their kindergarten year. As shown in Exhibit 4, the proportion of White students (45.2%) in the elementary immersion applicant pool in 2013–14 exceeded the districtwide proportion of White students (28.9%) by 15.3 percentage points. Conversely, the proportion of Hispanic/Latino students who applied (17.9%) was 12.7 percentage points lower than the districtwide proportion of Hispanic/Latino students who applied (17.9%) was 12.7 percentage points lower than the districtwide proportion of Hispanic/Latino students. The proportions of Black/African American students (16.5%) and Asian students (11.5%) were slightly lower than districtwide proportions (by 3.6 and 3.1 percentage points, respectively). Additionally, the proportion of FARMS students who applied to elementary language immersion programs was 28.7 percentage points lower, and the proportion of LEP applicants was 20.6 percentage points lower than the districtwide proportions for those subgroups.

Acceptance rates to elementary language immersions by student subgroup are not presented in the report because MCPS uses a random lottery to select students for the programs. Analyses showed that there were only minor disparities in the acceptance rates by race/ethnicity or socioeconomic status, which were primarily due to differences in the local school populations for programs that provided preference to local students.



Exhibit 4: Profile of Applicants and Invited Students to Elementary Language Immersion Programs Compared to District Enrollment (2013–14)

**Siblings accounted for almost one in every five applications**. For the 2013–14 school year, a total of 110 rising kindergarten applicants to elementary language immersion programs were

siblings of students who were already enrolled in a program. These 110 students received admission to the programs with the sibling link—representing 29.8% of all students who were invited to enroll in a language immersion program. The proportion of siblings in the applicant pool varied by school. As shown in the textbox, applicants with sibling link ranged from a high of 45.8% at Rock Creek Forest ES to a low of 12.0% at Rolling Terrace ES.

# Applicants with sibling link by program:

- Rock Creek Forest ES 45.8%
- Sligo Creek ES— 41.0%
- Potomac ES— 40.0%
- College Gardens ES 32.3%
- Maryvale ES 26.8%
- Burnt Mill ES 16.7%
- Rolling Terrace ES 12.0%

The demographic characteristics of applicants with a sibling link in the lottery were very different from the districtwide population. As shown in Exhibit 5, 52.7% of applicants with a sibling link were White, 16.4% were Hispanic/Latino, and 12.7% were each Black/African American and Asian. Furthermore, only 10.9% were eligible for FARMS. The number of LEP students was less than 10, and therefore data are not reported for this subgroup.

Invitations to language immersion programs through the sibling link impact equitable access because they reduce the number of spots available for new families. The sibling link, however, is important for families with more than one child and parents who cannot transport their children to more than one school because of work schedules or after-school commitments. Additionally, the sibling link provides opportunities to reinforce learning in homes where parents or guardians do not speak the language of instruction.

It should be noted that in June 2013, the Board proposed changes to the sibling exemption in Policy JEE, *Student Transfers*, to address inequities due to sibling





links.<sup>68</sup> However, the Board encountered signification opposition to the changes from parents and community members; and as a result, acted in October 2013 to rescind the proposed policy changes pending further review.<sup>69</sup>

Six in 10 elementary language immersion students articulated to a middle school program in 2013–14. Among the 215 students who completed an elementary language immersion program, 60.9% entered Grade 6 in a language immersion program in middle school in 2013–14. The articulation rate was lower among students who were eligible for FARMS (51.7%) than for non-FARMS students (62.4%). Additionally, there were slight differences in articulation rates by subgroups by race/ethnicity: the rates were slightly higher for Asian (65.0%) and White students (64.4%) than for Hispanic/Latino students (59.0%), multi-ethnic (55.0%) or Black/African American (54.3%) students. The number of LEP students who completed an elementary language immersion program was less than 10, and therefore data are not reported for this subgroup.

There were also differences in articulation rates into middle school immersion programs by elementary school. Sligo Creek ES, Rock Creek Forest ES, and Potomac ES had the highest rates of students articulating to a middle school language immersion program (77.8%, 76.8%, and 79.2% respectively). The proportions from other schools were lower: 50% at College Gardens ES, 45.7% at Maryvale, 42.9% at Rolling Terrace, and less than a quarter (23.1%) at Burnt Mills ES.

### 2. Profile of language immersion students

The demographic profile of language immersion students does not reflect the district's student population. In 2013–14, 1,539 MCPS students were enrolled in elementary language immersion programs, representing 2.1% of all elementary students in MCPS. Among language immersion students, there was a higher proportion of White students and lower proportions of Hispanic/Latino students, students who are eligible for FARMS and special education students than are found across the district population. The number of LEP students in elementary language immersion programs was less than 10, and therefore data are not reported for this subgroup. As shown in Exhibit 6, the proportion of White students in language immersion programs was 16.1 percentage points higher than in the districtwide population, while the proportion of Hispanic/Latino was 11.4 percentage points lower. The proportions of FARMS was more than 28 percentage points lower than the proportions districtwide; and the proportion

<sup>&</sup>lt;sup>68</sup> Memorandum to the Board of Education from Patricia O'Neill, Chair Board Policy Management Committee re: Rescission of Tentative Action for Policy JEE, *Student Transfers*. (November 12, 2013).

<sup>&</sup>lt;sup>69</sup> Memorandum to the Board of Education from Patricia O'Neill, Chair Board Policy Management Committee re: Update Regarding Policy JEE, *Student Transfers.* (April 29, 2014).

of special education students was 6.8 percentage points lower than districtwide.





In 2013–14, the middle school language immersion programs served 496 middle school students, or 1.5% of all middle school students in MCPS. Findings about the demographics of the student population served in middle school program were similar to those of elementary programs: the language immersion student population included lower proportions of Hispanic/Latino students, Black/African American students, students who were eligible for FARMS, LEP students, and special education students than the middle school student population districtwide. These data are presented in Exhibit 7.



Exhibit 7: Profile of Middle School Language Immersion Students Compared to Districtwide Enrollment (2013–14)

Focus group participants attributed lower enrollments of Hispanic/Latino, low-income, and LEP students in language immersion programs to limitations in parental awareness of the program options for their children. Across focus groups with school and district staff, parents, and principals, respondents reported that applying to elementary language immersion programs requires substantial independent research on the part of parents and a high level of parent "savvy" and resources. They noted that, although MCPS conducts outreach activities to share information about the language immersion programs, parents must know to look for the information, adding that independent research may be challenging for parents who work multiple jobs or who do not speak English as a first language. Additionally, parents who have not had prior experiences enrolling a child in MCPS may be disadvantaged because they must submit applications for kindergarten seats in elementary language immersion programs before students are enrolled. Almost all of the parents in the focus groups reported that they had learned about the language immersion programs through social networks or at their child's preschool. Again, this may disadvantage parents who do not have equal access to social networks or preschool programs. Some comments on this topic included:

"There is pressure from parents to have language immersion programs. For Latinos...[our] students have the least access to it. Lottery parents who know how to play the game and work the lottery system do. The Latino community is not the parents that realize the benefit of knowing two languages." – Community leader

"Language and culture in the Latino population is different. Many parents respond better to people to people contact than email or paper." – Community leader

### 3. Academic outcomes of language immersion students

these gaps were smaller and not statistically significant.

Academic levels of language immersion students are high and exceeded levels of nonlanguage immersion students in the same schools. At the elementary level, language immersion students demonstrated high levels of achievement on the district's reading and math academic milestones. In 2013–14, 91.6% of elementary language immersion students met the Grade 3 reading milestone, 100% met the Grade 5 reading milestone, and 99.0% met the Grade 5 math milestone. These proportions were significantly higher than among non-language immersion students in the schools that house the programs and were higher than district averages. Across all elementary schools with immersions programs, the proportion of immersion students who met the Grade 3 reading milestone in 2013–14 exceeded that of non-language immersion students in the same schools by 17.4 percentage points. The difference between the two groups on the Grade 5 reading milestone was 13.9 points, and on the Grade 5 math milestone was 19.8 points. The differences on each milestone were statistically significant.<sup>70</sup>

### Among language immersion students, there were achievement gaps between racial and ethnic groups on the reading milestone in Grade 3; but these gaps were not observed in Grade 5. The analysis of 2013–14 milestone data showed that on the Grade 3 reading milestone, there were statistically significant achievement gaps among language immersion students across all programs by race/ethnicity. The proportions of Black/African American (79.1%) and Hispanic/Latino (86.7%) language immersion students who met the Grade 3 reading milestone were lower than of White (96.1%) and Asian (100%) language immersion students. The differences were statistically significant.<sup>71</sup> On the Grade 5 reading and Grade 5 math milestones,

A similar finding was found when the data were disaggregated by eligibility for FARMS: 93.4% of students who were not FARMS-eligible met the Grade 3 reading milestone compared with 78.8% of students who were eligible for FARMS, and the difference was statistically significant.<sup>72</sup>

<sup>&</sup>lt;sup>70</sup> Grade 3 Reading: Language immersion students to home school population (p<.05, Pearson's Chi-Square=31.974); Grade 5 Reading: Language immersion students to home school population (p<.05, Pearson's Chi-Square=34.363); Grade 5 Math: Language immersion students to home school population (p<.05, Cramer's V =.275).

<sup>&</sup>lt;sup>71</sup> Grade 3 Reading: Black/African American students to White students (p<.05, Pearson's Chi-Square=12.275); Grade 3 Reading Black/African American students to Asian students (p=.016, Cramer's V =.294); Grade 3 Reading Hispanic/Latino students to White students (p = .027, Pearson's Chi-Square=4.901); Grade 3 Reading Hispanic/Latino students to Asian students.

<sup>&</sup>lt;sup>72</sup> Grade 3 Reading: FARMS students to non-FARMS students (p = .005, Pearson's Chi-Square=8.061); Grade 5 Math: FARMS students to non-FARMS students (p < .05, Cramer's V = .254).

These gaps were not observed on the Grade 5 reading milestone and were smaller on the Grade 5 math milestone.



# Exhibit 8: MCPS Grade 3 Reading Data—Percentage of Students by Race/Ethnicity and FARMS Eligibility Meeting the Milestone (2013–14)







## Exhibit 10: MCPS Grade 5 Math Data—Percentage of Students by Race/Ethnicity Meeting the Milestone (2013–14)

Middle school language immersion students also demonstrated high levels of achievement on MCPS milestones and exceeded those of non-language immersion students in the schools that house the programs, as well as districtwide average achievement levels. All (100%) of middle school language immersion students across programs met the Grade 8 reading milestone in 2013–14, compared with 84.6% of non-language immersion students in the same schools, and the differences was statistically significant.<sup>73</sup> In Algebra I, 85.6% of all language immersion students met the milestone, which exceeded non-language immersion students in the same schools by 23.2 percentage points and students districtwide by 29.6 points. The differences were statistically significant.<sup>74</sup>

Achievement gaps on the Algebra I milestone were seen among language immersion students by race/ethnicity and income level. Overall, 85.6% of all middle school language immersion students met the Algebra I milestone by Grade 8 in 2013–14. By race/ethnicity, the data show achievement gaps that were statistically significant between Black/African American students (60.0%) and White students (93.1%), and between Hispanic/Latino students (71.4%) and White students (93.1%).<sup>75</sup> All Asian students met the milestone. A similar finding was noted when the data were disaggregated by FARMS eligibility: 57.9% of students who were eligible for FARMS met the milestone compared to 88.8% of students who were not eligible for FARMS (Exhibit 12).<sup>76</sup> There were no observed achievement gaps on the Grade 8 reading milestone.

<sup>&</sup>lt;sup>73</sup> Grade 8 reading: Language immersion students to home student population (p<.05; Cramer's V=.152).

<sup>&</sup>lt;sup>74</sup> Algebra I: Language immersion students to home school population (p<.05, Pearson's Chi-Square = 37.240); Algebra I: Language immersion students to district population (p<.05, Pearson's Chi-Square = 64.724).

 $<sup>^{75}</sup>$  Algebra I: Black/African American students to White students (p<.05; Cramer's V =.400); Algebra I: Hispanic/Latino students to White students (p<.05, Cramer's V =.292).

<sup>&</sup>lt;sup>76</sup> Algebra I: FARMS students to non-FARMS students (p<.05; Pearson's Chi-Square = 13.152).





Exhibit 12: MCPS Algebra I by Grade 8 Data—Percentage of Students by Race/Ethnicity and FARMS Eligibility Meeting the Milestone (2013–14)



# 4. Perceptions of parents, students, and staff of language immersion programs

**Parents and students in language immersion programs place a high value on the cognitive and academic benefits of learning a second language.** Parents in the focus groups overwhelmingly agreed that they chose the language immersion programs for their children because of the documented cognitive and developmental benefits of these types of programs. Students agreed; as an example, one middle school language immersion student stated:

"I think that taking Spanish as a whole kind of opens you up to different cultures and allows you to communicate with a whole different variety of people. I think that's a little more interesting than people

## who don't open themselves up to different languages because they don't have the experience of knowing what it's like to communicate in that kind of way."

Other reasons why parents enrolled their children in the programs were so they could learn the native language of their family to communicate with extended family members or because they felt that the language immersion programs would provide more rigorous academic experiences than were available in their home school.

The lack of vertical articulation and language immersion programs at the high school level, however, is a major concern for language immersion families. Parents, staff, and students in language immersion programs expressed serious concerns about MCPS's lack of vertical planning for language immersion especially at the high school level. As one parent articulated, "The immersion programs lack purpose and a goal in the long term. When a kid starts in kindergarten, what is the vision when they graduate from high school? What do you want them to give back to this county? What do you want them to give back to the U.S.?" Furthermore, parents and students expressed concerns that students may not be able to become fully bilingual or bi-literate unless the language immersion programs are planned as a K-12 continuous pathway. As a student stated, "I think that they should keep it going and have more Spanish immersion programs especially in high school because it gives us so many more opportunities, especially with jobs. There are a lot more job opportunities and it will really help you in life." This viewpoint was also clearly articulated by a community leader in Montgomery County who stated:

"There is no well-articulated policy on language. There is no strong message that MCPS wants to reward, praise, and provide opportunities for language education. There used to be a diversity of languages in more schools and in more languages. If programs were seen as valuable, we would have many more than we do now."

Other concerns raised during focus groups included insufficient funding for language immersion programs and limited preparation of elementary language immersion students for middle school courses in English. During focus groups, parents and staff expressed concerns that schools that house elementary language immersion programs do not receive enough additional funding or resources to purchase instructional materials for the target language of the program. They added that the limited funding for the programs could take resources away from students in the local school population as well as the language immersion students. Furthermore, staff and parents reported that teachers often need to translate materials because they cannot find resources that align with the MCPS curricula. This can be especially challenging when teachers need to access language immersion resources to use with students who have IEPs. The limited supply of language immersion resources for students with IEPs, they felt, can impact equity of access for students with disabilities.

Some middle school language immersion students also reported during focus groups that because they received limited instruction in English in elementary school, they felt underprepared for English instruction in middle school. This concern is articulated in the following student comments:

"We didn't have any English classes in elementary school. I did really poorly here at the beginning in all subjects because all were in English. I had all been taught in Spanish and didn't know a lot of things in English, how to say things."

"Especially math was really hard. I know this word in Spanish, but I don't know how to say it in English. English is also really hard. I had to read all these books. Mom taught me how to read. But at [elementary school], they had no English classes for us. There should at least have one class in English or something from the beginning."

"We had writing in 5<sup>th</sup> grade but still didn't teach us grammar or spelling."

**Regardless of these concerns, many parents and students agreed that MCPS should expand language immersion programs.** On the community survey, for example, 62% of the respondents reported that MCPS offers *too few* language immersion programs, compared with 29.3% who said there is the *right amount* and 8.7% who said there are *too many*. This sentiment was also expressed during focus groups, as articulated in the following focus group participant quotes:

"I think it's a little unfair because just the number of people on the waiting list really shows you that these people want to learn these languages." – MCPS student

"There's so much demand. It's the most amazing program and our whole family has really benefitted from it, and why it can't be expanded." – MCPS parent

"If you are going to have these full immersion programs, make it to available to everyone or put it in the whole school somehow, but honestly it is mind-numbing to me that we are in this place that is one of the most internationally and linguistically diverse in the entire country and yet we have not grown the program." – MCPS parent

"If they are really concerned about excellence and preparing kids for the 21<sup>st</sup> century like they talk about, this should not be a tiny program, this should be something that is main-stream. It should not be an add-on." – MCPS parent

#### 5. Impact on sending schools

Elementary language immersion programs attracted students who were zoned to attend 72 different elementary schools across MCPS in 2013–14; but the movement of students from home schools to elementary language immersion programs had very little effect on the academic outcomes in the sending schools. In 2013–14, kindergarten students who were zoned to attend 72 different elementary schools across MCPS did not to attend their home school but

rather enrolled in an elementary language immersion program. Only eight schools had more than five kindergarten students within its attendance zone who enrolled in an elementary language immersion program. These schools were: Takoma Park ES (15 students); Woodlin ES (13 students); Flora M. Singer ES (9 students); Highland View ES, Bel Pre ES, and Roscoe R. Nix ES (each with 8 students); and Montgomery Knolls ES and Twinbrook ES (each with 7 students). An analysis of MCPS elementary milestone data indicated that the movement of students to elementary language immersion programs had minimal impact on school-level academic outcomes of the 72 schools that language immersion students were originally zoned to attend based on their home address.

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

Although language immersion programs were initially developed to promote diversity and reduce racial isolation in schools, they have created perceptions of within-school separation among immersion and local student populations. Elementary language immersion programs in MCPS, as designed, have produced increased racial and ethnic diversity within the schools where they are located by attracting out of boundary students to attend the school. However, differences in the demographic characteristics of the out of boundary language immersion students and the non-immersion local student populations, as well as the isolation of students in the classes based on language of instruction, have produced perceptions of within-school separation for language immersion programs. These concerns were expressed during parent and staff focus groups. In fact, it was mentioned in several of the focus groups that the programs function as two separate schools within one building. Focus groups respondents provided the following quotes on this point:

"The school is predominantly brown and immersion classes are White. It looks like they are busing in White classes. There are separate schools. It is hard to integrate when students live in different areas and take long bus rides." - MCPS parent

"The students do not mix classes so they don't get to know each other. When a neighborhood school has to name their program the English Academy and the Spanish Immersion program, that creates a divide. Why do we have to name a program where our children go to school?" — MCPS parent

"I don't think there are opportunities for more [interactions] because when you have a program that relies on instruction in a target language, when you mix the kids with students who are not in the programs, you can't speak the target language." — MCPS staff

The perceptions of within-school separation are aggravated by the differences in the demographic characteristics of the language immersion and non-language immersion student populations. These data are shown in Exhibit 13. These differences were observed in each of the elementary language immersion schools to varying degrees, with the exception of Potomac ES.



Exhibit 13: Enrollment by Race/Ethnicity and Eligibility for FARMS—Elementary Language Immersion Students and Non-Language Immersion Students (2013–14)

Focus group respondents did not report any impact on the middle school language immersion programs on the hosting schools. In fact, parents, staff, and students reported that language immersion students are fully integrated into the schools and are only separated for the language classes.

The addition of language immersion students from higher socioeconomic groups to lowerincome home school populations can impact a school's Title I status. During focus groups, staff and parents in schools that house language immersion programs raised the concern that adding language immersion students who are generally not eligible for FARMS to the larger school population can contribute to a decrease in the school's overall proportion of FARMSeligible students, thus jeopardizing the school's eligibility to receive Title I funding. Although MCPS also provides differentiated funding for focus schools that have significant FARMS populations but do not qualify for Title I status, the loss of Title I funding impacts the availability of extra supports students receive in order to reduce achievement gaps and help overcome obstacles associated with low-income levels. As two staff members remarked:

"Our community is a very challenged community. Socioeconomically, we would be a Title I school if we didn't have an immersion program. Looking at the local children, [you] see the achievement gap kids; but the resources they are entitled to, they do not get and [that] impacts their learning greatly." – MCPS staff

"The programs were designed to look on good paper. Parents look on [the] school website and it's great because the numbers appear so diverse. But they walk into the school and see the immersion class is White and the community classes are the African American students." – MCPS staff

### 7. Staffing and transportation costs for language immersion programs

According to data provided by MCPS, the additional incremental costs for staffing and transportation associated with the elementary and middle school language immersion programs for the current school year (2015–16) total approximately \$1,860,804. This total includes \$135,804 for district-level staff and program resources, including portions of the salaries of a program director, supervisor, instructional specialists, a data management coordinator, and sitebased administrative staff to support program enrollment and temporary part-time personnel. Additional costs are spent for local travel to support program implementation, as well as costs to translate and create materials for these programs. In addition, each elementary language immersion program or 0.5 FTE for a partial immersion program, which totals approximately \$575,000 across the seven programs. Middle school programs do not receive addition staffing at the school level beyond their local allocation.

MCPS operates an additional 20.66 bus routes for elementary language immersion students for a total cost of \$1.15 million. The amount represents the incremental cost for transportation, above the costs that MCPS would normally incur for transporting the same students to home schools. Middle school immersion students do not receive transportation.

### 8. Research and benchmarking

**Specialized language programs have expanded across the U.S. due to the cognitive and social benefits attributed to bilingualism.** Traditional, or one-way, language immersion programs, such as those currently offered in MCPS, were first introduced in the U.S. in 1971 to provide native English speakers with unique opportunities to learn a second language. Over the past 40 years, the number of this type of language immersion programs in the U.S. has increased exponentially—from just three in 1971 to 448 in 2011.<sup>77</sup> About half of the programs provide instruction in Spanish; yet programs also provide instruction in a variety of other languages, including French, Mandarin Chinese, Japanese, Hawaiian, and German, among others.<sup>78</sup>

Demand for traditional language immersion programs has been driven by parent and educator response to published academic research highlighting the benefits of bi- and multi-lingualism to

<sup>&</sup>lt;sup>77</sup> Center for Applied Linguistics, Growth of Language Immersion Programs in the U.S., 1971-2011, available at http://webapp.cal.org/Immersion/

<sup>&</sup>lt;sup>78</sup> Center for Applied Linguistics, Growth of Language Immersion Programs in the U.S., 1971-2011, available at http://webapp.cal.org/Immersion/

children's cognitive and brain development.<sup>79</sup> Studies have shown that bilingualism is reliably associated with the variety of cognitive outcomes, including increased attentional control, memory, and linguistic development and awareness.<sup>80</sup> Additionally, bilingualism is associated with mental flexibility, creative thinking, and communication skills, and does not compromise students' overall academic achievement in either language.<sup>81</sup>

An increasingly popular model across the U.S. is the two-way or dual language immersion program that is designed to build bilingualism among both native English speakers and native speakers of other languages. Dual language immersion (DLI) is an instructional model that integrates native English speakers and native speakers of another language to provide instruction in core subjects to both groups of students in both languages.<sup>82</sup> The DLI model has gained popularity over the past 15 years. Statistics from the Center for Applied Linguistics (CAL) indicate that there are more than 450 dual language immersion programs currently operating in the U.S.<sup>83</sup> This increase has resulted from the growth in non-native English speaking students in the U.S. public education system, as well as findings from academic studies about the positive impacts of DLI on increasing student academic achievement and promoting linguistic and cultural equity.84,85 A recent study of DLI programs in Portland Public Schools in Oregon, conducted by the RAND Institute with funding from the U.S. Department of Education's Institute for Education Sciences, found that students who were randomly assigned to DLI programs outperformed control group students in English test scores, and there were no statistically significant differences in math or science performance.<sup>86</sup> Additionally, extensive research conducted by George Mason University professors Wayne Thomas and Virginia Collier has highlighted the academic and social benefits of DLI, including implementation of high

<sup>&</sup>lt;sup>79</sup> Donke, Lisa. (2015). Integrating Language and Content Instruction in Immersion Classrooms: Literature Review. *MSU Working Papers in Second Language Studies, 6*(1), 49-62.

<sup>&</sup>lt;sup>80</sup> Adesope, Olusola O. (2010). A Systematic Review and Meta-Analysis of the Cognitive Correlates of Bilingualism. Review of Educational Research, 80(2), 207-245.

<sup>&</sup>lt;sup>81</sup> Lazaruk, Wally. (2007). Linguistic, academic, and cognitive benefits of French immersion. *Canadian Modern Language Review, 63*(5), 605-627.

<sup>&</sup>lt;sup>82</sup> Howard, Elizabeth R., Sugarman, Julie, & Christian, Donna (2003). *Trends in Two-Way Immersion Education: A Review of the Research*. Baltimore: Center for Research on the Education of Students Placed At Risk.

<sup>83</sup> http://www.cal.org/twi/.

<sup>&</sup>lt;sup>84</sup> Alvear, Sandra. (2015). Reading Achievement Among English Language Learners: Evidence of Two-way Bilingual Immersion Advantages. Houston: Houston Education Research Consortium, Rice University Kinder Institute for Urban Research.

<sup>&</sup>lt;sup>85</sup> Sugarman, Julie. (2012). Fostering Linguistic and Cultural Equity in Dual Language Programs. Presented at The New York State Association for Bilingual Education.

<sup>&</sup>lt;sup>86</sup> RAND (2015). Study of Dual-Language Immersion in the Portland Public Schools Year 4 Briefing. Retrieved from http://res.cloudinary.com/bdy4ger4/image/upload/v1446848442/DLI\_Year\_4\_Summary\_Nov2015v3\_1\_jwny3e.pdf

quality language arts instruction, support for positive interdependence among students of different cultures, and active school-family partnerships.<sup>87</sup>

Research also indicates that the DLI model has been effective in meeting the academic and language needs of all students and providing equitable educational opportunities that do not emphasize instruction in one language group over another.<sup>88</sup> English language learners are able to continue building proficiency in their home language in an academic environment while gaining English proficiency that is required for high school graduation.<sup>89</sup> Additionally, native speakers of both languages receive instruction necessary to close the achievement gap while engaging in challenging and accelerated—not remedial—instruction.<sup>90</sup>

Most DLI programs offer instruction in Spanish and English, but they have expanded to include other languages such as Mandarin Chinese, French, German, Italian and Japanese.<sup>91</sup> In recent years, there has been interest at the national level to expand DLI programs to address languages that the National Security Agency has defined as "critical need languages" for global security and competitiveness.<sup>92</sup> These languages include Chinese, Arabic, Hindi, Persian, Urdu, Swahili, Turkish, Dari, Russian, Portuguese, and Korean. Development of DLI programs in these languages is the focus of STARTALK, an initiative launched in 2006 by the Director of National Intelligence that is being implemented in collaboration with the National Foreign Language Center at the University of Maryland.<sup>93</sup>

Research also shows that there can be some important challenges that should be considered in development of new DLI programs. Staffing, for example, can be a challenge on multiple levels. First, schools are often challenged in finding enough highly qualified, licensed teachers who are native speakers or have adequate level of proficiency in the target language.<sup>94</sup> Furthermore,

<sup>91</sup> Center for Applied Linguistics, available at http://www2.cal.org/jsp/TWI/SchoolListings.jsp.

<sup>&</sup>lt;sup>87</sup> Thomas, W. P., & Collier, V. P. (2002). A national study of school effectiveness for language minority students' long-term academic achievement. Santa Cruz, CA: Center for Research on Education, Diversity, and Excellence, University of California-Santa Cruz.

<sup>&</sup>lt;sup>88</sup> http://www.idra.org/IDRA\_Newsletter/April\_2012\_Curriculum\_Quality/Two-Way\_Dual\_Language\_Immersion\_Programs/

<sup>&</sup>lt;sup>89</sup> Howard, E.R., Sugarman, J. & Christian, D. et al. (2007). *Guiding Principles for Dual Language Education* (2d ed.), Washington, DC: Center for Applied Linguistics.

<sup>&</sup>lt;sup>90</sup> Thomas, W. P., & Collier, V. P. (2003). The Multiple Benefits of Dual Language. *Educational Leadership, 61*(2), 61-64; Collier, V.P., & Thomas, W.P. (2014). *Creating Dual Language Schools for a Transformed World: Administrators Speak*. Albuquerque, NM: Dual Language Education of New Mexico – Fuente Press.

<sup>92</sup> https://startalk.umd.edu/public/about.

<sup>93</sup> Ibid.

<sup>&</sup>lt;sup>94</sup> Fortune, Tara Williams (2012). *What the Research Says about Immersion*. Minneapolis: Center for Advanced Research in Language Acquisition, University of Minnesota.

schools need a pool of substitute teachers with proficiency in the target language to fill in when dual language immersion teachers are absent due to personal reasons or for district training. DLI teachers also require specialized professional development to address the content, language, and literacy needs of non-native and native English speaking students in dual language programs. Second, programs face challenges with accessing appropriate curriculum, materials, and resources that meet local district, state, and national standards. Third, in upper elementary levels, it can be challenging for teachers to teach advanced-level subject matters because students' language proficiency levels are not yet as advanced as their cognitive development.<sup>95</sup>

Implementation of DLI programs at the secondary level also poses unique challenges. Schools have faced conflicts in course scheduling for DLI classes and find that programs may conflict with students' other educational priorities. Additionally, programs must reduce the exposure to the target language to less than 50% of instructional time in order for students to enroll in required courses as well as DLI classes.<sup>96</sup>

# Five of the seven school districts used to benchmark MCPS's practices currently operate traditional language immersion or dual language programs.

- **Baltimore County Public Schools (BCPS)** currently offers an elementary language immersion magnet program in French at Wellwood International School. Students spend a portion of their day learning academic content in French and the other portion learning in English, with the goal that students will become fluent in French by the end of Grade 5. At the middle school level, BCPS offers world language magnet programs in Spanish, French, and Japanese at Sudbrook Middle Magnet School, and in Spanish at Deer Park Middle School. Students in these magnet programs have 90-minute classes in their chosen language five days a week. Students may earn up to three high school credits by successfully completing the language courses. The selection process for participating in this program is the same as for other middle school magnet programs, discussed below. BCPS does not operate any dual language programs. <sup>97</sup>
- Wake County Public School System (WCPSS) offers language immersion and dual language immersion programs as part of its menu of magnet programs According to the WCPSS, these programs "offer students an opportunity to develop English acquisition

<sup>&</sup>lt;sup>95</sup> Met, M. (2002). Elementary school immersion in less commonly taught languages. In R. D. Lambert & E. Shohamy (Eds.), *Language policy and pedagogy: Essays in honor of A. Ronald Walton* (pp. 139-160). Philadelphia: John Benjamins Publishing Co.

<sup>&</sup>lt;sup>96</sup> Lindholm-Leary, Kathryn & Adelson-Rodriquez, Nenette (2015). *Secondary Dual Language Education*. San Jose State University and San Diego County Office of Education.

<sup>97</sup> http://www.bcps.org/offices/omp/.

as well as a second language (Spanish or Chinese) development. The Standard curriculum is utilized throughout all of the language immersion programs. Students, however, take their literacy, math, social studies and sciences classes in a second language. While students are together for their immersion experience, they have the opportunity to participate in globally focused specials, taught in English during other parts of the day."<sup>98</sup>

At the elementary school level, WCPSS offers programs at three schools, including one Mandarin Chinese language immersion program, one Spanish language immersion program, and one Spanish dual language immersion program. At the middle school level, WCPSS offers language immersion programs in Spanish and Mandarin Chinese as part of its global studies middle school program when "*a cohort of students arrive from a participating pathway elementary school.*" At the high school level, WCPSS offers language immersion in Spanish and Mandarin Chinese as part of its global studies high school program when student cohorts in these languages "*arrive from a participating pathway middle school.*"

• Houston Independent School District (HISD) offers language immersion programs at two elementary schools as part of their magnet programs. One of the schools offers Arabic and the other school offers Mandarin Chinese. Beginning with the 2016-17 school year, HISD will offer a French immersion program at another elementary school. These language immersion programs begin in pre-kindergarten. Students spend half the day in classes in the foreign language offered at the school and the other half in classes in English with native speakers in the language. In addition, HISD offers two dual language elementary magnet programs in Spanish, as well as local dual language programs at more than 50 schools. Finally, HISD has an elementary foreign language magnet, which provides students the opportunity to explore three languages – Mandarin Chinese, French and Spanish. There are no academic criteria for students to be accepted into any of these elementary programs.<sup>99</sup>

At the middle school level, HISD has a foreign language magnet program at one school that introduces students to Mandarin Chinese, French, German, Italian and Spanish by rotating the languages during Grade 6. In Grades 7 and 8, students focus on one or two languages. Students are given the opportunity to earn a high school credit for taking one of the languages. In determining who will be accepted into this magnet school program, HISD considers grades and test results. At the high school level, HISD offers a world languages magnet program at one school, which offers students the opportunity to take

<sup>98</sup> http://www.wcpss.net/Page/173

<sup>99</sup> http://www.houstonisd.org/Page/91077.

the following languages: Arabic; Mandarin Chinese; French; German; Hebrew; Hindi; Italian; Japanese; Latin; Russian; and Spanish. To enroll in this program, students must take the Pimsleur Language Aptitude Test.

High school language programs in HISD can lead to a high school diploma with a certification of biliteracy.<sup>100</sup> The Seal of Biliteracy was developed in California in 2011 when it became the first state to enact legislation enabling schools and districts to offer certificate of biliteracy achievement with a high school diploma. Since then, 12 other states and the District of Columbia have enacted similar legislation and offer the Seal of Biliteracy, although Maryland has not.<sup>101,102</sup> Each state or school district develops a set of criteria for determining biliteracy, which generally includes completion of English and second language credits, course grades, and AP or IB exam scores. HISD offers the Seal of Biliteracy with its graduation diploma.

- Fairfax County Public Schools (FCPS) offers dual language immersion programs in Spanish and Korean in nine elementary schools. The elementary school program provides literacy instruction to native English speaking and native Spanish or Korean speaking students (depending on the program) for half a day in each language. The curriculum follows the district program of studies. Students who graduate from a DLI program in elementary school have opportunities to take language immersion courses in middle and high school.<sup>103</sup> FCPS offer students the opportunity to earn a Seal of Biliteracy upon high school graduation.
- Jefferson County Public Schools (JCPS) currently offers one dual language program, but does not offer language immersion. The program provides elementary dual language for students who are learning Spanish as a second language and students who are learning English as a second language. Students receive daily instruction in math and science in Spanish; the other content areas are taught in English.<sup>104</sup> This program is an "optional program," which means that it is open to all students in JCPS, but JCPS only provides transportation to students who live within the elementary cluster serves by the school hosting the program. JCPS currently does not offer dual language programs at the middle and high school levels.

<sup>&</sup>lt;sup>100</sup> http://www.houstonisd.org/Page/91077.

<sup>&</sup>lt;sup>101</sup> www.sealofbilteracy.org.

<sup>&</sup>lt;sup>102</sup> States that offer Seal of Biliteracy include CA, NY, IL, TX, NM, WA, LA, MN, VA, IN, NV, and HI and D.C.

<sup>&</sup>lt;sup>103</sup> http://www.fcps.edu/is/worldlanguages/elementary.shtml.

<sup>&</sup>lt;sup>104</sup> http://www.jefferson.k12.ky.us/schools/Elementary/Hawthorne/dual.asp.

• Hillsborough County School District (HCSD) and Clark County School District (CCSD) do not offer language immersion programs.

### **Conclusion and Program-Level Recommendations**

Language immersion programs in MCPS were originally designed to provide opportunities for students to gain proficiency in a second language and to promote voluntary student transfers to support racial and ethnic diversity in target schools. The programs are open to all MCPS students and do not use academic selection criteria for admissions at the primary entry points in kindergarten and Grade 1. Enrollment is based on a random lottery process that gives preference only to siblings of currently enrolled students and, in three programs, to local students. This section provides the following key findings about language immersion programs in MCPS:

- Language immersion programs have promoted diversity in schools that house the programs; as a result, however, the language immersion student population is demographically different from the non-language immersion student populations in the hosting schools.
- Demand for the language immersion programs exceeds the supply of seats, which limits access to the programs for many students through the lottery.
- Almost a third of the available kindergarten seats were assigned to siblings of currently enrolled students through the sibling link in the student transfer policy, which reduced the number of seats for non-sibling students and hindered equity of access.
- Student enrollment in language immersion programs does not reflect the racial, ethnic, or socioeconomic diversity of MCPS. Data for 2013–14 show that the proportions of White students in elementary and middle school immersion programs exceeded districtwide proportions by 16.1 and 13.9 percentage points, respectively. Furthermore, the proportions of Hispanic/Latino and Black/African American students were much lower than districtwide proportions. Furthermore, there were only small numbers of LEP students in the programs, even though some of the programs were housed within schools with substantial LEP populations.
- MCPS does not provide a clear pathway for language immersion students to continue language instruction through high school. Middle school programs are limited, and MCPS does not currently offer language immersion programs at the high school level. This lack of a clear pathway is a factor contributing to the decision of 40% of the students who begin language immersion in elementary school not to continue into middle school.

- The additional incremental costs for staffing and transportation associated with the elementary and middle school language immersion programs for the 2015–16 school year total approximately \$1,860,804. These costs include district-level staff and program resources, local travel to support program implementation, translation and materials, program staffing, and transportation through an additional 20.66 bus routes for elementary language immersion students.
- Academic research on language immersion programs indicates that many school districts are opting to implement dual language immersion programs, either in addition to or in lieu of the traditional one-way language immersion programs, such as those currently offered in MCPS. Dual language immersion programs are designed to meet the learning needs of both native English speakers and native speakers of other languages in classrooms that provide instruction in both English and another target language, often Spanish. Research has shown that dual language immersion programs are effective in supporting bi-lingualism among native English speakers, a skill that is strongly associated with improved cognitive and brain development, and supporting English language and other academic development among LEP students.

In light of these findings, MCPS should consider the following recommendations for the language immersion programs:

- Revise existing or develop new communication, outreach, and recruitment strategies to ensure that broad segments of the MCPS community, including students from diverse racial and ethnic and socio-economic backgrounds, as well as non-native English speakers, have access to the information and are aware of the program opportunities and the process and timeline for applying to elementary language immersion programs.
- Enhance equitable access to elementary immersion programs by revising Policy JEE, Student Transfers, to clarify that the sibling link for elementary language immersion programs is not automatic; while siblings should be able to attend the same school where the immersion program is located provided that there are available seats, those siblings should be required to participate in the immersion lottery to earn a seat in the program.
- Develop and enhance practices for all language immersion schools to ensure that language immersion and home school students have meaningful social and academic interactions such as expanded use of specials or electives, common lunch or recess periods, and extracurricular programs—and that recruitment efforts are tailored to encourage local student populations to apply for the programs.
- > Develop a defined articulation pattern for language immersion students from elementary through high school, including an option for achieving a certificate of biliteracy upon high

school graduation (such as the Seal of Biliteracy).

Establish a systemic approach to dual language programs, starting at the elementary level and building upon models in other districts that have proven successful at reducing achievement gaps and expanding equitable access, for both native and non-English speakers. MCPS should consider development of programs in traditional target languages, such as Spanish, as well as programs in critical need languages.