



# SHERMAN CENTER

**for Early Learning**  
in Urban Communities

## LAKELAND DUAL LANGUAGE PROGRAM STUDY

AY 2016-17 to AY 2018-19

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# EXECUTIVE SUMMARY

During AY 2018 – 2019, Jennifer Mata-McMahon, UMBC Associate Professor of Early Childhood Education, and Research Faculty of the UMBC Sherman Center for Early Learning in Urban Communities, and the principal investigator of this study (from here on referred to as the PI), approached Lakeland Elementary/Middle School in Baltimore City (from here on referred to as Lakeland or FSCS – Full Service Community School), to offer to conduct a collaborative program evaluation of the Lakeland Dual Language Program (DLP). The PI and her graduate research assistant (GRA), Laurel Burggraf-Bassett, teamed up with Ana Gabriela Salas, a teacher at Lakeland spearheading the DLP, to conduct the proposed research study. Joshua Michael was invited to collaborate in the study with his expertise in quantitative data analysis. From here forward the PI, the GRA, Ms. Salas and Mr. Michael will be referred to as the research team.

In order to evaluate the Lakeland DLP, four research questions were posed for AY 2016 – 2017 through AY 2018 – 2019. These research questions were:

- RQ1. How was the DLP designed and implemented at the FSCS?
- RQ2. What has been the DLP's impact on learning outcomes at the FSCS?
- RQ3. What are the conditions, processes, and supports necessary to scale up the FSCS's DLP from K to K-2 and beyond?
- RQ4. What are the challenges and successes of scaling up the FSCS's DLP from K to K-2 and beyond?

After IRB approval from UMBC and Baltimore City Public Schools, the research team began data collection in order to answer the research questions. Phase I of the project consisted of program documentation. Through focus groups and interviews conducted with key stakeholders (administrators, teaching staff, parents, and students), classroom observations and video recordings, documentation of the design and implementation of the DLP were completed.

Phase II consisted of the program evaluation. Qualitative findings from Phase I were used to answer research questions one, three and four, as they relate to key stakeholder perceptions of the DLP. As well, student outcomes from the standardized assessment, mCLASS Text Reading and Comprehension (TRC), were analyzed to determine the impact the DLP is having on student reading comprehension in the first three cohorts of the program and allow the research team to begin answering research question two. Further iterations of Phase II will allow for a more thorough response to this research question as further quantitative data are gathered from future cohorts and other assessments, such as DIBELS and iReady.

Phase III consisted of looking into the DLP's scale up process, as it moved from being offered in kindergarten only, to kindergarten through second grade. In this phase the research team focused on data analysis through the conceptual framework of Coburn's reconceptualization of scale (Coburn, 2003). In the findings, research questions one, three and four are answered taking into account Coburn's four interrelated elements: depth, sustainability, spread, and shift in ownership.

Findings indicate the DLP's benefits for students, regarding language proficiency in Spanish, academic performance across subject matters, and overall socio-cultural benefits for families as well as within the school community and beyond, as children are being prepared to become global citizens. Test scores measured through the mCLASS TRC assessment show a lower annual growth of the DLP student in English compared to their mainstream program counterparts. Yet, when looking at the TRC scores in students' primary language of instruction, the DLP students showed a higher annual growth than the native-English speaking students. These findings point to the DLP being a program with encouraging potential for promoting dual language proficiency and overall academic success.

Recommendations for the program are for further data to be collected in future grade levels as the program scales up from a primarily one-way DLP in kindergarten and first grade, to a 50/50 DLP model in upper grade levels. Of note, such analyses should seek to compare outcomes for DLP and non-DLP students in the upper grades, given that the statistical model suggests a leveling of DLP students' academic annual growth to meet and perhaps even surpass those of the mainstream program students. Future studies should also explore factors that influence the achievement and progress of DLP students including enhanced family engagement and individual and peer grit.

# PURPOSE AND OBJECTIVES

This study looks at evaluating the design and implementation of the Lakeland Dual Language Program (DLP). Lakeland is a Full-Service Community School (FSCS) in Baltimore, Maryland serving primarily Latinx and African American students. The purpose of this study is twofold: 1) to document the design, implementation and scaling of the FSCS's DLP, coming into its fifth cohort (this report considered cohorts one through three), and 2) to gauge the impact the program has had on the learning outcomes of Emergent Bilingual (EBs). The ultimate goal of this ongoing study is to allow for dissemination and replication of the DLP into other public schools in the district and beyond.

# FRAMEWORK

## BACKGROUND

Beginning in 2011, under the efforts of then Mayor Stephanie Rawlings Blake to smooth the way for immigrant families to move to Baltimore City, there have been significant demographic shifts at Lakeland, a Full-Service Community School (FSCS), in a south-east Baltimore neighborhood.<sup>1</sup> As a FCSC, Lakeland, aims "to reduce educational inequality by addressing the multifaceted needs of low-income children and youth", through striving "to generate sufficient social capital to provide students, families, and teachers with essential resources" (Galindo, Sanders & Abel, 2017, p. 140S). In AY 2012 - 13, the school had a 57.8% African American student population, now in AY 2019 - 20, the percentage of enrollment by demographics shows a 56.2% Latinx student population, with 32.7% of the overall student body being English Learners (Baltimore City Public Schools, 2019). This FSCS's administration and staff have responded to this shift by seeking ways to support Spanish speaking children and families. Thus, when the school was invited to join a working group on dual language learning through the Baltimore City School District, they quickly formed a team to participate. This team conducted a literature review, visited other DLPs in the mid-Atlantic region and sought opportunities for teacher professional development, even as district efforts dissipated.

Currently, there are only three DLPs in the Baltimore area (aside from the one studied here), and they are housed in a charter school, a private Montessori school, and a Catholic school. Expanding outward to the state of Maryland, most other DLPs are in magnet or charter schools serving affluent populations. Also, most Maryland schools with DLPs use a 50/50 model of instruction, which, while championed by legislators, is not necessarily proven to have the best language nor academic outcomes for English learners. Dual Language Programs that begin with a 90/10 model, mimicking a one-way type of DLP, are ones recommended for English learners and newcomers, since they focus on maintaining and further developing the students' native language and literacy skills, which can be transferred over to English when proficiency has been acquired (Umansky, Valentino & Reardon, 2015). This FSCS program involves both an 80/20 and 70/30 model in kindergarten and first grade, and a 50/50 model from second grade onwards, largely in response to the language strengths of the actual student population in each cohort. Recently, this DLP expanded to include prekindergarten (preK), with a 50/50 model of instruction. Data from AY 2019 - 2020 that include preK and third grade outcomes are not presented in this report since they have not yet been collected from the FSCS or Baltimore City Public Schools.

In implementing the DLP, this FSCS considers both academic outcomes for students and social outcomes for the community. Teachers and administrators strive to create an environment that fosters student empathy and leadership, and builds bridges between parents, staff and students. DLPs can make a tremendous difference in the lives, education, and language development of non-native English speakers (August, Goldenberg & Rueda, 2010), particularly when outcomes are compared to those of non-native English speakers placed in English immersion programs (Umansky, Valentino & Reardon, 2015). DLPs also allow students to hold onto and build on their cultural heritage (Portes & Rumbaut, 2001), which families currently involved in the program at this FSCS cite as important. The principal, teaching staff and both Latinx and African American parents at this FSCS also describe educational and cultural benefits for African American native English speakers enrolled in the program. This student demographic in particular is woefully under-researched in relation to dual language learning studies (Steele, et al., 2018). A study conducted in a rural town in Georgia with a growing Latinx population looked at interactional dynamics of classrooms in which both Spanish and African American Language (AAL) were spoken. The authors found that teachers needed to be further encouraged to recognize the legitimacy of all language varieties, in particular AAL, in order to ensure support for language learning along multiple dimensions for all students (Rymes & Anderson, 2004). This FSCS offers the unique opportunity to study how teachers navigate and respond to culturally sensitive characteristics of their student population as they implement the DLP.

## CONCEPTUAL FRAMEWORK

Coburn's Conceptualization of Scale: Coburn's (2003) multidimensional conceptualization of scale includes four interrelated elements—depth, sustainability, spread, and shift in ownership—that provide a framework to understand scale at both the school and district levels.<sup>2</sup> For the purposes of this study, depth refers to changes in Lakeland's beliefs, norms of interactions, and principles as a result of DLP design and implementation. Sustainability refers to the maintenance of the foundational principles of the DLP at Lakeland over time. Spread refers to the growth in the number of school personnel aware of and involved in implementing the DLP and the concurrent expansion of school policies and procedures to support reform implementation. Finally, ownership refers to the transfer or sharing of authority for DLP implementation from its initial designers to the broader school community responsible for its implementation and success. Coburn's reconceptualization of scale informed each phase of the research study, from design and data collection to data analysis and presentation of findings.

<sup>1</sup> Montgomery County has definitely led the way in this regard and is developing new Spanish total immersion programs moving into the 2019-2020 school year, but these continue to be by application only and serving students of more affluent backgrounds.

<sup>2</sup> This study will use Coburn's conceptualization of scale to investigate the process of DLP scale up at the school level, recognizing its significance for understanding how the reform might also be expanded to schools throughout the district. See, for example, Sanders (2012).

# METHODOLOGY

## RESEARCH DESIGN AND METHODS

This study is best characterized as implementation research (Halle, Metz & Martinez-Beck, 2013; Damschroder, et. al, 2009), examining how and how well the DLP at Lakeland is designed, implemented and scaled up, while looking at the salient factors involved in these processes. It was conducted using an Intrinsic Case Study strategy in which the focus is on the case itself (evaluating and studying the design, implementation, sustainability and scaling of the DLP) because it presents salient characteristics (Creswell, 2007) that will provide insights into the phenomenon of interest.

The overall study uses mixed methods (Johnson & Onwuegbuzie, 2004), gathering qualitative data through key stakeholder interviews, focus groups, classroom observations and video recordings; and quantitative data from parent and teacher surveys (to be conducted in AY 2020 - 2021) and student assessments and test scores.

The Lakeland teacher leading the design and implementation of the DLP serves as a research team-partner working along with the principal investigator (PI) and her graduate research assistant (GRA). This ongoing study began in January 2019 and data collection for Phase I and parts of Phase II culminated in June of the same year. Analysis of data was conducted through spring of 2020, with completion of reports and articles in fall 2020. The current ongoing study has university and school system IRB approval (IRB Research Protocol #Y19JMM26085 and Baltimore City Public Schools IRB# 2020-001). The study will continue Phase II and III in fall 2020 through 2022.<sup>3</sup>

### Phase I – Program Documentation (completed)

This phase of the project consisted of documenting the design and implementation process for the Lakeland DLP through interviews and focus groups of key stakeholders (teachers, parents, students, and administrators), classroom observations and video recordings, and analysis of pertinent documents for the purpose of dissemination.

### Phase II – Program Evaluation (ongoing)

This phase consists of the research team conducting an evaluation of the Lakeland DLP since its inception in August 2016 through June 2019. The evaluation examines key stakeholder (teachers, parents, students, and administrators) perceptions through interviews and focus groups, as well as student outcomes through grades obtained in informal assessments and tests scores. Initial data collection for this phase was completed in June 2019. Data analysis culminated in summer 2020, with analysis of mCLASS TRC scores of three cohorts from AY 2016 - 2017 through AY 2018 - 2019. Phases I and II were completed with funding provided by the Sherman Center for Early Learning in Urban Communities. Subsequent iterations of Phase II, with analysis of mCLASS DIBELS and iReady scores for cohorts three, four, and five, will continue through the academic year of AY 2021 - 22.

### Phase III – Program Scale up (ongoing)

This phase will help determine the factors, conditions and supports that allow the DLP to be scaled up from K in AY 2016 - 17 to K-2 in AY 2018 - 19 (presented in this report) and beyond. Data for Phase III are being collected through interviews and focus groups of key stakeholders and community members. Phase III will continue through AY 2021 - 22, and will be collected through surveys completed by parents, teachers and staff, and students from both the DLP and the mainstream program.

## RESEARCH QUESTIONS

Research questions guiding the ongoing study are:

RQ1. How was the DLP designed and implemented at the FSCS?

RQ2. What has been the DLP's impact on learning outcomes at the FSCS?

RQ3. What are the conditions, processes, and supports necessary to scale up the FSCS's DLP from K to K-2 and beyond?

RQ4. What are the challenges and successes of scaling up the FSCS's DLP from K to K-2 and beyond?

## PARTICIPANTS

For this report, participants are Lakeland's teaching staff, administrators, parents or guardians, and students enrolled in the DLP. These key stakeholders were invited to participate in the study and given a consent form to sign, ensuring confidentiality. In the future, teaching staff, parents, and students from the mainstream program will also be invited to participate in the study. The data presented here were collected from Lakeland's parents and families, who were 63.2% Latinx, 35.5% African American, 1.3% White, and primarily from underserved and low-income backgrounds. Latinx families in Lakeland are primarily immigrants from Central and South America and speak Spanish as the main language at home. Teaching staff are 58% White, 20.5% African American, 17% Latinx, and 4.5% Asian/Pacific Islander.

Lakeland's DLP began in AY 2016 - 17, with one kindergarten section. These data were collected at the end of the third year of program implementation (AY 2018 - 19). The DLP had expanded to three sections – one section in kindergarten, one in first grade, and one in second grade. In fall 2019, the school added two pre-kindergarten sections and moved the current second graders in the program up to a dual language third-grade class. The intention is to continue scaling the program through the grades, following the first cohort of students. This report presents data from the DLP kindergarten (cohort 3), first grade (cohort 2), and second grade (cohort 1) students. In order to compare academic outcomes, these DLP students' scores were compared to those of their mainstream program counterparts. Students from pre-kindergarten, third, and fourth grades will also be included, as the program continues to expand. Table 1 shows the demographic characteristics of all the participants included in the qualitative data collected, and Table 2 provides the demographic information for students included in the quantitative analysis, for both the dual language program (DLP) and the mainstream program (MP) by cohort.

<sup>3</sup>Pending funding approval.

**TABLE 1**  
Demographic information of all participants included in qualitative data

	Amount	Race/Ethnicity
Teachers/Staff/Administrators	5	Latinx
	1	African American
	5	White
	<b>11</b>	<b>Total</b>
Parents/Guardians	4	Latinx
	2	African American
	0	White
	<b>6</b>	<b>Total</b>
Students	9	Latinx
	3	African American
	0	White
	<b>12</b>	<b>Total</b>
	<b>29</b>	<b>Overall</b>

**TABLE 2**  
Demographic information of DLP and MP students by cohort

	Total DLP	Total MP	Cohort 1 DLP	Cohort 1 MP	Cohort 2 DLP	Cohort 2 MP	Cohort 3 DLP	Cohort 3 MP
Gender – Female	44%	49%	55%	46%	27%	58%	50%	46%
Race/Ethnicity Latinx	83%	55%	85%	46%	91%	56%	73%	62%
Race/Ethnicity White	0%	7%	0%	9%	0%	8%	0%	3%
Race/Ethnicity Black	17%	35%	15%	42%	9%	34%	27%	30%
Race/Ethnicity Multiracial	0%	1%	0%	3%	0%	0%	0%	1%
Home Language English	14%	32%	0%	19%	9%	37%	32%	39%
Home Language Spanish	80%	52%	80%	42%	91%	53%	68%	60%
Limited English Proficiency	76%	52%	75%	42%	91%	56%	60%	57%
Total Students	64	230	20	78	22	62	22	90

## DATA COLLECTION

This study includes qualitative analysis of data collected through stakeholder interviews, focus groups, observations and recordings of classes in progress, and analysis of design and implementation materials (provided by Lakeland) for the program documentation (Phase I), program evaluation (Phase II), and program scale up (Phase III) phases of the project. In the future, Phase III, will also provide qualitative data from open-ended questions from staff, parent and student surveys.

Quantitative analysis of data collected from student test scores (baseline data) compared to test scores and outcomes after three years of program implementation, AY 2016 - 17 through AY 2018 - 2019 (data provided by Lakeland), were used in the program evaluation phase of the study (Phase II), and are presented in this report. Further test scores for AY 2019 - 20 through AY 2021 - 22 will be presented in future reports. Quantitative data from staff and parent surveys will also be analyzed to better understand community perceptions of the program for the scale up phase of the study (Phase III). Surveys will be distributed for data collection in AY 2020 - 21 and AY 2021 - 22.

## DATA SOURCES

### Focus Groups

Semi-structured focus groups were conducted at the school with key stakeholders: parents, teaching staff, students, and administrators. Key stakeholders were provided consent forms before focus group interviews were conducted. Focus groups were audio recorded and then transcribed and member checked. Focus group protocols with pre-established questions were used during focus group sessions and designed following the funnel-shaped interview guidelines (Morgan, 2019). Focus groups began with an introduction including a welcome and overview of the study, ground rules and an opening warm-up question (Krueger & Casey, 2015). Following the introduction, broad, less structured questions were asked first, followed by more structured questions pertaining to in-depth topics, and ending with a wrap-up summary question (Morgan, 2019). See semi-structured focus group protocols in Appendix A, B, and C.

### Interviews

Interviews were conducted at the school with key stakeholders (parents, teaching staff, students and administrators) who did not attend the focus groups, or from whom more information was desired based on their participation in the focus groups (Seidman, 2013). Interviews were conducted using a talk less, listen more approach (Seidman, 2013). Interviewees were provided a consent form before individual interviews were conducted. Interviews were audio recorded, transcribed and member checked. See interview protocol in Appendix A, B, C, and D.

### Classroom Observations

Observations were conducted in kindergarten, first and second grade classrooms and will be conducted in preschool, third and fourth grade classrooms in the AY 2020 - 2021. The focus of the observations was on the delivery of the curriculum for the DLP. In the future, observations will also be conducted in the mainstream program homerooms in order to compare the instructional approaches. Observations included a combination of in-depth note taking and video recording.

### Documents

Documents, including school-home communications, web pages, program announcements and meeting notes, were gathered from the administrators and the lead teacher(s) in charge of designing and implementing the DLP, as pertinent data sources.

### Test Scores

Summative student test scores from the mCLASS Text Reading and Comprehension (TRC) assessment were collected from school administrators for AY 2016 - 17, AY 2017 - 18, and AY 2018 - 19. Data from

# FINDINGS AND DISCUSSION

AY 2019 – 20, AY 2020 – 21 and AY 2021 – 22 will also be collected, from the mCLASS TRC, DIBELS and iReady assessments from students participating in the DLP. Grades from informal assessments designed by the teachers were also reviewed to examine formative progress during the school year.

## Surveys

Surveys will be designed and administered to teachers and staff, parents and guardians, and fourth grade students, both participating in the DLP and in the mainstream program. The surveys will include open-ended questions and Likert scale items. Design of surveys was completed in 2020; surveys have begun to be rolled out with funding from the Sherman Center for Early Learning in Urban Communities. Further data collection through surveys, with incentives for all participants, will continue in AY 2021 – 22.

## DATA ANALYSIS

In depth content analysis was used to code and interpret the qualitative data, during spring and summer 2020. The process included both deductive (Hatch, 2002) and grounded theory (inductive) approaches (Strauss & Corbin, 1998). Specifically, Coburn's (2003) four dimensions of scale informed the deductive phase of data analysis when the qualitative data was read, and passages related to each dimension were identified. The inductive phase allowed for themes and concepts to emerge from the data without pre-established notions or concepts onto which the data were made to fit. This phase allowed for in-vivo codes (Charmaz, 2006) to emerge directly from the data, using the participants' words. Through these complementary and iterative approaches, key codes and subcodes, salient themes in organized narratives, and supporting evidence were identified. NVivo 12 software was partially used to analyze the qualitative data.

The quantitative data were analyzed using simple descriptive statistics, as only three years of test scores for the mCLASS TRC were available. The analysis of student achievement data consisted of tests to compare scores across groups and determine statistical significance and standard deviations in score improvements, as well as OLS regression. Likert scale survey items will be analyzed for frequency of response and correlation across item responses, once those data have been collected. STATA software was used for quantitative analysis.

## VALIDITY AND RELIABILITY

Issues of qualitative validity were addressed through triangulation of data sources (administrators, teachers, staff, parents and students), and triangulation of data collection methods (interviews, focus groups, and observations) (Miles, Huberman & Saldaña, 2014). Researcher triangulation also contributed to the validity of the study, as researchers discussed emergent findings after observations and interviews to identify and reduce observer bias (Lavrakas, 2008). Finally, an iterative approach to coding by the research team allowed for inter-coder reliability.

Specifically, inter-coder reliability was accomplished by the research team, through separately conducting both the in-vivo coding and the subsequent conceptual coding, and then coming together to negotiate codes and coding processes. From the negotiation of codes, codes related to design and implementation of the DLP (RQ1), conditions, processes and supports (RQ3), as well as challenges and successes (RQ4) were established, within Coburn's reconceptualization of scale, as depth, sustainability, spread, and ownership. Also identified were salient codes regarding student perceptions and the presence of translanguaging in the classroom.

The TRC assessment measure approximating reading comprehension is subject to validity and reliability concerns due to the discretion of the proctor. School-based teachers have taken measures to increase the validity and reliability of implementation by regularly training teachers and regularly monitoring benchmark assessment cycles. According to a report published by Amplify (2014), the parent-company for this assessment, the TRC assessment maintains strong internal consistency with a median marginal reliability of 0.86 across grades kindergarten (K) through 3 and higher rates across racial subgroups.

## QUALITATIVE FINDINGS

The qualitative findings stem from the analysis of the interviews and focus groups conducted with administrators, teaching staff, parents and students, as well as video recordings and observations of classroom activities. The analysis of the qualitative data allowed the research team to answer RQ1, RQ3, and RQ4. In order to complete an inductive analysis of the data from the interviews and focus groups, the research questions were kept in the forefront. A grounded theory approach was used for initial coding (Charmaz, 2006), in which the research team allowed the codes to emerge from the data. Later, the conceptual framework provided by Coburn's conceptualization of scale was used, looking for instances where participants mentioned aspects related to depth, sustainability, spread, and ownership, and organizing the initial in-vivo codes (Charmaz, 2006) into the conceptual codes. Tables 3 and 4 below show the frequency of codes found per conceptual framework and in-vivo coding across all stakeholders, in each of the focus groups and interviews conducted.

**TABLE 3**  
Frequencies for conceptual codes and subcodes across all stakeholders

Code	Subcode	A_FG1	A_FG2	A_11	P_FG1_Sp	P_FG2_En	P_11_Sp	K_FG1_En/Sp	F_FG1_Sp	F_FG2_Sp	S_FG1_Sp	S_11_En	Totals
Depth		10	10	10	14	16	7	2				4	73
	Benefits	29	8	10	15	11	11						84
	Strengths	6	3	2		2							13
	Relationships							2					2
	Design	7		2	1								10
	Challenges	1	1	3	1	8	1						15
Ownership		2	3	8	7	8	4	4	8			1	45
	Challenges		1	6					2			1	10
Sustainability		7	11	3	8	24	7	3	5		1	6	75
	Rec Young Students							1	3	4	1	9	18
	Partnerships			3		1							4
	Parent Involvement				5	5	1						11
	Support			3									3
	Challenges	6	6	7	5	11	1						36
Spread		10	14	16	11	12	8				3	5	79
	History	6	2										8
	Rec DLPS	9											9
	Challenges	1	7	7	5	1							21

**TABLE 4**  
Frequencies for in vivo codes and subcodes across all stakeholders

Code	Subcode	A_FG1	A_FG2	A_11	P_FG1_Sp	P_FG2_En	P_11_Sp	K_FG1_En/Sp	F_FG1_Sp	F_FG2_Sp	S_FG1_Sp	S_11_En	Totals
Translanguaging								3				6	9
	AAL							10					10
	Challenges				2	2	1						5
Student Perceptions						1		6			5	8	20
	Stud Likes							8	8	5	6	5	32
	Stud Dislikes								6	3	1	1	11
	Stud Find Easy									1			1
	Stud Difficulties							2	3	1	5	1	11
	Stud Would Change Challenges							2	6	4	2		14
											2		2

In order to better understand the codes used to identify each stakeholder a legend is provided in Table 5 below.

**TABLE 5**  
Legend

Code	Meaning
A	Administrator/Teacher/Staff
FG	Focus Group
I	Interview
P	Parent
K	Kindergarteners
F	First Graders
S	Second Graders
En	English
Sp	Spanish

The findings illustrated by quotes from the participants will be presented by research question below.

### **RQ1. How was the DLP designed and implemented at the FSCS?**

Administrators shared that the impetus for the program came from the district level, but the actual development of the program was done more immediately within the neighborhood and school community, with particular focus on the need to maintain and continue developing the native language of Spanish. One of the teachers described:

*It [the program] started in 2015, identifying a need at the school, identifying a different ESOL model to help our ELL students, identifying a way to make sure that we're helping them meet their academic needs, but also improving their language. (A\_I1)*

As the neighborhood population shifted, the school needed to identify new ways to create positive learning environments that supported a growing Latinx population and a still substantial population of African American students and families. As one administrator put it:

*There's a long-term huge benefit to cultural and community building that happens in our community, with the demographic shift that has been happening. How do you bridge some divides? And I think getting communities to come together – and I think the program does some of that work, so I think that's really, really powerful. (A\_FG2)*

The administrative team demonstrated a willingness to participate in a proposed larger effort at the district level and was able to continue their research on bilingual education, and build their own program when district proposals fell through:

*The district extended the opportunity to pilot a [dual language] program to our school and to another school...the other school ultimately just didn't launch it and we did, and [when] support from the district faded, this was an opportunity for us to develop our own resources and develop our own strategies. (A\_I1)*

While school families did not specifically request a DLP, administrators and teachers engaged with families from the beginning to make sure there would be community support for a program that would ultimately serve both native Spanish speaking and native English-speaking students:

*We found the interest was there from a large enough body [of families] that we decided to move forward. (A\_I1)*

Yet even though there was interest in and support for the program from the beginning, there was also a reluctance among some students about using Spanish in school and a worry among some parents about what it would mean for their children to lose instructional time in English. A monolingual English-speaking teacher who is now a part of the DLP team noted a shift in school culture, as her students are:

*not embarrassed about, like they used to, when I would need a student... to translate for a parent, they wouldn't do it. Because they didn't want to speak in Spanish in front of their peers. But now, they're like Oh, yeah!... that pride in their native language. And you know, you should be proud of it. (A\_FG1)*

Regarding recruiting families into the program, an administrator related,

*We had to do a lot of work with educating and supporting our families around the development of first language and how powerful that could be for them. (A\_I1)*

Administration and staff were also aware of how transient their population could be, which compounded fears about learning in Spanish:

*One of the big barriers that we had to do a lot of work around was: "I came to this country so that my kid could get a better opportunity. In some situations, there's a potential that we have to return to our country, and I want my child to nail down English. (A\_I1)*

This DLP had to do what Morales and Hartman (2019) describe as positioning Spanish-speakers as valuable contributors, "indispensable to knowledge creation in the classroom", and positioning African American Language (AAL) speakers in similar fashion, allowing learning to be "more transformative when teachers and children actively engage in exploring the connections between language, identity, and power." (p. 243). The use of AAL was recorded, both during the classroom observations and the focus

groups with students, as used by African American as well as Latinx students. In analyzing the videos on classroom observations, it was observed that the kindergarten and first grade teachers created multiple moments throughout classes for the students to work with each other in small groups on ELA and math assignments, where an observer could hear Spanish, AAL, and standard English (SE), as the children used the language that was easiest to access in working together to problem solve.

The second grade teachers allowed for moments of pair-sharing during full group instruction where the students were also observed using their full linguistic repertoire to develop varying degrees of different language practices in order to interact with their bilingual peers, making evident what García (2009) terms dynamic bilingualism (García & Kleifgen, 2018). The second grade math teacher would explain new concepts in English and Spanish when it seemed appropriate, and welcomed English and AAL responses and questions when the students were working through difficulties with understanding a process or a problem. From these observations, it was noted that teachers in the DLP seem to have created an environment in which students feel comfortable using all their linguistic funds of knowledge, by speaking in Spanish, SE, and AAL within the academic school setting.

Morales and Hartman (2019) also actively warn against the use of heritage languages as "consumable resources" for students of privilege. This is a real concern for administrators at this DLP. One administrator feels strongly that:

*I think most Dual Language Programs in the country tend to serve people of wealth, they're from a higher social demographic category, and so I think there needs to be more Dual Language programs serving communities of color. We need to engage for biculturalism and that sharing of ideas, but also – how do we close the achievement gap in developing both sides – I think there's powerful pieces that will be both helpful for individual students but also for community building efforts. (A\_I1)*

These aims of sharing ideas and empowering students and communities echo the aims of global citizenship education, one of the school's future aspirations for the program, to advance equity and inclusion (Engel, Fundalinski, & Cannon, 2016).

In speaking with students, it was evident that using more than one language was integral to the children's lived experience. In fact, it was already the way they were "sharing ideas" and building bridges in the lunchroom, on the playground, and in the neighborhood. In an interview, a second-grade student shared:

*Some of us talk Spanish, like when we play, sometimes. Because...we just like to talk both of them on recess and lunch. Because some of us don't know as much English as others, and some of us know more English than each other. (S\_I1\_En)*

Before each focus group or interview was conducted, the participants were asked in which language they preferred to hold the conversation, all Latinx parents preferred to converse in Spanish, as did most all the Latinx students, except for a second grade student who had an interview with the monolingual English speaking researcher. When asked which language they preferred to learn, all Latinx children responded that Spanish was their preferred learning language, see conversation below from the focus group with the kindergarten students.

Researcher: *¿Tú prefieres aprender en español o en inglés?*

Student 1: *Español.*

Researcher: *En español.*

Student 2: *Sometimes she talks English at lunchtime. (K\_FG1\_En/Sp)*

From the history shared by the administrators, teachers and staff, and the anecdotes related by parents and students, it is evident that the DLP's design and implementation came from a deep concern and a sincere desire to support their community's linguistic needs. The school staff understands the importance of maintenance of native and heritage languages (Morales & Hartman, 2019) and values the richness that maintaining and continuing to develop these languages have for their students. The Latinx students themselves seem to prefer to converse as well as learn in their native language, demonstrating from their responses during the focus groups and interviews that they now have a renewed value and pride in the language they used to only speak at home.

When looking at the literature on the benefits of bilingualism there are a slew of studies that have found many cognitive benefits (Byrd, 2012), as they relate to executive functioning skills (Akhtar & Menjivar, 2012),

specifically working memory (Blom et al., 2014), problem solving through attention control (Kempert, Saalbach & Hardy, 2011), managing inhibitory control (Carlson & Meltzoff, 2008; Bialystok & Viswanathan, 2009), and cognitive flexibility (Prior & MacWhinney, 2010). Studies have also shown benefits in literacy skills as they relate to vocabulary size (when accounting for both languages and controlling for SES) (Bialystok et al. 2009), precocious pragmatics (using referential gestures and tone of voice to judge emotions) (Akhtar & Tomasello, 2000; Yow & Markman, 2011), and even reading fluency. Thus, it is no surprise that Lakeland decided that designing and implementing a dual language program was in the best interest of their student population.

Furthermore, in dual language programs, the benefits are not only for the native speakers of the partner language. In a study comparing children in bilingual (Spanish-English) schools who were either from Spanish-speaking homes or English-Speaking homes (new to Spanish), to English-speaking children in monolingual schools, Kovelman, Baker and Petitto (2008) found that an early age of first bilingual exposure has a positive effect on reading, phonological awareness, and language competence in both languages. Moreover, they found that schooling in two languages afforded children from monolingual English homes an advantage in phoneme awareness skills. Finally, the authors found that “early bilingual exposure is best for dual language reading development, and it may afford such a powerful positive impact on reading and language development that it may possibly ameliorate the negative effect of low SES on literacy” (p. 203). Thus, this research suggests that exposure to two languages in the early grades through programs such as the DLP would not only benefit native-Spanish speaking students but also students coming from monolingual English homes, regardless of socioeconomic background. These benefits of bilingualism were some of the premises supporting the design and the implementation of the DLP in this FSCS.

### **RQ3. What are the conditions, processes, and supports necessary to scale up the FSCS’s DLP from K to K-2 and beyond?**

The research team found that the conditions, processes, and supports needed in order to scale up the Lakeland DLP were mentioned across all four components of Coburn’s reconceptualization of scale. Finding the majority of mentions of supports in the component of Depth (coding frequency: 197), as it relates to changes in Lakeland’s beliefs, norms of interactions (including parental involvement), and principles as a result of the DLP design and implementation. This is what participants had to say:

Spanish-speaking parents described being able to participate more fully in the academic lives of their students:

*[Para] mí el beneficio ha sido que yo no hablo mucho inglés, y cuando ella venía a clases de prekindergarten sólo de inglés, me costaba ayudarle en las tareas. En cambio, ahí en español, ya ella hasta lee, porque estamos como que yo entiendo que es lo que ella va a hacer. Yo me siento feliz con este programa, y le doy gracias a todas las maestras, a ustedes, porque es bonito todo. (P\_FG1\_Sp)*

*[For me the benefit has been that, since I don’t speak much English, when she came to English-only pre-kindergarten classes, I struggled to help her with her homework. On the other hand, in the Spanish program, she even reads with me, because we’re like... I understand what she’s going to do. I’m happy with this program, and I thank all the teachers, you guys, because everything is beautiful.]*

English-speaking families appreciated the cognitive and social benefits of speaking in two languages, a parent shared:

*Learning two different languages at such a young age...they would be able to maneuver through things differently because they tap into a certain part of their brain that most people don’t. (P\_FG2\_En)*

Similarly, Salmon, Gangotena and Melliou (2018) note that developing these mindsets guides students to “becoming change makers who are inquisitive, and proactive” allowing them to “make important connections with all that is different.” (p. 304)

Parents also identified benefits such as their students gaining empathy, communication skills, and the ability to compare cultures, which are steps towards global citizenship.

*I feel like it is a very good character building – um – opportunity, because he has an opportunity to relate with other cultures at this young age, you know, to be able to better socialize, communicate, understand people as he grows. And so those, I believe, are some of the benefits of being part of the program. (P\_FG2\_En)*

The changes in norms and beliefs at the school could not be more clearly demonstrated than through statements like these, or the teacher’s realization that her children were now proud to translate between parent and teacher to build a bridge between home and school. Nothing short of redefinition of self and others is taking place within the context of the DLP.

As students acquire these skills, it is clear that parents see their students as key stakeholders in the Spread (frequency of 117) of the program, even beyond teacher-student relationships. Parents hope that the DLP will serve as a bridge between families and the larger community.

*[Espero que ella] comparta su experiencia a otros estudiantes, a padres para que ellos vean. Que si ella pudo, también los otros niños pueden, y que no se quede ahí, que no se quede solamente con lo que le enseñó el programa, que siempre siga buscando más, no se quede con lo que nos enseñan solamente los profesores, si no, siempre hay que buscar más, porque siempre tenemos que educarnos más. (P\_FG1\_Sp)*

*[(I hope that she) would share her experience with other students and parents, so they can see. That if she could do it, so can the other children, and then not just remain with what the program taught her, but that she would always keep looking for more—not just stop at what the teacher tells her, but more so, to always look for more, because we always have to educate ourselves more.]*

In order to continue the process of education, in particular the DLP, for all, it was important to examine Coburn’s component of Sustainability, where a frequency of 144 codes were found. In this case study, sustainability refers to the maintenance of the foundational principles of the DLP in the case study school over time. Below is an example of what a teacher shared regarding Sustainability.

*I think the design has stayed the same, we haven’t changed like, we’ve said you know kindergarten 80/20, first grade 70/30, second grade 50/50. Like that’s – we haven’t changed from that – but maybe we’ve changed what is it exactly that you’re teaching in Spanish and how does your schedule look now, but trying to keep the structure. (A\_FG1)*

Maintaining consistency of language use in the classroom as the program scales up has been important. What has happened outside of the classroom is perceived as significant as well. When comparing coding frequencies in Staff, Parent, and Student interviews, the Sustainability code shows up most often in Parent interviews. Parents described how they came to the program and how students, administrators, staff, and parents can reach out to new families to help them understand the benefits of the program despite the skepticism that may be voiced by some families at the school. One parent shared an important conversation she had with an administrator after another parent had warned her against the program:

*llego yo con la curiosidad y le digo, “que me dijeron esto”, me dice él, “Porque es gente que está cerrada, porque si la niña aprende bien el español le va a costar menos hablar el inglés”, así es que yo después fui poniéndome centrada que sí, que está bien que mi hija aprenda bien el español. (P\_FG1\_Sp)*

*[I came with curiosity and I told him “they told me this”, and he said, “Those are folks who are closed off, because if the child learns Spanish well, it will be less difficult for her to speak English”, so I started changing my mind and centering myself in believing that it is good that my child learns Spanish well.]*

There was a frequency of 55 for Coburn’s component of Ownership. Parents talked about supports to the dual language curriculum, for parents, that helped them be productive leaders of learning, such as the English and Spanish classes held after school during the week for parents and faculty:

*The Spanish class, because if you’re learning while they’re learning it, it makes it easy for you to relate to them and to help them with the homework, even though you might not be learning the same stuff—like, ‘cause I’m in a Spanish class, and so mostly we’re learning conversational stuff but they’re learning the basics, so they might not know all the phrases that we’re learning, so it’s like you can still help them with different phrases, like at home. (P\_FG2\_En)*

While Ownership as a code can, and often did, refer to how staff are taking on leadership roles within the DLP, students clearly also play a significant role when it comes to Ownership. In interviews and focus groups, students were eager to share what they were learning: drawing pictures, assigning the interviewers math problems, and the kindergartners, particularly, conducted an impromptu phonics lesson:

SK2: Yeah, we have to do sight words.

SK1: We have to do...um...our sílabas and...like....”

R1: *Do you like doing the sílabas?*

SK2: *Yeah. We do: na ne ni no nu... pa pe pi po pu...* (SK3 says along with her)

SK3: *(much faster) Ha he hi ho hu*

SK2: *Sa se si so su.... La le li lo lu* (K\_FG1\_En/Sp)

It is clear that students take pride in their work in the DLP, one student shared:

*me gusta – es que estamos aprendiendo a ser más inteligentes*

*[I like it – we are learning to be more intelligent]* (1\_FG2\_Sp).

This pride for their developing skills puts students in the position of advocating for the program toward other students and families, sharing the leadership, through ownership, with the DLP staff and teachers.

A parent reported that her English speaking student was initially overwhelmed by learning in Spanish, but “now he’s at the place where he’s helping, you know, other students and some of them are native Spanish speaking kids, so now I guess he feels a little too good—so (laughter)—yeah.” (P\_FG2\_En)

Similarly, a student from the first cohort commented, when asked about what language she and her friends spoke most outside of class: “The girls from here [the United States], they know a lot of Spanish too, because they’re in the—they’ve been in the class also since kindergarten.” (2\_I1\_En)

In summary, it was found that for Depth one of the more salient changes in Lakeland’s beliefs and norms of interactions was reflected in the newly acquired empowerment of parents for their involvement in their children’s learning. For Sustainability, it was noted that maintaining the models of instruction implemented in the DLP over time was crucial. As a key component of Spread, the positive experiences students are having in learning in their native language and becoming literate in Spanish, as well as word of mouth communication of these positive outcomes among families, has been paramount for the Sustainability and Spread of the program. Lastly, Ownership was evident when all key stakeholders related the benefits they observed within the program and the students’ learning, and even that monolingual native-English parents could benefit from Spanish classes.

#### **RQ4. What are the challenges and successes of scaling up the FSCS’s DLP from K to K-2 and beyond?**

Challenges of scaling the program appeared across each of Coburn’s components of scale, as did successes. As described below the majority of the successes clearly impacted the component of Depth.

#### **SUCCESSSES OF SCALING UP THE DLP**

Building community was seen as important for bridging the gap between different cultures and for increased capacity for academic success, with new parent involvement in student learning.

English speaking parents could see benefits for their Spanish speaking counterparts:

*I feel like it is empowering for parents, both for native Spanish speaking parents and native English-speaking parents, for maybe different reasons. I think for native Spanish speaking parents... they feel like they’re much more of an included, invited part of their child’s learning and they can support, and they can develop closer relationships with their child’s teachers.* (P\_FG2\_En)

Teachers commented about how important it was, as the program was first developing, to have parents come in to read to classes in Spanish or share elements of their culture.

*Some of the moms came in and would read a book in Spanish and then do a song from their country and teach it to all the kids and I really loved that.* (A\_FG1)

Cultural celebrations are now happening on a larger scale as well, such as Hispanic Heritage Month and Black History 365 – these are joint, sustained efforts on the part of teachers, parents, and students and are growing, year over year.

Coding for Sustainability, it became clear that teachers and staff informally claim that DLP students are doing as well, and in some cases better, academically, than their peers in the mainstream English homerooms.

*I think there’s a lot of leaders in these classrooms. A lot of these kids [are] very confident in themselves and their ability and now with both languages, especially in first grade, I have them start translating academically and I think they are getting a better understanding of – I’m a bilingual student and these are my abilities.* (A\_FG1)

Long established studies make evident that bilingual students generally demonstrate greater self-confidence and higher motivation (ADAE, 1996; Dalby, 1985; Dutcher, 1995). Recent research looking at peer grit, where each cohort of Dual Language Learners supports each other and motivates each other toward future success, specifically to improve literacy outcomes (O’Neal, 2018), pushes this narrative in a more specific direction.

Grit is also a metric that is important to Baltimore City Public Schools. In their annual Survey Assessment, metrics labelled Grit include the following statements: “I keep working at schoolwork and homework that is hard until I get it right.”, “When I’m taught something that I don’t get, I keep working at it until I get it.” And for parents, statements such as, “I encourage my child to keep working at difficult tasks until he/she figures them out.”

These surveys are currently not administered to students in second grade or lower, so it will be important to see how these scores compare for students in the DLP versus the mainstream program. In the next phase of our research, we will be implementing a survey that includes some of these measures and will be administered to the first cohort of the DLP and their mainstream peers in fourth grade.

The interviews conducted with kindergarten, first, and second grade students revealed that recommendations they made for younger students to have success in the DLP were exclusively about grit and building community. This is what some of students had to say:

Student 1: *You have to listen to the teacher.*

Student 2: *And do work.* (K\_FG1\_En/Sp)

Student 12: *Deben ser amables.* [They must be kind.]

Student 13: *Que sean amables, que hagan muchos amigos.* [To be kind, to make many friends.] (F\_FG2\_Sp)

Student 22: *Necesitas hacer toda tu tarea bien.* [You need to do all your homework well.] (S\_FG1\_S)

Student 23: *[Students should] try their best in speaking Spanish, if they don’t know a lot of Spanish. And if they don’t know a lot of English, when they’re in the English class, I’d tell them to try their best in English.* (S\_I1\_En)

What might be the outcome of peer grit, confidence, empathy, and awareness of difference? Teachers explored this question and speak with their students and parents about what the future might bring:

*When they do their Community Helpers Unit, tying it back to where you grow up, can you imagine what it’s like to have a bilingual doctor, how important that is, think about when you go to the doctor with your family, and if your doctor doesn’t speak Spanish, how does that make you feel? But you can be that for somebody. And how does it make you feel when you have a teacher who speaks Spanish just like you, you can do that for somebody else.* (A\_FG1)

Units such as this, that engage families in the classroom, are making students and parents excited to be in school together, two parents shared:

*Me gusta asistir cuando hacen las actividades de los niños, que mi niña me dice, “Mami, ¿Vas a ir?” Sí,” le digo, “Voy a ir,” yo veo la manera, me vengo y trato de ayudarle ahí a la maestra cuando anda repartiendo cosas, a involucrarme ahí con ella.* (P\_I1\_Sp)

*[I like to attend when they have activities for the children, when my girl says to me “Mommy, are you going?” “Yes,” I say, “I’m going to go.” I come and try to help the teacher with distributing things, to get involved that way with her.]*

*Cuando tienen actividades hacen el evento del Hispanic Heritage Month, siempre me apunto con [la profesora], [para] siempre estar involucrada con esto.* (P\_FG1\_Sp)

*[When they have activities—they do the Hispanic Heritage Month event, I always sign up with [the teacher], [to] always be involved with this.]*

Under Spread, it was noted that the school has added both Spanish and English classes after school for parents and teachers. Partner organizations at this Full-Service Community School also offer services that allow for more successful participation in the DLP. A parent shared:

*I take her [gesturing to her younger daughter] to the Fun with Foreign Language, through the Judy Center, and that helps them, I mean that helps with beginning Spanish for your young kids if you do want to put them in the Dual Language Program.* (P\_FG2\_En)

Parents also offered several ideas about how to spread the DLP from the point of view of community awareness. Some suggested new community events, such as a field day, where DLP students could serve as ambassadors for their program. Others suggested new opportunities for students to experience the DLP one day a week:

*Como ahora mismo, mi nena está en After School Program dos días a la semana, tienen siempre un programa, pero para el dual language tenerlo, por lo menos un día a la semana, para que esos estudiantes que no están registrados no tengan que estar registrados, sino si los papás le dan permiso puedan venir, qué tal y les gusta, y se entran al programa. (P\_I1\_Sp)*

*[Right now, my girl is in the After School Program two days a week, they always have a program, but they could also have it for the dual language, at least one day a week. For those students who are not registered, not having to be registered, but if their parents give them permission to come, if they like it, then they could enter the program.]*

Coding for Ownership (code frequency of 55), the research revealed that teachers noticed their students taking ownership: sharing authority to improve communication between fellow students and teachers. One teacher shared:

*In the gym, what I've noticed – some of the kids that don't speak English very well, that the kids that are bilingual and speak both languages well want to interpret and make sure they understand all my directions. We'll be doing different sports that none of the kids have ever played, so it's new to everyone, and then they'll take what I'm saying and make sure it's clear to the other students so everyone can actually participate and do it right. (A\_FG1)*

Also, it was noticed that the students themselves were being coded as expressing ownership for the DLP when asked about what they liked the most of being in the program. One student shared:

*A mi me gusta, es que estamos aprendiendo a ser mas inteligentes y algunas veces me gusta hacer el trabajo de matemáticas, pero bueno a veces no. (1\_FG2\_Sp)*

*[I like that we are learning to be more intelligent and sometimes I like to do the math work, but sometimes I don't.]*

Ownership was also seen when students talked about how they interact with students from the lower grades of the DLP. A first grade student shared this about their visits to the kindergarten class:

*Luego los niños de kinder van a saber, como nosotros les vamos a leer a ellos, y ellos les van ir a leer a los otros niños de kinder. (1\_FG2\_Sp)*

*[After, the kids from kindergarten will know, because we go and read to them, and then they will go and read to the other kindergarteners.]*

## CHALLENGES OF SCALING UP THE DLP

Participants revealed that just as well as the successes, there were challenges to scaling up the DLP. In relation to Depth, administrators and teachers shared:

*We will always have to defend why we're doing something different than what the district is doing. (A\_I1)*

*In terms of professional development and in terms of materials, the dual language teachers need more and this is not telling secrets, the administration would agree – need more in terms of curriculum and materials, need more in terms of professional development, need more in terms of a professional community to interact with and say, how did this work in your classroom, I'm trying this, what do you see? (A\_FG2)*

Parents described pre-existing conditions at the school and in the broader area that still need to be more fully addressed to ensure that all students benefit from scaling up the DLP:

*African Americans – even if you look statistically, I believe it will show too, that our children, as far as African American children, are behind. As it pertains to education, even here. (P\_FG2\_En)*

Providing context for this statement, Milner (2010) describes an opportunity gap as opposed to an achievement gap, where “sociopolitical issues related to race, language, and other social constructs deprive [Latinx and African American] students of success, and further, very few African American

students have had the opportunity to participate in [Dual Language Programs].” (Bauer, Colomer & Wiemelt, 2020, p. 333). Ladson-Billings (2013), further explains that calling the persistent achievement disparities between Black and Latinx students and White students a “gap”, suggests that something inherent in Black and Latinx students, their families, their communities, their cultures, their schools, or their teachers is responsible for these disparities. Ladson-Billings agrees that some aspects of each of these elements might contribute to the problem, nevertheless, she argues that it is shortsighted and incomplete to single them out as the only causes. She explains that the achievement disparities we see in the United States are a result of historical, economic, political, and moral decisions that we as a society have made over time. These arguments are important to take into account when thinking about scaling the DLP, particularly when thinking about enrollment strategies that will affect the students that are invited into the program and those who are left out.

Some African American parents also perceived a competitiveness between cultures and the reality of limited resources leading to an imbalance that negatively impacts their students:

*I think there's the need for more balance, so that there is the proper attention being put in all areas. I think it's awesome and amazing that Spanish speaking families have somewhere where they can get the community and all of these things, but those of us who are not Spanish speaking families, I feel like it's great to feel like we are also, you know, cared for, and that there's a place here at Lakeland for us as well. (P\_FG2\_En)*

Some recent studies examine teachers' perceptions of how African American students can use translanguaging (Bauer, Colomer, Wiemelt, 2020) or bring their full funds of linguistic knowledge into the classroom (Morales & Hartman, 2019). Others examine what effect emotional and instructional supports from teachers have on student language development (Olivia-Olson, 2019). Examining the impact of peer grit on African American students is a viable research possibility in this DLP, as there is already anecdotal evidence that students in DLP classrooms are motivating each other in key areas such as perseverance and love of learning, and recent research suggests that peer grit may have positive outcomes for literacy achievement (O'Neal, 2017). A specific focus on assessing and improving learning outcomes for African American students through the DLP, might help address the parent perception that attention is not being paid equally to all students.

In addition to ensuring that African American students' needs and talents are considered, Lakeland administrators are aware of other challenges they face in sustaining and scaling the program. For example, class sizes across programs and student mobility (moving in and out of the school zone) are areas of constant concern:

*– if we have a situation where there's 21 [students] in the dual language homeroom but there's 47 in the other ones, then the school community's going to say, “Enough of this.” That's the condition under which the community would rightly no longer support it. (A\_FG2)*

Regardless of issues like limited resources, student mobility, and equitable access, the challenges of Spread have a lot to do with communication. Administrators, teachers, and staff who have direct contact with parents need to:

*do better as a school in speaking to English speaking parents and parents in general about the benefits for their children and calming their fears about the risks, for example that they're going to start reading first in Spanish, that makes some anxieties for English speaking parents. (A\_FG2)*

Making sure that staff are able to make research-driven arguments for the program is also important. Benson (2004) describes the “myth that parents want L2-only schooling” or instruction in the high-status language, but points to studies by Heugh (2003), “when parents are allowed to make an educated choice from appropriate options, they overwhelmingly opt for bilingual rather than all-L2 programs, and most bilingual program evaluations report high levels of community support.” (p. 7). There is an awareness at this DLP of how important it is to do this, and an awareness that this is still an area for growth.

*We need to be better versed, so that if a parent comes with a concern to an administrator, regardless of how closely they work with the program, they can speak to the research, to – this is what the trajectory looks like. So – expanding the knowledge of the rest of the staff who might not be as intimately connected to the program. (A\_FG2)*

Expanding knowledge and techniques of the program was especially important to Specials' teachers (i.e., gym, music, art, technology, theater, and health) who work with mainstream and DLP students, but

currently receive little guidance and do not meet regularly with the DLP teachers. This can lead to a lack of consistency for the children, though it also provides opportunities for the children to advocate for themselves and each other, and take more ownership of their learning, as they have in their gym classes.

Since the program’s model shifts as the students move through the lower grades, the lack of consistency can pose challenges to students, who become used to communicating one way and then need to learn the new communication style of new teachers:

*La mía sí ha tenido frustraciones y retos, porque como ella comenzó desde el primero. Cuando empiezan sí va a ser todo más fácil, porque están hablando más español, pero al cambiar, ya en segundo grado, cambian de maestra, no van a tener a [la misma maestra]. Ya ella conoce a cada estudiante. Ahora, al cambiar para otro profesor, mi nena cambia de – le toca cambiar [de maestra]. [La nueva maestra] no habla [español]... todo es en inglés. (P\_FG1\_Sp)*

*[My child has had frustrations and challenges, because of how she started from the beginning. When they start, everything is easier, because they speak more Spanish, but when they change, already in second grade, they change teachers, they will not have [the same teacher]. She already knows each student. Now, when changing to another teacher, my child changes – she has to change [teachers]. [The new teacher] doesn’t speak [Spanish]...everything is in English.]*

### OVERCOMING THE CHALLENGES – AN EXPECTATION OF GLOBAL CITIZENSHIP

Despite above mentioned frustrations and differences in instructional models across grades, video recordings conducted with all three cohorts of the DLP (kindergarten, first and second grades) revealed many similarities in teaching strategies, classroom management and engagement with students. Teachers used call and response techniques to signal transitions, had students use thumbs up/thumbs down responses so that everyone could respond to questions simultaneously with gestures as opposed to words, and selected from cups of popsicle sticks with student names written on them to decide which student would be asked to answer questions or demonstrate on the touch screen boards. DLP teachers consistently accompanied their speech with animated facial expressions, gestures and movements, to convey meaning in multiple ways.

Teachers made use of full group instruction, small group, partner work, and independent work times, allowing students to participate in the target language in full group instruction. Teachers were observed using what García and Wei (2014) explain as translanguaging, a pedagogical practice where students are asked to alternate languages for the purpose of receptive or productive use, during small group work and while practicing writing skills independently. Teachers also used times when students were working independently, to work one-on-one with students who needed extra support. Overall, teachers demonstrated what Newcomer calls “funds of caring”, in building in moments for one-on-one instruction, including all students in discussions during whole group learning, and speaking to their cultural heritage as a natural part of the lessons being taught (Newcomer, 2018). Class dance parties as transitions, incentive plans and participating in school wide events as representatives of the DLP, seem to be helping to develop peer grit and expand communication skills, even as the instructional model of the program shifts dramatically in the second grade.

There were many recursive moments in the research: many moments where it became clear that this administrative and teaching staff is examining and refining their program all the time, in response to student, budget, and staffing needs, all which affect the component of Ownership. One administrator shared:

*So I think a big challenge initially was – um – curriculum, and I guess design of the program and seeing that – depending on where you went to observe dual language programs, the models were very different. (A\_11)*

Despite these challenges, projected outcomes for students, where their ownership of the program, their process and their learning are of benefit to the larger community, are ever-present talking points. When asked about the academic expectations for the DLP students, an administrator shared,

*I’d like to be able to see them start to take AP Literature courses, AP courses that they can take and get university credits, um, and then I think them being—you know, their intelligence and their ability to academically perform being strengthened would be one thing that I’d obviously want to see.*

*Them being global citizens and having an understanding of their community and the community around them I think is critical. (A\_11)*

The school aims above and beyond, in their hopes for the DLP students becoming global citizens. Teachers and administrators speak with these students, directly and indirectly, about what Boix-Mansilla (2016) describes as the globally competent student. This learner is “curious about and engaged in the world, able to investigate the world beyond their immediate surroundings, understand their own and others’ cultural perspectives, communicate across differences, and take action to improve conditions” (Salmon, Gangotena, Melliou, 2018). Lakeland is definitely making strides through the DLP, to support their students in becoming the global citizens the community in which they are embedded so urgently needs.

## QUANTITATIVE FINDINGS

The quantitative analysis helped to address research question two (RQ2), which focused on the impact of DLP on students’ learning outcomes, as well as how those outcomes can be interpreted in light of the literature on these types of bilingual programs.

### RQ2. What has been the DLP’s impact on learning outcomes at the FSCS?

Within the three cohorts studied, about 64 students in grades K-2 participated in the DLP, compared to approximately 230 students in the mainstream (MP) program in AY 2016 - 17 through AY 2018 - 19 (see Table 2 in the Participants section for demographic information on these students; note that variation in the number of students per cohort reflects changes in enrollment). Scores available for analysis came from 58 students in the DLP and 169 students in the MP, in grades K-2.

Quantitative analysis of reading levels as measured through the mCLASS Text Reading and Comprehension (TRC) assessment complements qualitative findings and helps identify how the DLP has impacted student learning outcomes as they relate specifically to reading comprehension. The TRC assessment is administered three times per year (beginning-BOY, middle-MOY, and end-EOY) and these data were available to the research team for AY 2016 - 17 through 2018 - 19. The TRC provides a letter to indicate a student’s reading level, to allow for quantitative analysis this letter score was converted to a corresponding numerical value. A Spanish version of the TRC was administered to students in the DLP, alongside the English version, beginning with the second cohort during the AY 2017 - 18.

In looking at cohort performance on the TRC, a statistically significant bias in the composition of the dual language classes was detected based on initial reading levels across all three cohorts. Thus far, DLP students enter kindergarten with a 0.543 higher reading level than the MP students, see Table 6 below. In addition to having higher initial reading levels, the DLP group is disproportionately more Latinx compared to the mainstream program group.

**TABLE 6**  
Initial reading level English TRC BOY Kindergarten for DLP and MP cohorts

	DLP	MP	Difference	Sig.
Cohort 1 (SD, N)	0.294 (0.849, 17)	-0.023 (0.792, 44)	0.317	
Cohort 2 (SD, N)	0.381 (1.396, 21)	-0.512 (0.597, 41)	0.893	***
Cohort 3 (SD, N)	0.05 (0.887, 20)	-0.345 (0.668, 84)	0.395	**
<b>Total (SD, N)</b>	<b>0.241 (1.081, 58)</b>	<b>-0.302 (0.705, 169)</b>	<b>0.543</b>	<b>***</b>

Statistical Significance Levels: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Regarding average growth by grade, observed lower annual growth scores for DLP students on the English TRC assessment in kindergarten and first grade are confirmed through a t-test with statistical significance at the 0.01 level, see Table 7 below, and an ordinary-least squares (OLS) regression analysis, see Table 8 below. Conversely, dual language students seem to grow at a faster rate on the English TRC assessment in second grade than their mainstream program counterparts, as suggested by a t-test approaching statistical significance at the 0.10 level. This difference does not hold in the OLS regression model in Table 8, possibly due to the small sample size.

In looking at the number of students (N) in each program per grade, the cohort of DLP students seems to be significantly more stable. Note the significant growth in the mainstream population cohort 1 from Table 6 when they were in Kindergarten (K) (N=44), to Table 7 when the MP cohort 1 is in second grade (N=76). Thus, the accelerating student achievement gains observed in the DLP may be attributed, in part, to a "school-effect"; that is, students in DLP may show higher gains because the vast majority of the DLP students have been enrolled at FSCS since the beginning of kindergarten or earlier, while many students in the MP have transferred into the school at a later date.

**TABLE 7**  
Average growth of English TRC for DLP and MP by grade

	DLP	MP	Difference	Sig.
Kindergarten (SD, N)	1.544 (1.615, 57)	4.56 (2.421, 166)	-3.016	***
Grade 1 (SD, N)	4.575 (2.591, 40)	6.474 (3.049, 116)	-1.899	***
Grade 2 (SD, N)	6.895 (1.941, 19)	6.013 (1.999, 76)	0.882	*

Statistical Significance Levels: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Furthermore, a comparison of means does not account for the selection bias and observed differences within the groups of students. To begin to address this limitation, an ordinary-least-squares (OLS) regression in Table 8 models for student characteristics that plausibly introduce variation in treatment and outcomes, including beginning-of-year reading level, race/ethnicity, home language, and cohort. Using this model, it is estimated that the dual language program has a statistically significant, but diminishing, negative effect on English reading comprehension as measured by the TRC in kindergarten (3.2 levels) and first grade (1.7 levels). The model estimates no statistically significant negative effect on English reading comprehension by second grade.

This statistical model demonstrates that the estimated effect of the program is consistent with the anticipated lag in English proficiency in the initial years of the dual language program, in which the instructional model is one of 70/30 and 80/20. Interestingly, once the instructional model moves to 50/50 there appears to be no statistically significant negative effect on English comprehension; this is quite a promising finding for the future of the Lakeland DLP.

**TABLE 8**  
OLS Regression of English TRC for DLP growth by grade

	1 TRC – Growth K	2 TRC – Growth 1	3 TRC – Growth 2
Dual Language	-3.218*** (0.298)	-1.678*** (0.539)	0.570 (0.547)
TRC – BOY K	0.860*** (0.285)		
TRC – BOY 1		0.311*** (0.073)	
TRC – BOY 2			-0.013 (0.056)
Gender – Female	0.221 (0.283)	1.027** (0.464)	0.874* (0.446)
Race/Ethnicity – Latinx	-3.882*** (1.253)	-2.297* (1.207)	-2.399 (1.517)
Race/Ethnicity – White	-3.291*** (0.906)	-2.136 (1.299)	-3.816*** (1.440)
Race/Ethnicity – Black	-2.750*** (0.795)	-0.924 (1.083)	-2.133** (0.988)
Race/Ethnicity – Multiracial	-2.009*** (0.724)	0	0
Home Language – English	-0.125 (0.512)	0.822 (0.716)	-0.344 (0.548)
Home Language – Spanish	1.928 (1.325)	2.036* (1.092)	1.272 (1.260)
Limited English Proficiency	-1.727** (0.829)	-0.610 (0.883)	-0.944* (0.526)
Cohort 1	0	1.067** (0.501)	0
Cohort 2	-0.161 (0.363)	0	0
Cohort 3	-0.192 (0.361)	0	0
Constant	7.999*** (0.845)	5.733*** (1.209)	8.000*** (0.748)
r <sup>2</sup>	0.400	0.208	0.163
N	218	155	95

Statistical Significance Levels: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01  
Ordinary Least Squares (OLS) regression results: coefficients and (standard errors)

# LIMITATIONS

When looking at the Spanish TRC assessment results, while limited, findings demonstrate a promising trend of accelerated reading comprehension for students when assessed in the language of primary instruction, see Table 9 below. Initial descriptive statistics indicate that dual language students in cohorts 1 and 2 far exceed comprehension levels in Spanish in first and second grade when compared to their mainstream program peers assessed in English.

**TABLE 9**  
A comparison of TRC scores for DLP and MP cohorts by language of instruction

		Kindergarten			1st Grade			2nd Grade		
		BOY	MOY	EOY	BOY	MOY	EOY	BOY	MOY	EOY
Cohort 1	DLP – English	0.294	0.736	2.105	1.947	3.895	7.12	3.526	7.789	9.85
	N	17	17	19	19	19	19	19	19	20
	DLP – Spanish					12.79	18.316	13.684	17.61	18.2
	N				19	19	19	18	20	
	MP – English	-0.02	2.043	4.353	2.797	6.517	9.42	6.697	9.803	
	N	44	46	51	59	60	64	76	76	
Cohort 2	DLP – English	0.381	0.952	1.35	2.429	4.429	6.091			
	N	21	21	20	21	21	22			
	DLP – Spanish		0.6	3.15	1.571	11.14	14.857			
	N		20	20	21	21	21			
	MP – English	-0.51	0.867	3.899	2.246	5	7.774			
	N	41	45	45	57	57	62			
Cohort 3	DLP – English	0.05	0.952	1.59						
	N	20	21	22						
	DLP – Spanish	-0.2	1	3.455						
	N	20	20	22						
	MP – English	-0.35	1.64	3.876						
	N	84	89	89						

DLP – Dual Language Program  
MP – Mainstream Program

English – English TRC Assessment  
Spanish – Spanish TRC Assessment

Cohort 1 – Kindergarten in 2016 – 17  
Cohort 2 – Kindergarten in 2017 – 18  
Cohort 3 – Kindergarten in 2018 – 19

These findings must be understood within the context of the study's limitations. In order to better grasp the growth of the DLP students it is important to note the selection biased identified in all three of the DLP cohorts. Growth observed in TRC scores both in Spanish and English, might not be attainable if the selection of students into the program encompassed a wider range of reading levels at the BOY measures among the participants. Quantitative findings related to reading comprehension are also bound by the limitations of the TRC assessment, both in English and in Spanish. Specifically, the validity of both Spanish and English TRC scores are subject to teacher discretion and interpretation in implementation. The first iteration of the test taken for Spanish MOY AY 2017-18 seems somewhat inconsistent with other testing levels. This may be due to a lack of familiarity in implementing the Spanish TRC during the first administration.

Also, the comparison between the DLP and the MP cohorts might be influenced by the fact that enrollment in the MP program at Lakeland seems to be increasing annually, while the enrollment in the DLP remains consistent. This might mean that the improving learning outcomes for the DLP students as compared to the MP students may not be fully attributed to the dual language program itself, but could be inflated due to the changes in the MP enrollment.

Finally, the findings in this report are bound by temporal limits to data collection for a program designed to yield long-term outcomes. The DLP, in theory, offers great promise for student learning and achievement in measures that are not easily quantified and may take years to manifest. Additionally, disruptions to district-level testing due to the public health response to COVID-19 have precluded the research team from analyzing student achievement data from AY 2019 – 20. In this way, the findings in this report provide early indication of possible long-term outcomes.

## RECOMMENDATIONS

Despite these limitations, the study's findings present new knowledge on which to base several recommendations for revising and implementing the DLP. For future iterations of the dual language program it is suggested that the instructional model remain consistent, if not with a 50/50 model throughout the program, at least with a consistent model within grade levels. In particular, the quantitative findings from the analysis of the TRC scores, both in English and Spanish, show strong support for maintaining the higher levels of Spanish instruction (80/20 and 70/30) in the lower grades (PreK, K, 1), moving to a sustained 50/50 instructional model from second grade and above. Maintaining the instructional model will allow for strong learning outcomes in Spanish, and leveling outcomes in English when instructional time in this language is increased.

Recommendations also pertain to enrollment and recruitment practices. These practices could be revised to address the selection bias observed. Specifically, it is recommended that native-Spanish speaking newcomer students, particularly in the lower grades, be invited to participate in the DLP, in order to benefit from the model offering higher levels of Spanish instruction. Also, efforts to recruit and support the success of a higher number of African American students in the overall program will help to address issues of equity raised by several stakeholder groups. Importantly, such efforts must be grounded in a respect for and understanding of the linguistic richness and diversity these students bring to the classroom.

Based on the quantitative findings, recommendations regarding collecting further data on mCLASS both through the TRC and DIBELS is recommended as well as also analyzing the data from the iReady assessment to look into the DLP's impact on mathematical outcomes for these students. These data will need to be collected and analyzed over several years in order to determine the impact of the DLP once a 50/50 instructional model is being implemented over many grade levels, and the original AY 2016 - 17 cohort has been in the program for five to seven years. This is the expected time for emergent bilinguals to become academically proficient in the target language. Additionally, future studies should also explore the impact of the DLP on conditions such as increased family engagement and peer grit that have been shown to have a direct and lasting influence on student achievement (O'Neil, 2018).

## CONCLUSIONS

The Lakeland DLP featured in this intrinsic case study provides an excellent opportunity to further explore issues that arise when a public school designs and implements a dual language program in response to its families' needs. This study is of particular importance since this initiative emerged as a direct response to the linguistic characteristics of one of the populations served by the school and is also intended to benefit native English speakers in the school community. The African American families and students in the DLP have different needs than the Latinx families and students, regarding language, culture, and historic characteristics. Balancing concerns over resources, pedagogy, and cultural responsiveness is an ongoing endeavor for both families, administrators, and staff.

The findings in this report highlight the impact this DLP has had in this school's community and how aspects of Depth, Sustainability, Spread and Ownership play out in the scaling of this program into the upper grades. The learning outcomes, as they relate to reading comprehension show an expected lower annual growth in scores for the dual language students in the lower grades, as compared to their counterparts in the mainstream program in English. Yet, by second grade this negative effect is no longer evident. As well, the annual growth for the DLP students surpasses that of their mainstream English counterparts when both groups are assessed in their main language of instruction.

Continuing to collect data on current and future cohorts will allow further tracking of the student learning outcomes, as they relate to reading comprehension and fluency in both languages. It will also be important to study the DLP students' mathematical skills, in comparison to the mainstream program students, accounting for race and gender. This would be the next step in continuing the study through AY 2021 - 2022 – exploring the growth outcomes of the DLP students as the program expands to include new cohorts.

Lakeland's DLP provides a tremendous opportunity for improving outcomes for students, families and communities in urban settings. Studying the bilingual education practices put in place by early childhood educators at this school, particularly looking at the impact the DLP has for its Latinx and African American students provides new and much needed avenues for research. Organically drawing on funds of knowledge from the Latinx and African American families in their three cohorts, as well as from the teachers developing new practices reflected in curriculum and intergenerational program design, Lakeland has the potential to provide a way forward for schools with similar populations in Baltimore City and beyond.

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## APPENDIX A

### Semi-Structured Focus Group/Interview Protocol Dual Language Program (DLP)

#### STAFF (TEACHERS AND ADMINISTRATORS)

**Introductions:** Lakeland Dual Language Program Study (purpose: dissemination to other BCPS, and evaluation of academic impact), the researchers, and the participants.

**Guidelines:** "We are conducting this focus group as part of our study on the Lakeland Dual Language Program, we have a list of questions we will need to get through and we want to hear from all of you. I will be monitoring the discussion, yet you will be doing most of the talking. Anything you discuss here is confidential and should not be shared outside this room. We have one hour, please be mindful of the time when providing answers. I apologize in advance if I have to interrupt your discussion and move on to the next question, as we have several questions to cover. Thank you for participating. Let's begin."

**Starter Question:** How did the DLP come to be? How did you first get involved with the DLP?

1. What are the strengths of the DLP?
2. How does the DLP address the needs of the Lakeland Community?
3. How can the school better support the DLP?
4. How can the DLP benefit the overall Lakeland Community in the future?
5. How can the Lakeland community best support the DLP?
6. Fast forwarding 5 years, where do you see the DLP?
7. What are the expectations for alumni of the DLP (competencies and academic outcomes)?

**Wrap-Up Questions:** What would your recommendations be, based on your experience, for schools with similar populations starting a Dual Language Program? Can you give a specific example, based on your experience with the DLP.

**Extra Questions (on partnerships):**

1. How can the DLP help the school in establishing partnerships or collaboration with other schools and communities?

## APPENDIX B

### Semi-Structured Focus Group/Interview Protocol Dual Language Program (DLP)

#### PARENTS AND GUARDIANS

**Introductions:** Lakeland Dual Language Program Study (purpose: dissemination to other BCPS, and evaluation of academic impact), the researchers, and the participants.

**Guidelines:** “We are conducting this focus group as part of our study on the Lakeland Dual Language Program, we have a list of questions we will need to get through and we want to hear from all of you. I will be monitoring the discussion, yet you will be doing most of the talking. Anything you discuss here is confidential and should not be shared outside this room. We have one hour, please be mindful of the time when providing answers. I apologize in advance if I have to interrupt your discussion and move on to the next question, as we have several questions to cover. Thank you for participating. Let’s begin.”

**Starter Question:** How did you hear about the DLP? How did you first get involved with the DLP? What attracted you to participate in the DLP?

1. In your experience so far, what are the strengths and benefits of the DLP?
2. In your experience so far, what are some of the frustrations and challenges you have faced with the DLP?
3. How does the DLP address the needs of the Lakeland Community?
4. How can the school better support the DLP?
5. How can the DLP benefit the overall Lakeland Community in the future?
6. How can the Lakeland community best support the DLP?
7. How do you as a parent engage with the DLP?
8. What are your expectations for your child upon completing the DLP?

**Wrap-up Questions:** What would your recommendations be, based on your experience, for improving the Dual Language Program? Please give a specific example, of something the school or teachers could do.

### Protocolo de Grupo Focal o Entrevista Semi-estructurado Programa de Educación Bilingüe (PEB)

#### PADRES Y REPRESENTANTES

**Introducción:** Estudio Investigativo del Programa de Educación Bilingüe (propósito: diseminar el programa a otros colegios públicos de la ciudad de Baltimore, y evaluar el impacto académico del mismo), las investigadoras, y los participantes.

**Instrucciones:** “Estamos llevando a cabo este grupo focal como parte de un estudio de investigación sobre el Programa de Educación Bilingüe del Colegio Lakeland. Tenemos una lista de preguntas que hacerles y queremos escucharlos a todos y conocer más sobre su experiencia. Yo estaré monitoreando la discusión, pero la mayoría de la conversación vendrá de ustedes. Cualquier tema que discutamos aquí debe ser confidencial y no debe ser compartido afuera de este salón. Tendremos una hora para conversar, por favor sea considerado con el uso del tiempo al contestar las preguntas, de tal manera que todos tenga oportunidad de participar. De antemano me disculpo si debo interrumpirlos y avanzar la discusión hacia la próxima pregunta, ya que tenemos varias preguntas que cubrir. Gracias por su participación. Vamos a comenzar.”

**Pregunta Abreboca:** ¿Cómo se enteró de la existencia del PEB en Lakeland? Inicialmente, ¿Cómo se involucró en el programa? Y, ¿Qué lo atrajo a participar en el programa?

1. En su experiencia, ¿cuáles han sido las fortalezas y beneficios del PEB?
2. En su experiencia, ¿cuáles han sido las mayores frustraciones y retos que usted ha enfrentado con el PEB?
3. ¿Cómo logra el PEB atender las necesidades de la Comunidad de Lakeland?
4. ¿Cómo puede la escuela mejorar el apoyo prestado al PEB?
5. ¿Cómo puede el PEB beneficiar a la comunidad de Lakeland a futuro?
6. ¿Cómo puede la comunidad de Lakeland apoyar al PEB?
7. ¿Cómo participa usted como padre en el PEB?
8. ¿Cuáles son las expectativas que usted tiene para su hijo/a una vez que haya terminado el PEB?

**Preguntas de Cierre:** Basado en su experiencia, ¿Qué sugerencias tiene usted para mejorar el PEB? Por favor provea ejemplos específicos de medidas que puedan ser tomadas por el colegio o los maestros.

## APPENDIX C

### Semi-Structured Focus Group/Interview Protocol Dual Language Program (DLP)

#### STUDENTS

**Introductions:** We are Dr. Mata-McMahon and Ms. Bassett, from UMBC, and you are...? (ask children to state their names).

**Guidelines:** “We are doing a research project looking at how teachers teach English and Spanish in your classroom. We are going to ask you some questions about being a student in Ms. \_\_\_\_\_’s class. If you have any questions, let us know, and we will answer them for you. If you do not want to answer any question, you don’t have to answer. We want to thank you very much for participating, your answers will help us very much in our research project. Let’s begin.”

**Starter Question:** We are going to ask you to draw the answers to some of the questions we are going to ask you, so here are some crayons and paper for you to use. Can you draw for us what you like the most (your favorite thing) about your classroom, and/or about Ms. \_\_\_\_\_?

1. What do you like the most about your classes with Ms. \_\_\_\_\_?
2. What do you not like about your classes with Ms. \_\_\_\_\_?
3. What have you learned in Ms. \_\_\_\_\_’s class?
4. What is the hardest thing about being in Ms. \_\_\_\_\_’s class?
5. What do you like to do with your friends in Ms. \_\_\_\_\_’s class?
6. What would you tell a PreK/L/1st/2nd grade friend about Ms. \_\_\_\_\_’s class if they were going to be her student next year?

**Wrap-up Question:** If you had a magic wand/superpowers and you could change anything from Ms. \_\_\_\_\_’s classroom, what would you change?

**Note:** The focus group protocols provide a starting point for questions to ask the key stakeholders during the interviews in Phase I. Follow-up questions will also be asked stemming from the initial responses offered by the interviewees.

### Protocolo de Grupo Focal o Entrevista Semi-estructurada Programa de Educación Bilingüe (PEB)

#### ESTUDIANTES

**Presentación:** Nosotras somos la Dra. Mata-McMahon y la Sra. Burggraf-Bassett de UMBC, ¿cuáles son sus nombres? (pídele a los niños que digan sus nombres).

**Pautas:** “Estamos haciendo un proyecto de investigación que analiza cómo los maestros enseñan inglés y español en tu salón de clases. Te haremos algunas preguntas sobre ser estudiante en la clase de Ms. \_\_\_\_\_. Si tienes alguna pregunta, háznoslo saber y te responderemos. Si no deseas responder alguna pregunta, no tienes que responder. Queremos agradecerte por participar, sus respuestas nos ayudarán mucho en nuestro proyecto de investigación. Vamos a empezar.”

**Pregunta inicial:** vamos a pedirte que compartas tus respuestas a las preguntas que te vamos a hacer, aquí hay algunos crayones y papel para que los uses. ¿Puedes dibujar para nosotros lo que más te gusta (tu cosa favorita) sobre tu clase y/o sobre Ms. \_\_\_\_\_?

1. ¿Qué es lo que más te gusta de la clase de Ms. \_\_\_\_\_?
2. ¿Qué es lo que menos te gusta de la clase de Ms. \_\_\_\_\_?
3. ¿Qué has aprendido en la clase de Ms. \_\_\_\_\_?
4. ¿Qué es lo más difícil de estar en la clase de Ms. \_\_\_\_\_?
5. ¿Qué te gusta hacer con tus amigos en la clase de Ms. \_\_\_\_\_?
6. ¿Qué le dirías a una amiga de PreK/K/1er/2do grado sobre la clase de la Ms. \_\_\_\_\_ si fuera a ser su estudiante el próximo año?

**Pregunta de cierre:** Si tuvieras una varita mágica/súper poderes y pudieras cambiar lo que quisieras del salón de clases de Ms. \_\_\_\_\_, ¿qué cambiarías?

**Nota:** Los protocolos de entrevistas semi-estructuradas proporcionan un punto de partida para las preguntas que se deben formular a los participantes durante las entrevistas en la Fase I. También se formularán preguntas de seguimiento derivadas de las respuestas iniciales ofrecidas por los participantes.

## APPENDIX D

### Semi-Structured Interview Protocol Dual Language Program (DLP)

#### STAFF (PRINCIPAL)

**Introductions:** Lakeland Dual Language Program Study (purpose: dissemination to other BCPS, and evaluation of academic impact), the researchers, and the interviewee.

**Guidelines:** “We are conducting this interview as part of our study on the Lakeland Dual Language Program, we have a list of questions we would like to ask you regarding the program, how it came to be and might be some expectation stemming from its implementation. Thank you very much for participating. Let’s begin.”

**Starter Question:** How did the DLP come to be? Where did you get the inspiration for the DLP? What prompted the design and implementation of the DLP?

1. What needs did you identify in the school/population that would be met through a DLP?
2. What resources were you lacking or needing to design and implement the DLP?
3. Where did you find supports for the DLP?
4. What challenges did you face in designing and implementing the DLP? And, How were these challenges overcome?
5. How do you see the DLP functioning at the moment? What are some of its strengths and weaknesses?
6. How can the DLP help the school in establishing partnerships or collaboration with other schools and communities?
7. Fast forwarding 5 to 10 years, what are your expectations for the future of DLP?
8. What are the expectations for alumni of the DLP (competencies and academic outcomes)?
9. Given upcoming changes in the funding of Title 1 schools, do you foresee these impacting the DLP?

**Wrap-up Questions:** What would your recommendations be, based on your experience, for schools with similar populations starting a Dual Language Program? Can you provide specific examples, based on your experience with the DLP at Lakeland?

