SHERMAN
CENTER

for Early Learning
in Urban Communities

LAKELAND DUAL LANGUAGE PROGRAM STUDY

SY 2019 – 20 to SY 2020 – 21

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EXECUTIVE SUMMARY

During SY 2018-2019, Dr. Jennifer Mata-McMahon, UMBC Associate Professor of Early Childhood Education, Director 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 the FSCS – Full Service Community School), offering to conduct a collaborative program evaluation of the Lakeland Dual Language Program (DLP), reviewing data from SY 2016-2017 through SY 2018-2019. The PI and her graduate research assistant (GRA), Laurel Burggraf-Bassett, teamed up with Ana Gabriela Salas, a bilingual teacher at Lakeland spearheading the DLP, to conduct the proposed research study. Joshua Michael, a Public Policy doctoral student, was invited to collaborate in the study providing expertise in quantitative data analysis. The results from Phase I of the program evaluation were published in Sherman Center Research Report No. 1.

This Sherman Center Research Report (No. 3), presents the results from the continuation of this study, now focusing on data from SY 2019-2020 through SY 2020-2021. For Phase II of the study, the PI worked with graduate research assistants Sabrina Williams, Adebola Daramola, and Shahin Hossain, and statistician and psychometrician consultant Dr. Lance Kruse, from Invontics LLC, who focused on the quantitative analysis. From here forward the PI, the GRAs, and Dr. Kruse will be referred to as the research team. Mr. Justin Holbrook, then Assistant Principal at Lakeland, served as the research team's liaison.

The purpose for this study is twofold, 1) to document the design, implementation, and scaling of Lakeland's DLP, as it comes into its seventh cohort in SY 2022-2023, and 2) to gauge the impact the program has had on the learning outcomes of Emergent Bilingual (EBs). The ultimate goal of this study is to inform the dissemination and replication of the DLP into other public schools within the district and beyond.

With this purpose and goal in mind, the evaluation study continued in Phase II with three research questions posed to be addressed from data gathered from SY 2019-2020 through SY 2020-2021. These research questions were:

> RQ1. What are the challenges and successes of continuing to scale the FSCS's DLP from K-2 to PreK-4 and beyond?
>
> RQ2. What are the conditions, processes, and supports necessary to continue to scale the FSCS's DLP from K-2 to PreK-4 and beyond?
>
> RQ3. What is the DLP's impact on learning outcomes at the FSCS?

With an extension of IRB approval from UMBC (IRB Research Protocol 150 #Y19JMM26085) and Baltimore City Schools (IRB# 2020-001 and 2021-004), the research team began virtual data collection for Phase II during fall 2020, and in-person data collection in January 2021, once schools allowed research teams to resume on-site studies following required COVID-19 precautions.

In Phase II, the research team extended the participants beyond those comprising the DLP, the focus for Report 1, to also include students, teaching staff, and parents from the mainstream, English-only, program (MP) at Lakeland. Participants included 35 DLP and MP teachers, 48 DLP and MP parents or caregivers, and 82 DLP and MP third and fourth-grade students.

Through surveys, focus groups, classroom observations, and video recordings, qualitative data were collected (spring 2021) and analyzed (fall 2021-spring 2022) guided by the conceptual framework of Coburn's reconceptualization of scale (Coburn, 2003). Quantitative data from student, teacher, and parent surveys were also analyzed, allowing the research team to better

determine trends in community perceptions of the program as it continues to be scaled. Surveys were distributed in SY 2020-21, both online and in-person. RQ1 and RQ2 are answered by organizing these findings using Coburn's four interrelated elements: depth, sustainability, spread, and ownership.

Quantitative data measuring student performance stemmed from two different instruments: the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) (University of Oregon, 2018) and the iReady Diagnostic assessments (Curriculum Associates, 2019). These instruments were used by the school district across the two academic school years being studied. During SY 2019-20, Cohort 2 (grade 2) and Cohort 3 (grade 1) students completed the DIBELS assessment, which measures students reading skills in Grades K to 8 (University of Oregon, 2018). Students in Cohort 1 (grade 3) completed the iReady Diagnostic reading assessment, which measures student reading ability in Grades K to 8 (Curriculum Associates, 2019). During SY 2020-21, all students were assessed via the iReady Diagnostic reading assessment. To address RQ3, test scores for SY 2019-20 and SY 2020-21 were requested for students from both the DLP and the MP.

Concerning the challenges and successes of scaling the DLP (RQ1), findings showed that there was a dire need for a standardized curriculum. At that moment, teachers were sourcing robust curriculum materials, translating them, and aligning them with district guidelines. Unfortunately, this process often led to high burnout. Concerns arose with accessibility for students who were struggling academically and students with disabilities. Furthermore, findings also showed that myths about bilingualism thwarted some families from enrolling students in the DLP. Such hesitancy was often due to a lack of information about the benefits of bilingualism. Other issues identified in the findings pertained to a lack of awareness about the program, limited space available for newcomers, and limited language immersion due to COVID-19 virtual instruction.

Regarding successes, students in the DLP were described as being more enthusiastic, eager to learn, and confident in their abilities than students in the main program. Students in the DLP reportedly had stronger English reading skills. As a result of being in the DLP, students could transition between English and Spanish without hesitancy, easily adapting to social contexts. Students could also speak their non-native language at home and were eager to share what they learned with their families.

Regarding conditions, processes, and supports available to the DLP (RQ2), parents of students in the DLP were found to be generally more engaged in their child's learning, which is important to note as a type of program support, since academic success may be influenced by parental commitment. Findings also showed emergent bilinguals had high academic success upon entering the second grade. Moreover, school culture reflected diversity, encouraging attitudes and beliefs that support respect for other cultures within dual language learning. Findings showed that teachers and students often forged supportive long-lasting relationships with each other.

In summary, the findings suggest that the challenges the program faced regarding its scaling and sustainability over time were related to program logistics and design, the understanding some stakeholders have of bilingualism, aspects related to instruction during the COVID-19 pandemic, and lastly the overall school culture. There were concerns about accessibility and equitable education for DLP and MP students, as well as students with disabilities and struggling learners within both the DLP and MP programs. Increased mentoring, administrative support, and funding for DLP teachers were mentioned as supports needed for the sustainability of efforts. Moreover, building networks of support would help abate teacher burnout in the absence of a standardized dual-language curriculum, and further ownership efforts. Improved DLP advertising to families could help boost participation as well as address misconceptions regarding bilingual education.

Three cohorts were analyzed, comprising 288 students to determine learning outcomes (RQ3). The findings from SY 2020-2021 indicate that even during virtual learning due to COVID-19, the students in the DLP program did not regress in learning, regarding reading skills, when compared to the MP students. Specifically, Cohort 1 DLP students demonstrated more growth than their MP counterparts. Additionally, even though Cohort 3 MP students were outperforming the DLP students in the previous year, during SY 2020-2021, the DLP students' performance improved and was at a statistically similar level to their MP peers. As such, the DLP demonstrates a positive impact on student reading skills during virtual schooling by either improving their performance to outperform their MP peers or minimizing previous differences such that their performance is statistically similar to the performance of students in the MP.

These findings point to the DLP continuing to be a program with encouraging potential for promoting dual language proficiency and overall academic success. Notwithstanding the challenges and limitations of the study, the recommendations proposed seek to facilitate greater equity in the DLP enrollment practices, establish robust curricula, and incorporate greater parental involvement.

PURPOSE

This study looks at the implementation of a Dual Language Program (DLP) in a Full-Service Community School (FSCS) in Baltimore, Maryland, serving largely 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 seventh student cohort, and 2) to gauge the impact the program has had on the learning outcomes of Emergent Bilingual (EBs). This study's goal is to inform the dissemination and replication of the DLP in other public schools in Baltimore City and beyond.

CONTEXT

BACKGROUND

Beginning in 2011, with efforts to increase the number of immigrant families in Baltimore City, there have been significant demographic shifts in this FSCS's immediate neighborhood. In 2012-13, the school had a 57.8% African American student population; in 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). Now in 2022-23, students' demographics continue to shift, showing 73% as Latinx, and 60% as English Learners (Baltimore City Schools, 2022). This FSCS's administration and staff 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 and support dissipated.

Currently, there are only three other DLPs in the Baltimore area 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 more 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 or academic outcomes for
English learners. Dual Language Programs that begin with a 90/10 model, mimicking a one-way type of DLP, are recommended for emergent bilinguals and newcomers since they focus on maintaining and further developing students' native language and literacy skills, which can be transferred to English when proficiency has been acquired (Umansky, Valentino & Reardon, 2015). This FSCS program involves an 80/20, a 70/30, and a 50/50 model in different grades, largely in response to the language strengths of the actual student population in each cohort. The DLP's instructional model across grade levels can be seen in Table 1.

TABLE 1
Full-Service Community School DLP's Instructional Model across grades

Grade	Language of Instruction	Percentage in Spanish	Percentage in English
PreK	Half in Spanish, half in English - phonics in English, oral language and literacy comprehension in both languages	50%	50%
K	All in Spanish, except 1 resource class per day (e.g., art, gym, etc.)	80%	20%
1st	All content in Spanish, with English reading instruction added in at mid-year based on readiness	70%	30%
2nd	Half-day in English (2 core subjects), half-day in Spanish (2 core subjects), with reading and phonics instruction in each language	50%	50%
3rd-5th	Half the academic content in English and half in Spanish	50%	50%

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 particular student demographic is woefully under-researched in relation to dual language learning studies (Steele, et al., 2018). In a study conducted in a rural town in Georgia, with a growing Latinx population, looking at interactional dynamics of classrooms in which both Spanish and African American Language (AAL) were spoken, they found that teachers needed to be further encouraged to recognize the legitimacy of all language varieties, 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 and scale the DLP.

CONCEPTUAL FRAMEWORK

To best evaluate the growth of the dual-language program at this FSCS in terms of design, implementation, and scale, Coburn's Conceptualization of Scale was selected as the conceptual framework. Coburn (2003) defines scale as a multidimensional construct, that goes beyond the traditional conceptualization of scale predominantly as "the expansion of numbers of schools reached by a given reform effort" (p. 3). She explains that by focusing on numbers alone, the qualitative measures that may be fundamental to a school's ability to engage in reform efforts that make a difference in teaching and learning, are often neglected. Coburn (2003) proposes a multidimensional conceptualization of scale which includes four interrelated elements—depth, sustainability, spread, and a shift in ownership. This framework enables an understanding of

scale at both the school and district levels. For the purposes of this study, depth refers to changes in this FSCS'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 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 continued implementation and success. Coburn's conceptualization of scale informed each phase of the research study, from design and data collection to data analysis and presentation of findings.

METHODOLOGY

RESEARCH DESIGN AND METHODS

The broader study is best characterized as implementation research (Halle, Metz & Martinez-Beck, 2013; Damschroder, et.al, 2009), examining how and how well the DLP at this FSCS is designed, implemented, and scaled 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 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 surveys, quantitative data from student, parent, and teacher surveys, and student assessments and test scores.

The teacher leading the design and implementation of the DLP served as a research team partner working along with the PI and the GAs during Phase I, and the assistant principal served as the school liaison during Phase II. Phase I of the study looked at test score data from SY 2016-17 through SY 2018-19 and collected qualitative data in spring 2019. Analysis of data for Phase I, conducted through the spring of 2020, concluded with Sherman Center Research Report No. 1 and manuscripts for publication in fall of 2020 (Mata-McMahon, et al., August 2020). For Phase II, presented here, qualitative data collection occurred from fall 2020 through spring 2021, and students' test scores from SY 2019-20 to SY 2020-21 were analyzed. Due to COVID-19, data collection for Phase II was extended and some restrictions on data collection occurred. The study was approved as UMBC IRB Research Protocol 150 Y19JMM26085 and City Schools IRB 2020-001 and 2021-004.

RESEARCH QUESTIONS

Research questions guiding Phase II of the study are:

> RQ1. What are the challenges and successes of continuing to scale the FSCS's DLP from K-2 to PreK-4 and beyond?
>
> RQ2. What are the conditions, processes, and supports necessary to continue to scale the FSCS's DLP from K-2 to PreK-4 and beyond?
>
> RQ3. What is the DLP's impact on learning outcomes at the FSCS?

PARTICIPANTS

The participants for Phase I, were the FSCS's administrators, teaching staff, parents or guardians, and students in the DLP. They were invited to participate and given a consent form to sign, ensuring confidentiality. For Phase II, teaching staff, parents, and students from the mainstream program (MP) were also invited to participate in the study. At data collection, the FSCS's parents and families were 63.2% Latinx, 35.5% African American, and 1.3% White, primarily from underserved and low-income backgrounds. Latinx families were primarily immigrants from Central and South America and spoke Spanish as the primary language at home. The teaching staff was 58% White, 20.5% African American, 17% Latinx, and 4.5% Asian/Pacific Islander. A summary of Phase II participant information can be found in Table 2.

TABLE 2
Survey and focus group participant information

Participant	Amount	Program	Lang. Preference
Teachers/Staff/ Administrators	10	DLP	Bilingual
	14	Mainstream	English
	11	Both	English
	35		Total
Parents/Guardians	32	DLP	Spanish
	3	Mainstream	Spanish
	9	DLP	English
	4	Mainstream	English
	48		Total
Students	15	DLP	Spanish
	7	Mainstream	Spanish
	22	DLP	English
	38	Mainstream	English
	82		Total
	165		Overall Total

Lakeland's DLP began in SY 2016-17, with one kindergarten section. In fall 2019, the school added two pre-kindergarten classes and advanced the second graders in the program up to a dual language third-grade class. In fall of 2020, the original DLP cohort advanced into fourth grade. At the end of the fifth-year iteration of the program, in SY 2020-21, the DLP had expanded to sections in prekindergarten, kindergarten, first, second, third, and fourth grade. Lakeland's intention is to continue to advance the program by adding one grade level each year, following the first cohort of students.

The student participants, comprising the data presented in this paper, are the DLP and MP second, third, and fourth-grade students during SY 2020-21, representing the same cohorts of students studied in Phase I of this study. A summary of the Phase II participating students' demographics per cohort can be seen in Table 3. The racial information in absolute values for the students enrolled in the DLP by cohort and academic year can be seen in Table 4.

TABLE 3
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	55%	52%	59%	48%	46%	51%	59%	57%
Race/Ethnicity – Latinx	92%	62%	91%	47%	100%	67%	86%	70%
Race/Ethnicity – White	0%	4%	0%	7%	0%	2%	0%	2%
Race/Ethnicity – Black	8%	32%	9%	42%	0%	29%	14%	25%
Race/Ethnicity – Asian	0%	1%	0%	0%	0%	2%	0%	0%
Race/Ethnicity – Multiracial	0%	2%	0%	4%	0%	0%	0%	3%
Home Language – English	9%	27%	14%	40%	0%	21%	14%	21%
Home Language – Spanish	91%	29%	86%	27%	100%	41%	86%	48%
Limited English Proficiency	74%	36%	64%	21%	86%	38%	73%	47%
Total Students (n)	66	222	21	73	22	63	23	86

TABLE 4
Demographic information of DLP students by cohort and academic year

Cohort/ Race	SY 2019 – 20			SY 2020 – 21		
	African American	Latinx	Total	African American	Latinx	Total
1	2	20	22	2	22	24
2	0	23	23	0	23	23
3	3	20	23	3	22	25

DATA COLLECTION

This study includes qualitative data collected through stakeholder interviews, focus groups, observations, recordings of classes in progress, surveys, and analysis of design and implementation materials (provided by the FSCS) for program documentation, program evaluation, and program scale-up. Phase II presented here includes qualitative data from open-ended questions from staff, parent, and student surveys and teacher focus groups.

Quantitative data gathered from student test scores (baseline data) compared to test scores and outcomes after three years of program implementation, SY 2016-17 through SY 2018-2019 were the focus of Phase I. Further test scores for SY 2019-20 and SY 2020-21 are presented here for Phase II of this study. Quantitative data from student, teacher, and parent surveys were also analyzed, allowing the research team to better determine community perceptions of the program as it scales. Surveys were distributed in SY 2020-21, both online and in-person, with limited access to participants due to COVID-19 and thus reflected as lower response rates.

DATA SOURCES

Data for Phase II, were collected from surveys, focus groups, classroom observations, and student test scores.

Surveys

Were designed and administered to teachers and staff (see Appendix A, B, and C), parents and guardians (see Appendix D, E, F, and G), and third and fourth-grade students (see Appendix H, I, J, and K) participating in the DLP or the MP. The surveys included open-ended questions and rating scale-type items and were available in both English and Spanish. The surveys were rolled out virtually in fall 2020, and in person during spring 2021.

Focus Groups

Were conducted virtually with DLP and MP teaching staff. Focus groups were audio recorded, transcribed, and member-checked. Focus group protocols with pre-established questions were used during focus group sessions (see Appendix L) 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). Broad questions that were less structured were asked first, continuing with more structured questions pertaining to in-depth topics, and ending with a summary question (Morgan, 2019).

Classroom Observations

Observations were conducted initially in kindergarten, first and second grades in SY 2018-19, and observations continued in preschool, third, and fourth grades in the SY 2020-2021. The focus of the observations was on the delivery of the curriculum for the DLP, student-teacher interactions, and student engagement during instruction. Observations were also conducted in the mainstream program homerooms to compare instructional approaches. Observations included a combination of in-depth note-taking and video recording.

Test Scores

Student performance was measured via two different instruments across the two academic school years studied. During SY 2019-20, Cohort 2 (grade 2) and Cohort 3 (grade 1) students completed the DIBELS assessment, which measures students reading skills in Grades K to 8 (University of Oregon, 2018). Students in Cohort 1 (grade 3) completed the iReady Diagnostic reading assessment, which measures student reading ability (including phonological awareness, phonics, high-frequency words, vocabulary, comprehension in literature, and comprehension in informational texts) in Grades K to 8 (Curriculum Associates, 2019). During SY 2020-21, all

students were assessed via the iReady Diagnostic reading assessment. Most students were tested at the beginning (BOY), middle (MOY), and end of the school year (EOY), with some inconsistencies in the regularity of testing due to COVID-19. Student growth was determined by identifying the difference between their EOY and BOY composite test scores, when available. A growth score indicates a student's increase in their reading skills during that school year.

DATA ANALYSIS

In-depth content analysis was used to code and interpret the qualitative data. 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 were 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 conceptual and in vivo codes and subcodes that emerged from the coding process are presented in Table 5 across all stakeholders by data source. The legend to interpret the codes assigned to each data source can be seen in Table 6.

A series of independent sample t-tests were conducted to compare differences in growth scores (i.e., BOY to EOY) for students in the MP and those in the DLP for each Cohort in both SY 2019-2020 and SY 2020-2021. Analyses were conducted using SPSS version 28. Results were interpreted with an alpha level of 0.05 and effect sizes were computed using Cohen's d.

Other quantitative data such as rating scale survey questions were analyzed using simple descriptive and inferential statistics to determine the frequency of response and correlation across items.

TABLE 5
Frequencies for conceptual and in vivo codes across all stakeholders per data source

Code	Subcode	Sub-Subcode	A_M_FG1	A_DL_FG2	P_M_SR	P_DL_SR	A_M_SR	A_DL_SR	A_DLM_SR	Totals
Depth										
	Benefits		9	12	12	44	15	26	32	150
		Strengths	2	1	-	-	-	-	-	3
	Challenges		6	19	-	21	25	18	27	116
		School Culture	1	-	-	-	-	-	-	1
		Relationships	-	-	-	-	-	-	-	0
		Design	2	3	-	-	4	-	-	9
		COVID Instruction	-	-	-	3	3	-	-	6
	No Change		-	-	-	-	4	-	1	5
Ownership										
	Capacity to support DL		2	1	-	-	-	-	-	3
	Benefits		1	-	-	-	-	-	-	1
	Challenges			-	-	-	-	-	-	-
Sustainability										
	Recommendation Program		5	-	-	-	1	-	-	6
	Partnerships		-	-	-	-	-	-	-	0
	Parent Involve		-	1	-	-	-	-	-	1
	Support		1	8	-	-	-	-	-	9
	Benefits		1	-	-	-	-	-	-	1
	Challenges		5	-	-	-	1	-	-	6
Spread										
	History		-	-	-	-	-	-	-	0
	Recommendation DLPS		7	-	-	-	-	-	-	7
	Benefits		7	3	-	-	-	1	-	11
	Challenges		4	1	2	-	4	-	2	13
Bilingualism										
	Benefit		-	-	-	25	-	-	-	25
	Challenges		-	-	-	2	-	4	-	6

TABLE 6 Legend	
Code	**Meaning**
A	Administrator/Teacher/Staff
P	Parent
DL	Dual Language Program
M	Mainstream Program
DLM	Dual Language and Mainstream
FG	Focus Group
SR	Survey Response
En	English
Sp	Spanish

VALIDITY AND RELIABILITY

Issues of qualitative validity were addressed through the triangulation of data sources (teachers, parents, and students), and triangulation of data collection methods used (surveys, 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 focus groups 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 the coding processes. From the negotiation of codes, conceptual codes related to challenges and successes of the DLP (RQ1), and conditions, processes, and supports (RQ2) were determined, utilizing Coburn's reconceptualization of scale, as depth, sustainability, spread, and ownership. Also identified were salient in vivo codes regarding bilingualism, specifically identified as benefits and challenges.

DLP student's learning outcomes (RQ3) were determined from the iReady Diagnostic and DIBLES scores. The iReady Diagnostic and DIBELS assessment measures are 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. Furthermore, according to a technical report published by Good et al. (2004), the DIBELS measure displayed adequate reliability in the .90s. They were also found to predict both oral reading fluency and Woodcock Johnson Total Reading Cluster score more than a year later. The iReady Diagnostic assessment measure has been adopted by many states in the U.S. to report on scale scores, norm-referenced percentiles, and criterion-referenced grade-level placements for students' performance in reading and math. This measure has been validated and is used by teachers to identify each student's strengths and inform if additional instruction is needed in any specific content area and continued to be used during the COVID-19 pandemic to assess learning outcomes (Curriculum Associates, 2022).

FINDINGS

Findings stem from both qualitative and quantitative data collected. The qualitative findings stem from the analysis of the open-ended questions from survey responses from teaching staff, parents, and students, as well as focus groups conducted with teaching staff from both programs. Video recordings and observations of classroom activities also provided qualitative data. The quantitative findings stem from the teaching staff, parents, and students' rating-scale items survey responses, and the analysis of the DIBLES and iReady Diagnostic scores for students in Cohort I, II, and III from the DLP and the Mainstream programs, from SY 2019-2020 and 2020-2021. Findings are presented below by research question.

RQ1. WHAT ARE THE CHALLENGES AND SUCCESSES OF CONTINUING TO SCALE THE FSCS'S DLP FROM K-2 TO PREK-4 AND BEYOND?

Looking at the qualitative data to answer RQ1, the research team found the challenges to scale the DLP from, K-2 to PreK-4 and beyond appeared across all four components of Coburn's reconceptualization of scale. The highest frequency of mentions for Challenges was found in the component of Depth (coding frequency: 116). Other mentions for challenges include Spread (coding frequency: 13), Sustainability (coding frequency: 6), and Ownership (coding frequency: 0), as shown in Table 4. The greatest challenges identified pertained to curriculum design, bilingualism, relationships/school culture, and COVID-19 instruction.

Challenges of Scaling the DLP

Challenges coded as Depth were identified in subcodes pertaining to curriculum design (frequency number: 95), bilingualism (frequency number: 18), relationships/school culture (frequency number: 11), and COVID-19 instruction (frequency number: 8). Each of the subsets for challenges as they related to depth, are descried below with quotes from the participants.

Curriculum Design

Teachers in the Dual Language Program expressed a dire need for more resources so that the curriculum can best meet student needs. Because there is no standardized curriculum, teachers must plan lessons around the district's guidelines to prepare students for state testing.

> *Planning can feel lonely. I have to find PD resources on my own. Our professional network in Baltimore is very small. (A_DL_SR)*
>
> *Lack of resources, attempting to fit DL curriculum into the district's curriculum and meet all of the district and state requirements. Lack of Spanish intervention. (A_DL_SR)*
>
> *It is really nice to have a curriculum that we have established. That would be nice. That goes from K to 4th, so that we can consistently see the growth, grammar rules, and so forth. Versus each individual grade coming up with their curriculum. (A_M_FG1)*

Lack of instructional resources to assist dual language learning can be burdensome to teachers and time-consuming, as teachers must translate for students to ensure that all students are making progress accordingly. Some students fall behind in their comprehension of the material and lose motivation to learn. Parents may express frustration when they are unable to translate schoolwork for their child.

> *There are so many words that do not translate. So, they kind of lose their comprehension portion of literacy activities. (A_DL_FG2)*

> *I get a lot of 'I do not know what to do. I cannot read in English or write in English.' I also think it has something to do with their home. Because I have had parents jumping on the call, saying you know that he does not speak English why are you making them do this. (A_DL_FG2)*

There is concern that students who struggle in the program get left behind and removed from the DLP to the mainstream program. Because the DLP is structured for students to enter in younger grades (e.g., Pre-K and Kindergarten), new students are rarely added to the program. Unfortunately, students who struggled in the DLP were often native English speakers. One teacher admitted:

> *I realize that I was taking away, I was not recommending students, some of those whose first language was not Spanish. (A_DL_FG2)*

Concerns arise as to whether the curriculum is robust and can offer additional support to students who are struggling academically.

> *The program does not include or make room for those who need extra support (AS29_FG1)*

> *I have noticed and seen that students who are struggling have been dismissed from the program. So, it does seem that the program does not include or make room for those who need extra support…Because a student that is struggling should still be able to get the support needed in order to be participating in the dual language program. Just because they might have a particular need or they need an accommodation for, whatever it may be, does not mean that they should be excluded from the program. I feel it should be on the program to give them the support they need so that they can participate. (A_M_FG1)*

However, native Spanish-speaking students also struggle from dwindling language immersion as they advance through grade levels and teachers are forced to teach students in English in preparation for state testing, which is administered in English. Briceño (2021) argued that in such cases, Latinx students' needs are insufficiently met with this DLP structure, as the focus is primarily on English, which provides a greater benefit to English-speaking students than Latinx students. Teachers reported that DLP students often express confusion in ELA in 2nd grade. Confusion can result in low participation, motivation, and self-efficacy among struggling learners.

> *These are bright kids, who would be able to excel in Spanish but because they had not had as much exposure in English reading, now that they are in 2nd grade, I guess they are suffering from low self-esteem. (A_DLP_FG2)*

Furthermore, there is concern with how students may interpret the Dual Language Program. Due to limited accessibility, the DLP may be perceived as an exclusive program, and students can feel inclined to determine the value of their own intelligence on whether they are members of the DLP.

> *I do not want to use the term negative, but it creates a bit of struggle, because the rest of the student's kind of see the dual language class as kind of special or better in a way. (A_M_FG1)*

Bilingualism

Teachers often speculated that parents who are hesitant to enroll their child in the DLP may have misconceptions about bilingual education. Hesitancy coupled with lack of information about the DLP may contribute to some parents believing that their child would become confused learning two languages simultaneously or would compromise proficiency in the child's native language. Some parents may not see the benefit of bilingualism. While, other parents do want their child to be enrolled in the DLP yet fear that they would not be able to help their child with schoolwork because they are not bilingual.

> *Families believe their English skills will deteriorate or they will become confused between languages. Families don't have the time to commit to working with their students at home. Non-Spanish speaking families are worried about how they will support their students if they don't speak the language. Lack of special education in DLP. (A_DLM_SR)*

> *For some English-speaking families, they probably don't see the need for it. For the non-English-speaking ones, they'd rather that their children learn English at school since they don't normally use the language at home. (A_M_SR)*

Relationships/School Culture

Some teachers noted that there is minimal interaction between students in the DLP and students in the mainstream program.

> *The students not in the DLP think of the DLP kids as special, because "they are in the Spanish class" (those are true student words). They are basically not really part of the rest of the grade level because they have special things/classes/ teachers that all the other students don't have. (A_M_SR)*

> *Some students who were previously in the DLP program but have moved to mainstream or vice versa have a difficult time adjusting to a new group of classmates and also miss previous classmates. (A_M_SR)*

Covid-19 Instruction

Instructional time in Spanish diminished during virtual learning, therefore placing native-English speaking students at a disadvantage. Parental involvement was a buffer for struggling students. Highly involved parents supported their children's education by providing instructional supplements at home (e.g., sight words on the wall) to promote language immersion and retention.

Due to COVID-19 and the transition to online learning, students received less language immersion. Some native English-speaking students struggled to adapt to the new mode of instruction.

> *The English speakers are definitely a lot more challenging, because they are no longer immersed in the class where they are hearing me speak Spanish from 8:00am to 3:00pm. They are only hearing me speak Spanish occasionally if they are on their screen from 8:30am to 12:00pm. So, it has been very hard. (A_DL_FG2)*

> *They are not getting as much Spanish as they should be. It is not their fault. They get 2.5 hours virtually; they are not as immersed as they should be. (ASK3_FG2)*

During observation of the 4th grade virtual class, researchers noticed that teachers had to manage large class sizes of about 71-72 students. Managing larger class sizes presented challenges for instructors, as they worked to redirect students' attention to the lesson and ensure student comprehension.

Spread

Teachers and parents provided a rationale for students not participating in the DLP. The most common reason pertained to a lack of awareness about the program. Notably, over 50% of parents of mainstream students indicated that they were not aware of the DLP Lakeland.

> *Unsure of the expectations of the program or are unaware that their child could be in the program. (A_DL_SR)*

Other parents strive to get their children into the DLP but are unable due to limited space in the program.

> *Space available, the unknown if they will be able to support their students learning in English. (A_M_SR)*

Additionally, there is concern that the dual language program may appear to cater mostly to Spanish-speaking students. In our research, we observed a noticeably higher number of Spanish-speaking students enrolled in the dual language program than English-speaking students. This observation can lead to misunderstandings about the target audience for dual language program enrollment. Thus, it is imperative to emphasize that dual language learning benefits all students and is created for all students regardless of background.

> *My first observation was that they taught same lesson as the Mainstream. The teacher taught and spoke Spanish with few words in English. The class was larger than Mainstream. Though I spend significantly lesser time in DLP compared to what time I spend in Mainstream, I noticed the pupil were more Spanish speaking unlike the previous class. (R_DLM_Ob)*

Sustainability

Many teachers advocated for additional support with instructional resources to help maintain the DLP. Instructional resources, such as a final curriculum, would make the DLP more manageable for teachers. Less time would be spent building the curriculum so that teachers can focus more on scaffolding and refining lesson plans as needed. Lack of resources was the most mentioned complaint and barrier to sustainability.

> *I will say that the school needs to do a lot to support the teachers in advance of the program. I think for our program in particular, the huge weight was put on the back of teachers to figure out and make it work. And I do not think that it is necessary to set the teachers or students for success when the teachers have to build as they go. So, if they were to spend more time on the front-end, and get everything figured out first, and then start the program. That would probably be ideal. (A_M_FG1)*

Other barriers to sustainability include DLP structure across grades. Students may receive varying levels of language immersion in particular subjects across grades, which may impact retention as students advance.

> *In terms of being intentional and the difference it looks like in grades, being intentional in what subject continues to carry on. Is it going to be math, science, social studies, when they go from 1st, 2nd, 3rd, 4th? Because that way the students have the opportunity to build the academic language when they are in*

> *1st grade social studies, and they continue to have it when they are in 4th grade social studies; not, we are gonna pick up social studies in the 4th grade. (A_M_FG1)*

Ownership

Due to the newness of the program and limited resources, teachers seem to have difficulties when attempting to take ownership of the DLP.

Successes of Scaling the DLP

The highest frequency of mentions for successes was found in the component of Depth (coding frequency: 150). Other mentions for challenges include Spread (coding frequency: 11), Sustainability (coding frequency: 1), and Ownership (coding frequency: 1).

Successes for Depth pertained to curriculum design (frequency number: 61), bilingualism (frequency number: 56), relationships/school culture (frequency number: 38), and COVID-19 instruction (frequency number: 0). Each of the subsets for successes of depth is listed below in further detail.

Curriculum Design

Students in the DLP have been described as being more enthusiastic, eager to learn, and confident in their abilities. Some DLP teachers speculated that high student engagement may be correlated with her levels of parental involvement.

> *The differences that I see are engagement with families. Students who are part of the DL program have parents who are more so involved than their mainstream peers. (A_DL_SR)*

> *In particular with my grade, K, students attend more classes and parents are more present and engaged in their student's learning. (A_DL_SR)*

Students in the DLP reportedly have stronger English reading skills and are often able to speak English and Spanish without hesitancy. Teachers often commend DLP learners for their studious nature. The DLP helps students gain greater self-confidence in their linguistic and social skills.

> *DLP students are generally more academically advanced in oral and written language skills compared to the non DLP students. (A_DLM_SR)*

Bilingualism

As a result of being in the DLP, students can transition between English and Spanish as needed, easily adapting to social contexts. Teachers observe non-native Spanish speakers get so excited to learn a new language.

> *They can easily switch from English to Spanish or Spanish to English depending on the other student's native tongue. (A_DL_SR)*

> *The most rewarding part of teaching in the DLP is seeing students who do not have family that speak Spanish ask to speak in Spanish. Seeing their interactions with their Spanish speaking classmates, as well as communicating with their teachers using their new language. (A_DL_SR)*

Students also speak their non-native language at home and are eager to share what they learn with their family. Parents notice greater confidence in their child's bilingual abilities. Moreover,

parents are confident that being bilingual will expose their child to greater educational and vocational opportunities.

> *My son expresses himself better with Spanish at home and has learned to let go of fear. (P_DL_SR_Sp)*

Relationships/School Culture

Lakeland is known for promoting cultural awareness and clearly communicating school values (e.g., respect, safety, and support).

> *One of the most rewarding aspects of teaching at Lakeland is working with a program that celebrates the wholeness of Hispanic and Latin culture, emphasizes the value of learning and preserving the Spanish language, and teaches it as an important aspect of academic rigor (not just passively allows Spanish speaking at school). (A_DLM_SR)*

> *Most rewarding is seeing the students embrace their culture and heritage. As someone who was a native Spanish speaker in a mainstream program, I often felt the need to hide my Spanish because it was viewed as other. These students don't see it that way. (A_DLM_SR)*

Students in the DLP tend to forge closer relationships. Students in the DLP also tend to have families that spend time outside of school together.

> *DLP students seem to have stronger bonds with classmates and teachers in the program. Increased confidence in students in DLP. (A_DLM_SR)*

Teachers observe that DLP students generally have parents who are more involved in their child's education. Some teachers believe that students can gain motivation to learn when parents show more interest in their education.

> *The differences that I see are engagement with families. Students who are part of the DL program have parents who are more so involved than their mainstream peers. Similarities are students still show up for school on a daily basis for the most part. (A_DLM_SR)*

Spread

Newcomers in the Dual Language program gain literacy in their native language.

> *I think, you know, being taught in their native language is really powerful. They have the social language and now they are being taught the academic language. And I think it is a really good experience for these students who come into the program either as newcomers or students that are new to the school, can join right into content, they can join right into conversation with their peers and with their teachers. So, I think all of that together makes the program really successful. (A_M_FG1)*

Moreover, the DLP helps minimize issues with integrating newcomers, as they [newcomers] can avoid facing language barriers at Lakeland.

> *I agree with AS30 that it is a beautiful thing to see children, even if they just came into this country, and they can just dive right into that content, and they do not have to worry about language being another barrier that they have to overcome. (A_M_FG1)*

Giving them that underlining foundation of native language by the time they get to second grade they have such a strong understanding of their own language, and the English Language, and the content they are being taught. So, they really just, in second grade, so I think halfway through first grade, that is when they start learning English. So, when they start getting that English in second grade, they took off with content. (A_M_FG1)

Students in the DLP develop strong oral language and writing skills.

Two areas that I think, in addition to the areas that have been mentioned, are their oral language skills, and the Dual Language Program students have such strong oral language skills whether they are confidently speaking in full English sentences or confidently speaking in full sentences in Spanish, that has been a beneficial part of watching our kids grow from such a young age. In addition to that, I have seen their writing skills really flourish. I think that our Dual Language Program teachers have been very intentional about developing their writing skills from early age and I have seen that transferred over to 2nd grade when I am asking them to write in English, they have such a strong foundation of writing in Spanish. (A_M_FG1)

The DLP acknowledges and celebrates Latinx culture and heritage.

I think another benefit is the way the teachers of the Dual Language Program have not only translated the content that they are teaching but they are specifically uplifting and highlighting Spanish examples, like authors, or I do not know. It seems like a very sincere way to celebrate Spanish and Latin culture and heritage. (A_M_FG1)

In addition, non-native Spanish speakers are excelling in the DLP and gaining confidence in their bilingual skills.

It is also very powerful for students without Spanish as their native language. We have some 4th Graders, especially who are excelling in the Dual Language Program who do not come from predominately Spanish-speaking households as well, to allow students to gain that academic experience from a young age. (A_M_FG1)

Parents of students in the DLP usually spread awareness to family and friends about the program.

Sustainability

Parents play a vital role in supporting teachers and student biliteracy at home.

I think virtually, it has been a difficult year so far… I am so thankful that the English speaker parents are so involved a lot in our students' classes. In like, they go above and beyond to put different sight words on the wall, like objects, so that the students can keep practicing them throughout the day. (A_DLP_FG2)

Ownership

Teachers are willing to contribute to the bilingual literature and work together to establish a dual language curriculum with current resources and feedback from other instructors. Teachers become a beacon of support for each other.

I think another benefit is the way the teachers of the Dual Language Program have not only translated the content that they are teaching but they are specifically uplifting and highlighting Spanish. (A_M_FG1)

RQ2. WHAT ARE THE CONDITIONS, PROCESSES, AND SUPPORTS NECESSARY TO CONTINUE TO SCALE THE FSCS'S DLP FROM K-2 TO PREK-4 AND BEYOND?

Research participants proposed many recommendations for scaling the DLP from K-2 to PreK-4 for spread, sustainability, and ownership. For sustainability, there were recommendations (coding frequency: 6) and mentions for support (coding frequency: 9). For spread, there were recommendations (coding frequency: 7) and no mention of support. Lastly, for Ownership, there were no recommendations and few mentions of support (coding frequency: 3).

Conditions, Processes, and Supports to Scale the DLP

Supports for the program were mentioned as required for the sustainability and the ownership of the DLP.

Sustainability

Teachers also highlighted the dire need for a dual language curriculum. A dual language curriculum would provide teachers with needed resources instead of teachers having to find resources on their own. This recommendation includes access to resources that are already translated.

> *I will say that the school needs to do a lot to support the teachers in advance of the program. I think for our program in particular, the huge weight was put on the back of teachers to figure out and make it work. And I do not think that it is necessary to set the teachers or students for success when the teachers have to build as they go. So, if they were to spend more time on the front-end, and get everything figured out first, and then start the program. That would probably be ideal. (A_M_FG1)*

> *It is really nice to have a curriculum that we have established. That would be nice. That goes from K to 4th, so that we can consistently see the growth, grammar rules, and so forth versus each individual grade coming up with their curriculum. That is mapping it up. So that like an album, there is something to refer to, we can say we are on this lesson, and so forth. I think that would be terrific. (A_M_FG1)*

Teachers often highlighted the stressfulness of resource-dispersing for lesson planning. Mental health check-ins for teachers may be helpful, as the school places high standards for the DLP curriculum. Reforming the DLP curriculum design could help minimize teacher burnout.

> *I think Dual Language teachers deserve more prep time. They are creating an entire curricular map in another language and have to translate everything on their own. (A_M_SR)*

> *It is rewarding that the community is so close and teachers care so much about families but Lakeland has really high expectations for teachers. I feel like we are expected to work from sunrise to sunset or we're not doing enough. (A_DLM_SR)*

> *Can lead to burnout when there seems to always be one more thing to add or adjust. I believe in going above and beyond for my community but keeping in check with staff mental health is also very important especially during COVID times. (A_M_SR)*

Ownership

Teachers show ownership of the DLP by taking pride in Latin culture. In turn, students gain greater socio-cultural competence.

Another benefit is the way the teachers of the Dual Language Program have not only translated the content that they are teaching but they are specifically uplifting and highlighting Spanish examples, like authors, or I do not know. It seems like a very sincere way to celebrate Spanish and Latin culture and heritage. [A_M_FG1]

Teachers are willing to translate instructional material despite the difficulties. The academic vocabulary that we use in English does not necessarily translate all the way to Spanish or other languages, not just Spanish. Sometimes I wonder, like the DLP tutors do a really good job to kind of translate anyway. [A_M_FG1]

Teachers take initiative by seeking quality instructional materials that can be easily translated and enhance student learning.

I have literally translated so many books. It is very frustrating. I think that is something I wish I can have, here, the books you need, just like everybody else. They are all in Spanish. Like have fun. Like I feel a lot of my time is spent looking for books and translating books. [A_DL_FG2]

Recommendations for DLP Sustainability and Spread

Recommendations for the program were mentioned as required for the DLP's sustainability and spread by parents and administrators.

Sustainability

To sustain the DLP, some teachers encouraged enrolling students in the DLP at higher grades since the long-term goal is to expand the DLP so that it is available to all students, avoiding the burden of students having to transition between programs.

Something that the school should look into to create a more sustainable program is figuring out ways to continue to add to the group over time… we have such a transient population that we lose some of those students. So, then the roster number is significantly lower than the other classes in the grade. And we might try to plug-in a particular student that could work in the program, but there is nothing in place that can guarantee them to be able to make that transition easily. (A_M_FG1)

Spread

Some teachers encouraged more enrollment for non-native Spanish-speaking students, as the program may seemingly cater more towards Latinx students.

One thing that I would like to see is a little more emphasis on getting more involvement from non-native Spanish speakers because I feel with time to prioritize non-native speakers with the program, and I feel there are a lot of missed opportunities for native speakers' kind of develop in that sense. (A_M_FG1)

A more robust DLP would be more inclusive and can accommodate all student needs including highly gifted students and students with disabilities.

The program should be more inclusive to all students but also have the resources including trained bilingual staff to accommodate students of every ability. (A_DLM_SR)

Parents of DLP students want to be kept abreast of the latest developments of the DLP.

> *Mejor información para padres que sólo hablan el español y les cuesta entender el inglés. (P_DL_SR_Sp)*
> [Better information for parents who only speak Spanish and have trouble understanding English.]

> *Deberíamos tener más información de lo que es el DLP. (P_DL_SR_Sp)*
> [We should have more information about what DLP is.]

Moreover, parents of mainstream students desire more information about the program. Over 50% of parents of mainstream students indicated that they did not have sufficient information about the DLP. Students can gain greater accessibility to the DLP if more information is provided to parents.

Data collected from survey responses from students, parents, and teachers, identified their perception of the program, which if considered could support the continuing scaling of the DLP and insure its sustainability over time.

Student Survey Responses

There was a total of 82 students who responded to the surveys in English (n = 60) and Spanish (n = 22). Of those respondents, 37 students were in the DLP, and 45 were in the mainstream program (MP). Findings are presented below by program attended and language of survey response.

DLP Students

There were similar themes for students who responded to the surveys in both English and Spanish. Contrary to what parents reported, students in the DLP generally agreed that the DLP is a well-known program at Lakeland and that the program maintains a positive reputation within the school. Students reported that they do not speak more Spanish at home because of being in the DLP. However, students agreed that they often learn about other cultures, from both the curriculum and from classmates. Moreover, many agreed students and teachers display mutual respect. Most respondents indicated that they enjoy their classes and understand the importance of attending school daily, and strive to understand complex material. Most DLP students were unsure or did not believe that they learn the same material as their peers in the mainstream program. Over half of the DLP students strongly agreed that the school often keeps parents abreast of their school performance.

Mainstream Program Students

Over half of the MP students who responded in Spanish disagreed that most students know about the DLP offered at Lakeland, yet most respondents agreed that the DLP has a positive reputation at school. Most MP students believed in their ability to learn English and Spanish simultaneously and wished that they could learn Spanish in their classes. Additionally, most MP students believed that they did not learn the same concepts as their DLP peers. Many MP students indicated that they do not learn much about other cultures, nor do they feel valued at school, by peers and teachers. Furthermore, many respondents indicated that they do not enjoy their classes and do not feel that it is important to attend school daily.

However, over half of the MP students who responded in English believe that most students are aware of the DLP and that they learn the same concepts as their DLP peers. Moreover, MP students indicated that they interact with peers in the DLP. Many MP students indicated that they do learn about other cultures, and they feel valued at school, by peers and teachers. Furthermore, many respondents indicated that they enjoy their classes and understand the importance of attending school every day.

Parent Survey Responses

There was a total of 48 parents who responded to the surveys in English (n = 13) and Spanish (n = 35). Of those respondents, 43 parents had children who were enrolled in the DLP, and 5 parents had children who were enrolled in the mainstream program.

Parents with students in the DLP

All parents agreed that the DLP is well-known throughout the school and is positively perceived by many parents. Most parents agreed that their child is more fluent in Spanish after enrolling in the DLP. Moreover, parents increased their commitment to speaking Spanish at home. In addition, parents agreed that parents should have more opportunities to share their ideas about the DLP with school administrators. Overall, parents agreed that they saw improvement in their child's literacy skills in both English and Spanish.

Contrarily, even though fewer parents responded (n=13), most of those who responded in English were either unsure or disagreed that their child speaks better Spanish after enrolling in the DLP. Also, parents did not emphasize commitment to speaking Spanish in the home. Furthermore, some parents admitted that they were enticed to bring their children to Lakeland because of the DLP. They believed that the program would prepare their children to be more successful in their education and career.

Similarly, parents who responded in both English and Spanish agreed that the program emphasizes cultural awareness and respect. Also, parents generally agreed that there is enough information about the DLP. Notably, all parents agreed that they can provide homework assistance and work collaboratively with teachers to receive important information. In addition, parents generally agreed that they should have more opportunities to share their ideas about the DLP with school administrators.

Parents with students in the Mainstream Program

It is important to note that only five parents with students enrolled in the mainstream program responded to the survey. Within this low response rate, there were many similarities between parents who responded in English and those who responded in Spanish. These parents generally disagreed that the DLP is well-known throughout the school and were unsure about the reputation of the program. Most parents admitted that they wanted to enroll their children in the DLP because they believed that the program would prepare their children to be more successful in their education and career. Most parents believed that their child would be able to speak and write in English regardless of their enrollment in the DLP. However, most parents agreed that the program emphasizes cultural awareness.

Furthermore, these parents generally agreed that there is enough information about the DLP and believed that students in the DLP receive more educational resources than students in the mainstream program, and for the most part, did not feel valued among the Lakeland community. All of these parents agreed that they can provide homework assistance and work collaboratively with teachers to receive important information. In addition, they agreed that parents should have more opportunities to share their ideas about the DLP with school administrators.

Teacher Survey Responses

There was a total of 35 teachers who responded to the survey. Of those respondents, 10 were DLP teachers, 14 were mainstream teachers, and 11 were both DLP and mainstream teachers.

DLP teachers

Teachers who taught exclusively in the DLP, generally agreed that the DLP is well-known throughout the school, is positively perceived by many parents, and is accessible to all students.

Most agreed that DLP students outperform their mainstream counterparts and have better attendance rates. In addition, teachers agreed that the program emphasizes socio-cultural awareness. Teachers mostly agreed that it is easy to explain the benefits and challenges to students joining the DLP. Moreover, parents of DLP students generally serve as non-official recruiters for the program. Teachers also observed closer student bonds and more family engagement.

Mainstream Program teachers

Teachers who taught exclusively in the MP, generally agreed that the DLP is well-known throughout the school, is positively perceived by many parents, and is accessible to all students. Teachers generally disagreed that DLP students receive more resources than mainstream students. Mainstream teachers agreed that they often collaborate to adjust curriculums to meet student needs. Most teachers were unsure or disagreed that mainstream students perform at or above their grade level. English appears to be a major barrier to student success. Teachers agreed that the school promotes cultural awareness and respect. Many teachers disagreed that it is easy to explain the benefits and risks of joining the DLP. Furthermore, many disagreed that the school helps students smoothly transition in and out of the DLP.

DLP and Mainstream Program teachers

Teachers who taught in both programs mostly agreed that the DLP is well-known throughout the school and is positively perceived by many parents. However, they generally disagreed that the DLP is accessible to all students. Most agreed that DLP students outperform their mainstream counterparts and have better attendance rates. Teachers were mostly unsure whether DLP students received more resources than mainstream students. In addition, teachers agreed that the program emphasizes socio-cultural awareness. Teachers mostly disagreed that it is easy to explain the benefits and challenges to students joining the DLP. Many teachers were also unsure or disagreed that parents serve as unofficial recruiters for the DLP.

RQ3. WHAT IS THE DLP'S IMPACT ON LEARNING OUTCOMES AT THE FSCS?

In SY 2019-2020, there were no significant differences between MP and DLP students for Cohort 1 or 2, although the DLP students demonstrated more growth than MP students. For Cohort 3, the MP students (71.31) grew significantly more than the DLP students (60.32); $p<0.01$, $d=0.690$ (see Table 7).

TABLE 7
Independent samples t-tests results of comparing differences in growth scores by program for SY 2019-2020

2019 – 2020	MP M (SD) n	DLP M (SD) n	Difference	Cohen's d
Cohort 1 (Grade 3)[a]	21.56 (24.64) n=73	24.70 (30.32) n=20	3.14	0.121
Cohort 2 (Grade 2)[b]	55.35 (9.88) n=63	61.82 (14.20) n=22	6.57	0.590
Cohort 3 (Grade 1)[b]	71.31 (15.44) n=86	60.32 (17.30) n=22	-10.99**	0.690

[a]iReady
[b]DIBELS
*$p<0.05$, **$p<0.01$, ***$p<0.001$

In SY 2020-2021, DLP students in Cohort 1 (108.95) grew significantly more than MP students (99.21); $p<0.05$, $d=0.530$. There was no significant difference for Cohort 2 or Cohort 3 between MP and DLP student growth (see Table 8).

TABLE 8
Independent samples t-tests results of comparing differences in growth scores by program for SY 2020-2021

2019 – 2020	MP M (SD) n	DLP M (SD) n	Difference	Cohen's d
Cohort 1 (Grade 4)[a]	99.21 (17.81) n=66	108.95 (20.06) n=21	9.74*	0.530
Cohort 2 (Grade 3)[a]	108.10 (18.88) n=59	107.75 (18.28) n=20	-0.35	0.019
Cohort 3 (Grade 2)[a]	109.31 (15.65) n=74	110.87 (16.95) n=23	1.56	0.098

[a]iReady
[b]DIBELS
*$p<0.05$, **$p<0.01$, ***$p<0.001$

Due to the change in instruments being used across the years and Cohorts, a combined analysis of Cohorts across the school years is not possible. Additionally, a regression analysis using various demographic variables as predictors (e.g., gender, minority status, home language) was not able to be completed due to the small sample size in each group, which significantly undermined the statistical power of the analysis.

DISCUSSION

DISCUSSION FROM QUALITATIVE FINDINGS

Research suggests that the challenges the DLP program faces regarding its scaling and sustainability relate to program logistics and design, the understanding stakeholders have of bilingualism, aspects related to instruction during the COVID-19 pandemic, and lastly, the overall school culture.

Concerns arise over accessibility for students with special needs. Students requiring additional instructional support are often excluded from or removed from the DLP and sent to the mainstream program. Thus, raising concerns over the rise of implicit biases toward students in the DLP. Students may believe that inclusion into the DLP indicates exceptional intelligence compared to peers in the mainstream program, exacerbating elitist attitudes. Such exclusivity may impact the self-esteem of mainstream students and further augment educational inequity.

Currently, accessibility issues fuel DLP enrollment outcomes and concerns of educational inequity between students in the DLP and mainstream programs. Our research indicated that poor advertisement strategies geared toward reaching the parents of students in the mainstream program may be a contributing factor. The DLP program is not widely advertised to families in Lakeland. Survey results revealed that over 50% of parents in the mainstream program were unaware of the DLP enrollment process. Many teachers affirmed that parents with students in the DLP are "unofficial recruiters" of the DLP program; enrollment into the DLP often occurs through word of mouth to family and friends. Issues of accessibility come to the fore if parents are not adequately informed about the program. Participants' suggestions included enrolling students in the DLP at higher grades to avoid having to transition between programs. Additionally, a greater need to enroll non-native Spanish-speaking students was found, as the program is perceived to cater to Latinx students. Concerns also arose with accessibility for students who were struggling academically and students with disabilities. A more robust DLP would be more inclusive and could accommodate all student needs including gifted students and students with disabilities. Enrollment efforts could include greater outreach to parents of mainstream program students.

Initiatives that address barriers to inclusive education will benefit all students. Kart & Kart (2021) highlights the impact of inclusive education on student well-being: reduced anxiety, intimidation, and bias, and increased tolerance, acceptance, and understanding. Inclusive education can reduce silos and othering among students based on program enrollment. Inclusive learning models core learning values (e.g., respect, understanding, and acceptance) which should be impressed upon all students, regardless of needs and abilities.

Findings showed that there was a dire need for a standardized curriculum. Currently, teachers must source curriculum materials that are robust, offer translations, and align with district guidelines. Unfortunately, this process often led to high burnout. Additionally, a DLP curriculum would provide teachers with needed resources instead of teachers having to find resources on their own, including translated material, as resource-dispersing is often time-consuming and affects efficiency of teachers' planning time (Schnur & Rubio, 2021). Mental health check-ins for teachers may prove helpful, as the school places high standards for the DLP curriculum. Reforming the DLP curriculum design could help minimize teacher burnout.

Furthermore, findings also showed that myths about bilingualism thwarted some families from enrolling students in the DLP. Such hesitancy was often due to a lack of information about the benefits of bilingualism. Other issues identified in the findings pertained to a lack of awareness about the program, limited space available for newcomers, and limited language immersion due to COVID-19. Findings support the need for mentoring efforts for teachers and additional support from educational stakeholders with such a new program. Often, teachers identified shortfalls within the program and instituted solutions. Many teachers felt the brunt

of responsibility for the program's success. Educators could benefit from support sessions that include quality training for teaching multilingual learners and assistance with adequate instructional preparation that meets students' vast needs.

Studies indicate issues about bilingualism include misinformation and unawareness about the benefits of bilingualism. Olivos & Lucero (2018) highlight that some parents are reluctant to enroll their child in a DLP for fear of compromising the child's oral and written proficiency in their native language. Moreover, some parents fear that students may lose their cultural identity and values or that students may become confused while learning two languages simultaneously (Olivos & Lucero, 2018). However, the benefits of child biliteracy far outweigh such misconceptions. Olivos & Lucero (2018) found that parents may opt out of enrolling their child into a DLP due to a general lack of information about bilingual education. When school administrators fail to educate parents about the benefits of bilingual education, parents form opinions about bilingualism based on information provided by family and friends.

COVID-19 online instruction impacted student learning outcomes as there was reduced language immersion and less support for translating instructional materials. Teachers had difficulties teaching Spanish online. Since consistent language immersion is imperative for developing language proficiency, educators could consider additional resources (e.g., language translation technology) which translate instructional materials into the student's home language (Sikes & Villanueva, 2021). At-home learning materials can account for reduced language immersion time due to COVID-19 online learning and support parents in providing practical homework assistance. Additionally, adequate funding to provide pedagogical support beyond the classroom would be beneficial (Hsin et al., 2022).

Ramirez (2022) highlights that solid and supportive relationships foster student academic achievement. Teachers often highlighted the camaraderie among DLP students inside and outside the classroom. Throughout their early childhood career, students forge bonds with cohorts and learn to embrace diversity among peers (Ansari et al., 2018). Furthermore, students' sense of community expands as they play with cohorts outside of school and meet other parents and families. Findings showed that teachers often forged supportive relationships with students in the DLP.

Parents of students in the DLP were found to be generally more engaged in their child's learning, which is important to note as program support as academic success may be influenced by parental commitment. There was generally low attrition, and students tend to become highly successful in the DLP. Students in the DLP were described as being more enthusiastic, eager to learn, and confident in their abilities. Students in the DLP reportedly have stronger English reading skills and are often able to speak English and Spanish without hesitancy. As a result of being in the DLP, students could transition between English and Spanish as needed, easily adapting to social contexts. Students could also speak their non-native language at home and were eager to share what they learned with their families.

Newcomers often succeed academically in DLPs because they do not need to overcome language barriers. Research findings showed that bilingual learners had high academic success upon entering the second grade. By the time students entered the second grade, students generally had equal or above proficiency in English than mainstream program monolingual students. Moreover, upon entering the second grade, native Spanish speakers exhibited increased language proficiency in both English and Spanish. In the primary grades, students are still undergoing the early stages of brain development, allowing them to learn multiple languages effectively (Sikes & Villanueva, 2021). According to the U.S. Department of Education, children who learn a second language before age six are more likely to develop critical thinking skills (Sikes & Villanueva, 2021). Interestingly, native-Spanish speaking MP students reported wanting to be able to learn Spanish and not perceiving themselves as being taught the same content than their DLP peers.

School culture reflected diversity, encouraging attitudes and beliefs that support respect for other cultures within dual language learning. Findings showed that teachers and students often forged supportive long-lasting relationships with each other. Students in the DLP learn to embrace Latinx culture notwithstanding racial and ethnic background. Moreover, dual language learning helps instill pride in students' cultural backgrounds. Students learn to gain more respect and understanding for other cultures. Ansari et al. (2018) argue that students learn to embrace cultural differences, as learning materials and experiences in the classroom reflect the language and culture of the general student population. Moreover, students learn to take pride in their cultural identity. Such pride breeds a culture of acceptance that encourages students to actively participate in their learning experiences.

In summary, findings from the qualitative data suggested that the challenges the program faced regarding its scaling and sustainability over time were related to program logistics and design, the understanding stakeholders have of bilingualism, aspects related to instruction during the COVID-19 pandemic, and lastly the overall school culture. There were concerns about accessibility and equitable education for DLP and MP students, as well as students with disabilities and struggling learners within both programs. Increased mentoring, administrative support, and funding for DLP teachers were mentioned as supports needed for the sustainability of efforts. Moreover, building networks of support would help abate teacher burnout in the absence of a standardized curriculum, and further ownership efforts. Improved DLP advertising to families could help boost participation as well as address misconceptions regarding bilingual education.

DISCUSSION FROM QUANTITATIVE FINDINGS

Student Surveys

There were notable differences in survey responses from DLP and mainstream students. DLP students reported greater enthusiasm and positive perceptions regarding the DLP. Such positive reception surrounding dual language learning may be attributed to higher self-esteem, better social-emotional competence, increased problem-solving abilities, and higher family support (Hsin et al., 2022). Student satisfaction may be linked to greater self-efficacy, as students learn to navigate and overcome academic challenges within the program. Many students understood the importance of education and admittedly persevered through academic challenges by working hard to understand difficult concepts. In addition, DLP students commonly mentioned respect for other cultures, as well as respecting teachers and peers. Students also highlighted parental involvement in their education.

Contrarily, mainstream program students generally had less enthusiasm for their education. Mainstream program students, particularly those who responded in Spanish, generally believed that their DLP peers had access to better and different educational experiences and resources. However, there were differences between mainstream program students who responded to the surveys in Spanish and English. Students who responded in Spanish generally did not feel valued at school and believed that they did not learn much about various cultures. Interestingly, mainstream program students who responded to the survey in English mostly indicated otherwise.

Parent Surveys

Accessibility and knowledge of the benefits of bilingual education were common differences among parents with children in the DLP and parents with children in the mainstream program. Parents of DLP students were generally more aware of the benefits of bilingual education, intending to enroll their child in the program as soon as possible. Common reasons for enrolling students in the program include biliteracy, academic and vocational success, and preparation for higher education. DLP parents were typically more involved in their child's education and were considered "unofficial recruiters" for the program; thus, DLP parents informed other parents about the program, encouraging student enrollment. When educators work with families to

maintain student progress, families are better able to support students' interests, strengths, and academic success (Hsin et al., 2022). We found that Latinx parents felt a greater sense of community through the program and often interacted with other DLP parents outside of school. Overall, both Latinx and non-Latinx parents were generally satisfied with the program and their child's learning progress.

Contrarily, parents of mainstream program students were often unaware of the DLP or the benefits of bilingual education. Some parents were disinclined to enroll their children in the program because they believed that students should be literate in their native language first before learning a foreign language. Research shows that parents who want their children to become bilingual generally understand the benefits of bilingualism (Hsin et al., 2022). Informational sessions provide an opportunity to debunk myths regarding the benefits of bilingualism. Furthermore, some parents refused to enroll their child into the DLP because they were unsure whether they could provide homework assistance. Lack of resources, knowledge, and time were common factors that hindered parents from enrolling their children in the program. Some mainstream program parents were disgruntled with being unable to enroll their children in the program. Findings indicated that Lakeland's DLP recruitment structure hindered accessibility at higher grade levels.

Teacher Surveys

DLP teachers commonly advocated for greater instructional support to minimize burnout due to high program expectations and limited educational resources (e.g., unofficial DLP curriculum). Limited instructional material may be attributed to limited funding and the need for more mentoring and training opportunities. Additionally, DLP teachers are often overwhelmed, as they must adapt dual language instruction to meet district and state curriculum requirements. Mainstream program teachers recognized that DLP teachers struggled with instructional support and were often overwhelmed with instructional planning. In addition, some mainstream teachers believed that DLP teachers should have more time to prepare lessons.

Across programs, teachers recognized the accessibility issues within the DLP. Some mainstream program teachers believed that the DLP should foster greater inclusivity and train bilingual staff to accommodate students with various learning needs. Kart & Kart (2021) found that inclusion positively impacts academic achievement more so in earlier grades than in later grades. Moreover, inclusion helps students with disabilities gain greater social competence amongst peers—reduced fear and prejudice, and increased tolerance and respect (Kart & Kart, 2021). Across programs, teachers believed that all students could benefit from the program, as DLP students show higher academic achievement and experience significant gains in literacy and fluency in both English and Spanish.

Test Scores

The findings from SY 2020-2021 indicate that even during virtual learning caused by COVID-19, the students in the DLP program did not regress in learning when compared to the MP students. Specifically, Cohort 1 DLP students demonstrated more growth than their MP counterparts. These findings closely align with those from older, large-scale longitudinal studies conducted on dual language programs (Collier & Thomas, 2004). Additionally, even though Cohort 3 MP students were outperforming the DLP students in the previous year, during SY 2020-2021, the DLP students improved their performance to be at a statistically similar level to their MP peers. As such, the DLP demonstrates a positive impact on student learning during virtual schooling by either improving their performance to outperform their MP peers or to minimize previous differences such that their performance is statistically similar to the performance of students in the mainstream program.

These findings point to the DLP continuing to be a program with encouraging potential for promoting dual language proficiency and overall academic success even during virtual learning due to the COVID-19 pandemic.

LIMITATIONS

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 in the Sherman Center Research Report No. 1 for Phase I of this study (Mata-McMahon, et al., 2020) continue to impact the current selection for new DLP cohorts. Similarly, to Phase I findings, the growth observed in the Dibbles and iReady scores may have been reduced if the students enrolled in the program included a wider range of reading levels at entry.

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, under 25 students per cohort. 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.

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, as well as emphasized the constraints afforded to researchers, resulting in limited access to teachers, students, and parents. In this way, the findings in this report provide early indication of possible positive long-term outcomes yet need to be further studied beyond these limitations.

RECOMMENDATIONS

Notwithstanding the challenges and limitations of the study, the research team found the following considerations proposed as recommendations to amend and strengthen the DLP. Recommendations mainly seek to nurture greater equity in DLP enrollment practices, establish robust curricula, and develop deeper parental engagement.

ENROLLMENT

Enrollment recommendations support improved recruitment processes to foster greater equity and inclusivity. Revamped recruitment processes can help minimize selection bias and increase accessibility for non-native Spanish speakers or non-Latinx students and students with disabilities. The program should be responsive to students of all racial backgrounds and intellectual abilities. Additionally, educators can place greater efforts in promoting bilingualism among African American students through equitable recruitment efforts. To increase program access, recruiters should develop creative and consistent practices to ensure parents know that the DLP exists and are aware of the recruitment and enrollment procedures. Howard et al. (2018) urge school administrators and district-level leadership to monitor enrollment practices to ensure enrollment procedures align with the program's mission and goals. Taking into account these recommendations in expanding accessibility to all students aligns with the school's mission to empower diverse learners. Promoting students to continue fostering greater respect for their school community's cultural, intellectual, and linguistic diversity.

Brooks et al. (2010) encourage dual language educators to build a network of instructional leadership to create inclusive learning environments for dual language learners effectively. The network of instructional leadership comprises school administrators, teachers, curriculum specialists, school office personnel, district leadership, and community members. Network

members are responsible for holding each other accountable for supporting dual language learners (Brooks et al., 2010) an could provide a way for Lakeland to improve their DLP's enrollment and recruitment criteria and strategies.

New approaches to enrollment in the DLP can help address barriers to inclusive education that will benefit all students. Kart & Kart (2021) highlights the impact inclusive education (enrolling students of different developmental abilities in the same class) can have on student well-being: reduced anxiety, intimidation, and bias, and increased tolerance, acceptance, and understanding. Inclusive education can reduce silos and othering among students based on program enrollment. Inclusive learning models core learning values (e.g., respect, understanding, and acceptance) which should be impressed upon all students, regardless of needs and abilities.

Findings also suggest inviting newcomers into the DLP at higher grade levels. Currently, students enter the program at lower grade levels. However, lifting grade-level exclusions will help expand accessibility efforts.

CURRICULUM

Recommendations also pertain to curriculum development and support. Teachers commonly shared the desire for a dual language program that offers instructional materials in Spanish. Additionally, instructional materials that include translations will assist teachers and minimize teacher burnout. In conjunction with classroom materials, research also supports at-home materials to supplement student learning, such as lending library initiatives (Hsin et al., 2022). Lending libraries can include translated reading materials.

Expanding access helps prevent silos between students in the mainstream and dual language programs. Moreover, expanding access to bilingual education may include learning management systems that students can access on the school's intranet to play fun educational games that both challenge students and promote learning. Therefore, learning can occur outside of the classroom. Furthermore, incorporating a lending library can help encourage socio-cultural awareness while promoting bilingual initiatives for all students. While such initiatives would require more funding and resources, there is an opportunity for administrators, parents, teachers, students, community members, and other stakeholders to come together and advocate for greater monetary support to help Lakeland build upon DLP initiatives.

PARENTAL ENGAGEMENT

Maintaining contact and open communication with parents helps foster greater parental engagement with the DLP. Our research indicated that students with highly involved and engaged families tend to perform better academically. Moreover, research suggests that schools can support parents at home by keeping families abreast of their student's academic progress and providing scaffolds to support dual language learning. Educators suggest learning activities and materials at home. Examples include book selections, allowing children to utilize their bilingual skills to create their books in their home language with translations.

Lakeland can continue utilizing varied modes of communication to maintain contact with parents in their preferred language to keep them aware of the latest program developments. However, Lakeland can strengthen parental engagement by forging partnerships with parents. Allowing parents to play a greater role in the program may help nurture students' skills, curiosities, and sense of identity, further nurturing healthy socio-cultural development and academic success. Therefore, Lakeland can invite families of various cultural backgrounds to the classroom to lead or be part of cultural awareness activities in their native language as well as design activities within the school to enhance the linguistic and cultural richness of this population.

In summary, for sustaining the implementation of the DLP in Lakeland and beyond, we recognize the presence of many external constraints, including continuous funding, teachers' preparation, and the motivation and engagement of families. To overcome these constraints, Lakeland could

ensure that the program continues to receive funding and support from the district. Furthermore, teacher professional development needs to be strengthened to expand the offering of educators prepared to work with linguistically diverse students. Finally, families should continue to be engaged in the teaching/learning process and continue to serve as ambassadors for the program within their communities.

CONCLUSIONS

The evaluation of the DLP at Lakeland 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 community's needs. This study is of particular importance since this initiative came from 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, promoting bilingualism and its known benefits (Benson, 2002; Marian & Shook, 2012) for all students. The African American families and students in the DLP have different needs than the Latinx families and students, regarding language, culture, and historic characteristics. Thus, balancing equity concerns with resources, curricula, enrollment, and overall school culture is an ongoing endeavor for both families and staff.

Recognizing that there are external constraints for program sustainability, such as funding, and bilingual teacher shortage, this study highlights the impact the DLP has had in Lakeland's community, the learning outcomes of the participating students, and the possibilities inherent in the growth of the program as it expands to include new cohorts. Further research is recommended to expand on the findings presented here as the program scales over time.

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 on 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 participating cohorts, as well as from the teachers developing new practices reflected in curricula and intergenerational program design, this FSCS has the potential to provide a way forward for schools with similar populations in Baltimore City and beyond.

REFERENCES

Ansari, S., Fehrer, K., Tognozzi, N. (2018). Transforming Early Childhood Education for Dual Language Learners: A Theory of Change. In John W. Gardner Center for Youth and Their Communities. John W. Gardner Center for Youth and Their Communities.

August, D., Goldenberg, C. & Rueda, R. (2010). Restrictive state language policies: Are they scientifically based? In P. Gandara & M. Hopkins (Eds.), Forbidden languages: English learners and restrictive language policies. New York: Teachers College Press.

Baltimore City Public Schools (2022). City Schools at a Glance. Retrieved from https://www.baltimorecityschools.org/district-overview

Baltimore City Public Schools (2019). Lakeland Elementary/Middle School, School Profile - Fall 2019. Retrieved from https://www.baltimorecityschools.org/schools/12

Benson, C. J. (2002). Real and potential benefits of bilingual programmes in developing countries. International Journal of Bilingual Education and Bilingualism, 5(6), 303-317. DOI: https://doi.org/10.1080/13670050208667764

Brooks, K., Adams, S. R., & Morita-Mullaney, T. (2010). Creating Inclusive Learning Communities for ELL Students: Transforming School Principals' Perspectives. Theory Into Practice, 49(2), 145-151. DOI: https://doi.org/10.1080/00405841003641501

Charmaz, K. (2006). Constructing Grounded Theory: A practical guide through qualitative analysis. Thousand Oaks, CA: Sage

Coburn, C. E. (2003). Rethinking Scale: Moving beyond numbers to deep and lasting change. Educational Researcher, 32(6), 3-12. DOI: https://doi.org/10.3102/0013189X032006003

Collier, V. P., & Thomas, W. P. (2004). The astounding effectiveness of dual language education for all. NABE Journal of Research and practice, 2(1), 1-20.

Creswell, J. W. (2007). Qualitative Inquiry and Research Design: Choosing among five approaches (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Curriculum Associates. (2022). i-READY The State of Student Learning in 2022 (Annual Report). North Billerica, MA.

Curriculum Associates. (2019). iReady: Proven to work (Technical Report). North Billerica, MA: Author.

Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. Implementation science, 4(1), 1-15. DOI: 10.1186/1748-5908-4-50

Good, R. H., Kaminski, R. A., Shinn, M., Bratten, J., Shinn, M., Laimon, D., Smith, S., & Flindt, N. (2004). Technical Adequacy of DIBELS: Results of the Early Childhood Research Institute on measuring growth and development (Technical Report, No. 7). Eugene, OR: University of Oregon.

Halle, T., Metz, A., & Martinez-Beck, I. (Eds.). (2013). Applying implementation science in early childhood programs and systems (pp. 1-18). Baltimore, MD: Paul H. Brookes Publishing Company.

Hatch, J. A. (2002). Doing Qualitative Research in Education Settings. Albany, NY: State University of New York Press.

Howard, E. R., Lindholm-Leary, K. J., Rogers, D., Olague, N., Medina, J., Kennedy, B., Sugarman, J., & Christian, D. (2018). Guiding Principles for Dual Language Education (3rd ed.). Washington, DC: Center for Applied Linguistics.

Hsin, L., White, L., Anthony, J., Brodziak de los Reyes, I., Holtzman, D., Martin, A., and Quick, H. (2022). Research brief: Engaging dual language learner families in their children's early education.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. Educational Researcher, 33(7), 14-26.

Kart, A., & Kart, M. (2021). Academic and Social Effects of Inclusion on Students without Disabilities: A Review of the Literature. Education Sciences, 11(1), 16. https://doi.org/10.3390/educsci11010016

Krueger, R. A., & Casey, M. A. (2015). Focus Groups: A Practical Guide for Applied Research (5th ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Lavrakas, P. J. (ed.) (2008). Encyclopedia of Survey Research Methods. Thousand Oaks, CA: Sage Publications, Inc.

Marian, V., & Shook, A. (2012, September). The cognitive benefits of being bilingual. In Cerebrum: The Dana forum on brain science (Vol. 2012). Dana Foundation.

Mata-McMahon, J., Burggraf Bassett, L., Salas, A. G., and Michael, J. L. (August 2020). Lakeland Dual Language Program Study AY 2016-17 to AY 2018-19 Sherman Center Research Report No 1. Sherman Center for Early Learning in Urban Communities. Baltimore, MD: UMBC.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). Qualitative Data Analysis: A Methods Sourcebook. (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Morgan, D. L. (2019). Basic and Advances Focus Groups. Thousand Oaks, CA: SAGE Publications, Inc.

Olivos, E. M., & Lucero, A. (2018). Latino parents in dual language immersion programs: why are they so satisfied? International Journal of Bilingual Education and Bilingualism, 23:10, 1211-1224, DOI: 10.1080/13670050.2018.1436520

Portes, A., & Rumbaut, R. G. (2001). Legacies: The Story of the Immigrant Second Generation (First ed.). Oakland, CA: University of California Press.

Ramírez, P. C. (2022). Reframing dual language education in the U.S. International Journal of Bilingual Education and Bilingualism, 1-5. DOI: 10.1080/13670050.2022.2087469

Rymes, B., & Anderson, K. (2004). Second Language Acquisition for All: Understanding the Interactional Dynamic of Classrooms in which Spanish and AAE are spoken. Research in the Teaching of English, 39(2), pp. 107-135.

Schnur, E., & Rubio, F. (2021). Lexical complexity, writing proficiency and task effects in Spanish Dual Language Immersion. Language Learning & Technology, 25(1), 53-72.

Sikes, C. L., Villanueva, C. K. (2021). Creating a More Bilingual Texas: A Closer Look at Bilingual Education in the Lone Star State. In Every Texan. Every Texan.

Steele, J. L., Slater, R. O., Li, J., Zamarro, G., Miller, T., & Bacon, M. (2018). Dual-Language Immersion Education at Scale: An Analysis of Program Costs, Mechanisms, and Moderators. Educational Evaluation and Policy Analysis, 40(3), 420–445. https://doi.org/10.3102/0162373718779457

Strauss, A., & Corbin, J. (1998). Basics of Qualitative Research: Techniques and procedures for developing grounded theory (2nd ed.). Thousand Oaks, CA: Sage.

Umansky, I. M., Valentino, R. A., & Reardon, S. F. (2015). The Promise of Bilingual and Dual Immersion Education. CEPA Working Paper No. 15-11. Stanford Center for Education Policy Analysis. Retrieved from http://cepa.stanford.edu/wp15-11

University of Oregon, Center on Teaching and Learning (2018). Understanding the research behind DIBELS® 8th Edition (Technical Report 1801). Eugene, OR: Author.

APPENDICES

APPENDIX A – SURVEY DLP STAFF

No.	Statement	SD	D	U	A	SA
FOR STAFF IN THE DUAL LANGUAGE PROGRAM (DLP)						
SD=Strongly Disagree; D=Disagree; U=Undecided; A=Agree; SA=Strongly Agree						
	Perceptions of the Dual Language Program (DLP)					
1.	There is a wide knowledge of the DLP throughout the school.	1	2	3	4	5
2.	There is a positive impression of the DLP throughout the school.	1	2	3	4	5
3.	The DLP seems like it is open to everyone to participate in.	1	2	3	4	5
	Student Outcomes in the DLP					
4.	Students in the DLP serve as translators among peers and between peers and instructors.	1	2	3	4	5
5.	DLP students outperform their mainstream section peers on standardized tests.	1	2	3	4	5
6.	Staff in the DLP work closely together to adjust curriculum to fit student needs.	1	2	3	4	5
7.	DLP students outperform their mainstream section peers on summative curricular assessments.	1	2	3	4	5
8.	DLP students have better rates of attendance than their mainstream section peers.	1	2	3	4	5
9.	The DLP incorporates cultures of the families in the program along with English and Spanish instruction.	1	2	3	4	5
10.	Learning in two languages opens up discussions about language use and all language forms, including different forms of Spanish and English are celebrated.	1	2	3	4	5
	School Culture at Lakeland Elementary/Middle School					
11.	The DLP incorporates cultures of the families in the program along with English and Spanish instruction.	1	2	3	4	5
12.	Lakeland Elementary/Middle School celebrates the cultures of all its families.	1	2	3	4	5
13.	Community values are clear in terms of respect, communication, safety and support with all members of the Lakeland Elementary/Middle School community.	1	2	3	4	5

No.	Statement	SD	D	U	A	SA
	Systems in the DLP					
14.	Lakeland Elementary and the DLP have clear systems of communication with parents and guardians.	1	2	3	4	5
15.	There is enough time and resources for professional development for DLP teachers.	1	2	3	4	5
16.	Administrators work collaboratively with the staff in the DLP.	1	2	3	4	5
	Growth of the DLP					
17.	Students who have been in the program for several years are seeing significant gains in literacy and fluency in both English and Spanish.	1	2	3	4	5
18.	It is easy to explain to potential families what the benefits and risks are of joining the DLP.	1	2	3	4	5
19.	Siblings of students in the DLP now participate in the program as well.	1	2	3	4	5
20.	Current parents serve as unofficial recruiters for the program.	1	2	3	4	5

Open-Ended Questions

When applicable, think about and respond to the following questions given the recent modifications to instruction as a result of the COVID-19 pandemic:

1. What reasons do you think families have for not choosing to participate in the DLP?

2. What are some differences and similarities you notice between students in the DLP and students in the other sections of pre-kindergarten through third grade?

3. What have you noticed about interactions between students in the DLP and students outside of the DLP?

4. What are the most rewarding and most challenging aspects of teaching in the DLP?

5. Would you like to explain any of your survey answers (where you chose a number between 1-5) in more detail? Perhaps, expand on why you chose your selected response.

APPENDIX B – SURVEY DLP AND MAINSTREAM STAFF

No.	Statement	SD	D	U	A	SA
FOR STAFF WORKING WITH DUAL LANGUAGE PROGRAM AND MAINSTREAM PROGRAM STUDENTS						
SD=Strongly Disagree; D=Disagree; U=Undecided; A=Agree; SA=Strongly Agree						
	Perceptions of the Dual Language Program (DLP)					
1.	There is a wide knowledge of the DLP throughout the school.	1	2	3	4	5
2.	There is a positive impression of the DLP throughout the school.	1	2	3	4	5
3.	The DLP seems like it is open to everyone to participate in.	1	2	3	4	5
4.	Students in the DLP get more resources than students in mainstream classrooms.	1	2	3	4	5
	Student Outcomes in the DLP					
5.	Students in the DLP serve as translators among peers and between peers and instructors.	1	2	3	4	5
6.	Students in the DLP are able to code switch (change languages and modes of language) more easily than their peers in mainstream sections.	1	2	3	4	5
7.	Students in the DLP serve as translators among peers and between peers and instructors.	1	2	3	4	5
8.	DLP students have better rates of attendance than their mainstream section peers.	1	2	3	4	5
9.	Learning in two languages opens up discussions about language use and all language forms, including different forms of Spanish and English, are celebrated.	1	2	3	4	5
10.	Lakeland Elementary/Middle School has enough ESOL/TESOL supports.	1	2	3	4	5
	School Culture at Lakeland Elementary/Middle School					
11.	Classroom instruction at Lakeland Elementary/Middle School incorporates cultures of the families in the community.	1	2	3	4	5
12.	School events at Lakeland Elementary/Middle School incorporate all cultures of the families in the community.	1	2	3	4	5
13.	Community values are clear in terms of respect, communication, safety and support with all members of the Lakeland Elementary/Middle School community.	1	2	3	4	5

No.	Statement	SD	D	U	A	SA
	Systems in the Pre-K Through Third Grades					
14.	Administrators and staff have clear systems of communication with parents and guardians.	1	2	3	4	5
15.	There is enough time and resources for professional development for teachers and staff.	1	2	3	4	5
16.	Administrators work collaboratively with staff.	1	2	3	4	5
17.	Grade teams and DLP staff and specials teachers have time to check in with each other about program updates and student growth.	1	2	3	4	5
	Growth of the DLP					
18.	It is easy for all staff to explain to potential families what the benefits and risks are of joining the DLP.	1	2	3	4	5
19.	Current parents serve as unofficial recruiters for the program.	1	2	3	4	5
20.	Students who have been in the program for several years are seeing significant gains in literacy and fluency in both English and Spanish.	1	2	3	4	5

Open-Ended Questions

When applicable, think about and respond to the following questions given the recent modifications to instruction as a result of the COVID-19 pandemic:

1. What reasons do you think families have for not choosing to participate in the DLP?

2. What are some similarities and contrasts you notice between students in the DLP and students in the other sections of pre-kindergarten through third grade?

3. What have you noticed about interactions between students in the DLP and students outside of the DLP?

4. What communication strategies do you use as a staff person at a multi-lingual school (with families, co-workers and students)?

5. What are the most rewarding and most challenging aspects of teaching at Lakeland Elementary?

6. Would you like to explain any of your survey answers (where you chose a number between 1-5) in more detail? Perhaps, expand on why you chose your selected response.

APPENDIX C – SURVEY MAINSTREAM STAFF

No.	Statement	SD	D	U	A	SA
	FOR STAFF IN THE MAINSTREAM PROGRAM					
	SD=Strongly Disagree; D=Disagree; U=Undecided; A=Agree; SA=Strongly Agree					
	Perceptions of the Dual Language Program (DLP)					
1.	There is a wide knowledge of the DLP throughout the school.	1	2	3	4	5
2.	There is a positive impression of the DLP throughout the school.	1	2	3	4	5
3.	The DLP seems like it is open to everyone to participate in.	1	2	3	4	5
4.	Students in the DLP get more resources than students in mainstream classrooms.	1	2	3	4	5
5.	Teachers in the DLP get more resources than teachers in mainstream classrooms.	1	2	3	4	5
	Student Outcomes in Pre-K Through Third Grade					
6.	Teachers in mainstream classrooms work closely together to adjust curriculum to fit student needs.	1	2	3	4	5
7.	Student outcomes are frequently compared between students in mainstream classrooms and students in the DLP.	1	2	3	4	5
8.	On average, students in the mainstream program are at or above grade level in core subjects.	1	2	3	4	5
9.	English language acquisition is a barrier, for some students, to academic success.	1	2	3	4	5
10.	Lakeland Elementary/Middle School has enough ESOL/TESOL supports.	1	2	3	4	5
	School Culture at Lakeland Elementary/Middle School					
11.	Classroom instruction at Lakeland Elementary/Middle School incorporates cultures of the families in the community.	1	2	3	4	5
12.	School events, at Lakeland Elementary/Middle School, incorporate cultures of all the families in the community.	1	2	3	4	5
13.	Community values are clear in terms of respect, communication, safety and support with all members of the Lakeland Elementary/Middle School community.	1	2	3	4	5

No.	Statement	SD	D	U	A	SA
	Systems in the Pre-K Through Third Grades					
14.	Administrators and staff have clear systems of communication with parents and guardians.	1	2	3	4	5
15.	There is enough time and resources for professional development for teachers and staff.	1	2	3	4	5
16.	Administrators work collaboratively with staff.	1	2	3	4	5
17.	Grade teams frequently meet and plan together.	1	2	3	4	5
	Growth of the DLP					
18.	It is easy for all staff to explain to potential families what the benefits and risks are of joining the DLP.	1	2	3	4	5
19.	Current parents serve as unofficial recruiters for the program.	1	2	3	4	5
20.	There are smooth transitions for students who move in and out of the DLP.	1	2	3	4	5

Open-Ended Questions

When applicable, think about and respond to the following questions given the recent modifications to instruction as a result of the COVID-19 pandemic:

1. What reasons do you think families have for not choosing to participate in the DLP?

2. What are some similarities and differences you notice between students in the DLP and students in the other sections of pre-kindergarten through third grade?

3. What have you noticed about interactions between students in the DLP and students outside of the DLP?

4. What are the most rewarding and most challenging aspects of teaching at Lakeland Elementary?

5. Would you like to explain any of your survey answers (where you chose a number between 1-5) in more detail? Perhaps, expand on why you chose your selected response.

APPENDIX D - SURVEY DLP PARENTS_ENGLISH

	FOR PARENTS AND GUARDIANS OF STUDENTS IN THE DUAL LANGUAGE PROGRAM (DLP)					
	SD=Strongly Disagree; D=Disagree; U=Undecided; A=Agree; SA=Strongly Agree					
No.	Statement	SD	D	U	A	SA
	Perceptions of the Dual Language Program (DLP)					
1.	There is a wide knowledge of the DLP throughout the school.	1	2	3	4	5
2.	There is a positive impression of the DLP throughout the school.	1	2	3	4	5
3.	My child/ren is better able to speak in Spanish to members of our family and community since joining the DLP.	1	2	3	4	5
4.	Our family has made a commitment to increasing our use of Spanish at home.	1	2	3	4	5
5.	I appreciate that my child is able to learn with and from students of another cultures.	1	2	3	4	5
6.	There is enough information available about the DLP for parents and guardians.	1	2	3	4	5
7.	Students in the DLP score better on tests and assignments than students in the mainstream program.	1	2	3	4	5
	School Culture at Lakeland Elementary/Middle School					
8.	The DLP incorporates cultures of the families in the program along with English and Spanish instruction.	1	2	3	4	5
9.	I feel like I am a part of the Lakeland community.	1	2	3	4	5
10.	School events, at Lakeland Elementary/Middle School, incorporate cultures of all the families in the community.	1	2	3	4	5
11.	Community values are clear in terms of respect, communication, safety and support with all members of the Lakeland Elementary/Middle School community.	1	2	3	4	5
12.	There are clear systems in place for the school to communicate with parents and guardians.	1	2	3	4	5
13.	My culture is celebrated at Lakeland Elementary School.	1	2	3	4	5

No.	Statement	SD	D	U	A	SA
	Participating in the DLP					
14.	I am able to help with my child's homework.	1	2	3	4	5
15.	It is easy to get the information I need from teachers.	1	2	3	4	5
16.	There are differences between "school Spanish" and "home Spanish."	1	2	3	4	5
	Growth of the DLP					
17.	It is easy to explain to potential families what the benefits and risks are of joining the DLP.	1	2	3	4	5
18.	Siblings of students in the DLP now participate in the program as well.	1	2	3	4	5
19.	Students who have been in the program for several years are seeing significant gains in literacy and fluency in both English and Spanish.	1	2	3	4	5
20.	I intend to have my child participate in the DLP throughout their time at Lakeland Elementary/Middle School.	1	2	3	4	5

Open-Ended Questions

1. Have there been any unexpected benefits or successes for your child in the DLP?

2. What frustrations and challenges have you faced in participating in the DLP?

3. What are your expectations for your child upon completing the DLP?

4. Would you like to explain any of your survey answers (where you chose a number between 1-5) in more detail?

APPENDIX E – SURVEY DLP PARENTS_SPANISH

	PARA PADRES Y REPRESENTANTES DE ESTUDIANTES EN EL PROGRAMA DE EDUCACIÓN BILINGÜE (PEB)					
	TD=Totalmente en Descuerdo; D=Descuerdo; NAD=Ni de Acuerdo Ni en Desacuerdo; A=Acuerdo; TA=Totalmente De Acuerdo					
Nu.	Declaración	TD	D	NAD	A	TA
	Percepciones del programa de educación bilingüe (PEB)					
1.	Hay un amplio conocimiento del PEB en toda la escuela.	1	2	3	4	5
2.	Hay una impresión positiva del PEB en toda la escuela.	1	2	3	4	5
3.	Mis hijos pueden hablar mejor en español a los miembros de nuestra familia y comunidad desde que se unieron al PEB.	1	2	3	4	5
4.	Nuestra familia se ha comprometido a aumentar nuestro uso del inglés en casa.	1	2	3	4	5
5.	Aprecio que mi hijo pueda aprender con y de estudiantes de otras culturas.	1	2	3	4	5
6.	Hay suficiente información disponible sobre el PEB para padres y tutores.	1	2	3	4	5
7.	Los estudiantes en el PEB obtienen mejores resultados en las pruebas y tareas que los estudiantes en el programa en inglés.	1	2	3	4	5
	Cultura escolar en Lakeland Elementary / Middle School					
8.	El PEB incorpora estudios de las culturas de las familias en el programa junto con instrucción en inglés y español.	1	2	3	4	5
9.	Siento que soy parte de la comunidad de Lakeland.	1	2	3	4	5
10.	Los eventos escolares en Lakeland Elementary / Middle School incorporan culturas de las familias en la comunidad.	1	2	3	4	5
11.	Los valores de la comunidad son claros en términos de respeto, comunicación, seguridad y apoyo con todos los miembros de la comunidad de Lakeland Elementary / Middle School.	1	2	3	4	5
12.	Existen sistemas claros para que la escuela se comunique con los padres y representantes.	1	2	3	4	5
13.	Mi cultura se celebra en la escuela primaria Lakeland.	1	2	3	4	5

Nu.	Declaración	TD	D	NAD	A	TA
	Participando en el PEB					
14.	Puedo ayudar con la tarea de mi hijo.	1	2	3	4	5
15.	Es fácil obtener la información que necesito de los maestros.	1	2	3	4	5
16.	Hay diferencias entre el "español escolar" y el "español en casa".	1	2	3	4	5
	Crecimiento del PEB					
17.	Es fácil explicar a las familias potenciales cuáles son los beneficios y los riesgos de unirse al PEB.	1	2	3	4	5
18.	Los hermanos de estudiantes en el PEB ahora también participan en el programa.	1	2	3	4	5
19.	Los estudiantes que han estado en el programa durante varios años están viendo avances significativos en alfabetización y fluidez tanto en inglés como en español.	1	2	3	4	5
20.	Tengo la intención de que mi hijo participe en el PEB durante todo su tiempo estudiando en Lakeland Elementary / Middle School.	1	2	3	4	5

Preguntas abiertas

1. ¿Ha habido algún beneficio o éxito inesperado para su hijo en el PEB?

2. ¿Qué frustraciones y desafíos ha enfrentado al participar en el PEB?

3. ¿Cuáles son sus expectativas para su hijo al completar el PEB?

4. ¿Le gustaría explicar con más detalle cualquiera de sus respuestas de la encuesta (donde eligió un número entre 1-5)?

APPENDIX F – SURVEY MAINSTREAM PARENTS_ENGLISH

	FOR PARENTS AND GUARDIANS OF STUDENTS IN THE MAINSTREAM PROGRAM					
	SD=Strongly Disagree; D=Disagree; U=Undecided; A=Agree; SA=Strongly Agree					
No.	Statement	SD	D	U	A	SA
	Perceptions of the Dual Language Program (DLP)					
1.	There is a wide knowledge of the DLP throughout the school.	1	2	3	4	5
2.	There is a positive impression of the DLP throughout the school.	1	2	3	4	5
3.	My child would not be able to speak and read in English well enough if they participated in the DLP.	1	2	3	4	5
4.	My child would not be able to learn English fast enough if they participated in the DLP.	1	2	3	4	5
5.	My child has no need to learn Spanish.	1	2	3	4	5
6.	There is enough information available about the DLP for parents and guardians.	1	2	3	4	5
7.	Students in the DLP get more resources than students in mainstream classrooms.	1	2	3	4	5
	School Culture at Lakeland Elementary/Middle School					
8.	Classroom instruction at Lakeland Elementary/ Middle School incorporates cultures of the families in the community.	1	2	3	4	5
9.	I feel like I am a part of the Lakeland community.	1	2	3	4	5
10.	School events, at Lakeland Elementary/Middle School, incorporate cultures of all the families in the community.	1	2	3	4	5
11.	Community values are clear in terms of respect, communication, safety and support with all members of the Lakeland Elementary/Middle School community.	1	2	3	4	5
12.	My culture is celebrated at Lakeland Elementary/ Middle School.	1	2	3	4	5
13.	There are clear systems in place for the school to communicate with parents and guardians.	1	2	3	4	5

No.	Statement	SD	D	U	A	SA
	Participating in My Child's Education					
14.	I am able to help with my child's homework.	1	2	3	4	5
15.	It is easy to get the information I need from teachers.	1	2	3	4	5
16.	I have heard about Spanish and English classes offered by the school for parents.	1	2	3	4	5
17.	I take advantage of community programs on reading, STEM or family activities at the school.	1	2	3	4	5
	Growth of the DLP					
18.	I could explain to potential families what the benefits and risks are of joining the DLP.	1	2	3	4	5
19.	Growing the program one to two years at a time is better than putting a DLP class in every grade all at once.	1	2	3	4	5
20.	Parents should have more opportunities to share ideas about the DLP with administrators.	1	2	3	4	5

Open-Ended Questions

1. What challenges or benefits have you faced in sharing a school with the DLP?

2. How does it affect your child to be in a multi-lingual school?

3. What are your expectations for your child upon graduating from Lakeland Elementary/Middle School?

4. Would you like to explain any of your survey answers (where you chose a number between 1-5) in more detail?

PARA PADRES Y REPRESENTANTES DE ESTUDIANTES EN EL PROGRAMA EN INGLÉS					
TD= Totalmente en Descuerdo; D= Descuerdo; NAD=Ni de Acuerdo Ni en Desacuerdo; A= Acuerdo; TA= Totalmente De Acuerdo					
Nu.	Declaración	TD	D	NAD	A	TA
	Percepciones del programa de educación bilingüe (PEB)					
1.	Hay un amplio conocimiento del PEB en toda la escuela.	1	2	3	4	5
2.	Hay una impresión positiva del PEB en toda la escuela.	1	2	3	4	5
3.	Mi hijo no podría hablar o leer en inglés lo suficientemente bien si participara en el PEB.	1	2	3	4	5
4.	Mi hijo no podría aprender inglés lo suficientemente rápido si participara en el PEB.	1	2	3	4	5
5.	Mi hijo no tiene necesidad de aprender español.	1	2	3	4	5
6.	Hay suficiente información disponible sobre el PEB para padres y tutores.	1	2	3	4	5
7.	Los estudiantes en el PEB obtienen más recursos que los estudiantes en el programa de inglés.	1	2	3	4	5
	Cultura escolar en Lakeland Elementary / Middle School					
8.	La instrucción en el aula de la Lakeland Elementary/ Middle School incorpora culturas de las familias de la comunidad.	1	2	3	4	5
9.	Siento que soy parte de la comunidad de Lakeland.	1	2	3	4	5
10.	Los eventos escolares en Lakeland Elementary/ Middle School incorporan culturas de todas las familias en la comunidad.	1	2	3	4	5
11.	Los valores de la comunidad son claros en términos de respeto, comunicación, seguridad y apoyo con todos los miembros de la comunidad de Lakeland Elementary/Middle School.	1	2	3	4	5
12.	Mi cultura se celebra en Lakeland Elementary/Middle School.	1	2	3	4	5
13.	Existen sistemas claros para que la escuela se comunique con los padres y representantes.	1	2	3	4	5

Nu.	Declaración	TD	D	NAD	A	TA
	Participando en la educación de mi hijo					
14.	Puedo ayudar con la tarea de mi hijo.	1	2	3	4	5
15.	Es fácil obtener la información que necesito de los maestros.	1	2	3	4	5
16.	He oído sobre las clases de español e inglés que ofrece la escuela para padres y representantes.	1	2	3	4	5
17.	Es fácil explicar a las familias potenciales cuáles son los beneficios y los riesgos de unirse al PEB.	1	2	3	4	5
	Crecimiento del PEB					
18.	Podría explicar cuáles son los beneficios y los riesgos de unirse al PEB a las familias interesadas.	1	2	3	4	5
19.	Hacer crecer el programa de uno a dos años a la vez es mejor que poner una clase PEB en cada grado al mismo tiempo.	1	2	3	4	5
20.	Los padres y representantes deberían tener más oportunidades para compartir ideas sobre el PEB con los administradores.	1	2	3	4	5

Preguntas abiertas

1. ¿Qué desafíos o beneficios ha enfrentado al compartir el programa en inglés con el PEB?

2. ¿Cómo afecta a su hijo estar en una escuela multilingüe?

3. ¿Cuáles son sus expectativas para su hijo al graduarse de Lakeland Elementary/Middle School?

4. ¿Le gustaría explicar con más detalle alguna de sus respuestas a la encuesta (donde eligió un número entre 1-5)?

APPENDIX H – SURVEY DLP STUDENTS_ENGLISH

	FOR STUDENTS IN THE DUAL LANGUAGE PROGRAM (DLP)					
	SD=Strongly Disagree; D=Disagree; U=Undecided; A=Agree; SA=Strongly Agree					
No.	Statement	SD	D	U	A	SA
	What People Think of the Dual Language Program (DLP)					
1.	Everyone knows about the DLP at my school.	1	2	3	4	5
2.	People think the DLP is a good thing at my school.	1	2	3	4	5
3.	Now that I am in the DLP, I speak more Spanish at home with my family and community.	1	2	3	4	5
4.	In the DLP I get to learn from students from other cultures.	1	2	3	4	5
5.	We learn the same things as students in the other fourth grade sections.	1	2	3	4	5
6.	Other members of my family are now in the DLP.	1	2	3	4	5
7.	I speak in English and Spanish at lunch and recess.	1	2	3	4	5
	School Culture					
8.	I learn about my culture in my classes.	1	2	3	4	5
9.	I feel like I am valued at school.	1	2	3	4	5
10.	We do assemblies and programs to learn about our cultures.	1	2	3	4	5
11.	Students respect each other.	1	2	3	4	5
12.	Students respect teachers.	1	2	3	4	5
13.	Teachers respect students.	1	2	3	4	5
14.	When I do something good at school, my family hears about it.	1	2	3	4	5
15.	When I do something bad at school, my family hears about it.	1	2	3	4	5
	My Learning					
16.	I can finish my homework every day.	1	2	3	4	5
17.	My teachers help me when I ask for help.	1	2	3	4	5
18.	I like my classes.	1	2	3	4	5
19.	It is important for me to come to school every day.	1	2	3	4	5
20.	When I'm taught something that I don't get, I keep working at it until I get it.	1	2	3	4	5

APPENDIX I – SURVEY DLP STUDENTS_SPANISH

Nu.	Declaración	TD 😞	D 🙁	NAD 😐	A 🙂	TA 😃
	PARA ESTUDIANTES EN EL PROGRAMA DE EDUCACIÓN BILINGÜE (PEB)					
	TD=Totalmente en Descuerdo; D=Descuerdo; NAD=Ni de Acuerdo Ni en Desacuerdo; A=Acuerdo; TA=Totalmente De Acuerdo					
	Lo que la gente piensa del Programa De Educación Bilingüe (PEB)					
1.	En mi escuela, todos saben sobre el PEB.	1	2	3	4	5
2.	En mi escuela, la gente piensa que el PEB es algo bueno.	1	2	3	4	5
3.	Ahora que estoy en el PEB, hablo más español en casa con mi familia y en la comunidad.	1	2	3	4	5
4.	Aprendo de estudiantes de otras culturas en el PEB.	1	2	3	4	5
5.	Aprendemos lo mismo que los estudiantes en las otras secciones de cuarto grado.	1	2	3	4	5
6.	Otros miembros de mi familia están ahora en el PEB.	1	2	3	4	5
7.	Hablo en inglés y español durante el almuerzo y el recreo.	1	2	3	4	5
	Cultura escolar					
8.	Aprendo sobre mi cultura en mis clases.	1	2	3	4	5
9.	Siento que me valoran en la escuela.	1	2	3	4	5
10.	Hacemos reuniones y proyectos para aprender sobre nuestras culturas.	1	2	3	4	5
11.	Los estudiantes se respetan unos a otros.	1	2	3	4	5
12.	Los estudiantes respetan a los maestros.	1	2	3	4	5
13.	Los maestros respetan a los estudiantes.	1	2	3	4	5
14.	Cuando hago algo bueno en la escuela, mi familia se entera.	1	2	3	4	5
15.	Cuando hago algo malo en la escuela, mi familia se entera.	1	2	3	4	5
	Mi aprendizaje					
16.	Puedo terminar mi tarea todos los días.	1	2	3	4	5
17.	Mis maestros me ayudan cuando pido ayuda.	1	2	3	4	5
18.	Me gustan mis clases.	1	2	3	4	5
19.	Es importante para mí venir a la escuela todos los días.	1	2	3	4	5
20.	Cuando me enseñan algo que no entiendo, sigo trabajando hasta que logro entenderlo.	1	2	3	4	5

	FOR STUDENTS IN THE MAINSTREAM PROGRAM					
	SD=Strongly Disagree; D=Disagree; U=Undecided; A=Agree; SA=Strongly Agree					
No.	Statement	SD	D	U	A	SA
	What People Think of the Dual Language Program (DLP)					
1.	Everyone knows about the DLP at my school.	1	2	3	4	5
2.	People think the DLP is a good thing at my school.	1	2	3	4	5
3.	I would have a hard time trying to learn in Spanish and English in my classes.	1	2	3	4	5
4.	I wish I was able to speak Spanish in my classes.	1	2	3	4	5
5.	We learn the same things as students in the DLP.	1	2	3	4	5
6.	I play with kids in the DLP.	1	2	3	4	5
7.	I speak in English and Spanish at lunch and recess.	1	2	3	4	5
	School Culture					
8.	I learn about my culture in my classes.	1	2	3	4	5
9.	I feel like I am valued at school.	1	2	3	4	5
10.	We do assemblies and programs to learn about our cultures.	1	2	3	4	5
11.	Students respect each other.	1	2	3	4	5
12.	Students respect teachers.	1	2	3	4	5
13.	Teachers respect students.	1	2	3	4	5
14.	When I do something good at school, my family hears about it.	1	2	3	4	5
15.	When I do something bad at school, my family hears about it.	1	2	3	4	5
	My Learning					
16.	I can finish my homework every day.	1	2	3	4	5
17.	My teachers help me when I ask for help.	1	2	3	4	5
18.	I like my classes.	1	2	3	4	5
19.	It is important for me to come to school every day.	1	2	3	4	5
20.	When I'm taught something that I don't get, I keep working at it until I get it.	1	2	3	4	5

APPENDIX K – SURVEY MAINSTREAM STUDENTS_SPANISH

	PARA ESTUDIANTES EN EL PROGRAMA EN INGLÉS					
	TD=Totalmente en Descuerdo; D=Descuerdo; NAD=Ni de Acuerdo Ni en Desacuerdo; A=Acuerdo; TA=Totalmente De Acuerdo					
Nu.	Declaración	TD 😞	D 🙁	NAD 😐	A 🙂	TA 😃
	Lo que la gente piensa del Programa De Educación Bilingüe (PEB)					
1.	En mi escuela, todos saben sobre el PEB.	1	2	3	4	5
2.	En mi escuela, la gente piensa que el PEB es algo bueno.	1	2	3	4	5
3.	Me resultaría difícil aprender si combinasen español e inglés en mis clases.	1	2	3	4	5
4.	Desearía poder hablar español en mis clases.	1	2	3	4	5
5.	Aprendemos las mismas cosas que los estudiantes en el PEB.	1	2	3	4	5
6.	Juego con niños en el PEB.	1	2	3	4	5
7.	Hablo en inglés y español durante el almuerzo y el recreo.	1	2	3	4	5
	Cultura escolar					
8.	Aprendo sobre mi cultura en mis clases.	1	2	3	4	5
9.	Siento que me valoran en la escuela.	1	2	3	4	5
10.	Hacemos reuniones y proyectos para aprender sobre nuestras culturas.	1	2	3	4	5
11.	Los estudiantes se respetan unos a otros.	1	2	3	4	5
12.	Los estudiantes respetan a los maestros.	1	2	3	4	5
13.	Los maestros respetan a los estudiantes.	1	2	3	4	5
14.	Cuando hago algo bueno en la escuela, mi familia se entera.	1	2	3	4	5
15.	Cuando hago algo malo en la escuela, mi familia se entera.	1	2	3	4	5
	Mi aprendizaje					
16.	Puedo terminar mi tarea todos los días.	1	2	3	4	5
17.	Mis maestros me ayudan cuando pido ayuda.	1	2	3	4	5
18.	Me gustan mis clases.	1	2	3	4	5
19.	Es importante para mí venir a la escuela todos los días.	1	2	3	4	5
20.	Cuando me enseñan algo que no entiendo, sigo trabajando hasta que logro entenderlo.	1	2	3	4	5

APPENDIX L – SEMI-STRUCTURED FOCUS GROUP PROTOCOL DLP AND MAINSTREAM STAFF

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

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. We 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 virtual room. We have 30 minutes, 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."

For DLP Teachers:

Starter Question: Introduce yourself and explain - How you first got involved with the DLP

1. How does the DLP address the needs and/or benefit the Lakeland Community?

2. What are the strengths and challenges of the DLP?

3. How can the school better support the DLP? (for instruction)

4. What reasons do you think families have for choosing to participate or not in the DLP?

5. What are some differences/similarities you notice between students in the DLP and students in the other sections of pre-kindergarten through third grade? (behavior, academics, interactions, etc.)

6. Fast-forwarding 5 years, where do you see the DLP? (partnerships, collaboration)

7. What are the expectations for alumni of the DLP versus Mainstream Program (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?

Extra Questions (on partnerships):

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

For Mainstream Teachers:

Starter Question: Introduce yourself and explain - Share an overall opinion of the Lakeland DLP

1. How does the DLP address the needs and/or benefit the Lakeland Community?

2. What are the strengths and challenges of the DLP?

3. How can the school better support the DLP? (to make it stronger)

4. What reasons do you think families have for choosing to participate or not in the DLP?

5. What are some differences/similarities you notice between students in the DLP and students in the other sections of pre-kindergarten through third grade? (behavior, academics, interactions, etc.)

6. Fast-forwarding 5 years, where do you see the DLP? (partnerships, collaboration)

7. What are the expectations for alumni of the DLP versus Mainstream Program (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?

Extra Questions (on partnerships):

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