Article

Two-Way Immersion Classrooms during the COVID-19 Pandemic: Parent and Teacher Perceptions of Student Learning

Ximena Franco-Jenkins [1,*], Doré R. LaForett [1], Adam Winsler [2] and Diego Ordoñez Rojas [2]

1 FPG Child Development Institute, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599, USA; laforett@unc.edu
2 College of Humanities and Social Sciences, George Mason University, Fairfax, VA 22030, USA; awinsler@gmu.edu (A.W.); dordone@gmu.edu (D.O.R.)
* Correspondence: ximena.franco@unc.edu

Abstract: The present study examined parents' and teachers' perceptions of student learning in Spanish–English Dual Language Education (DLE) programs during the COVID-19 pandemic. The participants included 72 parents of students from kindergarten to second grade and eight teachers in two schools in the southeastern U.S. Parents retrospectively reported their perceptions of their children's instruction and learning experiences in English and Spanish during the 2020–2021 school year. Teachers reported if their students had opportunities to practice oral bilingual skills and their perception of students' improvement in English and Spanish skills. Parents reported that there were more opportunities to practice English than there were to practice Spanish. Teachers reported that remote instruction offered fewer opportunities than hybrid instruction did to practice oral language skills. Overall, the teachers agreed that students' language skills in English and Spanish improved. Similarly, the parents agreed that students' language skills improved; however, they reported that their English skills improved more than their Spanish skills did. Student and family background factors, such as language fluency and parental education, were negatively associated with barriers to remote access. Implications for future research and suggestions for supporting students attending DLE programs during remote instruction are offered.

Keywords: dual language education; COVID-19; remote instruction; bilingual education; elementary school; two-way immersion (TWI)

1. Introduction

The National Center for Education Statistics [1] reported that the number of students classified as English learners (ELs) in US schools increased between fall 2010 (4.5 million students; 9.2%) and fall 2019 (5.1 million students; 10.4%). The National Education Association [2] reported that ELs are the fastest-growing population in the United States, and continued growth is expected, with 25% of school-aged children projected to be ELs by 2025. ELs speak a wide variety of languages, including Spanish, Arabic, Chinese, Vietnamese, and Hmong, among other languages. However, most ELs come from Latine Spanish-speaking homes (3.9 million students; 75.7%) [3]. (We use the term "Latine" as a gender-inclusive term to refer to people of Latin American descent in the United States.) As the number of ELs continues to rise, so does the need to serve this diverse group of students representing various languages, cultures, ethnicities, and nationalities. ELs are disproportionately more likely to be children of color and grow up in low-income households [4]. Evidence from research in the last two decades has established that the use of bilingual children's home language in instruction is associated with more significant improvements in language, literacy and overall achievement outcomes when compared to ELs experiencing English-only instruction without support for their home language [5–8].

2. Literature Review

2.1. Dual Language Education Instruction

There is consensus in the field that Dual Language Education (DLE) programming benefits EL students. In 2021, it was estimated that 3000 K-12 dual language immersion programs exist across the United States, serving approximately 5 million ELs [9]. Accordingly, Dual Language Education (DLE) has gained attention in the last decade. DLE programs utilize a dual immersion approach that provides instructions in both English and a partner language. There are two types of DLE programs: one-way dual language programs and two-way dual language programs [7]. One-way programs primarily serve students from one home language group (e.g., students learning English and their home language). On the other hand, two-way programs serve EL students and those already proficient in English as their first language. Two-way DLE programs follow either a 50/50 model (50% instruction in the partner language and 50% instruction in English) or a 90/10 model (90% instruction in the partner language and 10% instruction in English, transitioning to a 50/50 allocation as students progress through the grades). Depending on the DLE model, some students will have two teachers, one for English instruction and one for instruction in the partner language. In contrast, other models will have one bilingual teacher who splits the language allocation throughout the day or alternates the instructional language by day. Ultimately, which model to implement depends on students' needs, the language proficiency of available teachers and staff, parent and community preferences, and the availability of instructional materials in the partner language [10]. DLE programs are considered to be additive and enriching as they provide opportunities for ELs to acquire English while continuing to develop the partner language [11]. For example, a random assignment study in Portland has shown that ELs assigned to kindergarten immersion classrooms outperform their peers assigned to English-only classrooms on state accountability tests in reading by the fifth grade [12].

2.2. DLE Programs and the COVID-19 Pandemic

Due to the unprecedented COVID-19 pandemic in the spring of 2020, seven out of ten schools in the United States closed their doors to in-person learning [1]. During this period, 77% of schools reported moving their instruction to an online platform, while the schools that remained open moved to a hybrid or blended learning model where students received some instruction remotely and some instruction in-person [1]. The pandemic abruptly disrupted children's family dynamics and learning experiences at school for all children and exacerbated opportunity gap among families from low-income households [13,14]. As schools physically closed and K-12 education became virtual during the pandemic, homeschooling and having limited access to devices and the internet intensified ELs' challenges [15,16]. Moreover, according to a U.S. national survey of elementary and secondary public-school teachers in 2021, teachers doing remote instruction with a higher number of ELs in their classrooms reported significantly more obstacles, including inconsistent attendance, difficulties in understanding lessons and completing class work, and difficulties in receiving support at home or their place of study compared to teachers with fewer ELs in their classrooms [17]. Although most school districts moved quickly to provide continuity in education by moving instruction to a remote platform, DLE programs faced additional challenges as they needed infrastructure for online bilingual education and online materials in the partner language in addition to English [18]. During the pandemic, parents were the principal facilitators of their children's remote experiences, which can be overwhelming, especially when parents are not fluent in the partner language and when there are cultural differences between home and school [19].

3. The Current Study

In this study, we examined three aspects of DLE teacher and student experiences during the 2020–2021 school year: (1) DLE teaching and learning opportunities and experiences, (2) perceived improvements in students' bilingual skills, and (3) factors related to students' learning experiences and skill improvement. The current study addressed three research questions:

- RQ1: To what extent did teachers and parents perceive that student instructional opportunities varied during remote vs. hybrid instruction? We expected that teachers would report more use of both languages in hybrid instruction than in remote instruction. For the parents, we expected most to agree that their child had more opportunities to speak in English than Spanish during remote instruction.
- RQ2: To what extent did parents and teachers believe that the students' English and Spanish skills improved? For this question, we expected both parents and teachers to perceive more improvement in the students' English versus Spanish skills. Also, we expected that teachers would report more improvement in their students' English and Spanish skills compared to parents.
- RQ3: To what extent were student learning experiences and skill improvement associated with technology barriers and student and family background factors? While we expected that, overall, most would agree that their child fully participated in remote instruction, we expected greater technology barriers to accessing remote instruction to be reported by the parents of Latine students given prior research showing that Latine students have less access to and less frequent use of computers and technology compared to parents of White students [20]. We expected that factors disproportionately experienced by Latine immigrant families (e.g., Spanish home language, lower parental English and Spanish language fluency, and lower parent education) would be negatively associated with students' learning experiences and skill improvement [14].

4. Method

4.1. Participants

The data for this study came from two schools that participated in a larger project examining early elementary students' experiences in Spanish–English two-way immersion DLE programs in the southeastern U.S. Both schools used a 50/50 model for their DLE programming, where two teachers each provided English or Spanish instruction to the students, and the students switched languages/teachers mid-day each day. During the 2020–2021 school year, School 1 provided remote instruction in the first quarter, hybrid instruction in the second and third quarters, and in-person instruction in the fourth quarter. School 2 provided remote instruction in quarters 1–3 and in-person instruction in the fourth quarter.

In the fall of 2021, 72 parents (School 1, 53%) completed surveys about their children's learning experiences during the 2020–2021 school year. Most parents had a child in G2 (67%), followed by G1 (29%), and K (4%). In the United States, typically, children's ages range from 5–6 years old for kindergarten; 6–7 years old for first grade; and 7–8 years old for second grade. Additional family and child demographic characteristics are presented in Table 1.

Also, in fall 2021, 8 teachers (School 1, 50%) completed surveys on their perceptions of students' learning during the 2020–2021 school year. Half of the teachers taught G2, with the remaining equally split between G1 and K. Most teachers were female (88%). Teachers were 50% Latine (born in countries other than the US) and 50% White and reported on their language fluency (English fluency (88%) and Spanish fluency (63%)). Half of the teachers had a bachelor's degree, while the other 50% had a master's degree.

Table 1. Child and family demographics.

Characteristics	*n*	%
Gender		
Male	30	42
Female	42	58
Ethnicity/Race		
Black or African American	2	3
White	38	53
Multi-Ethnic	7	10
Hispanic/Latine	25	35
Parent Education		
Less than a high school degree	14	19
High school graduate	4	6
Some college	3	4
Associate's degree	2	3
Bachelor's degree	13	18
Graduate/professional degree	36	50
Parent Language Fluency		
Speaks English like a native speaker	45	63
Speaks Spanish as a native speaker	21	29

Note. Percentages might not add up to 100% due to multiple responses.

4.2. Measures

4.2.1. Family Demographic Survey

The parents completed a survey developed by the researchers requesting information about student and family demographics and languages spoken at home. The key demographics included the students' age, gender, ethnicity, parents' highest educational degree, years of education, and whether the parent was educated in the United States.

4.2.2. Teacher Demographic Survey

The teachers completed a background questionnaire developed by the researchers to provide demographics (e.g., age, gender, and race/ethnicity) and information about the highest educational degree.

4.2.3. Learning Experiences during the COVID-19 Pandemic—Parent Survey

As part of a family demographic survey developed by the researchers, parents responded to six questions about their child's instructional and learning experiences during the 2020–2021 school year. Two questions concerned target language use opportunities during remote instruction: (1) during remote instruction, my child had plenty of opportunities to speak English, and (2) during remote instruction, my child had plenty of opportunities to speak Spanish. In addition, two items concerned students' access to learning opportunities during remote instruction: (3) my child had difficulty accessing remote learning opportunities due to technology, and (4) my child fully participated in remote instruction activities. The final two items asked about the parents' perception of their child's improved skills in English and Spanish: (5) my child improved their skills in English, and (6) my child improved their skills in Spanish. Parents responded using a Likert scale with the following response choices: 1 = Strongly disagree; 2 = Disagree; 3 = Agree; and 4 = Strongly Agree.

4.2.4. Learning Experiences during the COVID-19 Pandemic—Teacher Survey

As part of a demographic survey developed by the researchers, teachers responded to six questions about students' learning experiences during the 2020–2021 school year. Two questions asked about the teachers' target language use during different instruction formats: (1) I was able to use the expected language of instruction (English, Spanish, or both) during remote instruction, and (2) I was able to use the expected language of instruction (English, Spanish, or both) during hybrid instruction. In addition, two items concerned the teachers'

perceptions of students' opportunities to practice oral bilingual language skills: (3) during remote instruction, students had ample opportunities to practice oral bilingual language skills, and (4) during hybrid instruction, students had ample opportunities to practice oral bilingual language skills. The final two items concerned the teachers' perception of their students' improved skills in English and Spanish: (5) students improved their English language skills, and (6) students improved their Spanish language skills. Teachers responded using a Likert scale with the following response choices: 1 = Strongly disagree; 2 = Disagree; 3 = Agree; and 4 = Strongly Agree.

4.3. Procedures

Schools 1 and 2 were participants in a larger study about DLE. At the beginning of the school year, the researchers invited kindergarten, first-, and second-grade teachers to participate in the study, and the research team collected completed paper–pencil consent forms and demographic forms from the teachers. Teachers who agreed to participate worked with the research team to distribute envelopes to all students in their classrooms, which contained paper–pencil consent forms and demographic surveys available in English and Spanish. All families who returned the consent form indicating agreement for their child to participate, and the completed demographic survey, were included in this study.

Parents and teachers completed paper–pencil demographic surveys in the fall of 2021. The surveys included questions about their experiences during the 2020–2021 school year when schools employed remote, hybrid, and in-person instruction in response to the COVID-19 pandemic. Teachers reported on their perceptions of students they had in the 2020–2021 school year, whereas parents reported on their own child's experiences during that school year. It is worth noting that the parents and teachers did not report on the same children. Parents had the opportunity to complete the surveys in English (72%) or Spanish (28%). All families who returned the consent form were given a USD $10 gift card as a token of appreciation. The university's Institutional Review Board and the school districts approved all study procedures for the ethical treatment of human participants.

4.4. Data Analysis

We computed frequencies to describe the extent of agreement with the statements on DLE teaching experiences and learning (RQ1), improvements in students' bilingual language skills (RQ2), and engagement in remote learning activities (RQ3). For RQ3, we also conducted a series of analyses of variance (ANOVA) to examine differences by home language (English only or any Spanish), child gender (i.e., male or female), parents' language fluency in Spanish and English (good/excellent/is a native speaker, poor/fair/okay), and parents' education (i.e., less than college or some college education or higher) for the following parent-reported data: barriers to accessing remote instruction due to technology, opportunities to speak in the target language, and improvement in English and Spanish skills. We did not conduct ANOVAs for the teacher-report data given our small sample size.

5. Results

- RQ 1: DLE teaching experiences and learning opportunities

Frequency analysis revealed that most teachers agreed or strongly agreed that they were able to use the expected language during remote (88%) and hybrid instruction (78%). Contrary to our hypothesis, teachers reported using the target language more during remote instruction than during hybrid instruction. Most teachers agreed or strongly agreed that students had ample opportunities to practice oral bilingual language skills during remote (63%) and hybrid instruction (88%); however, the teachers reported that remote instruction offered fewer opportunities for students to practice oral bilingual language skills.

Parents reported only on their perceptions of their child's opportunities to speak in the target language during remote instruction. Many parents agreed or strongly agreed that their child had plenty of opportunities to speak English (81%) and Spanish (61%) during remote instruction, but as seen in the percentages above, fewer parents reported there being plenty of opportunities in Spanish. Most parents agreed or strongly agreed that their child fully participated in remote learning activities.

- RQ 2: Improvements in Students' Bilingual Skills

The teachers and parents were asked to report their perceptions regarding children's improvements in their English and Spanish skills. As expected, both the teachers and parents perceived more improvement in students' English than Spanish skills, and teachers reported more improvement in both students' English and Spanish skills compared to that reported by parents. Specifically, all teachers agreed or strongly agreed that students improved their skills in English, compared to 75% who agreed or strongly agreed that students improved their Spanish skills. For parents, 75% agreed or strongly agreed that their child improved their English skills, yet only 57% agreed or strongly agreed that their child's Spanish skills improved.

- RQ 3: Factors Affecting Students' Learning Experiences and Skill Improvement

As expected, most parents (73%) agreed or strongly agreed that their child participated fully in remote instruction. Yet, 21% of the parents agreed or strongly agreed that their child had difficulty accessing remote learning opportunities due to technology barriers. ANOVAs showed that the parents who spoke Spanish at home more often agreed that their child experienced technology barriers in accessing remote instruction compared with the parents who spoke English at home ($F[1,71] = 5.99$, $p = 0.017$, $d = 0.59$). Parents with stronger English fluency ($F[1,71] = 7.41$, $p = 0.008$, $d = 0.70$) and higher education levels ($F[1,71] = 10.65$, $p = 0.002$, $d = 0.89$) reported that their child had fewer difficulties accessing remote learning opportunities due to technology compared to parents with weaker English fluency skills and lower education levels.

For opportunities to speak in the target language, parents who spoke English at home ($F[1,71] = 7.81$, $p = 0.007$, $d = 0.67$), who had greater English fluency ($F[1,71] = 13.38$, $p = 0.001$, $d = 0.93$), and who had higher levels of education ($F[1,71] = 18.25$, $p = 0.001$, $d = 1.16$) more often agreed that their child had plenty of opportunities to speak English. There were no differences between parents who spoke English at home compared to Spanish in perceptions of whether their child had plenty of opportunities to speak Spanish during remote instruction.

The only group difference observed for perceptions of improved bilingual skills was that parents who spoke Spanish at home were more likely to agree that their child's Spanish skills improved ($F[1,71] = 5.31$, $p = 0.024$, $d = 0.60$), compared to parents who spoke English at home.

No other differences emerged by home language, parents' English fluency, Spanish fluency, or parent education. There were no student gender differences in remote instruction access, opportunities to speak in the target language, or improvement in bilingual language skills.

6. Discussion

Dual Language Education Programs are beneficial for English Language Learners [12]. Due to the COVID-19 pandemic, schools in the United States abruptly closed their doors to in-person learning. The present study examined three aspects of DLE teacher and student experiences during the 2020–2021 school year. First, regarding DLE teaching and learning opportunities and experiences, our data show that most teachers agreed that they were able to use the expected language during remote and hybrid instruction and that students had ample opportunities to practice their oral bilingual language skills. Yet, teachers reported that remote instruction did not offer as many opportunities for students to practice oral language skills compared to those available during hybrid instruction.

Perhaps this finding is due to reduced instructional time given during remote instruction. Although not specific to DLE programs, the American Institute for Research (AIR) found in their survey of schools that students in early grades received an average of 2–3 h a day of remote instruction [21]. This time allocation falls short of the required five to six hours according to state regulations [22]. Similarly, parents reported that their children had plenty of opportunities to speak both English and Spanish and that they fully participated in remote learning activities; however, parents reported fewer opportunities in Spanish than there were for English. Given the reduced time during general instruction and the nature of dual language programs (i.e., instructional time is split into two languages of instruction), we can presume that there was more time allocated to English instruction than Spanish instruction. In addition to the reduced instructional time, the limited resources for Spanish remote instruction could have played a role in the number of learning opportunities in Spanish experienced by the children.

Second, we asked parents and teachers to report their perceptions regarding children's improvements in their English and Spanish skills. As was foreseen, the teachers and parents perceived more improvements in students' English versus Spanish skills; however, teachers reported more improvements in both language skills than did parents. There do not appear to be any national data or published studies to date examining the impact of the COVID-19 pandemic on children's Spanish language skills while attending DLE programs, perhaps due to the lack of national state assessments. As a result, we do not have achievement data on Spanish skills. However, given the limited instructional time that the children received, the lack of Spanish resources for online learning, and other potential barriers faced by children of color, we can presume that the parents' perception that their children improved their English skills more than their Spanish skills might be correct [18]. Contrary to parents' and teachers' perceptions that students improved their English language skills, the National Assessment of Education Progress [23] assessments show significant and unprecedented declines in reading achievement scores between 2019 and 2022. While all students showed declines, these declines were higher for children of color. Unfortunately, we do not have achievement data for our sample before their return to school in the 2021–2022 school year; hence, we cannot confirm that this was the case for the children who participated in this study.

Third, we asked parents and teachers to report on factors related to students' learning experiences and skill improvement (i.e., gender, home language, language proficiency, and parental education). The data showed no differences by students' gender, but did show differences among the other three factors. As mentioned above, most parents reported that their child fully participated in remote instruction; although, many parents reported technology barriers. Our data show that parents reported their children having difficulty accessing remote learning. Parents who spoke Spanish at home more often experienced technology barriers, and parents who were more fluent in English and had higher education levels reported fewer difficulties accessing remote learning opportunities. These findings are consistent with other studies that report that the limited access to remote devices and the internet exacerbated challenges for ELs [15,16].

Moreover, our data show that parents who spoke English at home, particularly those who were more fluent in English and had higher levels of education, more often agreed that their child had opportunities to speak English during remote instruction compared to Spanish. This finding is consistent with studies that found that during the pandemic, parents became the facilitators when children were participating in remote instruction [19]. Not surprisingly, parents who spoke Spanish at home reported that their child's Spanish skills improved more than children whose parents spoke English at home. For families who spoke English at home, this might be the result of the parents not being fluent in the partner language. It is unclear if the families who spoke Spanish at home reported improvements in their children's Spanish skills as a result of the learning opportunities provided by the school or as a result of being at home with their families and exposed to their home language the majority of the time.

DLE programs are seen as opportunities to create better alignment or cultural match with the home environment of English learners (ELs) compared to that created by non-DLE programs [24,25]. DLE programs aim to support heritage languages and promote bilingualism, biliteracy, and biculturalism, which, in turn, enhance the social capital of ELs, improve academic performance, and reduce the achievement gap [26]. Thus, effective DLE programs can serve as anti-racist policies and practices [4]. However, some researchers have raised concerns that DLE programs may confer more benefits to White, native English speakers compared to the students whose heritage language and culture are supposed to be elevated in DLE programs [4]. This is particularly worrisome given our data, which suggests that the benefits for native English speakers may have been exacerbated during the pandemic due to factors such as a lack of access to technology and less-educated families struggling to support their children during remote instruction.

6.1. Implications for Practice

The findings of this study are meaningful because they shed light on needs related to high-quality DLE instruction and learning opportunities, as well as disparities in home environments that can negatively affect learning opportunities for Els in DLE programs. While this study focused on student and teacher experiences during the pandemic, there is strong consensus that the pandemic further exacerbated already existing disparities that negatively affect students and families from marginalized communities, such as ELs [13,27]. Even though we hope the future will not bring another pandemic or similar historical event with such societally altering consequences, we argue that the lessons learned from the pandemic still hold relevant implications for DLE instruction and students' learning experiences. Namely, the pandemic significantly improved schools' infrastructure and capacity for utilizing remote instruction. While in-person instruction remains the preferred setting for optimizing student learning [28], schools are now better positioned to leverage remote learning options in time-limited circumstances (e.g., weather closures). Thus, it remains important to utilize the knowledge gained during the pandemic to ensure that future use of remote instruction for students in DLE programs does indeed adhere to the principles and practices associated with high-quality DLE instruction and employs strategies to minimize barriers to students' access to remote learning.

Specifically, our data clearly indicate the need for more intentional planning and delivery of strategies to support both English and Spanish languages so that DLE programs remain aligned with the expectations of high-quality programming. School administrators now have a better understanding of the challenges involved in remote instruction and can work toward enhancing infrastructures to implement effective remote learning in DLE programs, when needed. For example, although teachers are largely trained to provide in-person instruction, it would be worthwhile to ensure that at least a small portion of ongoing professional development includes regular opportunities to support teachers on how to change in-person lessons into remote ones. These planning sessions should cover how to maximize students' opportunities to speak in each target language, and which strategies the teachers will use to ensure they are providing the expected amount of instruction in each language, consistent with their DLE model. Discussions among teachers and administrators can explore how to leverage features in existing platforms, such as creating Zoom breakout chat rooms, to facilitate meaningful discussions in English and the partner language, and what is possible with students in different grade levels. The importance of ensuring that students can practice each language and interact with peers is crucial given that language learning is a social experience, and such practice opportunities are especially needed for students who are not fully bilingual or do not come from bilingual households. In addition, paying attention to remote instruction in professional development can help administrators determine teachers' comfort and capacity with remote instruction and digital instructional models and identify which teachers might need more support.

To minimize barriers to accessing remote learning, schools should routinely assess the needs and capacity of all enrolled families to engage in remote learning, particularly before assuming that all families can equitably participate. In anticipation of potentially using remote learning, schools should consider collecting information from families on their current technology capacity and literacy, including information about the devices in the home (e.g., type and number), access to reliable internet, and comfort or experience with technology among the children and adults in the house. If possible, schools should explore avenues for supporting families with needs in these areas. In addition, schools should routinely provide online resources and communications in both languages to engage families via technology (e.g., school website, social media, ClassDojo). Another possibility is to create within-grade parent support networks that can provide "technical assistance," which is a type of support for families with questions or needs related to helping their child access and fully participate in remote instruction in situations that call for it. By incorporating the lessons learned from this study, we can enhance DLE programming and ensure that children have the necessary resources to succeed.

6.2. Limitations

This study has several limitations that should be considered when interpreting the results. First, the sample size was small, which may limit the generalizability of the findings to other populations. Additionally, the study's sample may not be representative, which may affect the external validity of the results. For example, the sample only included eight teachers from two schools. In addition, during the fall of 2021, families may have been continuing to experience pandemic-related stressors, which may have affected their willingness to participate in the study. Secondly, the retrospective nature of the data collection method relied on the accuracy of the parents' and teachers' recall, which may have introduced biases and errors in the data.

7. Conclusions

Taken all together, this study highlights the impact of the pandemic on the experiences of English learners (ELs) in Dual Language Education (DLE) programs. It emphasizes the urgent need for high-quality DLE instruction and equitable learning opportunities for ELs, especially those from marginalized communities. While the pandemic further exacerbated existing disparities, it also provided an opportunity for schools to enhance their capacity for remote instruction. Although in-person instruction remains preferable, the knowledge gained during the pandemic can be leveraged to effectively utilize remote learning options in time-limited circumstances. However, it is essential to ensure that remote instruction in DLE programs adheres to the principles of high-quality DLE instruction and minimizes barriers to access. This includes intentional planning and delivery of strategies to support both English and Spanish languages, as well as ongoing professional development for teachers. Schools should also assess the needs and capacities of families to engage in remote learning, providing necessary support and resources. By applying the knowledge and insights gained from this study, we have the opportunity to improve DLE programming and ensure that every child has access to the essential resources they need to thrive academically.

References

1. National Center for Education Statistics. *U.S. Education in the Time of COVID*; U.S. Department of Education, Institute of Education Sciences: Washington, DC, USA, 2022. Available online: https://nces.ed.gov/surveys/annualreports/topical-studies/covid/. (accessed on 25 August 2023).
2. National Education Association. English Language Learners. 2020. Available online: https://www.nea.org/resource-library/english-language-learners. (accessed on 25 August 2023).
3. Irwin, V.; Wang, K.; Tezil, T.; Zhang, J.; Filbey, A.; Jung, J.; Bullock Mann, F.; Dilig, R.; Parker, S. *Report on the Condition of Education 2023 (NCES 2023-144)*; U.S. Department of Education, National Center for Education Statistics: Washington, DC, USA, 2023.
4. Williams, C.P.; Meek, S.; Marcus, M.; Zabala, J. *Ensuring Equitable Access to Dual Language Immersion Programs Supporting English Learners' Emerging Bilingualism*; The Century Foundation: New York, NY, USA, 2023.
5. Baker, D.L.; Park, Y.; Baker, S.K.; Basaraba, D.L.; Kame'enui, E.J.; Beck, C.T. Effects of a paired bilingual reading program and an English-only program on the reading performance of English learners in grades 1–3. *J. Sch. Psychol.* **2012**, *50*, 737–758. [CrossRef] [PubMed]
6. Francis, D.; Lesaux, N.; August, D. Language of Instruction. In *Developing Literacy in Second-Language Learners: Report of the National Literacy Panel on Language-Minority Children and Youth*; August, D., Shanahan, T., Eds.; Lawrence Erlbaum Associates Publishers: New Jersey, NJ, USA, 2006; pp. 365–413.
7. National Academies of Sciences, Engineering, and Medicine. *Promoting the Educational Success of Children and Youth Learning English: Promising Futures*; The National Academies Press: Washington, DC, USA, 2017. [CrossRef]
8. Rolstad, K.; Mahoney, K.; Glass, G.V. The big picture: A meta-analysis of program effectiveness research on English language learners. *Educ. Policy* **2005**, *19*, 572–594. [CrossRef]
9. American Councils Research Center. Canvass of Dual Language and Immersion (DLI) Programs in US Public Schools. 2021. Available online: https://www.americancouncils.org/sites/default/files/documents/pages/2021-10/Canvass%20DLI%20-%20October%202021-2_ac.pdf. (accessed on 25 August 2023).
10. Howard, E.R.; Olague, N.; Rogers, D. *The Dual Language Program Planner: A Guide for Designing and Implementing Dual Language Programs*; Center for Research on Education, Diversity, and Excellence: Washington, DC, USA, 2003.
11. Hamayan, E.; Genesee, F.; Cloud, N. *Dual Language Instruction: From A to Z*; Heinle Heinle: Portsmouth, NH, USA, 2013.
12. Steele, J.L.; Slater, R.O.; Zamarro, G.; Miller, T.; Li, J.; Burkhauser, S.; Bacon, M. Effects of dual-language immersion programs on student achievement: Evidence from lottery data. *Am. Educ. Res. J.* **2017**, *54*, 282S–306S. [CrossRef]
13. García, E.; Weiss, E. *COVID-19 and Student Performance, Equity, and U.S. Education Policy. Lessons from Pre-Pandemic Research to Inform Relief, Recovery, and Rebuilding*; Economy Policy Institute: Washington, DC, USA, 2020.
14. National Academies of Sciences, Engineering, and Medicine. *Addressing the Long-Term Effects of the COVID-19 Pandemic on Children and Families*; The National Academies Press: Washington, DC, USA, 2023. [CrossRef]
15. Altavilla, J. How technology affects instruction for English learners. *Phi Delta Kappan* **2020**, *102*, 18–23. [CrossRef]
16. Leech, N.L.; Gullett, S.; Cummings, M.H.; Haug, C.A. The Challenges of Remote K-12 Education during the COVID-19 Pandemic: Differences by Grade Level. *Online Learn.* **2022**, *26*, 245–267. [CrossRef]
17. United States Government Accountability Office. Teachers Reported Many Obstacles for High-Poverty Students and English Learners as Well as Some Mitigating Strategies. GAO-22-105815. Available online: https://www.gao.gov/products/gao-22-105815. (accessed on 25 August 2023).
18. Sugarman, J.; Lazarín, M. *Educating English Learners during the COVID-19 Pandemic*; Migration Policy Institute: Washington, DC, USA, 2020. Available online: https://www.migrationpolicy.org/research/english-learners-covid-19-pandemic-policy-ideas (accessed on 25 August 2023).
19. Cioè-Peña, M. Computers secured, connection still needed: Understanding how COVID-19-related remote schooling impacted Spanish-speaking mothers of emergent bilinguals with dis/abilities. *J. Lat. Educ.* **2022**, *21*, 224–238. [CrossRef]
20. Wang, J.; Hong, H.; Ravitz, J.; Hejazi Moghadam, S. Landscape of K-12 computer science education in the U.S.: Perceptions, access, and barriers. In Proceedings of the 47th ACM Technical Symposium on Computing Science Education (SIGCSE '16), Memphis, TN, USA, 2–5 March 2016. [CrossRef]
21. American Institutes for Research (AIR). National Survey on Public Education's Coronavirus Pandemic Response. 2020. Available online: https://www.air.org/project/national-survey-public-educations-response-covid-19. (accessed on 25 August 2023).

22. National Center for Education Statistics. Table 1.1 minimum number of instructional days and hours in the school year, by state: 2020. In *State of Education Practices*; Department of Education, Institute of Education Sciences: Washington, DC, USA, 2020.

23. National Assessment of Education Progress. *NAEP Long-Term Trend Assessment Results: Reading and Mathematics*; Institute of Education Sciences (IES): Washington, DC, USA, 2023.

24. Collier, V.P.; Thomas, W.P. The astounding effectiveness of dual language education for all. *NABE J. Res. Pract.* **2004**, *2*, 1–20.

25. Lindholm-Leary, K.; Genesee, F. Alternative Educational Programs For English Language Learners. In *Improving Education for English Learners: Research-Based Approaches*; California Department of Education, Ed.; CDE Press: Sacramento, CA, USA, 2010; pp. 323–382.

26. Cervantes-Soon, C.G. A critical look at dual language immersion in the new Latin@ diaspora. *Biling. Res. J.* **2014**, *37*, 64–82. [CrossRef]

27. Donohue, J.M.; Miller, E. COVID-19 and school closures. *J. Am. Med. Assoc.* **2020**, *324*, 845–847. [CrossRef] [PubMed]

28. Pew Research Center. Most Parents of K-12 Students Learning Online Worry About Them Falling Behind. 2020. Available online: https://www.pewresearch.org/social-trends/2020/10/29/most-parents-of-k-12-students-learning-online-worry-about-them-falling-behind/. (accessed on 25 August 2023).