

Dual Language Program Planning and Equity ***Forum on Equity and Dual Language Immersion***

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Some educators question whether DLI programs really work with all students. They make comments like “DLI may work with other students, but it is/would not working with *our* students”. Given the strong research base on the impact of DLI programs on disaggregated groups of students in a variety of different communities (e.g., Lindholm-Leary, 2016a; National Academies of Sciences, Engineering and Medicine, 2017; Steele, Slater, Zamarro, Miller, Li, Burkhauser, & Bacon, 2017; Umansky & Reardon, 2014; Valentino & Reardon, 2015), this comment suggests that the DLI program has not been well developed at the school or district level. Why? DLI programs are sometimes viewed as “magic”, with the assumption that any DLI program will result in the outcomes well documented in the literature. Yet, DLI programs require considerable planning in order to equitably meet the goals of *all* students in a DLI program (e.g., Howard, Lindholm-Leary, Rogers, Olague, Medina, Kennedy, Sugarman, & Christian, 2018). To best meet the needs of *all* students, there are a number of equity issues to consider as educators plan for DLI programs. These issues can be classified into four major categories: 1) administrative, 2) programmatic, 3) school characteristics, and 4) students and families. While each of these categories will be considered, the first two will receive greater emphasis since other papers in this panel will cover, to some extent, equity issues associated with school characteristics and students and families.

Many equity issues arise in DLI planning, but a prominent equity issue that impacts most of the other planning concerns and the overall success of the program is the vision for bilingualism and biliteracy. Research clearly demonstrates the *positive impact of bilingualism* in

a variety of domains, including: 1) students' cognitive and academic success, including lower drop-out rates and higher college attendance (Bialystok 2007; Collins, O'Connor, Suarez-Orozco, Nieto-Castañon, & Toppelberg, 2014; de Groot, 2011; de Jong & Bearse, 2011; Genesee, Lindholm-Leary, Saunders, & Christian, 2006; Lindholm & Aclan, 1991; Lindholm-Leary, 2016a, 2018a, b; Lindholm-Leary & Hernandez, 2011, 2018; National Academies of Sciences, Engineering and Medicine, 2017; Rumbaut, 2014; Santibañez & Zarate, 2014); 2) comparable or even higher social-emotional outcomes (Halle, Hair, Wandener, McNamara, & Chien, 2014; Han, 2010, 2012; Han & Huang, 2010; National Academies of Sciences, Engineering and Medicine, 2017); 3) economic and career advantages, such as higher salaries, higher employment status, and better job opportunities (Agirdag, 2014; Callahan & Gándara, 2014; Rumbaut, 2014). In summary, the research strongly demonstrates the importance of promoting *high* levels of bilingualism and biliteracy.

Consequently, without a clearly stated vision that highlights the importance of developing high levels of bilingualism and biliteracy, the administrative, programmatic, school, and student-family considerations are planning issues similar to most programs. Therefore, these four equity issues will be discussed, as appropriate, with reference to a vision, not merely the typically stated goals, of bilingualism and biliteracy.

I. Administrative

Equity issues that affect DLI planning at the administrative level include: sustainability of the DLI program, resources to develop DLI programs, and staffing.

Sustainability

Specialized programs outside the mainstream English classrooms tend to come and go because they are often not designed for sustainability. This is true for DLI programs, though

recent years have witnessed more policies that serve to promote sustainability. At the federal level, there is no official policy to promote bilingualism, but no official English-only policy either, and there have been different waves of funding and support for DLI programs (Lindholm-Leary, 2015). At the state level, some states have legislation that supports bilingualism (e.g., California, Hawaii, Utah), some states still favor English-only instructional approaches (e.g., Arizona), and some states have neither legislation nor official policy in either direction. As noted in the U.S. Department of Education (2015) report on current state policies and practices toward DLI programs, there is some movement toward greater support for DLI education among a few states that have developed policies or value statements and/or funding to support DLI education. However, having a policy that is supportive of DLI programs, but no stated vision of bilingualism, can erode support for DLI or for promoting program characteristics that can foster high levels of bilingualism. As noted by Field and Menken (2015), having a strong language policy is critical to safeguarding the educational priorities of a particular district or school; otherwise, they are susceptible to top-down directives that can undermine a DLI program.

According to the U.S. Department of Education (2015) report, only four states (DE, GA, NC, UT) have developed policies that provide *pathways* for continuing the DLI program at the secondary level, though there are many districts outside of those states that have developed pathways as well. Currently, it is not clear how many secondary-level DLI programs exist since there is little information about secondary DLI programs, even in the Center for Applied Linguistics Directory of DLI programs (<http://webapp.cal.org/duallanguage/>). Without the K-12 pathways approved at district and/or statewide levels, it is easy for isolated DLI elementary programs to be dismantled or changed, and for secondary schools to either opt out of providing any continuing DLI program or to provide limited coursework – mostly, existing elective world

language or heritage language coursework. Many parents and educators have apparently accepted this pathway as it is the most common pathway in many districts with DLI elementary programs. Yet, as mentioned previously, the research clearly shows the importance of developing *high* levels of bilingualism and biliteracy to promote more successful academic, cognitive, language, socio-emotional, and career outcomes. Thus, planning in effective DLI districts/schools should include a master plan that provides a clear description of the DLI model and components, with a K-12 pathway. In addition, to promote stronger bilingual and academic proficiencies, educators should consider how to integrate Advance Placement (AP) coursework or an International Baccalaureate (IB) program (Aldana & Mayer, 2014). The K-12 pathway should be developed and approved by the school board in the early years of DLI implementation, if not prior to DLI implementation.

The Seal of Biliteracy is another policy that has provided impetus for bilingualism/biliteracy and sustainability of K-12 DLI programs because it provides incentives for schools to develop language education programs that enable students to receive recognition for bilingualism/biliteracy on their high school diplomas. At this point, all but six states have adopted or are considering adopting the Seal of Biliteracy as a statewide policy. Some schools and districts have used this policy as an opportunity to recognize students' increasing bilingualism at the elementary, middle school, and high school levels. However, because the Seal of Biliteracy did not provide for a clear definition of bilingualism or biliteracy, it was left to states and districts to decide on their own definitions and measures of bilingualism/biliteracy (Davin & Heineke, 2017, 2018). According to O'Rourke, Zhou and Rottman (2016), "The lack of recognition by state policy makers of the basic parameters for successful language learning underlines the lack of prioritization for world language education, even in states that have

requirements” (p. 797). This lack of understanding undermines a vision of establishing high levels of partner language competence, and hence bilingualism.

Furthermore, it is not clear to what extent current or previous EL students have benefitted from the Seal of Biliteracy, and whether definitions of bilingualism include or exclude such students from the recognition of their bilingualism. As Davin and Heineke (2017, 2018) point out, there are issues of equity and access to attaining the Seal if students speak a home language other than English, including appropriate assessments of English proficiency, availability of assessments in the home language, and access to AP and IB programs.

All sustainability of DLI hinges on a policy with clearly stated goals and a vision of bilingualism and biliteracy. We know from the research on effective schools that high quality dual language programs exist where there is a cohesive school-wide shared vision and goals that define achievement, instructional focus and a commitment to achievement and high expectations that are shared by educators, administrators, parents, and students (Calderón, Slavin & Sánchez, 2011; Genesee et al., 2006; Howard et al., 2018; Parrish, Linqanti, Merickel, Quick, Laird & Esra, 2006). Also, in DLI programs, the need for a clear commitment to a vision and goals focused on bilingualism and biliteracy has been demonstrated in studies and advocated by DLI teachers and administrators (de Jong & Bearse, 2011; Genesee et al., 2006; Howard et al., 2018; Lindholm-Leary, 2001; Lindholm-Leary, Martinez & Molina, 2018).

Without a strong commitment to bilingualism and biliteracy, sustainability falters for three major reasons. First, the lack of value for bilingualism and biliteracy can result in DLI programs that are provided only at the elementary level, leaving EL students with less opportunity to develop high levels of academic bilingualism and biliteracy. Second, without a strong commitment to bilingualism and biliteracy, schools, districts or states do not develop or

require assessment or accountability in the partner language. Without accountability, there may be little motivation to promote high levels of proficiency in the partner language. This lack of accountability and commitment to bilingualism/biliteracy may be why DLI researchers sometimes report that secondary students do not reach the high levels of academic proficiency in the partner language that DLI programs seek to promote, and partner language proficiency diminishes in the secondary grades (Lindholm-Leary, 2018a). For example, Potowski (2007) found that among a group of eighth grade DLI students, their Spanish proficiency was less well developed than their English proficiency. In a study of high school students, de Jong and Bearse (2011) reported that former DLI students commented on their diminishing oral proficiency in Spanish due to less instructional time in Spanish, little content taught through Spanish, less status for Spanish at school, and overall less use, even among native Spanish speakers who used Spanish at home. Third, English is the language of power in the U.S., and policies and procedures are put into place that associate English with greater power and the partner language with less power (Valdez, Freire, & Delavan, 2016). For example, in a critical discourse analysis of Utah's promotional materials for DLI programs, Delavan, Valdez and Freire (2016) argue that the materials were targeted toward white families and a world language perspective, and did not reflect the importance of language and cultural maintenance for heritage language communities. When students recognize this power differential, it can result in both a language shift from the partner language to English and a power shift among students who are native speakers of the partner language and those who are native English speakers, to the detriment of those who speak the partner language (Alfaro & Hernández, 2016; Hernández & Daoud, 2014; Potowski, 2004).

Resources

Resources to plan new programs refers to the development and purchase of curriculum, library and instructional materials, and assessments in the partner language; managerial support (DLI coordinator); professional development for administrators, teachers, and staff involved in curriculum, assessment, and special education. In a recent cost-analysis of DLI programs, costs of DLI were small and mostly focused at the district level, with a range of about 2% - 4% of per-pupil spending annually (Steele, Slater, Zamarro, Miller, & Bacon, 2018). Furthermore, they found that for each additional \$100 spent per DLI pupil, there was an increase of 8% of a standard deviation in language arts performance in English. Because the cost analysis was not conducted for EL students specifically, it is not clear what the per-pupil spending might be and the return for additional spending, but the authors did report that there were no ethnic/racial differences in the cost estimate. In a world of equality and equity, such lists of resources and cost estimates could be used as data for planning. However, there is a documented history of resource inequity in education (e.g., Gándara & Contreras, 2009; U.S. Department of Education, 2013) and thus these data do not provide sufficient information for communities that include schools with: poorly maintained physical facilities, teaching and administrative staff who are poorly trained or where staff turn-over is sizable, minimal library resources in the partner language and English, minimal or nonexistent staffing for specials (i.e., art, music, computer), and unsafe neighborhoods. In these instances, for equitable education in DLI programs, the costs may be greater to yield outcomes consistent with the vision of bilingualism and biliteracy and the goals of academic success. In these cases, there is greater need for staffing stability and administrative leadership of the DLI program; professional development for administrators, teachers, and certificated staff; parent education; specialists to enhance children's interests in music, art, math, engineering, etc.

Staffing

Administrative and teaching staff quality is a critical factor in student achievement, though little research has examined the impact of administrative or teacher quality for ELs or for DLI students (Master, Loeb, Whitney, & Wyckoff, 2016). While staffing and professional development issues will be considered in other papers for this panel, two comments are appropriate here relating to the administrative, teaching, and specialized staff.

First, because research shows the significant effect of leadership on student achievement (e.g., Herman, Gates, Chavez-Herrerias, & Harris, 2016), leadership of a DLI program, whether a strand or a full-school program, is critical to the success of the program. A principal must be the main advocate for a DLI program, but the leadership responsibilities may be assumed by a vice principal, program coordinator, resource teacher, or a leadership team that includes teachers and other educators. If a program relies on one person for leadership, even the most successful program can collapse if the effective leader is drawn away. Thus, shared leadership through a leadership team can provide higher stability and sustainability for the program. At least three major responsibilities are required of DLI leadership: program advocate and liaison; supervisor of model development, planning, and coordination; and facilitator of staff cohesion, collegiality, and development. It should be obvious by now that this leadership team needs to understand the DLI program (Alanis & Rodriguez 2008; Howard et al., 2018), be supportive of and an advocate for a vision of high bilingualism and biliteracy, and preferably have some understanding or proficiency in the partner language(s) at the school site.

Second, the teaching staff needs to include teachers with high proficiency levels in the partner language. If there are insufficient staff with the proficiency levels necessary to teach in the partner language at the appropriate grade level, then a program cannot be implemented. It

must be recognized that teachers with 2-3 years of world language instruction do not have sufficient proficiency to teach even kindergartners. Second, if there are not sufficient teachers, and staff are brought in from other countries, then these teachers need training in understanding the language and culture of the students in the classroom (e.g., teachers from Spain do not necessarily understand the culture of students from Puerto Rico or rural Mexico). This is because in a classroom or in other school settings, the ways in which teachers interact with students and the expectations that they have about those students can expose equity or bias. Such expectations are important since a vast literature base shows that teacher expectations impact student achievement (e.g., Hattie, 2018). As a consequence, students who are EL, ethnic or cultural minorities, immigrants, or of lower socioeconomic backgrounds are more likely to suffer the negative effects due to lower expectations for achievement (Gándara & Contreras, 2009). In addition, as Alfaro and Hernandez (2016) point out, “if we are serious about leveling the education playing field, it is imperative that dual language educators, who teach students from the economically poorest populations, intentionally resist and interrupt persistent hegemonic pedagogies” (p. 9). Thus, equity is at the core of social justice in a DLI classroom, including how DLI educators define the language and achievement goals for students. Since classroom research, especially at the higher grade levels, clearly shows the greater power and use of English over the partner language (de Jong & Bearse, 2011; Palmer, 2008; Potowski, 2004, 2007), issues of equity and social justice need to be addressed in professional development.

Specialized staff, including educators with special education certification, need to be considered in DLI planning as well. Administrators need to make every effort to locate special educators and other specialized staff (e.g., librarians, instructors for specials like computer, art, music) who have proficiency in the partner language of the program.

II. Programmatic

While there has been continued and widespread interest in DLI programs, there has been little funding at any level to understand the specific vital DLI program characteristics that are associated with the successful outcomes clearly documented in the research (e.g., Howard et al., 2018). This lack of clarity has led to DLI programs with a hodgepodge of implementation designs, instructional strategies and practices, and assessment practices, which may or may not be based on research and best practices. Thus, it is vital to engage in a high level of planning, since more planning is associated with more successful programs (Howard et al., 2018; National Academies of Sciences, Engineering and Medicine, 2017; U.S. Department of Education, 2012; Williams, Hakuta & Haertel, 2007). In developing a new program or enhancing an older program, there should be a well-thought out plan that focuses on meeting the goals of the program (especially bilingualism and biliteracy) as well as improving *all* students' achievement.

There are a number of equity concerns relating to the program design and development, which must be considered in the planning process: program configuration; selection of partner language(s); and ensuring alignment between any PreK program and language of instruction in the K program.

Program Configuration

As noted by educators and policy makers, states vary considerably in terms of their terminology, definitions, and implementation of dual language programs (U.S. Department of Education, 2015). This is advantageous in the sense that it provides more choice at the local district or school levels to design programs that best meet the needs of their students and communities. It is detrimental when the lack of definition leads educators to design programs that are inconsistent with research and best practices, leading to low quality programs, or when

the definition is so narrow that a school cannot develop a different model that might better meet the needs of their culturally, linguistically, and socio-economically diverse students. It is critical that research and best practices be used to design or enhance a DLI program that both meets the needs of their native speakers of the partner language(s) and native speakers of English.

In DLI program planning, it is important to understand that the vision of bilingualism and biliteracy entails the concept of ‘*additive bilingualism*’ – that all students are provided the opportunity to acquire a second language at no cost to their home language (Hamayan, Genesee, & Cloud, 2013). Considerable research over several decades demonstrates that additive bilingual programs are associated with content area achievement and proficiency in the second language and the home language (e.g., Alvear, 2018; Genesee et al., 2006; Lindholm-Leary, 2001; Lindholm-Leary & Genesee, 2010; U.S. Department of Education, 2012) and improved self-esteem and cross-cultural attitudes (de Jong & Bearse, 2011; Lindholm-Leary, 2011, 2016a, c; Lindholm-Leary & Howard, 2008; Potowski, 2007). Conversely, subtractive bilingual contexts – meaning that a second language replaces the native language – have negative effects on the school performance of many EL students. That is, research shows that native language loss is associated with lower levels of second language attainment, scholastic underachievement, and psychosocial disorders (Hammer, Lawrence, & Miccio, 2008; Lindholm-Leary, 2014; Lindholm-Leary & Borsato, 2006; Montrul, 2016). Thus, there are more positive outcomes for EL students associated with developing both the home language and the second language simultaneously.

Another consideration is whether the DLI program is a single strand within a school with one or more other strands (e.g., English mainstream, other specialized programs) or full school. If the DLI program is a strand within the school, two important conditions must be met for sustainability: 1) there should be at least two classes per grade level, preferably three in the

primary grades, to protect against low program enrollment due to attrition and to maintain staff morale through the sharing of resources (e.g., books; curriculum, assessment, or material development in the partner language; conference attendance); and, 2) program planning, and any professional development about DLI, should be schoolwide and include teachers from all programs in the school to ensure understanding of and garner support for the DLI program. If these issues are not considered, the DLI program may suffer adverse consequences such as: inadequate student population; staff tension associated with the perception of the DLI strand as elite or having to adopt the DLI program without staff input; and/or conflicts with the teacher union about phasing out the English only program and threatening job security or seniority.

A further equity issue that can impact DLI program design concerns the allocation of time given to each language. In DLI programs, there are two major possibilities for time allocation at the elementary level: 1) 90/10 programs in which the partner language is used for 90% of the instructional day in grades K-1, with additional English added each year until later elementary grades, where each language is taught for half the day; and 2) 50/50 programs, which provide instruction through each language for half the instructional day across all grades.

There is an expectation on the part of many administrators and educators that for ELs, more exposure to English in school will result in greater English proficiency than will less exposure. Many educators, administrators, and policy makers are concerned that EL students in their schools or districts will not develop proficiency in English or achieve as high in 90/10 programs as they might in 50/50 programs. Thus, there is a tendency for states/districts/schools to adopt 50/50 models over 90/10 models. According to the U.S. Department of Education (2015) study of dual language policies in the different states, four states (DE, IN, KY, UT) have exclusively adopted the 50/50 model for dual language programs. Further, many districts have

forced 90/10 programs to change to 50/50 in order to demonstrate higher English proficiency and achievement scores in English at earlier grade levels.

Yet, research has examined whether the amount of primary language instruction is a significant factor in promoting achievement for ELs. These studies have compared EL student outcomes from different variations of the same program model (late exit schools with more/less Spanish in the later grades; 90:10 vs. 50:50 DLI programs). Although the investigations were not designed to specifically examine this issue, the results are still helpful as they present evidence that can address this issue (for reviews, see August & Shanahan, 2006; Genesee & Lindholm-Leary, 2013; Lindholm-Leary & Borsato, 2006; Lindholm-Leary & Genesee, 2010; Lindholm-Leary & Howard, 2008). In a review of research on the question of whether there are different outcomes associated with more or less English/partner language in the instructional day (i.e., 90:10 vs. 50:50 programs), Lindholm-Leary (2016a, pp. 208-209) concluded:

This research is consistent in showing that students who spend less time in English in DL programs tend to score at similar levels as their peers who receive more English; this is true for level of English language proficiency (listening, speaking, reading, writing), reclassification rates from EL to Fluent English Proficient, and reading achievement measured in English... Furthermore, differences between DL and non-DL students that appear to favor non-DL peers tend to disappear by later elementary grades, and some studies show that children in DL programs may outperform their peers in non-DL English mainstream programs in English ... However, with respect to proficiency in the partner language, comparative studies show that students demonstrate higher levels of partner language proficiency when they participate in programs with higher levels of the partner language, that is, in 90:10 compared to 50:50 programs or DL vs. English mainstream programs... In addition, students rate their proficiency in Spanish and level of bilingualism higher in 90:10 than 50:50 programs. Finally, reading achievement measured in Spanish is higher in 90:10 than 50:50 programs, especially for EL students. In summary, ... programs with a higher amount of instruction through the partner language can lead to stronger proficiency in the partner language with no sacrifice to English proficiency. Thus, bilingualism and biliteracy may be enhanced to a greater degree when children receive higher levels of instruction in the partner language.

Thus, from an equity perspective – based on the goals of bilingualism and research on academic success for all students – we should expect more DLI programs that are 90/10 rather than 50/50, but that is not the case. Two factors that drive the selection of 50/50 programs over 90/10 programs and neither is concerned with equity. First, accountability requirements compel reclassification to English proficiency for EL students and grade-level literacy outcomes as early as possible. Yet the research clearly shows that it takes time for students to catch up to grade-level expectations, typically by later elementary grades. Thus, according to assessments in English, students appear to function below grade level for 2-4 years, though they clearly catch up. Second, and this is clearly an equity issue, there is not a strong vision for bilingualism and biliteracy, but rather a goal of some proficiency in the partner language. If educators valued high bilingualism, they would select a program that offered students as much of the partner language as possible in order to help them develop a high level of proficiency.

There is another reason to select a 90/10 program over a 50/50 program, which is that the less socially prestigious language in a society is the one most subject to language loss. To enhance prestige in the partner language to counteract the dominance of the societal language, one must focus more attention on the partner language in the early stages of a DLI program. That is why 90:10 DLI programs provide initial literacy instruction in the partner language. This rationale is based on two fields of research: 1) bilingual education research shows that EL students who are provided literacy instruction through their native language eventually score much higher on literacy tests in English -- and in their native language -- than students who have been provided literacy instruction largely or entirely in English (e.g., August & Shanahan, 2006; August, McCardle & Shanahan, 2014; Genesee et al., 2006; Lindholm-Leary & Genesee, 2010; National Academies of Sciences, Engineering and Medicine, 2017); and, 2) immersion research

for native English speakers provides evidence that teaching literacy through the second language does not place these students at risk in their development of the two languages since they catch up to grade level at least by the end of elementary school on standardized tests of reading achievement (Genesee, 2008; Genesee & Lindholm-Leary, 2013). These results are true for low- and middle-income African American students in French immersion and DLI programs (Haj-Broussard, 2005; Lindholm-Leary & Howard, 2008) and for low- and middle-income Latino students in DLI (Lindholm-Leary, 2001, 2016a; Lindholm-Leary & Block, 2010; Lindholm-Leary & Hernandez, 2011, 2018).

The results of this research are important because DLI students often read for pleasure in the partner language in first and second grade, but that once they are able to read in English, they choose to read for pleasure principally in English. One reason may be that English is the societal and prestigious language; thus, there is considerably more literature to choose from in English. The lack of available literature in the partner language becomes more pronounced across the grades, especially in grades 4+. If children do not begin reading in the partner language until second or third grade, after they have already started reading in English, they may never elect to read for pleasure in the partner language.

For example, in research with DLI students in 90:10 and 50/50 middle and high school Spanish or Chinese programs, Lindholm-Leary (Lindholm-Leary, 2011, 2016c; Lindholm-Leary & Ferrante, 2005) found that in the 50:50 program, even though most students thought they read and write “well” in the partner language, few students said they love or like to read for pleasure in the partner language, and most said they don't like or hate to read for pleasure in the partner language, though most students said they enjoyed reading for pleasure in English. In contrast, in the 90:10 program, while a similar percentage of students as in the 50:50 program indicated that

they enjoy reading for pleasure in English, most of students also said they enjoy reading for pleasure in the partner language. Further, the performance of the 90:10 students on the Spanish and English reading achievement tests was associated with their attitudes toward reading for pleasure in the two languages. If students do not like to read for pleasure in the partner language, it will clearly impede any efforts to develop high levels of literacy in the partner language, and therefore, biliteracy.

Selection of Partner Language(s)

When DLI programs are considered in a district or at a school site, oftentimes the default language is Spanish especially if there is a large Spanish-speaking community. There is less support for initiating programs in less commonly taught languages other than Spanish and Mandarin (e.g., Hmong, Vietnamese) even if there are sufficient numbers of ELs or native speakers in those communities desiring a DLI program. Many parents in these other language communities express a desire for DLI programs, but that need often goes unmet. To be fair, there are a number of issues that make it more challenging for these programs to be developed and sustained, including: availability of teachers with appropriate credentials and sufficient language proficiency; curricula, instructional materials, library resources, and assessment instruments in the partner language; and community attitudes about promoting bilingualism in these communities. In addition, when a district does provide a variety of languages, then it must consider and plan for the complexities in continuing the program into middle school and high school. These obstacles can be overcome, but again they require a vision for bilingualism, K-12 pathways, and the complexities need to be considered in the planning phase when a district offers multiple languages at different school sites.

Alignment between PreK Program and Language of Instruction and K Program

As indicated previously, research clearly indicates that a strong first language can serve as an important foundation for the second language and can lead to stronger achievement and second language development, but these results extend to preschool as well (e.g., Espinosa, 2007, 2014; Lindholm-Leary, 2014, 2018b, National Academies of Sciences, Engineering, and Medicine, 2017). Such research would suggest, especially for dual language learners (DLLs), the importance of primary language or bilingual instruction in preschool, as acknowledged in the National Association for the Education of Young Children and Head Start position statements. Research shows that for DLLs who received bilingual vs. English-only programs in PreK-2, assessments of English language proficiency and development did not differ for these students in grades K-1 and DLLs who spent all three years in bilingual instruction made more growth across the grades than their peers who were instructed in English during preschool followed by bilingual in grades K-1 (Lindholm-Leary, 2014, 2018b). These results, again consistent with research at the elementary level, demonstrate no disadvantage to being instructed bilingually and no significant advantage in English proficiency to being instructed through English. Another important finding was that among children who received bilingual instruction in preschool, those who were Mostly Proficient in Spanish scored *significantly higher in English language development* than children who were Mostly Limited in Spanish.

Though the topic of language loss or attrition has not received much investigative attention, researchers have consistently reported the loss and/or attrition of the primary language among potentially bilingual preschool children who are instructed only through English (Espinosa, 2007, 2014; Lindholm-Leary, 2014, 2018b; National Academies of Sciences, Engineering and Medicine, 2017). The findings hold for young children in preschool through

early elementary school, for Spanish and non-Spanish (e.g., Cantonese, Southeast Asian) speakers, and for oral and literate proficiencies.

These results demonstrate two important points related to equity and program planning. First, these findings again show the significance of bilingualism and the importance of having a vision of bilingualism and a pathway from PreK, not just K. Second, they show that program planning must consider the language of instruction in PreK. If a DLL student began preschool as a native speaker of the partner language and had 1-2 years of instruction only through English in preschool, that student is suffering native language loss and cannot be considered a true “native speaker” of the partner language. In fact, research shows that such students who are neither strong in English nor strong in their L1 are at greatest risk of educational failure (National Academies of Sciences, Engineering and Medicine, 2017). In addition, these student suffer further economic disadvantage in employment and wages in losing their bilingualism (Agirdag, 2014). These reasons argue for the necessity of including PreK in program planning and to have a vision of bilingualism across all grade spans (PreK-12).

III.School Characteristics

Research has clearly shown that school demographics and characteristics impact student achievement (e.g., Aikens & Barbarin, 2008; Muijs, Harris, Chapman, Stoll, & Russ, 2009; Sirin, 2005), but there has been little research examining school and equity issues with respect to DLI programs (Lindholm-Leary & Block, 2010). Two equity issues discussed here include school site location and processes for selecting student participants.

School Site Location(s)

There are a number of concerns in selecting a school site for the DLI program that may have serious equity repercussions. In order to make an equitable decision for a location, there

should be input from families that are likely to be affected by the decision. Many times, schools are simply selected by administrators, and parents (and teachers) are informed that a DLI program will be developed at one or more school sites. However, the decision needs to consider characteristics such as: 1) neighborhoods where the partner language and English-speaking families live; 2) communities where parents want and will support a DLI program *and* a vision of bilingualism and biliteracy; 3) transportation issues that may impact the ability of families to drop off and pick up their children, participate in school events and classroom activities, and enable children to develop friendship networks with other children in the program; 4) school sites that have before- and/or after-school care, if necessary; 5) school sites that already have teachers and staff with the required language proficiencies and attitudes supporting the vision of bilingualism and biliteracy; and 6) school sites with the ability to expand for DLI growth.

DLI programs exist in many different types of communities (e.g., urban, inner city, suburban, rural; and in lower SES, middle SES, and upper SES neighborhoods). One community issue that is impacting DLI programs is gentrification, where previously segregated or low-income neighborhoods have been restored and upgraded by more affluent people, leading to increased costs of housing and to displacement of many previous residents, often culturally and linguistically diverse and/or other low-income residents. The effect of this gentrification on DLI programs is that many Spanish, and potentially other partner language, DLI programs have fewer native Spanish-speaking, Latino, or African American students in the classroom. Thus, the population of some DLI programs comes to resemble one-way immersion programs serving fewer culturally, linguistically, and economically diverse students.

While many educators have reported that student outcomes are negatively impacted in low-SES neighborhood schools, Lindholm-Leary and Block (2010) found that Latino EL and

native English speakers, compared to peers in English mainstream classes, in highly segregated and low-income schools achieved at similar or higher levels in assessments in English while scoring at grade level in Spanish. Lindholm-Leary (2001) also found that the school and neighborhood demographics (HI = high ethnic diversity and high proportion of students on free lunch vs. LO = low ethnic diversity and relatively few students on free lunch) of DLI schools had an unintended impact on a variety of outcomes – language proficiency, student achievement, student attitudes, parent attitudes, and teacher attitudes. While academic achievement and language proficiency measured in English did not vary by sixth grade in 50/50, 90/10 HI, or 90/10 LO programs, scores in reading, math and language proficiency measured in Spanish were much lower in 90/10 LO than 90/10 HI programs. In addition, language attitudes, ratings of bilingualism, and ratings of the classroom environment (including equitable treatment) were more positive among 90/10 HI than 90/10 LO students, particularly as they moved into the upper grades. Furthermore, 90/10 HI teachers gave consistently higher ratings to meeting the needs of culturally and linguistically diverse students than did the 90/10 LO and 50/50 teachers, though they perceived lower levels of support from the principal and staff at their school. Finally, while most DLI parents believed that the staff was successful in promoting diversity and equity, parents at 90/10 HI sites gave staff higher scores than parents with children at 90/10 LO sites.

These results should not be construed as advocating for segregated schooling for low income, marginalized students. Rather, these are important findings because they indicate that some DLI programs are operating *without* the absolutely essential core foundation of educational equity, particularly DLI programs in neighborhoods that have more English-speaking students and fewer economically disadvantaged students. Overall, the findings from research show that the location of a school site is important, but the demographics of, and *more particularly the*

support for, a DLI program at a school site can impact teacher and parent attitudes as well as student perceptions and outcomes.

Processes for Selecting Student Participants

Issues of equality and equity may conflict in recruiting and selecting student participants for a DLI program. While planning processes should be in place to ensure that there are an equal representation of native speakers of the partner language and native speakers of English, sometimes this does not occur. Some programs must adhere to federal laws that prohibit discrimination and require that *all* students be subject to a lottery. A lottery has certain advantages in that everyone is perceived to have the same equal chance to participate in the DLI program. However, there are four equity factors that also need consideration in student selection and may trump equality provided by a lottery or which may impact other selection criteria.

1) Little research has been conducted to determine the *best* classroom composition for bilingual education programs in DLI programs. To maintain an environment of educational and linguistic equity in the classroom and to promote interactions between native speakers of English and the partner language, the most desirable ratio is 50% English speakers to 50% partner language speakers (Howard et al., 2018). Since the classroom composition in DLI requires a balance of two groups of students who vary according to proficiency in the partner language and English, it makes sense to ensure a balance by having separate selections (or lotteries) by language (one for partner language speakers and one for native English speakers). Otherwise, if there is a greater number of parents of one language group (e.g., native English speakers) requesting the program over another group, a disproportionate representation of that group may be selected as participants, which will disrupt the balance of the two groups and negatively impact intergroup communication that is so vital in DLI programs.

2) Some schools use placement tests to determine whether to enroll students in a DLI program, and sometimes to ensure that the students will enhance the school's reputation for academic success. A language proficiency test may be helpful for deciding whether a student is really a native speaker or for determining the level of language skills that entering students possess. However, other forms of cognitive or kindergarten readiness tests are inequitable if they are used for selection as they tend to provide greater advantage to students whose parents have higher levels of parent education and/or to children who have attended academic preschools.

3) Another recruitment/selection equity concern is whether younger siblings of a selected DLI student should receive priority in enrollment. From an equity perspective, parents who make a commitment to the DLI program should receive priority in enrolling younger siblings. There are two reasons for this. First, parents can be more readily engaged at one school than at two or more schools. Second, with multiple siblings in one family enrolled in a DLI program, there may be more language resources to enhance proficiency partner language proficiency (e.g., more literacy materials in the partner language, more opportunity to use the partner language among siblings).

4) A final recruitment/selection equity issue is whether to grant priority in enrollment to teachers/principals at a school with a DLI program. Having staff enroll their children in a DLI site at which they are working is a good way to facilitate additional support for the program.

In sum, any criteria for selection should provide for an equitable selection of a students that represent the socio-economic, ethnic, and language diversity of the community while also providing the ratio of native speakers of each language to enhance second language development. In addition, any procedures used to select students should not reflect bias toward more privileged students or away from students in underrepresented groups.

IV. Planning for Diverse Students and Families.

While important in all schools, equity is crucial in DLI program planning with the emphasis on *integrating* culturally, linguistically, and socio-economically diverse students for the goals of bilingualism, biliteracy, and academic success. Equity issues include *planning for recruitment and retention* of diverse students and their families.

In some DLI schools, a socio-economic gap exists, with native English speakers coming from economically advantaged and educated families, and native speakers of the partner language coming from more economically disadvantaged families where the parents may also have lower levels of formal education (Howard et al., 2018; Lindholm-Leary & Block, 2010; Lindholm-Leary & Hernández, 2011). In other schools, there may be a greater range of socio-economic, ethnic, and linguistic diversity. Student background differences must be acknowledged and addressed both to ensure equitable educational opportunities in the classroom for students (Gathercole, 2016; Genesee et al., 2006; Howard et al., 2018) and in professional development, parent training, assessment, and interpretations of the evaluation results.

As noted previously, research clearly demonstrates that EL students in DLI programs are more likely to be reclassified as fluent English proficient (National Academies of Science, 2017; Steele et al., 2017; Umansky & Reardon, 2014) and that high levels of bilingualism have a significant impact on their academic success and socio-emotional outcomes (Han, 2010, 2012; Lindholm-Leary, 2018a, b). However, processes must be in place to assure these positive outcomes, especially that EL students develop high levels of bilingualism and biliteracy, and not lose their primary language or become long-term ELs.

It is important to note that English-speaking students in DLI programs are also diverse in socio-economic status and parental education, as well as in ethnic composition and the use of

language variety/register. In some schools, the English-speaking population includes a diversity of economically advantaged and disadvantaged European Americans, African Americans, Latinos, and Asian Americans. In other schools, most of the English speakers are middle class and European-American. In still other schools, the majority of English speakers are economically disadvantaged African American and/or Latino students. Some educators have questioned whether economically disadvantaged African American or Latino students should participate in DLI programs, because of the achievement gap that often exists between these groups and European Americans. While there is relatively little research on the literacy and achievement of African American and Latino English speakers in immersion or DLI programs, there is sufficient disaggregated research pertaining to these students to indicate that they are not adversely affected, and may demonstrate higher levels of achievement and attitudes (Haj-Broussard, 2005; Lindholm-Leary, 2001; Lindholm-Leary & Block, 2011; Lindholm-Leary & Hernandez, 2011; Lindholm-Leary & Howard, 2008).

A group that has often been excluded from both DLI programs and research is the population of IFEPs (Initially Fluent English Proficient), or students from homes in which a language other than English is spoken and who enter school speaking English proficiently (Lindholm-Leary & Hernandez, 2018). These bilingual students should be included in the program because they are good language brokers between native speakers of English and the partner language at the early grade levels, and because the program enables them to achieve bilingualism, biliteracy, and academic success (Lindholm-Leary & Hernandez, 2018).

There has also been sufficient research on at-risk/special education populations to indicate that students in DLI programs show similar or higher levels of achievement compared to their at-risk peers in English mainstream programs (Howard et al., 2018; Lindholm-Leary &

Howard, 2008; Paradis, Genesee, & Crago, 2015). Consistent with immersion education, students with special education needs or learning disabilities are typically accepted in DLI programs and not removed specifically due to special education needs (Genesee & Lindholm-Leary, 2013; Paradis et al., 2015). Planning for these students requires hiring and training special education staff who possess proficiency in the partner language(s), especially for native speakers of the partner language.

Finally, it is important to mention families in program planning and equity. Research shows an important link between family engagement and student success. Overall, research clearly shows that parents of DLI children are interested in their children's education and believe that parent involvement is important (Gonzalez, Moll, & Amanti, 2005; National Academies of Sciences, Engineering and Medicine, 2017; Sibley & Dearing, 2014), and they have positive attitudes toward the DLI program (Lindholm-Leary, 2001). Yet, challenges to family engagement for culturally, linguistically, and socio-economically diverse families may include a sense of alienation, distrust, and, for some families, a perception that their low educational skills or proficiency in English are not sufficient to assist in the classroom (Arias & Morillo-Campbell, 2008; Lindholm-Leary, 2001; Valdés, Menken, & Castro, 2015). Engaging parents, especially economically or educationally disadvantaged or immigrant, necessitates including parent engagement in the vision of bilingualism and biliteracy; that is, having front office staff that can communicate with them in their language(s), having signage and communication to parents in the partner language(s), and having parent meetings that not only translate for parents but make them a meaningful group in the meeting.

Conclusions

This paper has examined a number of equity issues that educators should consider as they plan for DLI programs. These issues can be classified into four major categories: 1) administrative, 2) programmatic, 3) school, and 4) students and families. Further research is clearly needed to address the specific design and instructional characteristics, features, strategies and approaches that are associated with higher outcomes for disaggregated groups of DLI students. In addition, if *all* students are truly valued in our educational system, research needs to inform practice and policy to enhance sustainability of high-quality DLI programs to meet the needs of all DLI students. With proper planning to develop a vision of bilingualism and biliteracy and a high-quality DLI program, all student groups can meet the goals of bilingualism, biliteracy, and academic success.

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