

**Effective Practices in Bilingual Education Program Model Implementation:**

**A Review of the Literature**

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### **A Review of the Literature**

Cultural diversity in U.S. classrooms continues to increase, as does the number of English learners in public schools (García, 2009). In 2016-2017, approximately 4.9 million English learners were served in U.S. PK-12 schools, representing approximately 10% of the total K-12 student population (Sugarman, 2016). Some states, including Texas, identify more than 19% of their PK-12 students as English learners. At the same time, a persistent achievement gap exists between academic performance of students identified as English learners and their English-proficient peers (Collier & Thomas, 2009). Thus, there is a clear need for implementation of effective instructional models that are research-validated and ensure academic success for all students (Culatta, Reese, & Setzer, 2006).

The purpose of this literature review is to provide a summary of current research on best practices in effective bilingual education program implementation that are associated with elevated achievement outcomes for English learners. The first section of this literature review defines two common approaches to implementing bilingual education – transitional bilingual education and dual language immersion - and summarizes key findings in the national research regarding student achievement outcomes associated with effective implementation of these approaches. These findings identify participation in well-implemented dual language immersion (DLI) programs, as compared to participation in transitional bilingual education (TBE) and English as a Second Language (ESL) programs, to be clearly associated with the most positive cognitive, linguistic, and socioemotional student outcomes. Accordingly, the remainder of the literature review provides a comprehensive review of research findings on best practices in DLI

program model implementation. Best practices are shared in the areas of (a) DLI program model planning and design; (b) DLI instruction; (c) DLI staffing and professional development; and (d) coordinated systems of DLI program model support, monitoring, and evaluation. The information provided in this report aims to serve as the basis for the development of program model fidelity of implementation blueprints, rubrics, tools, and resources to support effective DLI program model implementation in Texas in accordance with, and going above and beyond, basic compliance with requirements in Texas statute.

### **Bilingual Education Program Model Types and Associated Academic Outcomes**

Definitions of bilingual education in the United States have evolved over recent decades, reflecting shifting socio-political attitudes toward bilingualism as a problem to be addressed, a human and civil right, and most recently, a valuable resource for effective participation in a globalized twenty-first century (García, 2009). For the purposes of this literature review, bilingual education is defined as a system for providing English learners in pre-kindergarten through grade twelve (PK-12) instruction delivered in their primary language, as well as integrated language, literacy, and content instruction in English, to ensure full access to grade-level curriculum while acquiring English. In U.S. PK-12 public education settings, bilingual education is generally provided through implementation of two basic program types: transitional bilingual education (TBE) and dual language immersion (DLI) (Moughamian, Rivera, & Francis, 2009). While TBE and DLI are both bilingual programs, there are key differences in their respective program goals that significantly impact all aspects of their implementation, as well as their associated student outcomes. This section defines TBE and DLI program types and presents research findings that associate English learner participation in an effectively implemented DLI

program with academic, linguistic, and socio-emotional benefits that significantly surpass outcomes associated with TBE program participation.

### **Transitional Bilingual Education (TBE)**

Implementation of TBE program models is not uncommon in the U.S., especially in states that have large numbers of English learners who share the same language and background (Collier & Thomas, 2009). The United States Department of Education (USDE) defined TBE as a “program that maintains and develops skills in the primary language while introducing, maintaining, and developing skills in English. The primary purpose of a TBE program is to facilitate the ELs’ transition to an all-English instructional program, while the students receive academic subject instruction in the primary language to the extent necessary” (U.S. Department of Education, 2016, p.10). TBE programs use the children’s primary language in instruction typically only until they develop English proficiency, at which time the students transition into all-English instruction for the remainder of their schooling; the role of the primary language, therefore, is to assist in the acquisition of English, resulting in a transition, or shift, to majority language (English) and loss of primary language, a process referred to in the research as language shift (García, 2009).

The amount of time that English learners served through TBE receive primary language instruction typically ranges from a minimum of two years (early-exit TBE) to six years (late-exit TBE). To facilitate the transition to English, teachers in TBE classrooms build on what students know in their primary language as the basis for what they are learning English. Many of the literacy skills taught in the primary language, for example, may transfer over and positively influence the acquisition of literacy skills in English. Similarly, children can transfer curriculum

content learned in the primary language over to English, as they gain English proficiency (Moughamian, et al., 2009). A common instructional strategy used by TBE teachers is random code-switching between the primary language and English during content instruction, also referred to as concurrent translation. TBE teachers frequently employ this mixing approach without conscious consideration, either following the lead of individual students, or for emotionally engaging the child, or for taking disciplinary actions (Zentella, 1997). Concurrent translation as an instructional practice has come under criticism, as it is associated with weaker academic outcomes for English learners than approaches that clearly separate program languages during instruction (Cummins & Swain, 1986). The use of random code-switching in TBE classrooms is associated in the research with erosion of the minority language and increased rates of language shift toward English (García, 1993).

Common to both early- and late-exit TBE is the goal of promoting English language acquisition at the expense of primary language proficiency, resulting in primary language loss. Thus, TBE program models have been criticized as subtractive and assimilationist in nature, systematically leading to loss of the child's primary language skills and diminishing of the child's multicultural perspectives and competences (García, 1993). Nonetheless, the provision of early literacy instruction in the primary language through effectively implemented TBE, coupled with content matter being presented in the child's primary language, is found in the research to have a positive impact on the ability for English learners to meaningfully access grade level content matter and achieve on grade level at greater rates than peers participating in English-only instruction (August and Shanahan 2006; Goldenberg 2013).

## **Dual Language Immersion (DLI)**

The USDE defined DLI as a bilingual program where “students are taught literacy and academic content in English and a partner language... aim[ing] to help students develop high levels of language proficiency and literacy in both program languages, attain high levels of academic achievement, and develop an appreciation and understanding of multiple cultures” (USDE, 2016, p. viii). DLI program models are considered additive and enriching, providing opportunities for English learners to acquire English at no cost to development of their primary language (Hamayan, Genesee, & Cloud, 2013) with the added benefit of retaining a strong sense of bilingual and bicultural identity (García 2009; Genesee 2004).

DLI instruction in the primary language and English is typically provided at the elementary school level for a minimum of six years, with strong support in the research for expansion of DLI services from PK-12. Regardless of DLI program duration, a non-negotiable program model feature is that the amount of core content instructional time delivered in the primary language never falls below that delivered in English, or 50% of the instructional time overall (Howard, Lindholm-Leary, Rogers, Olague, Medina, Kennedy, Sugarman, & Christian, 2018). Another traditionally emphasized feature of effective DLI programming is the strict and conscious separation of program languages and provision of instruction in one language at a time (Thomas & Collier, 2012). To provide an immersive learning environment, DLI teachers typically refrain from language switching and employ a variety of sheltering strategies (Echevarría, Vogt, and Short, 2016), with adaptations for dual language settings (Howard, Sugarman, & Coburn, 2006), to ensure that content is comprehensible and that students have ample language practice opportunities in which they are challenged to interact with peers in meaningful ways around grade-level content.

To minimize language shift and loss in support of the program’s biliteracy goals, effective DLI programs are intentionally structured to elevate the status of the non-English program language – commonly referred to as the partner language – so that it rises to a status equal to that of English. Implementing a strong language policy that carves out space in the instructional day and upholds rules of strict separation of languages during instruction are traditionally recognized in the research as important components for DLI program model success (Field & Menken, 2015).

### **Student Outcomes Associated with Program Participation**

Persistent academic achievement gaps and gaps in high school graduation rates between English learners and the general student population have been the object of concern for several years in US schools, particularly for the large number of English learners coming from Spanish-speaking homes (García, Jensen, & Scribner, 2009). The provision of primary-language instruction through bilingual education has emerged consistently in the research as beneficial in addressing these concerns (August & Shanahan, 2006; de Jong, 2014; Genesee, Lindholm-Leary, Saunders, & Christian, 2006; Lindholm-Leary & Genesee, 2014; Rolstadt, Mahoney, & Glass, 2005; Slavin & Cheung, 2005). Numerous studies identify high levels of oral language proficiency and literacy in a student’s primary language as beneficial in facilitating development of strong English literacy skills (August & Shanahan, 2006; Moughamian, Rivera, & Francis, 2009; Wu, 2005). Bialystok (2007) also found that significant cognitive advantages were associated with advanced levels of bilingualism.

Longitudinal studies have been conducted that compare English learner academic outcomes associated with participation in specific models of ESL and bilingual education. In an

analysis of academic achievement outcomes of over six million English learners in grades 1 – 12 served initially through seven program models, including ESL, TBE, and DLI, Collier and Thomas (2009) found that English learners initially served through well-implemented TBE outperformed, on average, those served through well-implemented ESL, as measured on English reading tests. English learners served through well-implemented DLI showed, on average, higher academic outcomes than their English learner peers served through any other language program and were the only group in the study to achieve full gap closure with their English proficient peers, which occurred by the middle school years (Collier & Thomas, 2009). Umansky and Reardon (2014) found that English learners served through bilingual education attained more favorable rates of reclassification as English proficient and higher levels of attainment of English proficiency in the long term than their peers served through all-English approaches, with students served through dual language programs showing the most promising results. Valentino and Reardon (2015) found that English learners in English-only programs initially outperformed their peers served through TBE and DLE in English proficiency by second grade. These early lags, however, were found to be eliminated, or in fact reversed, once the students in the study reached the middle school years, by which time those who had spent their elementary school years in TBE and DLE programs had test scores, English proficiency levels, and reclassification rates that were, on average, as high as or higher than similar students who were in English immersion classrooms at the elementary grades (Valentino & Reardon, 2015).

Primary-language instruction was also associated in the research with better emotional outcomes for English learners (Lindholm-Leary & Borsato, 2001). In a comparative study of Hispanic bilinguals educated through various English learner programs, those participating in DLI education had higher levels of bilingualism and were found to demonstrate more positive



motivation and a stronger sense of positive identity (Lopez, 2010). Students with high levels of bilingualism were also found to enjoy better family relations and fewer behavior problems at school (Portes & Hao, 2002). Santibañez and Zárata (2014) found that students who maintained their bilingualism through high school were more likely to attend college. Rumbaut (2014) found that higher levels of bilingualism among young adult children of immigrants were associated with lower high school dropout rates. In a study of over 6,000 young adults, increased levels of bilingualism were also associated with increased earning power and likelihood of professional success (Rumbaut, 2014). Evidence in support of a bilingual advantage in the marketplace emerged from a study of nearly three hundred business employers in California, two-thirds of whom reported a preference for bilingual job candidates over comparable monolingual employees (Porrás, Ee, & Gandara, 2014). Given the evidence in the research that English learners served through effectively implemented DLI programs demonstrated the most favorable linguistic, academic, and socioemotional outcomes, and based on the assets that bilingualism and biliteracy afford in the 21<sup>st</sup> century global economy, the remainder of this literature review focuses on best practices identified in the research for effective DLI program model implementation.

### **Program Model Planning and Design**

Effective DLI programs are carefully structured and designed to ensure that the program goals of bilingualism and biliteracy, academic achievement, and sociocultural competency are systematically addressed (de Jong, 2011; Genesee, et al., 2006; Lindholm-Leary & Genesee, 2010; Montecel & Cortez, 2002). Careful program planning and implementation with fidelity are identified in the research as key factors in ensuring that DLI program goals for student success are realized (Genesee et al., 2006; National Academies, 2017). Howard et al. (2018) emphasized

the importance of engaging in a focused and comprehensive DLI program planning process and creating a detailed DLI program plan prior to commencing program implementation. A needs assessment that identifies and analyzes locality-specific factors reflecting the diverse linguistic, cultural, and socioeconomic characteristics of community stakeholders was identified as a key component of the DLI program planning process (Howard et al., 2018). The program planning process should also invite the ongoing participation of a variety of local stakeholders – to include district-level and school-level staff, parents representing the diversity of the student body, and other members of the greater community – to increase likelihood of DLI program success (Montecel & Cortez, 2002). In summarizing key lessons learned from current research on DLI program implementation, Genesee (2018) emphasized the importance of engaging in an intentional planning process with strong leadership involvement, and foregoing a one-size-fits-all approach when planning a DLI program and ensuring that program design reflects local contextual factors.

### **Language Allocation (90-10, 50-50)**

A key decision point when planning to implement an effective DLI program is language allocation, or how the program will divide instruction appropriately between English and the partner language at each grade level. A well-designed language allocation plan is important, in that it systematically assigns instruction in each language and across content areas to promote equity between the two program languages and to support program goals. Language allocation is typically identified by naming the percentage of instruction to be provided in the partner language in comparison to English at the onset of the program, which typically occurs at pre-kindergarten or kindergarten.

The two most common DLI program models are the 90-10 and the 50-50 models. In the 90-10 model, 90% of instruction at program onset is delivered in the partner language, with the remaining 10% delivered in English (Gómez, Freeman, & Freeman, 2005; Palmer, 2007; Alanís & Rodriguez, 2008). This ratio gradually shifts with more instructional time allocated to English as children in the program progress up the grade levels. By grades 4 or 5, allocation typically reaches parity (50 – 50) between the partner language and English and remains equal for the remainder of the program (Howard, et al., 2018). Initial literacy instruction in 90-10 programs is typically delivered in the partner language, regardless of whether it is a one-way or two-way program, with English literacy introduced once basic partner language literacy is established (Lindholm-Leary, 2012). In DLI programs adopting this so-called sequential approach to biliteracy instruction, literacy instruction in the partner language continues, as English reading and language arts instruction is added in, to ensure that the program biliteracy goals are met.

A 50 – 50 DLI program, on the other hand, maintains an equal balance of instruction between the two program languages from program onset and for the duration of the elementary school program (Gómez, Freeman, & Freeman, 2005; Palmer, 2007; Lindholm-Leary, 2012). Initial literacy instruction varies across 50 – 50 programs, with some introducing literacy to students in their primary language and then adding in second language literacy instruction later (Gómez, Freeman, & Freeman, 2005), and others adopting a so-called simultaneous approach to biliteracy instruction, introducing literacy instruction in the two program languages from program onset (Lindholm-Leary, 2012).

Some schools adopt language allocations that lie somewhere between 90-10 and 50-50, such as models that begin with an 80-20, 70-30, or 60-40 allocation of partner language instruction to instruction in English. Research is scarce that specifically compares outcomes of

90-10, 50-50, and variation models, but all are associated with similarly positive student outcomes (Howard, et al., 2018). English proficient students in two-way programs have been found to have higher levels of partner language proficiency in 90-10 models than 50-50 models (de Jong, 2014). English proficient DLI students were also found to attain levels of English proficiency commensurate to peers not enrolled in DLI, although temporary lags in English literacy development during the first few years of program participation were found among participants in 90-10 models (Lindholm-Leary & Genesee, 2014). In summary, current research suggests that provision of initial literacy instruction in the partner language has no detrimental effect on long-term literacy development in English for DLI program participants overall, and that higher percentages of partner language instruction are associated with higher levels of partner language proficiency among English proficient DLI students. At the same time, exposure to the partner language is not the only key factor in influencing student outcomes, as levels of student engagement and approaches to instruction have been found in some instances to outweigh language allocation in leading to DLI program success (Genesee, 2018).

Language allocation plans in effective DLI programs should be fully formulated prior to initial program implementation and should clearly delineate what instructional content is delivered in English and the partner language at each grade level. Language allocation at the elementary level should be clearly articulated in a written language allocation plan, which typically defines language allocation either by content area (e.g. math in English, science in Mandarin), by teacher (e.g. one teacher delivers instruction in Spanish, and the other in English), or by time (e.g. half day in Arabic, half day in English) (Howard, et al., 2018). The alternation between program languages may also take place through thematic units (Collier & Thomas, 2009).

Regardless of design specifics, an effective DLI language allocation plan provides a clear structure for balancing instruction in the two program languages to ensure that grade-level curriculum is addressed with equal rigor through each program language, and that each program language is systematically awarded the same level of attention and esteem (Howard, et al., 2018). This is particularly relevant in contexts where the two program languages have unequal status, as is predominantly the case in US schools, where English is generally acknowledged as the universally recognized language of schooling and overall societal success. The language allocation plan is a tool for managing inequities in the status of the partner language and English, a challenge commonly cited in the research (de Jong & Howard, 2009).

Effective DLI programs have a language allocation plan that is designed to optimize realization of the program's three goals. To promote bilingualism and biliteracy, the allocation plan accounts for vertical planning of literacy instruction in the partner language and English at every grade level (50-50 programs), and literacy in the partner language at every grade level, and in both program languages, once English literacy instruction is introduced (90 – 10 programs) (Howard & Christian, 2002). The language allocation plan allows for the thoughtful distribution of standards-based content instruction across the two program languages, horizontally at each grade level, and vertically up and down the grade levels, to promote attainment of the goal of high academic achievement in the two program languages. To support the development of sociocultural competence, the language allocation plan upholds linguistic equity between the two program languages and provides for the systematic integration of instruction focused on development of sociocultural competencies and skills over the duration of the program (Howard & Christian, 2002).

## **Program Duration**

Effective DLI programs begin at kindergarten, or pre-kindergarten, if applicable, and extend through the elementary school years. A minimum program duration of six years is recommended in the research to ensure that participants have sufficient time to gain proficiency in the two program languages (Hakuta, Butler, & Witt, 2000, Saunders & O'Brien, 2006). The majority of DLI programs deliver instruction in English and an additional language, or partner language, that is the shared primary language of the English learners being served. Some programs introduce a third language, as well, typically as an enrichment course rather than as a full program language. Unlike in TBE and ESL programs, where English learners discontinue participation upon being reclassified as English proficient, continued participation of English learners in the DLI program after reclassification as English proficient is an important feature of DLI programming, as length of program participation is associated with higher linguistic and academic achievement outcomes (Howard, et al., 2018).

DLI programs may extend beyond the elementary school years so that students are afforded the opportunity to continue to develop their bilingual and biliteracy skills; program articulation at the secondary level, however, is more complex than at elementary, with unique staffing and scheduling challenges (Bearse, de Jong, & Tsai, 2018). DLI students in middle and high school typically take a partner language and literacy course each year, as well as an additional content course or elective in the partner language. Course schedules are carefully planned and structured to ensure that a clear pathway to biliteracy is upheld. Vertical articulation of partner language courses between the elementary and secondary school levels is important because world language courses typically offered at middle and high school are not appropriate to the needs of student coming up through DLI programs (Wilson, 1988).

DLI course offerings at the secondary level are frequently inhibited by scheduling challenges and a shortage of teachers qualified to teach rigorous secondary content effectively in the partner language (Montone & Loeb, 2000; Sandy-Sanchez, 2008). Researchers pointed to Canada, where some programs target French academic language development as an integral component of DLI teacher preparation programs, as a model for US universities to emulate to better prepare DLI teachers for teaching effectively at the secondary level (Burger, Weinberg, Hall, Movassat, & Hope, 2011).

Student attrition is another challenge faced by secondary DLI programs, which typically must compete with an array of electives and extracurricular activities such as athletics, the arts, clubs, and career-oriented course offerings that may lure DLI students away from the program. Effective practices to circumvent this challenge include offering DLI courses that afford opportunities for DLI students to apply their bilingual and biliteracy skills in real-world contexts, such as through medical translation and interpretation, community service, and bilingual teaching and tutoring opportunities, and offering linguistically and culturally relevant extracurricular activities, such as ballet folklorico and mariachi clubs, that build DLI student pride in their bilingual and bicultural identities and enhance their socio-cultural competence (Bears, de Jong, & Tsai, 2018). A key lever in encouraging students to continue DLI program participation through the end of high school is the awarding some form of special recognition, such as a Seal of Biliteracy, upon graduation. At the time of this writing, thirty-three states and the District of Columbia were reported to be providing the opportunity for high school graduates to attain a Seal of Biliteracy or similar distinction, based on completion of appropriate coursework and demonstration of high levels of bilingualism and biliteracy (Arias & Markos, 2018).

### **Program Scope (Whole School, Strand Within a School)**

DLI programs often begin as a strand within a school, with only one or two classrooms at each grade level implementing DLI instruction. Operating a DLI program as a strand within a school may bring with it associated challenges (Palmer, 2010). For example, students may not have opportunities to interact as much with non-DLI peers since they are more likely to be in the same class from one year to the next. In a strand program, DLI teachers may feel disconnected from their non-DLI colleagues, and linguistic equity of the partner language with English may be more difficult to establish and maintain (Palmer, 2010). Student attrition may also pose challenges to program sustainability in a strand program, as may struggles to build and sustain schoolwide cohesion among and between DLI and non-DLI teaching staff (Howard & Christian, 2002).

Implementation of DLI may also be expanded to include participation across the entire school. Schoolwide DLI implementation most frequently occurs after a strand DLI program becomes more established (Palmer, 2007). Schoolwide DLI implementation is associated with increased staff cohesion and an overall more positive school climate. Schoolwide implementation of DLI programming requires very high levels of community support, however, because the entire school must embrace the vision and commit to working to ensure that program goals are realized. Factors such as staff availability, level of community interest, and characteristics of the overall student population inform whether a strand or whole-school DLI program approach is more feasible (Howard & Christian, 2002).

### **Program Participants (One-way, Two-way)**

The research recognizes two types of DLI models, depending on the demographics of the participants. One-way DLI programs serve students from a single language group. Typically,



one-way programs serve children who, at the onset of the program in pre-kindergarten or kindergarten, are identified as English learners with a shared primary language spoken in the home. Instruction in the one-way program is delivered in English as well as in the children's primary language, commonly referred to as the partner language (Howard et al., 2018). Two-way DLI programs serve a more heterogeneously mixed group of students, with about half the class made up of English learners who share a common primary language, such as Spanish or Mandarin, and the other half made up of peers who are fluent in English. Students are integrated to receive instruction in the partner language and English and work side-by-side as language models to assist one another in a reciprocal language-learning process. It is generally recommended that the two student populations have equal, or nearly equal, representation in the classroom, with representation of either group never falling below one third of the entire group (Howard et al., 2018).

While one-way DLI programs typically admit English learners at any grade level as a means of providing them the specialized language services needed to access grade-level curriculum and acquire English, two-way programs often have policies in place that limit admission of English-fluent students to kindergarten or first grade, unless incoming students have had previous DLI experience. This is because they likely lack the necessary language and literacy skills needed for successful participation in DLI instruction at the upper grade levels. School-wide DLI program models may admit children of all language backgrounds at any grade level, but it is recommended they provide intensive and targeted language instruction to assist children in their adjustment to the language demands of the DLI program instruction (USDE 2015).

It is recommended that leaders of two-way DLI programs plan carefully for program sustainability, as attrition may occur, particularly among those students who entered the program as English proficient in the early grades. As the English proficient students move up through the grade levels, some may experience family life changes (moves, work transfers, etc.) and discontinue program participation, without being replaced by other English proficient children. Some parents of English-fluent students may lose confidence in the DLI program and pull their children out prematurely when they experience unexpected lags in their child's academic and linguistic progress (Lee & Jeong, 2013). Informing parents from the onset of this lag as a normal part of the process for children learning in two languages (Lindholm-Leary & Genesee, 2014) can serve to increase program sustainability. Providing clear and ongoing communication with DLI parents on how DLI programs operate and what to expect at various stages of program participation is recommended in the research so that parent expectations can be appropriately managed and program participation can be stabilized (Alanís & Rodriguez, 2008).

Researchers also pointed out a shift that has occurred over the past two decades in the profile of English learners in US schools. In many communities, most English learners were born in the US to immigrant parents but were not themselves immigrants, and they were reported to have had exposure to both English and another language since birth. These students, referred to in the research as simultaneous bilinguals, do not neatly fit into the DLI participation categories of English learner or English proficient, yet few DLI program leaders take the unique language profiles and needs of this group of students in account when designing their DLI programs (García 2009). Further research is needed to identify strategies for best meeting the needs of this dynamic and ever-changing group of children in US schools.

## **Instruction**

More research on what works in DLI instruction is needed, particularly given the shifting language profiles and associated linguistic strengths and needs of DLI program participants, but several effective practices in DLI instruction have been identified in the research.

### **Sheltered Instruction and Language Immersion**

Traditionally, a strict separation of languages during DLI instruction was recommended, based on research indicating that prolonged exposure to each program language, through language immersion accompanied by the provision of comprehensible input and other linguistic accommodations, promoted second language development (Collier & Thomas, 2005). Accordingly, DLI classrooms generally integrated language and academic content instruction through English immersion for part of the instructional time, and through immersion in partner language instruction for the remainder of the time. Research in ESL instruction supports the use of sheltering techniques such as incorporating language objectives and visuals into daily instruction, connecting content to students' background experiences, pre-teaching vocabulary, and providing scaffolds to ensure comprehension of input and to support production of language output (Short & Echevarría, 2015). Howard et al. (2006) recommended incorporation of cultural objectives into DLI instruction, as well teaching children of different language backgrounds specific sheltering techniques for supporting their peers during interactive activities, as enhancements of sheltered instruction in the two-way DLI classroom.

### **Student Grouping**

In two-way classrooms, having students work in bilingual pairs in bilingual learning and resource centers was recommended so that peers could model language use and support one

another in each other's languages (Gómez, Freeman, & Freeman, 2005). In analyzing student language use during peer interactions, de Jong and Howard (2009) found some evidence that students in two-way DLI classrooms served as resources for one another in specific instances and ways, such as by providing translations and explanations of word usage and grammatical structures. While DLI language instruction focused historically on meaning-making rather than on strict attention to form, this practice has emerged in the more recent research to be insufficient in producing individuals with high levels of bilingualism and biliteracy, and increased attention to language form during instruction has been recommended so that DLI students truly attain their proficiency goals (Genesee, 2018; Howard, et al., 2018). Schleppegrell (2013) found that instruction targeting the development of metalanguage strategies, or skills in thinking about and analyzing how language functions as part of a system (including morphology, grammar, semantics, syntax, usage), was an important component of language and literacy development. Balancing provision of both structured (i.e. form-focused) and unstructured (i.e. meaning-focused) group work activities was associated with the most promising linguistic outcomes (Saunders & O'Brien, 2006; Schleppegrell, 2013).

Bringing students of different language backgrounds together for instruction may result in enhanced linguistic and socio-cultural outcomes; this does not occur automatically, however. Researchers found that the unequal status of English (the language of power and status in the United States) and the partner language led to differences in interactions among peers (de Jong and Howard, 2009; Hernandez, 2015). Research indicates that English learners tend to acquire English at a more accelerated rate than the rate at which English proficient students acquire partner language proficiency. This is likely due to the status conferred English, as well as to the amount of exposure children generally have to English outside the classroom, in US

communities where English typically prevails. DLI students were observed to more frequently shift to English during academic discussions during partner language instruction, whereas shifts to the partner language were observed significantly less frequently during English-medium group work. Such shifts to English during instruction were found to undermine full development of partner language proficiency (de Jong and Howard, 2009). To encourage partner language use during student group work and dissuade students from shifting to English, de Jong and Howard (2009) recommended that teachers assign students proficient in the partner language designation as language experts. It was further suggested that teachers consider grouping children of similar language profiles together periodically for targeted language activities that challenge native speakers of the partner language to demonstrate high levels of proficiency, on the one hand, and support and encourage English proficient students to stick to the partner language and not resort back to English when challenges arise (de Jong & Howard, 2009). Incorporating specific strategies into daily instruction to ensure that the partner language is awarded equal status to English is an important feature of effective DLI instruction, in one-way, and particularly in two-way classroom settings.

### **Authentic literacy development**

Development of literacy skills in the two program languages is an important component of DLI instruction. August and Shanahan (2006) found that oral proficiency and literacy in an English learner's primary language facilitates strong literacy development in English. Transfer of language and literacy skills across the two program languages in a bidirectional process has been found to be essential in the development of a child's bilingualism and biliteracy (Beeman & Urow, 2012; García, 2009). Regardless of whether literacy is introduced initially in English, the partner language, or both, it is crucial that the instructional practices used during partner

language literacy instruction authentically reflect the specific features of that partner language (Howard, et al., 2018). Authentic literacy instruction is important at all grade levels, but methodological differences, as compared to English literacy instruction, are most pronounced in the early stages of reading instruction, when children are still learning to decode and encode sounds and symbols to make meaning through text. The structure and unique features of the partner language determine the method and approaches to teaching children to read and write in that language. Authentic literacy instruction in the early grades requires teachers to have a deep understanding of how English and the partner language are the same and how they differ, what this means when teaching reading and writing in the two languages, and how the structure of each program language impacts the discrete skills to be taught in each language, the sequencing of the teaching of those skills in each language, and the amount of emphasis and attention that needs to be paid on those skills in each language (Howard, et al., 2018).

As children progress through biliteracy instruction in well-implemented DLI programs, they are directed to become more aware of similarities and differences among and between the program languages, at the morpheme, word, sentence, and even text level. High-quality DLI instruction for more advanced bilinguals should incorporate opportunities for students to notice, compare, contrast, analyze, and hypothesize about features of the two program languages (Beeman & Urow, 2012). Development of such metalinguistic awareness is associated in the research with elevated cognitive and linguistic outcomes, particularly for children who have been participating in bilingual education for five years or more (Bialystok, Peets, & Moreno, 2014).

## **Development of Socio-cultural Competence**

Research on what specific practices are most effective for promoting socio-cultural competence among students participating in DLI programs is limited. There has been an assumption that bringing students of diverse linguistic and cultural backgrounds together in the two-way DLI classroom promoted positive interactions and relationship-building, and that resulted in demonstration of more positive dispositions toward other cultures among two-way DLI students than peers in other programs (Feinauer & Howard, 2014). Feinauer and Howard (2014) noted that research was shifting away from student attitude studies and attending to the complexities of student identity construction, with a focus on how intersectionalities between language, culture, and technology shape how DLI students view themselves and the world. How effective DLI programs can support students in meeting the program's socio-cultural remains an area in need of further research (Howard et al., 2018).

## **Language Use During Instruction**

Advances in brain science and language acquisition research have led to new discoveries on bilingual brain development, and bilingualism has come to be understood as a dynamic, multidimensional, hybridized, simultaneous, and multidirectional process rather than a binary, dichotomous, and linear one (García, 2009). Becoming bilingual has come to be recognized in the convergent research as a natural process and a viable goal for most, if not all, children, including those with disabilities and from a variety of backgrounds (Genesee, 2018). Bilingual learners are found to benefit when encouraged to use what they know in each language to enhance their development of proficiency in the other language. This includes honoring and celebrating the use of language varieties during classroom instruction, including regional dialects and different registers, marking a departure from the past, when the language of instruction was

more strictly limited to use of what is commonly termed standard academic language (Bears, et al., 2018).

In terms of language use during DLI instruction, a shift away from the strict separation of languages (Collier & Thomas, 2009) and toward the strategic separation of languages is underway. The incorporation of targeted opportunities for students to build their metalinguistic skills is increasingly recognized as an important component of DLI instruction, but questions abound as to exactly how the two languages are best leveraged to support the development of bilingualism and biliteracy (Genesee, 2018). At the more consciously strategic end, Beaman and Urow (2012) introduced the Bridge as a method for systematically guiding DLI students through cross-linguistic comparisons of content vocabulary and structures in the two program languages. A less structured approach is that of embracing translanguaging, or the free blending of language separation and language integration, as a key component of effective DLI instruction (García, 2009). Hernández (2015) waged the critique, however, that encouraging more fluid language practices in DLI classrooms may negatively affect interactions among peers, particularly in two-way programs, where the higher-status program language of English tends to be adopted over partner language use, thus eroding opportunities for partner language development. Others argue that language status issues need to be explicitly called out in DLI programs, so that DLI teachers and students develop full awareness of their language use and its impact on development of bilingualism and biliteracy (de Jong & Howard, 2009).

### **DLI Staffing and Professional Development**

Recruiting and retaining appropriately qualified teaching staff is identified in the research as one of the greatest challenges faced when implementing an effective DLI program (Kennedy, 2018b). As the research base in support of DLI has become stronger and more widely



recognized, DLI program popularity has risen and the number of DLI programs implemented across the United States has grown (Christian, 2018). Demand for qualified DLI teachers and school administrators is high, but teacher supply has not risen commensurately (Kennedy, 2018b). Furthermore, federal education policy over the past two decades has shifted toward adoption of English-focused education policies that allow for, but do not explicitly support, serving English learners through bilingual education, leaving each state on its own to carve out DLI implementation spaces (Christian, 2018). Within this context, the creation of systems for preparing, recruiting, and retaining qualified DLI educators falls to state-level administration, and even more frequently, to implementers of DLI education at the local level. The section that follows summarizes the research on DLI teacher qualifications and preparation, and on staffing strategies that include focused recruiting efforts and provision of targeted professional development to boost staff retention.

### **Teacher Qualifications and Preparation**

Teacher quality and instructional effectiveness are clearly associated in the research with positive student outcomes (Marzano, 2003). Like all educators, teachers in language education programs need to have a high level of content area knowledge, pedagogical expertise, effective classroom management, ability to differentiate instruction, and a deep understanding of sound assessment practices (Howard, et al., 2018). In addition, DLI teachers need to demonstrate academic language proficiency in the partner language; understanding of and ability to apply linguistics and second language acquisition theory; knowledge of the culture(s) where the partner language is commonly used; diversity awareness and skills in culturally responsive teaching; the adoption of a nondeficit attitude toward bilinguals and bilingualism; effective multicultural parent communication and education strategies; and the ability to design and deliver rigorous

content in English and the partner language using sheltered instruction techniques (Kennedy, 2018b). Thus, effective DLI teachers need a specialized skill set to positively impact student outcomes and support students in attaining the program's goals of bilingualism and biliteracy, high academic achievement, and socio-cultural competence.

Few states offer pre-service teacher preparation programs leading to a bilingual credential, and fewer still offer a DLI teaching credential (Kennedy, 2018a). Appropriate educator preparation and certification, resulting in fully credentialed teachers, was found to be associated with more positive teacher self-assessment regarding perceived ability to serve English learners effectively in the classroom (Lindholm-Leary, 2001). Given the specialized skill set required of DLI teachers to be effective, DLI teacher preparation standards are needed that would support a standardized credentialing process (LaChance, 2017). Despite this need, the USDE (2015) found that only seven states across the nation posted on their websites a requirement that teachers serving in DLI classrooms hold a bilingual teaching certificate or endorsement, and only eight states posted guidance of any sort on the web regarding recommended qualifications for DLI teachers.

In the absence of much-needed national DLI teacher preparation standards that could form the basis for aligned educator preparation programs (LaChance, 2017), leaders in higher education are forced to work in an ad hoc fashion to meet the growing school district demand for appropriately prepared DLI teachers (Kennedy, 2018a). In a small-scale case study of four university-based DLI teacher preparation programs, Kennedy (2018a) found that the programs under study focused their efforts for the most part on providing add-on degree or certificate programs for teachers already serving in DLI classrooms. On-line education was viewed as an effective means for meeting the needs of busy practitioners, and instruction was generally

delivered in English to meet the diverse needs of teachers serving students in various partner languages. Some case study programs did provide teacher preparation instruction in another language, most commonly Spanish.

Kennedy (2018a) found that the Texas and California programs provided initial certification preparation, but the curriculum was aligned to bilingual teaching standards in general rather than tailored specifically to DLI educator preparation. Other challenges cited in the study included a lack of adequately qualified university-level instructors to teach the specialized DLI courses, particularly in a language other than English, and difficulties finding an adequate number of field placement opportunities in local school district DLI classrooms to meet the needs of the growing number of DLI teacher candidates (Kennedy, 2018a). Despite these obstacles, case study program leaders demonstrated high levels of commitment, initiative, and creativity in attempting to expand the DLI teacher pool through systematic educator preparation program development.

Other approaches to DLI teacher preparation included the implementation of grow-your-own teacher initiatives that tap into local talent to expand the DLI teacher pool, and creation of alternative certification programs that provide intensive, accelerated preparation for initial teacher certification (Kennedy, 2018b). Nonetheless, a coherent and focused approach to DLI teacher preparation did not exist in the United States at the time of this writing. In the absence of an adequate structure for DLI teacher preparation, school districts are frequently left to assume the bulk of the responsibility of ensuring that DLI teachers demonstrate the knowledge, skills, and competencies needed to be effective. Work in this area is much needed to ensure that an adequate pool of well-prepared, highly effective DLI teachers are available to meet the growing demand across the country.

## **Recruiting and Retention**

Given the small candidate pool and high demand for effective DLI teachers, and to ensure program longevity and effectiveness, DLI program leaders need to adopt a well-articulated staff recruiting plan that employs a variety of creative recruiting strategies. One such strategy is to build up DLI staff by recruiting teachers directly from the countries where the partner language is spoken (USDE, 2015). Utah, for example, created an international guest teacher license that permits international teaching faculty to serve in its DLI classrooms for up to three years. Temporary housing was provided upon arrival, and educational orientation and professional development sessions were offered to assist international faculty in the transition to US schools (USDE, 2015). Mexico, Puerto Rico, and Spain, too, have served as the source for Spanish-speaking teachers to serve in the large number of DLI classrooms in Texas (Kennedy, 2018b).

Recruiting from abroad brings the benefits of diversifying the school's teaching staff and assuring high levels of partner language proficiency, but it is associated with significant challenges as well. In a case study of DLI school administrators, LaChance (2017) found a mismatch between teacher preparation of international faculty in their home countries and teaching expectations in US schools, which often led to culture shock, extended adjustment periods, and international teacher difficulties adopting a student-centered approach to instruction and classroom management in the American DLI classrooms. Administrators expressed high levels of frustration regarding the extended cultural transition time and high attrition rates of international teacher recruits, which threatened DLI program stability. Over-reliance on international recruits for staffing DLI schools in the United States emerged in the research as

problematic, and a need for increased focus on domestic sourcing of DLI educators was identified (LaChance, 2017).

Within the United States, school districts reported having traveled to national and state professional conferences and offering incentives such as district sign-on bonuses and annual teaching stipends to recruit DLI teachers (Kennedy, 2018b). Forging strong partnerships between state education agencies, colleges and universities, alternative certification programs, and local school districts was also recommended as a key strategy in boosting district-level recruitment of DLI teachers (Kennedy, 2018b). Some state education agencies provided funding for teachers to take graduate coursework or test preparation courses to add DLI certification to their existing licenses, while others left it to districts and universities to provide scholarships and other incentives to increase certification rates of DLI staff (USDE, 2015). What emerged in the research was the need for leaders of effective DLI programs to devise a clearly articulated plan for DLI teacher recruitment that outlines an array of targeted and coordinated strategies that may include international and national staff searches, hiring bonuses and stipends, scholarships for initial and add-on certificates, and the forging of partnerships with local universities and alternative certification entities to expand the pool of appropriately qualified DLI teaching staff.

Given the challenges and expense associated with recruiting DLI staff nationally and internationally, program leaders must focus efforts on teacher retention to ensure program success. In a qualitative case study of the bilingual teacher shortage in one Texas school district, Kennedy (2018b) identified several strategies to support DLI teacher retention, including: the use of targeted interview questions during the hiring process to increase likelihood of a good candidate-position fit; administrator acknowledgement that DLI instruction looks different from monolingual instruction; and provision of aligned supports, such as increased planning time and

adequate partner language curriculum and resources. Darling-Hammond, Hyler, and Gardner (2017) found that the provision of high quality, relevant professional development opportunities was associated with elevated rates of retention and greater return on investment.

### **Professional Development (PD)**

A feature of effective programs is the provision of PD that is aligned to what teachers need to ensure that program goals are met (Howard, et al., 2018). Thus, DLI programs should make sure that PD content supports teachers in their ability to promote bilingualism and biliteracy, academic achievement in two languages, and socio-cultural competence. To be effective in promoting high levels of bilingualism and biliteracy in their students, it is critical that DLI teachers themselves demonstrate high levels of partner language proficiency, including partner language reading and writing skills (Howard, et al., 2018). Montecel and Cortez (2002) recommended that teacher candidates be carefully screened prior to hire to ensure they possess the language proficiency needed to deliver content instruction effectively in the partner language. Once hired, DLI teachers have been found to benefit from PD that is conducted in the partner language and that focuses on developing, refining, and deepening academic proficiency in that language (Fortune, Tedick, and Walker, 2008). However, very few teachers have been found to have had opportunities to engage extensively in advanced academic discourse using the partner language (Howard, et al., 2018), making it difficult for teachers to develop and maintain the proficiency levels needed to be effective in the DLI classroom. PD targeting strategies for teaching primary literacy in the partner language is also crucial for program success, particularly since without such training, DLI teachers tend to use strategies that are appropriate for English literacy instruction and mis-apply them to partner language literacy instruction, resulting in poor literacy outcomes in the partner language (Howard, et al., 2018). PD in authentic partner

language literacy instruction is a key component in supporting teachers to meet the program's bilingualism and biliteracy goals.

To support DLI teachers in promoting high levels of academic achievement in English and the partner language, it is recommended that effective programs provide PD that strengthens instructional practices for diverse learners. PD content centered around sheltered instruction techniques that are modified for bilingual and two-way DLI settings was found to be effective in ensuring that students have full access to rigorous content instruction that is not impeded by any language barriers (Howard et al., 2006). Furthermore, PD is warranted that equips teachers to deliver instruction in culturally responsive ways that promote equitable access to grade level curriculum among diverse learners, and that introduces DLI teachers to strategies for effectively engaging parents and families of diverse learners (Howard et al., 2018). PD that builds skills in promoting socio-cultural competence among DLI learners and fortifies development of their bilingual identities is also beneficial. Given that DLI teachers are frequently tasked with creating curriculum and assessments appropriate to their needs, they also benefit from PD in curriculum writing and in generating formative and summative assessments for bilingual learners (Howard et al., 2018). In addition to DLI teacher PD, the need for PD to build knowledge and skills among administrators and district leaders is crucial to ensure that DLI programs are implemented with fidelity and supported appropriately (Howard et al., 2018).

When designing an effective PD plan for DLI program staff, research supports the provision of PD that is ongoing, job-embedded, and differentiated. In an examination of state-initiated PD supports for DLI (USDE, 2015), several approaches to providing comprehensive DLI PD were identified, including summer institutes, quarterly full-day workshops, professional learning communities, and hybridized offerings that combined face-to-face supports and web-

based training opportunities. Partnering new teachers with more experienced mentors has found to be a beneficial approach to building staff capacity, both in terms of supporting beginner teachers and providing opportunities to develop leadership capacity among veteran staff (Darling-Hammond, et al., 2017). The inclusion of school office staff in campus DLI PD, and provision of DLI training opportunities to district-level staff and school board members was also recommended as a way of strengthening school- and district-wide capacity to support effective DLI program implementation (Howard, et al., 2018).

### **Coordinated Systems of Support, Monitoring, and Evaluation**

The provision of coordinated systems of support is crucial for ensuring fidelity of implementation and DLI program success. At the center of DLI education is its commitment at the institutional level to promoting linguistic and cultural equity for its students and their families as a means for realizing program goals (Genesee, 2018). While effective classroom instruction is highly important, it is not enough. An intentional focus on upholding linguistic equity and coordinating services and supports is required at the classroom, school, and district levels. Effective DLI program leaders demonstrate an unwavering commitment to the DLI program, provide comprehensive, coordinated, and integrated institutional supports at all levels of the organization (de Jong, 2011).

At the classroom level, DLI teachers require support in terms of provision of an equitable curriculum that is additive in nature and considers the strengths and needs of bilingual learners. The curriculum should be designed to ensure that equally rigorous learning standards are upheld for DLI learners, regardless of the program language in which content is instructed (Howard, et al., 2018). When curriculum designed solely for monolingual classrooms is used in DLI settings,



instruction in the partner language runs the risk of getting watered down, resulting in program inequities that erode attainment of program goals.

A sound and rigorous curriculum must be further supported by provision of high-quality instructional resources in the two program languages. Textbooks, classroom libraries, instructional software, items for display, and manipulatives must be authentic to the partner language and its associated cultures and aligned to the program curriculum. Equity in terms of resource availability and resource quality must be established through intentional efforts in the program budget office (Howard, et al., 2018). Environmental print within the classroom should reflect program goals by displaying information in the partner language that features academic vocabulary and is grammatically and orthographically accurate, thus demonstrating value of the partner language as a language of academic discourse. Technology resources are fully integrated into the curriculum and include resources that promote attainment of the content, language, and literacy standards of the DLI program at all grade levels (Howard, et al., 2018).

Similar attention to the provision of equitable resources in the two program languages is required at the school level, with appropriate funding provided to stock the library, science lab, and other common spaces equitably with books, magazines, reference materials, audiovisual aides, and on-line resources in the partner language (Howard, et al., 2018). School and district-level budgetary support is crucial to ensuring that DLI teachers are not left bearing the responsibility for translating materials for instructional use. School signage should be consistently displayed equitably attention to the two program languages. Many successful DLI programs display the partner language more prominently, in fact, than English through use of positioning, font size and color to compensate for language inequities and elevate the partner language to a status equal to English. Use by students, teachers, and other staff members of the

partner language throughout the school is also encouraged in effective DLI schools, rather than used only behind the closed doors of individual DLI classrooms. Incorporation of partner language use into all aspects of school business is an effective strategy for building a welcoming school climate, including use of the partners language for public announcements, as the medium for PD and staff meetings, as appropriate. Other ways to demonstrate support for and honoring of the program partner language and culture include displaying multicultural artwork and cultural artifacts in public spaces and consciously assuring that at least half of the student work on display throughout the school features partner language use.

At the school level, effective principals articulate a clear schoolwide mission and vision in support of DLI program goals and create a welcoming multilingual environment in which the partner language is elevated to a status equal to English. Signage is posted in both languages with attention to font size and placement, school communications are sent out in the two program languages with attention to grammatical accuracy and detail, and the front office is staffed with bilingual individuals who are appropriately trained to communicate effectively with diverse families and stakeholders and can share DLI program goals and practices in articulate and accurate ways (Howard, et al., 2018). School administrators are adequately prepared to recognize best practices in DLI classroom instruction and to evaluate teaching staff accordingly. DLI principals acknowledge the extra work required of DLI educators, including the fact that they are often called upon to translate, adapt, or create instructional resources and assessments in the partner language, and create schedules that allow for additional planning time and opportunities for teacher collaboration (Kennedy, 2018b). They also encourage a distributed leadership model to capitalize on veteran teacher expertise and empower DLI staff to develop leadership skills through mentoring, advocating, coaching, and presenting at staff meetings and conferences

(Darling-Hammond, et al., 2017). Finally, effective DLI principles ensure that students served through the DLI program have equitable access to all services and activities provided at the school, including literacy interventions (delivered in the child’s primary language), and access to gifted services as well as special education (Howard, et al., 2018). Coordination of program services is an important component of school leadership in effective DLI programs.

At the district level, integrated institutional support is evidenced by the existence of personnel trained to design and deliver curriculum, professional development, and assessment resources that align with and support realization of DLI program goals (Howard, et al., 2018). Policy at the state and district levels has been identified as an important factor in defining the context in which DLI programs are implemented (USDE, 2015). By creating implementation spaces conducive to effective program model implementation, school district leaders play a critical role in program effectiveness. The superintendent, as well as members of the school board, should have at least a basic understanding of the goals and practices of DLI education (Howard, et al., 2018). A clear language policy should be developed at the district level to guide language allocation at schools with DLI programs to ensure fidelity of implementation and consistency across schools (Field & Menken, 2015). Policies should also be in place ensuring that funds are equitably distributed for acquisition of instructional resources and assessments in the partner language. (USDE, 2015). Other examples of district-level DLI program support include the development of a proactive DLI teacher recruiting plan, taking into account the unique transportation needs of the district’s diverse students and their families when planning events and identifying schools for program implementation, and providing incentives to encourage program participation, such as awarding a Seal of Biliteracy for successful program participants at graduation (USDE, 2015).

## **Family and Community**

High levels of family and community engagement are associated with favorable academic outcomes, better grades, increased levels of language proficiency, improved social skills, and higher rates of graduation and enrollment in postsecondary education (Howard et al., 2018). Ferguson (2008) found that the greater the engagement of parents and families in school related activities, the higher the achievement demonstrated by students. Most important is the school's adoption of an asset-based disposition when working with families, approaching them from a strength-based perspective, showing respect for the diverse cultural and linguistic practices and customs they bring to the school community, and earning trust as the basis for building for strong a school-home relationship (National Academies, 2017). Strategies for increasing engagement at DLI schools include creating a welcoming environment where information is made routinely accessible in a language families understand, hiring bilingual office staff, translating and interpreting, organizing schedules to accommodate family needs, providing guidance on how to navigate the US school system and how to support children at home, and using a variety of communication strategies aligned with stakeholder need (Howard, et al, 2018).

A welcoming school environment also provides opportunities for diverse families to actively participate in school advisory councils, parent-teacher organizations, and site-based management committees, empowering them to take on leadership roles and advocate on behalf of their children. Effective DLI schools engage in outreach with community organizations and connect resources to the families who needs them. They strive to identify members of the greater community and invite them into the school to make presentations for families and students on topics of genuine relevance and when possible, in the language parents understand best. School-

community partnerships are based on two-way communication, shared interests, mutually beneficial practices, and common needs and goals. School events celebrate the rich diversity of languages and cultures represented in the school and within the greater community, fostering a culture of inclusion, respect, and mutual regard (Howard, et al., 2018).

## **Curriculum**

Curriculum that is based on rigorous standards, focused on program goals, and aligned with instruction and assessment is a crucial component of any educational program (National Academies, 2017). Curriculum is typically designed, however, for use in monolingual classrooms and requires substantial adaptation for use in the DLI classroom (Howard, et al., 2018). A sound DLI curriculum must uphold equally high expectations for content instructed in the partner language and in English and must incorporate a scope and sequence that appropriately reflects the features of the specific program languages; furthermore, the curriculum should address biliteracy development rather than development of each program language in isolation (Howard, et al., 2018). Curriculum alignment up and down the grade levels, or vertical alignment, is another important element for program success, as is the integration within the curriculum of language and content standards (Howard, et al., 2018). Development of a cross-disciplinary curriculum, based around themes, is recognized as an effective way to manage the challenge of integrating the instruction of two languages and literacies into rigorous content instruction, but proves challenging within current educational contexts that separate content by subject area (Howard, et al., 2018).

Promising practices in secondary DLI programs include embracing student input in the design of DLI curriculum, integrating socio-cultural skills within the content curriculum, and incorporating project-based learning and opportunities for real-world application of students'

bilingualism and biliteracy skills (Bears, et al., 2018). A curriculum that promotes development of socio-cultural competence should (a) reflect and value diverse student and family cultures, language variations, and values; (b) include incorporation of opportunities for DLI students to foster positive attitudes about themselves and others; (c) deepen cultural knowledge about themselves and others in a non-stereotyped manner and develop associated behaviors; and (d) incorporate resources that are linguistically and culturally authentic, represent a multiplicity of genres, incorporate relevant technology resources, and support development of flexible bilingual student identities (Howard, et al., 2018).

### **Resources**

Successful DLI programs provide the funding needed to ensure that sufficient staff, materials, and professional development are procured to meet program goals, with systems in place for routinely assessing resource quality and adjusting, as needed (Howard, et al., 2018). The provision of high-quality instructional resources in the partner language, to the same degree in terms of quantity and quality as is provided in English, is key to ensuring linguistic equity and program success. Authentic literacy instruction in effective DLI programs includes the incorporation at all grade levels of culturally authentic texts from a variety of genres that reflect the diverse experiences, backgrounds, and linguistic profiles of the students (Howard, et al., 2018). Failure to provide adequate partner language literacy resources, or the provision of sub-par literacy instruction in the partner language, will result in a DLI program that promotes the development of English literacy over that of the partner language, perpetuating the notion that English is more important and worthy of study than the partner language, and ultimately impeding attainment of the program goals of bilingualism and biliteracy.

System-wide support to ensure that DLI programs are adequately resourced includes equitable funding for purchase of partner language resources to stock classroom libraries, the school library, and specialized literacy material libraries such as leveled book rooms. Technology subscriptions that invite students to access linguistically and culturally appropriate web-based information and resources in the partner language are another important DLI school resource. A commonly cited challenge is the identification of instructional resources in the partner language that address state grade-level content standards while utilizing culturally authentic illustrations and examples, rather than translations of instructional materials available in English. Furthermore, the provision of adequate and appropriate instructional resources in the partner language decreases program reliance on DLI teachers to translate or create partner language resources.

### **Assessment and Evaluation**

Program effectiveness is measured through adoption of student assessment and program evaluation practices that are fully aligned to the three DLE goals. Student assessment is an important component of any strong instructional program as it provides data to evaluate individual student performance and, in the aggregate, to gauge overall program effectiveness. It is important that assessments are systematically and consistently administered that target student progress toward program goals; thus, in DLI programs, assessments should be routinely conducted in both English and the partner language to measure progress toward the program's biliteracy and academic achievement goals, and assessment of progress toward development of socio-cultural competence should be measured as well (Howard, et al., 2018).

Challenges arise, however, when assessing student performance in DLI programs. Questions abound in the research regarding the validity for bilingual learners of tests designed

for English proficient students (Brisk & Proctor, 2012). Furthermore, state accountability systems frequently assess students in English, presenting a challenge for DLI students whose English proficiency may show a slight lag in the early years of DLI program participation. The perception that DLI students are underperforming in the early years, based on English test results, has been observed to drive program leaders to doubt the efficacy of the DLI program and to adjust, or even abandon, the program. Similar problems emerged when teacher evaluation systems rely in part on student outcomes on assessments conducted in English, thus unfairly identifying DLI teachers as ineffective (USDE, 2015).

To address these challenges, it is recommended that systems be established for monitoring progress in language and literacy acquisition in the partner language and in English, and that benchmarking expectations are aligned with language acquisition trajectories of bilingual students, as opposed to monolingual norms (Escamilla, Hopewell, Butvilofsky, Soltero-González, Ruiz-Figueroa, & Escamilla, 2014; USDE, 2015). Assessments administered in the partner language should be authentic; that is, they should not be mere translations of English tests; but rather, they should reflect linguistic and cultural aspects associated with the partner language, and when assessing primary literacy skills, they should assess skills that fully align with partner language literacy development and pedagogical practices. Furthermore, systems should be in place to manage over-assessment so that instruction in two languages does not mean double-testing. Finally, PD should be provided so that DLI educators are adequately trained to analyze assessment results appropriately, in accordance with research on biliteracy development (Howard, et al., 2018).

Regular and systematic program evaluation is an important component of any successful educational program. A DLI program evaluation must examine longitudinal student outcome



data aligned with three program goals, thus ensuring that program effectiveness is measured based not solely on English academic outcomes, but also on partner language and sociocultural competence outcomes (Howard, et al., 2018). The process shall be inclusive and equity-focused, with participation of diverse stakeholders and disaggregation of student outcome data by sub-populations such as English learners, former English learners, and English proficient students (in two-way programs) to ensure equitable outcomes. An analysis of equity in terms of staffing, resources, budgeting, and PD is crucial to the DLI program evaluation process.

### **Conclusion**

This literature review summarized current research with a focus on best practices in effective DLI program implementation in the areas of (a) DLI program model planning and design; (b) DLI instruction; (c) DLI staffing and professional development; and (d) coordinated systems of DLI program model support, monitoring, and evaluation. This information will serve as the basis for the development of program model fidelity of implementation blueprints, rubrics, tools, and resources to support effective DLI program model implementation in Texas in accordance with, and going above and beyond, basic compliance with requirements in Texas statute.

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