

# Using Dual Language Strategies in the Early Grades

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AN EARLY EXAMINATION OF HELIOS EDUCATION FOUNDATION'S  
INITIATIVE TO INCREASE LITERACY



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## ABOUT HELIOS EDUCATION FOUNDATION

Helios Education Foundation is dedicated to creating opportunities for individuals in Arizona and Florida to achieve a postsecondary education. Our work is driven by our four fundamental beliefs in Community, Equity, Investment, and Partnership, and we invest in initiatives across the full education continuum.

Through our Florida Regional Student Success Initiative, Helios is helping underserved, minority, and first-generation students from the state's large population centers in Miami, Orlando, and Tampa achieve a postsecondary education.

In Arizona, where Latino students comprise the largest percentage of the K-12 public school population, the Foundation is implementing its Arizona Latino Student Success initiative focused on preparing all students — especially students in high-poverty, underserved Latino communities — for success.

Dear Colleague:

Our fundamental beliefs in community, equity, investment, and partnership drive Helios Education Foundation to ensure that every student, regardless of zip code, receives a high-quality education. As our communities become more diverse and our students not only exposed to, but also fluent in, multiple home languages, classroom instruction that does not capitalize on this diversity falls short of delivering a globally competitive education.

Recognizing the challenge of monolingual instruction among an increasingly multilingual student population, Helios Education Foundation and partners have engaged in the implementation of dual language learning within preschool classrooms in three school districts, two in Arizona and one in Florida. Orange County Public Schools in Florida have joined Helios' partners, the Osborn and Creighton School districts in Arizona, to engage students aged three to five with two-way English/Spanish language immersion. The goal is to increase children's literacy while also educating children to be biliterate and bicultural.

Research affirms that the ability to speak and read in more than one language offers social, cultural, cognitive, and economic benefits. Children who maintain fluency in their home language while also acquiring a second language in the classroom benefit on many levels. Not only do these students benefit from social and cultural relationships that monolingual students do not, but they also show an increased aptitude in phonological awareness, a precursor to learning to read and write in alphabetic languages like English. Additionally, as our workforce evolves globally, the ability to speak, read, and write multiple languages will only benefit students as they progress into college and career.

While the Helios Education Foundation Dual Language Learners program has yet to be fully implemented in both states, we have identified some early learnings that can improve future implementation. Led by Dr. Karen Ortiz, Dr. Paul Perrault, and our partners at Arizona State University, Childsplay, Inc., and Orlando Repertory Theatre, Inc., these early lessons focus on student engagement, student comprehension, teaching personnel, educator professional development, and the necessity of district and staff commitment.

We hope that this brief will prove informative and insightful. As our nation's diversity grows and we prepare more children for success in K-12 education, providing an inclusive classroom experience that both respects and promotes multiple languages not only benefits the students, it benefits our nation.

Sincerely,



Vince Roig  
Founding Chairman  
Helios Education Foundation

A handwritten signature in black ink that reads "Vince Roig".



Paul J. Luna  
President & CEO  
Helios Education Foundation

A handwritten signature in black ink that reads "Paul J. Luna".





## EXECUTIVE SUMMARY

Helios Education Foundation is committed to ensuring more first-generation, minority, and low-income students not only pursue, but also complete a postsecondary degree. While each student's education journey is unique, a strong foundation that establishes emergent literacy skills and enables a child to read proficiently at grade level by the end of third grade is the strongest predictor of long-term education success. Although the United States has become increasingly diverse, instruction that promotes language and literacy skill development has not fully addressed this diversification. Therefore, a number of children who possess the intellectual ability to meet national and state testing standards fall short or are assumed learning deficient due to monolingual-focused instruction.

Recognizing the challenge of an increasingly multilingual population, this education brief explores the implementation of dual language learning within preschool classrooms in three school districts, two in Arizona and one in Florida. To carry out this initiative, Helios required three components: (1) a community-based organization to provide professional development; (2) a school district providing pre-k services; and (3) a university that could be a strong research partner. In 2015 Helios awarded \$721,000 to Arizona State University Foundation, Childsplay, Inc., and the Osborn School District; soon after, Creighton School District was added to the Arizona project. The following year Helios awarded \$1.59 million to Orange County School District\*, Arizona State University, Orlando Repertory Theatre, and Childsplay Theatre Company. The grant awards to both states were for the implementation of a dual language learner project for preschool-aged children using the two-way immersion model of presenting all learning experiences in both English and Spanish on alternating days or half days.

Key implementation strategies of two-way immersion are outlined as: (1) The child/student population should be divided as closely as possible between native speakers of one language and native speakers of the other language. (2) Both groups of students/children stay in core content courses together. (3) Instruction time is split evenly between both languages. (4) Instruction should be led by individuals who are both bilingual and biliterate.

Utilizing Childsplay's evidence-based Early Years Educators at Play (EYEPlay) program, educators receive professional development that integrates drama strategies for language and literacy instruction with the goal of developing teachers' knowledge of, skills in, and disposition toward using these drama strategies to enhance children's language and literacy development in both English and Spanish during this project and beyond.

\*Orange County Public Schools piloted in 2016-17. First year implementation begins Fall of 2017.

Although Helios' Dual Language Learners Project in Arizona and Florida has yet to be fully implemented, initial results show both early successes and real challenges. We need to improve our understanding of the teaching dynamic and the practicality of the single bilingual teacher setup. We must also consider how to better prepare the teachers to ensure they are adequately equipped to create a high-quality dual language early learning environment in an atmosphere of cultural appreciation and acceptance. For example, how do we create ample opportunity for the teachers and paraprofessionals to gain high-quality instructional strategies in all subject content areas, especially language acquisition and early literacy, and how can we work with our partners to create the space for the teachers and paraprofessionals to have the time to engage in their own learning and prepare new learning activities demonstrated through their involvement in the Helios Dual Language Learners Project?

To guide our continued exploration around the work in Arizona and Florida, Helios has commissioned a three-year research study with our partners. The goal of the research is to examine both the implementation of the program, and, more importantly, its influence on high-quality teaching strategies and the impact on children's early language and literacy skill development. We believe this work will create new thinking around instructional approaches for our youngest dual language learners as they transition into kindergarten.

## Introduction

The United States of America continues to struggle to adequately prepare its youngest students to read proficiently. Results from the 2015 National Assessment of Educational Progress (NAEP) indicate that only 36% of fourth graders scored at or above the proficient level in reading. These results are not atypical from state-level tests. In Arizona, only 41% of third graders scored proficient or higher on the state's AzMERIT examination, and in Florida just over half (58%) of third graders scored proficient or higher on the Florida Standards Assessment. The results of national- and state-level assessments paint a grim picture; most of our students are not proficient readers by the end of third grade.

Several factors contribute to children entering school with limited emergent literacy skills and being unable to progress to a proficient or higher level in reading by third grade. Poverty and limited access to high-quality early education programs are contributors, along with the student's family language being something other than

English. While speaking another language in itself is a positive trait, students may be disadvantaged by schools and classrooms that have not adapted to the growing linguistic diversity in the United States. There is no doubt that increased linguistic diversity in the United States has an impact. A recent report from the United States Census Bureau (2011) showed that 26% of children aged five and older spoke a language other than English at home. Among this group, 62% were Spanish speakers. While the proportion of non-native English speakers varies across the 50 states, in many states, non-native English speakers represent a substantial proportion of the population. In California, nearly half (43.8%) of the population five years and older speaks a language other than English at home, and, in both Texas and New Mexico, more than a third of the population does so.

As the U.S. population has become more linguistically diverse, the nation has not kept pace in the early language and literacy instruction it provides to non-native English speakers. In some cases, the challenges have been politically charged, with groups requiring students in the public K-12 education system to be taught only in English, while in other cases state legislatures and leaders have deferred to education researchers and experts. Regardless, what research shows is clear: The earlier we build a strong language and literacy foundation in children's lives—in their first language and in English—the more likely they are to be proficient readers by the end of third grade.

To address the challenges in developing emergent literacy skills and increased linguistic diversity, Helios took steps to identify a new and innovative approach to language acquisition and literacy. The goal was to improve language acquisition and literacy for both native and non-native English speakers through dual language instruction. Using best practices, recent research, and lessons learned, we identified partners to assist in implementing a modified dual language learner (DLL) program for preschoolers. Research shows that the more exposure children have to rich language and literacy learning activities prior to entering kindergarten, the more likely they will develop into proficient readers by the end of third grade. It is also widely recognized that it is easier for young children to learn a second language in school than it is for older children, as language demands and expectations increase for each grade level. In 2015 Helios awarded \$721,000 to Arizona State University Foundation, Childsplay, Inc., and the Osborn School District. Soon after, Creighton School

TABLE 1

## States with the Highest Proportion of Population who Speak a Language Other than English at Home

State	Population five years+ who speak a language other than English at home
California	43.8%
New Mexico	36.5%
Texas	34.7%
New Jersey	30.4%
Nevada	29.7%
New York	30.1%
Florida	27.6%
Arizona	27.0%
Hawaii	25.2%
Illinois	22.7%

District was added to the Arizona project. The following year, Helios awarded \$1.59 million to Orange County School District, Arizona State University, Orlando Repertory Theatre, and Childsplay Theatre Company. The grant awards in both states were for the implementation of a dual language learner project for preschool-aged children using the two-way immersion model of presenting all learning experiences in both English and Spanish on alternating days or half days.

This brief presents five key dimensions. Part I demonstrates the importance of DLL for both native and non-native English speakers. Part II examines promising practices for teaching dual language through the two-way immersion DLL project. Part III identifies instructional strategies that support DLL. Part IV lays out the Helios approach to early-grade two-way immersion and details its implementation in three districts. Part V identifies early successes and lessons learned.

## Why should we care about dual language learning?

Research has shown that the ability to speak and read in more than one language offers social, cultural, cognitive, and economic benefits. Socially, children who maintain their family language while learning a second language preserve important connections to grandparents and other relatives. These preserved relationships provide love, support, and knowledge (Romero-Little, McCarty, Warhol, & Zepeda, 2007). Language also allows for the transmission of cultural knowledge (Park, 2008), contributes to positive identity formation (Cho, 2000; Tse, 2001), and strengthens communities (Romero-Little et al., 2007; Wiley & Valdés, 2000). Beyond familial relationships, being in command of more than one language also provides opportunities for more meaningful interactions around the globe, increasing cultural awareness and understanding.

Learning any new language has cognitive benefits. Children who are “learning a second language can maintain attention despite outside stimuli better than children who know only one language” (Yang and Lust, 2009). This matters because that ability contributes to the development of cognitive processes to achieve goals in the face of distraction and plays a key role in academic readiness and success in school settings. Beyond just learning a new language, being an active, fluent dual language user has unique advantages. Because of their constant attention to multiple language systems, bilingual speakers across their lifespan are skilled at seeing problems from more than one perspective and have better executive functioning skills (general cognitive control) than monolingual speakers (Bialystok, 2011; Bialystok, Craik, & Luk, 2008; Kovács & Mehler, 2009). For young dual language learners, this attention to multiple language systems gives them better phonological awareness, a necessary precursor to learning to read and write in alphabetic languages such as English (Kuo & Anderson, 2010; 2012). Dual language learners who actively use both languages into adulthood may also benefit from the delayed onset of cognitive decline, such as Alzheimer’s Disease, by four to five years (Bialystok, Craik, & Freedman, 2007; Woumans et al., 2015).



Finally, proficiency in more than one language offers access to a greater range of jobs, as well as increased salaries, and the ability of a country's citizens to speak more than one language increases that country's ability to participate in international organizations and trade (Callahan & Gándara, 2014).

### **How to teach dual language learning: Promising practices using two-way immersion**

With the increase in the linguistic diversity of young children in the United States, researchers have increasingly focused on identifying promising practices in language acquisition in the early grades. For example, starting as early as preschool, researchers have examined the role of oral language and reading comprehension in promoting academic success. Among monolingual English speakers, researchers have shown "that children's language abilities at a given time play a powerful role in shaping their reading success" (Castro, Paez, Dickinson, & Frede, 2011, p. 16). In some ways, bilingual literacy development is similar. Oral language proficiency still drives literacy development, and many literacy skills transfer across languages (August, Calderon, & Carlo, 2002). In contrast, bilingual learning is more complex. Bilingual language and literacy development involve the integration of several skills (e.g., sound-symbol awareness and knowledge of grammar and vocabulary) as well as "more elusive" social culture variables (Castro, Paez, Dickinson, & Frede, 2011, p. 16).

When considering the different approaches to implementing a dual language program, the choice of the language of instruction is constant in the selection of which model to follow. School systems historically have encouraged the English language over a child's home language (Barnett, Yarosz, Thomas, Jung, & Blanco, 2007; Hakuta, 1986). While it is possible to become fluent in two languages through an English-only program, research has shown that there is an advantage to becoming proficient in a second language if the child's home language is also integrated and supported in the learning environment. In addition, research shows that the use of the child's home language in instruction can lead to higher levels of social, cognitive, and academic achievement for dual language learners (Garcia, Kleifgen, & Falchi, 2008). One model that has gained favor over the last decade is the two-way immersion model (TWI). This model provides dual language learners' and native English speakers' subject content in two languages (Castro, 2014; Barnett et al., 2007; Howard, Sugarman, & Christian, 2007).

Researchers see TWI as the gold standard of bilingual education. In TWI programs, children learn each language and culture not just from the teachers but also from one another and from parents who spend time in the classroom. According to Howard et al. (2007), TWI programs have three defining criteria. First, they must include a fairly equal balance in the size of two groups of

students, which in our context are English- and Spanish-speaking children. Second, the children are to be integrated into core content courses for all or most of the day. Third, the core academic instruction is provided to both groups of students in both languages. The proportion of the two different languages can vary. Some programs provide between 80% and 90% of instruction in the minority language for the early grades, increasing the proportion of the majority language with each higher grade level. The second approach that was adopted in our context was the 50/50 or balanced model, where half the instructional time is in one language, and the other half is in the other language (Howard et al., 2007).

### KEY IMPLEMENTATION STRATEGIES OF TWO-WAY IMMERSION

- The student population should be divided as close as possible between native speakers of the one language and native speakers of the other language.
- Both groups of students stay in core content courses together.
- Instructional time is split evenly between both languages. This could be one whole day in one language and then the next whole day in the other. Another approach could be one language in the morning and the other language in the afternoon.

### Instructional strategies that support dual language learning

Most language and literacy instruction in the United States occurs within an English-only language environment, often with a monolingual teacher. Without proper support in their native language, dual language learners can disengage or be falsely identified as learning disabled. Students not speaking English at home are often overrepresented in special education classes (Strand & Lindsey, 2009), as teachers often lack the ability to distinguish second language learning from language delay or disability (Klinger & Harry, 2006; Lesaux, 2006; McCardle, Mele-McCarthy, Cutting, Leos, & D’Emilio, 2005; Rinaldi & Samson, 2009; Wagner, Francis, & Morris, 2005).

A number of key instructional strategies successfully support learning in dual language classrooms. The primary strategy of teachers in dual language classrooms is to provide equal opportunities for students to use both their home language and the target language (e.g., English and Spanish). Teachers can alternate half days, full days, or weeks in each language to give learners time to engage fully in each. For new speakers of a language, time to process and practice is the key to learning. Mounting evidence shows that above all else, experience in a language is the best predictor of success (de Carli et al., 2014; Sheng, Bedore, Peña, & Fiestas, 2013). Additionally, although it may on the surface appear helpful to students just beginning to learn a new language to translate between the two languages, translation allows students to listen for content in their primary language only and ignore the rest. Further, in strong dual language programs, lessons are not repeated when the language switches. Rather, lessons build on and extend from previous lessons in the other classroom language, so, while both lessons will use similar vocabulary, each will present unique activities and content for students. For example, a lesson in English about autumn leaves might involve a walk and a leaf hunt, while the follow-up lesson, in Spanish, includes describing differences seen in those leaves with magnifying glasses and color swatches. Both activities will use words like trees/arboles, leaves/hojas, colors/colores, and shapes/formas, but one lesson grows from the other without repeating it.

Although keeping languages separate is considered best practice for new dual language learners, there are times when it is useful for learners to think cross-linguistically and to notice similarities and differences between their two languages. In the example of the autumn leaves lesson, teachers might point out that color and colores are cognates, or words that are similar across languages. Similarly, a student may notice that we say yellow leaves but hojas amarillas—the adjective goes in a different place in the two languages. Engaging in this kind of metalinguistic talk, or talk about language, boosts students’ ability to notice structure and form, important concepts of becoming a speaker, reader, and writer.

Additionally, some students enter dual language programs from households where both languages are used. These students are already bilingual. Teachers may notice that, for these students, thinking of their two languages as distinct from each other reflects neither who the students are nor how they use language in their daily lives. Researchers have recently begun to use the term translanguageing (Garcia & Wei, 2014) to describe bilingual students' use of their two languages. Rather than thinking of them as possessing two languages, it is more accurate to view them as possessing one coherent system of linguistic resources that they draw on to best convey their ideas and connect with their audiences (Rymes, 2014). With these students, a strict separation of languages may not always be the most desirable approach. Teachers instead might encourage students to use all the language at their disposal to engage in learning, and they might model decisions about when to use which linguistic resources for which purposes.

Assessing students in dual language programs is not like assessing students in a monolingual program. When bilingual students are compared to monolingual students on linguistic elements such as vocabulary, they may appear to lag in each language, but when both languages are considered together, bilingual children generally know more words overall. This means that the way we measure language in students in dual language programs is particularly important. To assess students accurately, students' linguistic knowledge should be considered across all the languages they know and should not be compared to monolingual norms.

Until recently, dual language learning practices and research have focused primarily on the K-12 setting. However, much of the research on literacy has strong implications for early learners as well. In their research on students from preschool to third grade, Castro et al. (2011) outline four strategies to support dual language learners. They are to: (1) conduct ongoing and frequent assessments to monitor DLL students' progress in their first and second languages; (2) provide focused and small group activities to give DLL students opportunities to use new concepts and words; (3) provide vocabulary instruction that allows for purposeful and repeated exposure to specific words; and (4) ensure the development of academic English, meaning specific language that goes beyond everyday conversation.

### KEY DUAL LANGUAGE LEARNING INSTRUCTIONAL STRATEGIES

- Use both primary (home) and secondary languages
- Provide opportunities to think cross-linguistically (e.g., colors and colores)
- Provide opportunities for translanguageing
- Provide frequent, developmentally appropriate formative assessment in both languages
- Use small groups and focused activities to practice new concepts and words
- Integrate meaningful and repeated exposure to specific words
- Ensure the development of academic English

### What is Helios's model and approach for increasing dual language learning through two-way immersion?

In 2015, Helios turned its attention to DLL and the possibility it offers to close the opportunity gap for children entering kindergarten. We compiled literature reviews and best practices, and we spoke with content experts and community leaders to identify how we could collaborate to improve early language and literacy development for all students. This work led us to focus on three tenets. First, our dual language learner program would focus on children three to five years old and include some developmental preschool classrooms. Our focus on three- to five-year-olds came about due to the lack of existing research in this space and that second language learning is easier at a young age, when the linguistic demands placed on children are lower. Second, our DLL program would follow the TWI model, with half of the weekly instruction in English and half in Spanish and a mix of Spanish and English speakers in the learning environment. Additionally, our reasoning for choosing the TWI model was because it showcased the advantages of being able to speak, read, and write in two languages, and we chose English and Spanish because of the large Latino populations in Arizona and Florida. Third, our DLL program would create new learning activities to highlight how young children learn best. This would be accomplished by incorporating creative drama by teaching artists to engage children in early language and literacy activities, as well as offering a new instructional method to early childhood practitioners.



We chose drama for its ability to provide a multisensory connection between vocabulary, stories, and experiences in the child’s world. The cognition and kinesthetic learning that inherently takes place in drama-integrated literacy lessons directly benefit the vocabulary and comprehension development of DLL students. Lessons focus on key social and academic vocabulary that is introduced, scaffolded, and embodied repeatedly. Lessons balance teacher-directed and student-directed learning and encourage participation among children at every stage in the language-acquisition process.

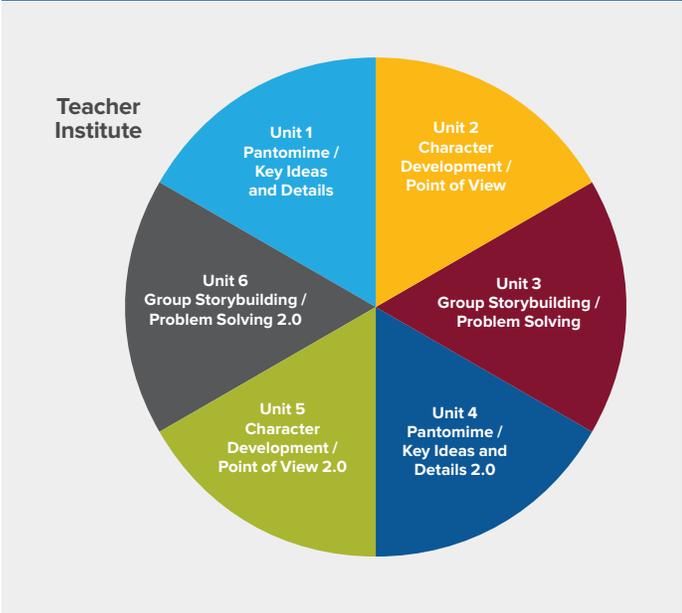
In the Helios dual language learning project, Childsplay provides professional development in Arizona and Florida to early childhood classrooms through the development and implementation of its Early Years Educators at Play (EYEPlay) program. EYEPlay is Childsplay’s evidence-based early childhood education professional development (PD) program that integrates drama strategies for language and literacy instruction in preschool classrooms. The program has three main objectives: (1) to develop teachers’ knowledge of, skills in, and disposition toward using drama strategies (e.g., pantomime, character development, group story building) as tools in language and literacy instruction; (2) to enhance young children’s language and literacy development in both English and Spanish; and (3) to develop self-sustaining personal and professional growth in the teachers, so they continue to employ the drama strategies after completion of the project (Kilinc, Chapman, Kelley, Adams, and Millinger, 2016). The team from Arizona State University studies the implementation and outcomes of the Helios DLL project across both states.

### **What is EYEPlay Dual Language Learning, and how does it enhance learning?**

The EYEPlay dual language learning professional development program supports students’ language and literacy development in English and Spanish by creating inclusive learning spaces and building teachers’ capacity for teaching early language and pre-literacy through drama. It follows an apprenticeship model in which individuals of varying levels of expertise and experience collaborate to achieve shared interests and goals (Rogoff, 1995). The model employs guided participation to prepare teachers and paraprofessionals to use drama strategies in their language and literacy instruction (Kilinc, Kelley, Adams, and Millinger, 2016). Via guided participation, preschool teachers engage in meaning-making processes using new materials and practices related to drama and emergent literacy.

The EYEPlay DLL PD program also uses cultural-historical activity theory (CHAT) to understand how the drama-framed lessons differ from traditional language and literacy lessons in preschool. CHAT argues that human actions are object-oriented and mediated by tools, division of labor, histories, and rules (Engeström & Sannino, 2010). The EYEPlay DLL approach transforms the traditional literacy activity context by using new tools and restructuring the rules and the teachers’ and students’ division of labor within the activity.

**FIGURE 1**  
**EYEPlay DLL Model Structure**



In traditional early literacy activities, the teacher reads to the children. During this time, the teacher expects the children to sit quietly in a circle or their assigned squares and to raise their hands to participate in the lesson. This activity highlights certain abilities, limits all students' opportunities to learn in different modalities, and maintains unequal power dynamics between the teacher and children.

In contrast, the EYEPlay DLL PD program uses new tools (e.g., magic bag and dust, multisensory elements) and re-conceptualizes traditional instructional strategies. In drama lessons, the unacceptable becomes acceptable, as seen in the children's kinesthetic actions (e.g., running, moving around) and in decision-making or division of labor (e.g., sharing authority between the teacher and children). The learning activities become more meaningful to all children through expanded multiple ways of participation (e.g., showing instead of telling and kinesthetic learning).

**What are drama frames?**

Drama frames are the purposeful pairing of a drama strategy (e.g., pantomime, character development, and group story building) with specific language and curricular objectives (e.g., receptive language, expressive language, and problem solving). The EYEPlay DLL PD program includes three drama frames. These drama frames are implemented as six units throughout the year (see Figure 1).

**FIGURE 2**  
**Instructional Approach of EYEPlay DLL Model**

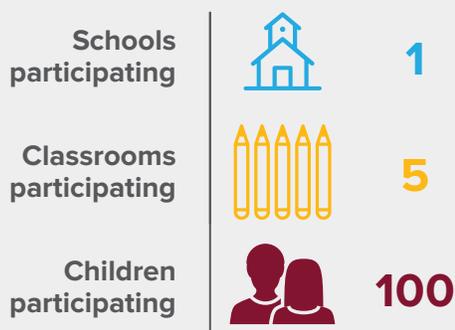


To scaffold the teachers' learning experiences, the program is designed as an "I do, we do, you do" progression that includes in-service, planning, and reflection sessions (see Figure 2).

**Each lesson follows the same structure:**

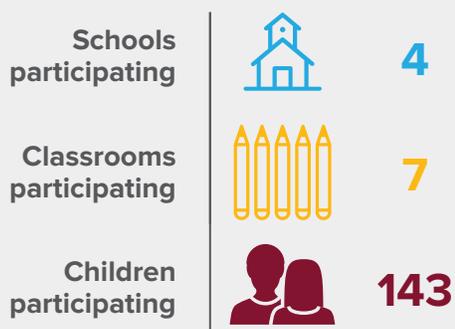
1. Anticipatory Set: Teachers introduce foundational concepts and vocabulary through multisensory elements (e.g., pictures, sounds, or objects). Children are encouraged through inquiry to relate new concepts to prior knowledge and cultural/familial contexts, placing them in the position of "experts."
2. Story Sharing: Teachers introduce a text through dynamic dialogic reading, with both verbal and kinesthetic points of participation (e.g., "How do you think the lion is feeling? Show me with your face and body.")
3. Drama: The key concepts of the story are explored kinesthetically, with children replaying action, assuming a character role from the story and retracing the character's emotional journey, or entering the story at a point of critical decision-making and problem solving as a group to create their own ending. Key vocabulary words are repeated and explored in the context of the drama.
4. Reflection: Key concepts and vocabulary are recalled through verbal and kinesthetic inquiry, and elements of the story are applied to the children's world.

### CREIGHTON SCHOOL DISTRICT (PHOENIX, AZ)



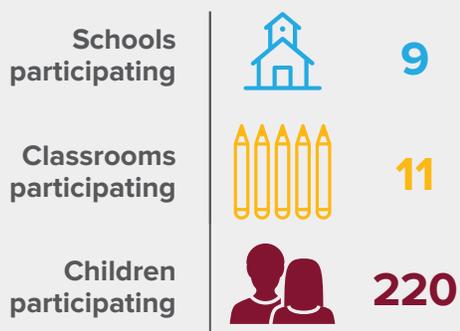
Teaching Model: Two-teacher teams (one primary English instructor and one primary Spanish instructor)

### OSBORN SCHOOL DISTRICT (PHOENIX, AZ)



Teaching model: Four two-teacher teams (one primary English instructor and one primary Spanish instructor); three single teacher

### ORLANDO COUNTY PUBLIC SCHOOLS (ORLANDO, FL)



Teaching model: Seven single teacher; four two-teacher teams (one primary English and one rotating Spanish)

### Where is the program being implemented?

The Helios dual language learner project is being implemented in three districts in two states. Creighton School District and Osborn School District are located in Phoenix, Arizona. The third district, Orange County Public Schools, is located in Orlando, Florida. The three districts have differences in the number of schools participating, number of classrooms, and teacher dynamics (e.g., one or two teachers per classroom). However, each district is implementing the program for three- to five-year-old preschoolers using the TWI and EYEPlay DLL strategies.

### What are the goals of the project and long-term study?

Four goals have been identified for this three-year initiative:

- 1) Improve the way early childhood educators teach language and literacy in DLL classrooms;
- 2) Establish a continuum of pedagogy in preschool to promote kindergarten readiness in all students;
- 3) Create a district-wide continuity of practice among preschool teachers to provide a similar set of educational experiences and foundational learning to all students; and
- 4) Provide greater opportunities for students to become proficient readers by the end of third grade.

### What is the focus of our research?

Our research goal is to understand the contexts for successful DLL program implementation. We will examine the program's impact across three domains: (1) context of implementation; (2) instructional practice; and (3) child outcomes. For each of these, we provide the primary research questions below.

#### Context of Implementation:

- In what contexts are the DLL programs being implemented? For example, what are the characteristics of the centers/classrooms? What are the features of the communities they serve? What characteristics do the children within them share?
- What level of success are the centers/classrooms achieving in their implementation of the DLL program?
- In what ways does implementation of the DLL program vary across centers/classrooms and/or states?



## Instructional Practice:

- How successful is the DLL program in leading to the implementation of high-quality instructional practices?
- What level of education is required of teachers and paraprofessionals to implement the DLL program successfully?

## Child Outcomes:

- To what extent is the program successful for children who entered the program with varied English or Spanish language skills?
- To what extent are children who complete the DLL program academically ready for kindergarten as defined by developmentally and culturally appropriate early childhood assessments?

### KEY PROGRAM COMPONENTS:

- Implemented in preschool classrooms (three- to five-year-olds)
- Incorporates TWI model — instruction half in English and half in Spanish
- Incorporates EYEPlay drama frames

## What are the successes and early lessons learned?

Although the Helios DLL project has yet to be fully implemented, several successes and early lessons have already been identified that policymakers and practitioners can use to improve future implementation. Many of these, outlined below, were observed by early childhood teachers and paraprofessionals at the beginning of the implementation of this project.

**Engagement and Inclusion.** Given that instruction was provided in both English and Spanish, teachers noted that students were more engaged and more willing to participate in the learning process. Some teachers pointed to the drama-based EYEPlay strategies as the key to this increased engagement. The hands-on integration of drama frames encouraged the children to be more actively involved in their learning. For example, one teacher reported:

*All my students are developmentally delayed, but they all have speech. Some have only speech, and some have other delays. It's included them more. I see them doing a drama, acting it out. [This includes students] who have hardly any*

*language at all, but they're getting the receptivity of doing it through the movements. I've also had parents . . . notice that their children are speaking more Spanish at home. My Spanish speakers, the ones who are exposed to Spanish at home, are picking it up more quickly than the others.*

Another teacher similarly found that the children were more likely to be engaged in the second language through drama. She reported:

*We have students with speech IEPs (Individual Educational Plans), especially one of our students. She's bilingual, Spanish-speaking in the home, with a speech IEP, and she is more willing to engage in drama time, Spanish lessons. Before, she was very afraid to speak; [now,] she's willing to speak a lot more.*

**Comprehension.** Teachers also reported that the program provided more opportunities for enhanced comprehension of material. One teacher spoke of a story that she had read with her students. She found, through the questions they asked at the end, that the curriculum was providing the children with a “better understanding of the book and the story. They're able to . . . show me with [their] bod[ies] how [they] would make a snowball. The comprehension is there.”

Another teacher talked about how important the drama component was to children's understanding of languages, as it gave them something to relate to. The curriculum helped make the literacy relatable, which increased comprehension:

*It gives them something to relate to, because if they're doing it with their bodies and turning into a character, it just builds their level of confidence and understanding, along with their vocabulary . . . and reading comprehension. They're able to remember it because they can think back, “Oh, we did this.”*

The first year of implementation has also illuminated areas for improvement.

**DLL Teaching Personnel.** One of the bigger challenges identified in the first year of implementation had to do with teaching format. It proved difficult to find the right setup for the teaching format. Prior to the onset of the project, Helios envisioned that a single bilingual teacher would lead each classroom. However, early into the implementation, it became apparent that the districts and schools were



struggling to find qualified teachers who have a strong oral and written command of both English and Spanish. Of the 23 participating classrooms, only 10 are currently being led by a single bilingual teacher. Another nine are being led by an English-speaking teacher with the help of a paraprofessional who leads the Spanish instruction. The remaining four are led by a dedicated English-speaking lead teacher and a rotating Spanish-speaking lead teacher.

In focus group discussions and in interviews, district-level administrators and staff identified a few challenges associated with the lead teacher/paraprofessional dynamic. Many of the lead teachers do not see their paraprofessionals as co-teachers, creating conflicts over power and identity. Additionally, the paraprofessionals are not compensated at the same level and with the same hours as the lead teachers, which may influence the level of time and commitment they are able to bring to the program.

**Teacher Preparedness.** Teachers wished that they would have had more professional development. In particular, teachers wanted: (1) to learn more instructional strategies for teaching children in the dual language program; (2) more opportunities to work with The Creative Curriculum®; and (3) for teachers in teacher/paraprofessional classrooms, more professional development for how they can better support their paraprofessionals. Additionally, some teachers and

administrators reported having a hard time linking the EYEPlay work to the DLL work. They saw DLL and the EYEPlay strategies as two separate components rather than as an aligned method for delivering a learning activity. Because of a lack of professional development and experience in bilingual teaching, some teachers held back in delivering the teaching content. The teachers did indicate that they are making progress and feeling more comfortable in their roles; however, they also noted that they need more experience, professional development support, and time. Communication from administrators also impacted their level of comfort with and understanding of the Helios DLL Project.

**District and Staff Commitment.** An additional lesson learned was that the success of the program depends on whether there is organizational support at every level, from the governing board, the superintendent, and support staff to the classroom teachers, their supervisors, and parents. Everyone needs to be aligned in understanding the principles behind and pursuing the goals of the DLL program. In many cases, the DLL program requires new instructional strategies, new curricula, new assessment systems<sup>1</sup>, and newly hired teachers, many of whom do not have dual language teaching experience. While this comprehensive, top-down support is still developing, once established it will lead to stronger implementation.

<sup>1</sup>Teaching Strategies Gold and Classroom Assessment Scoring System



### What is our conclusion?

Although Helios's DLL Project in Arizona and Florida has yet to be fully implemented, initial results show both early successes and real challenges. We need to improve our understanding of the teaching dynamic and the practicality of the single bilingual teacher setup. We must also consider how to better prepare the teachers to ensure they are adequately equipped to create a high-quality, dual language, early learning environment in an atmosphere of cultural appreciation and acceptance. For example, how do we create ample opportunity for the teachers and paraprofessionals to gain high-quality instructional strategies in all subject content areas, especially language acquisition and early literacy? How can we work with our partners to create the time for the teachers and paraprofessionals to engage in their own learning and prepare new learning activities demonstrated through their involvement in the Helios DLL Project?

To guide our continued exploration around the work in Arizona and Florida, Helios has commissioned a three-year research study with our partners. The goal of the research is to examine both the implementation of the program and, more importantly, its influence on high-quality teaching strategies and the impact on children's early language and literacy skill development. We believe this work will create new thinking around instructional approaches for our youngest dual language learners as they transition into kindergarten.

## REFERENCES

- American Speech–Language–Hearing Association. (2004). *Knowledge and skills needed by speech-language pathologists and audiologists to provide culturally and linguistically appropriate services*. Retrieved from <http://www.asha.org/policy/ks2004-00215.htm>.
- Artiles, A. J., & Kozleski, E. B. (2007). Beyond convictions: Interrogating culture, history, and power in inclusive education. *Language Arts*, 84, 357–364.
- Artiles, A. J., Rueda, R., Salazar, J., & Higuera, I. (2005). Within-group diversity in minority disproportionate representation: English language learners in urban school districts. *Exceptional Children*, 71, 283–300.
- Barnett, W. S., Yarosz, D. J., Thomas, J., Jung, K., & Blanco, D. (2007). Two-way and monolingual English immersion in preschool education: An experimental comparison. *Early Childhood Research Quarterly*, 22, 277–293.
- Beebe, S., & Nishimura, C. F. (2016). Right of limited English proficient students with disabilities and their parents to be served in their native language. *Texas Journal on Civil Liberties & Civil Rights*, 21(2), 127.
- Bialystok, E. (2011). Reshaping the mind: The benefits of bilingualism. *Canadian Journal of Experimental Psychology / Revue Canadienne de Psychologie Experimentale*, 65(4), 229–235. doi.org/10.1037/a0025406
- Bialystok, E., Craik, F. I. M., & Freedman, M. (2007). Bilingualism as a protection against the onset of symptoms of dementia. *Neuropsychologia*, 45(2), 459–464. doi.org/10.1016/j.neuropsychologia.2006.10.009
- Bialystok, E., Craik, F., & Luk, G. (2008). Cognitive control and lexical access in younger and older bilinguals. *Journal of Experimental Psychology. Learning, Memory, and Cognition*, 34(4), 859–873. doi.org/10.1037/0278-7393.34.4.859
- Caesar, L. G., & Kohler, P. D. (2007). The state of school-based language assessment: Actual practice versus recommended guidelines. *Language, Speech, and Hearing Services in Schools*, 38, 190–200.
- Callahan, R. M., & Gándara, P. C. (2014). *The bilingual advantage: Language, literacy and the US labor market*. New York, NY: Multilingual Matters.
- Castro, D. C. (2014). *Research based on best practices for DLLs in PreK-3rd grade: Instructional strategies and language of instruction approaches*. Sections of this paper are adaptations of Castro, Paez, Dickinson, & Frede, 2011.
- Castro, D. C., Espinosa, L. M., & Paez, M. M. (2011). Defining and measuring quality in early childhood practices that promote dual language learners' development and learning. In M. Zaslow, I. Martinez-Beck, K. Tout, & T. Halle (Eds.), *Quality measurement in early childhood settings* (pp. 257–280). Baltimore, MD: Brookes.
- Castro, D. C., Paez, M., Dickinson, D. K., & Frede, E. (2011). Promoting language and literacy in young dual language learners: Research, practice and policy. *Child Development Perspectives*, 5(1), 15–21.
- Cho, G. (2000). The role of heritage language in social interactions and relationships: Reflections from a language minority group. *Bilingual Research Journal*, 24(4), 369–384. doi.org/10.1080/15235882.2000.10162773
- Cleave, P. L., Girolametto, L. E., Chen, X., & Johnson, C. J. (2010). Narrative abilities in monolingual and dual language learning children with specific language impairment. *Journal of Communication Disorders*, 43(6), 511–522. doi:10.1016/j.jcomdis.2010.05.005
- De Carli, F., Dessi, B., Mariani, M., . . . Mara, M. (2015). Language use affects proficiency in Italian–Spanish bilinguals irrespective of age of second language acquisition. *Bilingualism: Language and Cognition*, 18 (Special Issue 02), 324–339.
- Engeström, Y., & Sannino, A. (2010). Studies of expansive learning: Foundations, findings and future challenges. *Educational Research Review*, 5(1), 1–24.
- Feltmate, K., & Kay–Raining Bird, E. (2008). Language learning in four bilingual children with Down Syndrome: A detailed analysis of vocabulary and morphosyntax. *Canadian Journal of Speech-Language Pathology and Audiology*, 32, 6–20.
- Ferjan Ramírez, N., Ramírez, R. R., Clarke, M., Taulu, S., & Kuhl, P. K. (2016). Speech discrimination in 11-month-old bilingual and monolingual infants: A magnetoencephalography study. *Developmental Science*. doi.org/10.1111/desc.12427
- Garcia, O., Kleifgen, J., & Falchi, L. (2008). From English language learners to emergent bilinguals. In *Equity matters: Research review no. 1*. Retrieved from [tc.columbia.edu/equitycampaign/article.asp?id=6559](http://tc.columbia.edu/equitycampaign/article.asp?id=6559)
- Garcia, O., & Wei, L. (2014). *Translanguaging: language, bilingualism and education*. New York, NY: Palgrave Macmillan.
- Gutierrez–Clellen, V. F., Simon–Cerejido, G., & Wagner, C. (2008). Bilingual children with language impairment: A comparison with monolinguals and second language learners. *Applied Psycholinguistics*, 29, 3–19.
- Hakuta, K. (1986). *Mirror of language: The debate of bilingualism*. New York, NY: Basic Books.
- Hambly, C., & Fombonne, E. (2012). The impact of bilingual environments on language development in children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 42(7), 1342–1352. doi:10.1007/s108030111365z
- Hambly, C., & Fombonne, E. (2014). Factors influencing bilingual expressive vocabulary size in children with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 8, 1079–1089.
- Hammer, C. S., Detwiler, J. S., Detwiler, J., Blood, G. W., & Qualls, C. D. (2004). Speech–language pathologists' training and confidence in serving Spanish–English bilingual children. *Journal of Communication Disorders*, 37, 91–108.
- Howard, E. R., Sugarman, J., Christian, D., Lindholm–Leary, K. J., & Rogers, D. (2007). *Guiding principles for dual language education* (2nd ed.). Washington, DC: Center for Applied Linguistics.
- Kay–Raining Bird, E., Cleave, P., Trudeau, N., Thordardottir, E., Sutton, A., & Thorpe, A. (2005). The language abilities of bilingual children with Down syndrome. *American Journal of Speech-Language Pathology*, 14, 187–199.
- Kay–Raining Bird, E., Lamond, E., & Holden, J. J. (2012). Survey of bilingualism in autism spectrum disorders. *International Journal of Language & Communication Disorders / Royal College of Speech & Language Therapists*, 47, 52–64.
- Kilinc, S., Chapman, K., Kelley, F. M., Adams, K., & Millinger, J. (2016). Teachers' reconceptualization of young children's identities and abilities through research–based drama professional development. *International Journal of Education & the Arts*, 17(22). Retrieved from [ijea.org/v17n22/](http://ijea.org/v17n22/)
- Kilinc, S., Kelley, F. M., Adams, K., & Millinger, J. (2016). Early years educators at play: A research–based early childhood professional development program. *Childhood Education*, 92(1), 50–57. doi: 10.1080/00094056.2016.1134242
- Klinger, J. K., & Harry, B. (2006). The special education referral and decision–making process for English language learners: Child study team meetings and staffings. *Teachers College Record*, 108, 2247–2281.

- Kohnert, K. (2008). *Language disorders in bilingual children and adults*. San Diego, CA: Plural.
- Kohnert, K. (2010). Bilingual children with primary language impairment: Issues, evidence and implications for clinical actions. *Journal of Communication Disorders*, 43(6), 456–473. doi:10.1016/j.jcomdis.2010.02.002
- Kohnert, K., & Medina, A. (2009). Bilingual children and communication disorders: A 30-year research retrospective. *Seminars in Speech and Language*, 30, 219–233.
- Kovács, Á. M., & Mehler, J. (2009). Cognitive gains in 7-month-old bilingual infants. *Proceedings of the National Academy of Sciences of the United States of America*, 106(16), 6556–6560. doi.org/10.1073/pnas.0811323106
- Kuo, L.-J., & Anderson, R. C. (2010). Beyond cross-language transfer: Reconceptualizing the impact of early bilingualism on phonological awareness. *Scientific Studies of Reading*, 14(4), 365–385. doi.org/10.1080/10888431003623470
- Kuo, L.-J., & Anderson, R. C. (2012). Effects of early bilingualism on learning phonological regularities in a new language. *Journal of Experimental Child Psychology*, 111(3), 455–467. doi.org/10.1016/j.jecp.2011.08.013
- Langdon, H. W. (2008). *Assessment & intervention for communication disorders in culturally & linguistically diverse populations*. Clifton Park, NY: Thomson Delmar Learning.
- Lesaux, N. K. (2006). Building consensus: Future directions for research on English language learners at risk for learning difficulties. *Teachers College Record*, 108, 2406–2438.
- Limbos, M., & Geva, E. (2002). Accuracy of teacher assessments of second-language students at risk for reading disability. *Journal of Learning Disabilities*, 34, 137–151.
- Lofranco, L. L., Pena, E. D., & Bedore, L. M. (2006). English language narratives of Filipino children. *Language, Speech and Hearing Services in Schools*, 37, 28–38.
- McCardle, P., Mele-McCarthy, J., Cutting, L., Leos, K., & D'Emilio, T. (2005). Learning disabilities in English language learners: Identifying the issues. *Learning Disabilities Research and Practice*, 20, 1–5.
- Ohashi, J. K., Mirenda, P., Marinova-Todd, S., Hambly, C., Fombonne, E., Szatmari, P., . . . Thompson, A. (2012). Comparing early language development in monolingual- and bilingual-exposed young children with autism spectrum disorders. *Research in Autism Spectrum Disorders*, 6(2), 890–897. doi:10.1016/j.rasd.2011.12.002
- Paneque, O. M., & Rodriguez, D. (2009). Language use by bilingual special educators of English language learners with disabilities. *International Journal of Special Education*, 24, 63–69.
- Paradis, J. (2016). The development of English as a second language with and without specific language impairment: Clinical implications. *Journal of Speech, Language, and Hearing Research*, 59, 171–182.
- Paradis, J., Crago, M., Genesee, F., & Rice, M. (2003). Bilingual children with specific language impairment: How do they compare with their monolingual peers? *Journal of Speech, Language and Hearing Research*, 46, 113–127.
- Park, E. (2008). Intergenerational transmission of cultural values in Korean American families: An analysis of the verb suffix. *Heritage Language Journal*, 6(2), 21–53.
- Peña, E. D., & Halle, T. G. (2011). Assessing preschool dual language learners: Traveling a multiforked road. *Child Development Perspectives*, 5(1), 28–32.
- Peña, E. D., Summer, C., & Resendiz, M. (2007). Language variation, assessment and intervention. In A. G. Kamhi, J. J. Masterson, & K. Apel (Eds.), *Clinical decision making in developmental language disorders* (pp. 99–118). Baltimore, MD: Brookes Publishing.
- Rinaldi, C., & Samson, J. (2008). English language learners and response to intervention referral considerations. *Teaching Exceptional Children*, 40(5), 6–14.
- Rodriguez, D. (2009). Meeting the needs of English language learners with disabilities in urban settings. *Urban Education*, 44(4), 452–464.
- Rogoff, B. (1995). Observing sociocultural activity on three planes: Participatory appropriation, guided participation and apprenticeship. In J. V. Wertsch, P. Del Rio, & A. Alvarez (Eds.), *Sociocultural studies of the mind* (pp. 139–163). Cambridge, England: Cambridge University Press.
- Rogoff, B. (2003). *The cultural nature of human development*. New York, NY: Oxford University Press.
- Rojas, R., & Iglesia, A. (2009). Making a case for language sampling: Assessment and intervention with (Spanish-English) second-language learners. *The ASHA Leader*, 14, 10–11, 13.
- Romero-Little, M. E., McCarty, T. L., Warhol, L., & Zepeda, O. (2007). Language policies in practice: Preliminary findings from a large-scale national study of Native American language shift. *TESOL Quarterly*, 41(3), 607–618. doi.org/10.1002/j.1545-7249.2007.tb00093.x
- Sheng, L., Bedore, L. M., Peña, E. D., & Fiestas, C. (2013). Semantic development in Spanish-English bilingual children: Effects of age and language experience. *Child Development*, 84(3), 1034–1045.
- Strand, S., & Lindsay, G. (2009). Evidence of ethnic disproportionality in special education in an English population. *Journal of Special Education*, 43(3), 174–190.
- Tse, L. (2001). Resisting and reversing language shift: Heritage-language resilience among U.S. native bilitates. *Harvard Educational Review*, 71(4), 676–709. doi.org/10.17763/haer.71.4.ku752mj536413336
- Wagner, R. K., Francis, D. J., & Morris, R. D. (2005). Identifying English language learners with learning disabilities: Key challenges and possible approaches. *Learning Disabilities Research and Practice*, 20(1), 17–23.
- Ware, J., Lye, C. B., & Kyffin, F. (2015). Bilingualism and students (learners) with intellectual disability: A review: Bilingualism and students with ID. *Journal of Policy and Practice in Intellectual Disabilities*, 12(3), 220–231. doi:10.1111/jppi.12124
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York, NY: Cambridge University Press.
- Wiley, T. G., & Valdés, G. (2000). Editors' introduction: Heritage language instruction in the United States: A time for renewal. *Bilingual Research Journal*, 24(4), iii–vii. doi.org/10.1080/15235882.2000.10162770
- Woumans, E., Santens, P., Sieben, A., Versijpt, J., Stevens, M., & Duyck, W. (2015). Bilingualism delays clinical manifestation of Alzheimer's disease. *Bilingualism: Language and Cognition*, 18(3), 568–574. doi.org/10.1017/S136672891400087X
- Yang, L., & Lust, B. (2009). *Discovering child language and cognitive growth*. Cornell University College of Human Ecology: Outreach & Extension. Retrieved from human.cornell.edu/hd/outreach-extension/upload/lust.pdf



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