Helios Education Foundation's Dual Language Learner Project:

EARLY IMPACTS OF EMERGENT LITERACY AND LANGUAGE ACQUISITION SKILLS FOR EDUCATORS AND PRE–K STUDENTS

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Education Foundation

AUTHORS

Katie Bernstein, Ph.D.
Arizona State University

Sultan Kilinc, Ph.D.
Arizona State University

Paul Perrault, Ph.D.
Helios Education Foundation

Karen Ortiz, Ph.D.
Helios Education Foundation

Michael F. Kelley, Ed.D.
Arizona State University

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,

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.

In laying the foundation for success in school and beyond, the ages between birth and eight are the most critical in a child's development. Ensuring young children have access to quality early learning environments, regardless of race, income, or geography, provides many proven individual and societal benefits. As a result, Helios is implementing robust professional development, dual-language programming, and research projects in Arizona and Florida aimed at improving language and literacy skills of children entering kindergarten.

The following brief provides an overview of the implementation of the program as well as its impact on classroom instruction and children's acquisition of language and literacy. We hope this brief helps facilitate conversations about how to effectively use dual-language learning strategies to ensure more children are prepared for success in kindergarten and ultimately read at grade level by the end of third grade.

Sincerely,

Vince Roig
Founding Chairman
Helios Education Foundation

Paul J. Luna
President & CEO
Helios Education Foundation

HELIOS EDUCATION FOUNDATION'S DUAL LANGUAGE LEARNER PROJECT: EARLY IMPACTS OF EMERGENT LITERACY AND LANGUAGE ACQUISITION SKILLS FOR EDUCATORS AND PRE–K STUDENTS

As Helios Education Foundation works to create more equitable education systems, the Foundation recognizes the importance of addressing the needs of our youngest learners. Helios is implementing robust professional development research projects in Arizona and Florida aimed at improving the language and emergent literacy of children entering kindergarten, using a two–way language immersion model. In two–way immersion, children who speak English and children who speak Spanish both learn content together, through both languages. This report, the second in a set of education briefs about the project in Arizona (see Ortiz et al., n.d.), includes initial data on how dual language learning (DLL) is influencing classroom practices and children's learning.

To guide our work in Arizona and Florida, Helios commissioned a multi–year research study with our partners. The goal is to examine both the implementation of the program, and, more importantly, its impacts on teachers' use of high–quality teaching strategies and on children's acquisition of language and literacy skills. We believe this work will spur the use of innovative and effective instructional strategies for our youngest English Language Learners (ELLs), helping to ensure their success in kindergarten and beyond. We plan to disseminate our research results to inform public policy and practice.

PART 1: INTRODUCTION AND PROBLEM

Arizona's educators are faced with limited choices for educating young ELLs in their classrooms. Until recently, Arizona policy required that students identified as ELLs be grouped together in a Structured English Immersion setting for a minimum of 4 hours per day of English language development (ARS 15–751 and 15.756.01). As of early 2019, while the Arizona State Legislature softened this policy by reducing the 4 hours to 2 hours, it has not fully embraced the value of a two–way immersion program. Educators working with ELLs have expressed concern that the SEI policy reduces students' access to core areas of academic content and limits their interactions with English–proficient peers. This policy, in combination with limited access to high–quality early education programs and other risk factors, can disadvantage young ELLs' development of cognitive, language, and literacy skills.

To address the challenges that schools have in developing emergent literacy skills within these constraints for an increasingly diverse student population, Helios, Arizona State University and Childsplay have developed a new, innovative approach. 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. Helios's project uses a two–way dual language immersion approach that engages all students in the development of English and Spanish language and literacy skills and teaches content knowledge in both languages.

This brief has four main sections. In Part I we describe the background and context surrounding DLL. In particular, we discuss the types of programs for effectively educating young ELLs and the benefits of dual language programs. In Part II we share our initial findings from the study. We examine instructional practices in English and Spanish, variance in Classroom Assessment Scoring System (CLASS) scores in English and Spanish, and student learning outcomes. In addition, we explain qualitative changes in classroom participation and in teacher beliefs. Part III identifies lessons learned; Part IV provides policy recommendations.

THE POSSIBILITIES: PROGRAM TYPES FOR EDUCATING ELLS

ELLs and dual language learners in the U.S. learn through a wide variety of instructional strategies and learning environments. Often, these are categorized into two main types. The first type focuses on an English-only immersion strategy, while the second type places children into a learning environment that uses both their home language and a secondary language. Research has demonstrated the advantages of the second.

ENGLISH-ONLY APPROACHES

There are several types of English-only approaches to educating ELLs. In submersion language education, ELLs are placed in mainstream classes without intentional language acquisition support. While this may be an acceptable option (although not optimal) for children in preschool or kindergarten, it becomes increasingly difficult for students when they encounter more complex subject content. Ideally, if ELLs are placed in mainstream classrooms, they should receive various levels of support. Other kinds of English-only education, which provide varying levels support are:

- pull-out support or support for part of the day with an English language acquisition specialist;

- structured or sheltered English immersion (SEI) in which ELLs learn separately from their English-proficient peers;

- push-in support, or in-classroom support, from an English as a Second Language specialist who assists both the student and the teacher to improve the ELLs' language and content learning.

BILINGUAL APPROACHES

There are also several types of bilingual approaches to educating ELLs. In transitional bilingual education, ELLs begin learning content in their home language, such as Spanish, while receiving English language acquisition support. Over 1-3 years, the language of instruction gradually shifts to 100% English (Goldenberg, Nemeth, Hicks, Zepeda, & Carona, 2013). In a second option, known as developmental (or maintenance) bilingual education, ELLs begin school by learning content in their home language while receiving instruction in English. These programs continue to use students' home language in addition to English throughout 5-6 years of elementary school, with the goal of students becoming fully bilingual and biliterate. A third option, which has gained favor over

the last decade, is the two-way immersion model (TWI). This model provides ELLs and English speakers with subject content in two languages (Barnett et al., 2007; Howard, Lindholm-Leary, Rogers, Medina, Kennedy, Sugarman, & Christian, 2018)).

Many 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. (2018), TWI programs have three defining criteria. They should include a relatively equal balance between students who speak English and students who speak Spanish (including, of course, students who are already bilingual). Secondly, core academic instruction is provided to all students through both languages, though the proportion of the two languages can vary. For instance, some programs provide between 80% and 90% of instruction in the minority language during the early grades, increasing the proportion of majority language instruction with each subsequent grade. Other programs use a 50/50, or balanced model, in which half the instructional time is in one language, and the other half is in the other language. Third, TWI programs strive for bilingualism, biliteracy, and sociocultural competence for all students, as well as equity between languages, cultures, and students (Howard et al., 2018).

Research about best practices for dual language learners also identifies specific instructional strategies. These include ongoing and frequent assessments to monitor dual language learners' development in both languages (Lesaux & Siegal, 2003), and focused small-group activities, allowing children the opportunity to respond to questions, practice reading skills, and receive explicit vocabulary instruction (McMaster et al., 2008; Vaughn et al., 2006). In addition, the strategies need to ensure ongoing acquisition of academic English, which specifically addresses the need for students to develop an understanding of the ways that academic coursework and language differ from conversational language (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006). The strategies also must promote social-emotional development through positive teacher interactions (Castro, Gillanders, Franco, & Zepedea, 2010; Gillanders, 2007; Howes & Ritchie, 2002). Other components include educators' dispositions toward diverse cultural backgrounds, the choice of curriculum, and the methodology of instruction.

	Program type	Languages used	Language goals	Who participates and for how long
English-only approaches	Mainstream sink-or-swim (submersion)	English	English learning	ELLs and mainstream peers
	Mainstream with support (pull out or push in)	English	English learning	ELLs and mainstream peers
	Structured/sheltered English immersion	English	English learning	ELLs only
Bilingual approaches	Transitional bilingual programs	English and Spanish	English learning	ELLs; 1–3 years
	Developmental bilingual programs	English and Spanish	Bilingualism and biliteracy	ELLs; 5–6 years
	Two-way dual language immersion programs	English and Spanish	Bilingualism, biliteracy, and sociocultural competence for all	ELLs, English speakers, bilingual speakers; 5–6 years

THE BENEFITS OF DUAL LANGUAGE PROGRAMS

Research has shown that ELLs have the best academic outcomes in strong dual language programs that provide content in both English and their home language throughout elementary school (Steele et al., 2017). In fact, strong dual language programs have been shown to completely close the achievement gap between ELLs and their English-speaking peers (Collier & Thomas, 2017). ELLs in strong bilingual programs consistently outperform ELLs in English-only programs in the areas of writing, math, graduation rates, and standardized test scores, as well as less measurable outcomes such as pride in their culture and heritage (August & Shanahan, 2006; Holm & Holm, 1995; Howard & Sugarman, 2007; Johnson & Legatz, 2006; Lindholm-Leary & Block, 2010; McField & McField, 2014).

In our review of the literature around DLL education, we recognized a void of data in the pre-K years. Based on that finding, Helios designed a research project that would be implemented with 4- and 5-year-olds using a TWI model and focusing on culturally responsive, literacy rich, early learning environments for the purpose of improving children's language and literacy development.

CHALLENGES IN IMPLEMENTING HIGH-QUALITY DUAL LANGUAGE PROGRAMS

Despite the known benefits of strong bilingual programs, there are several challenges to creating high-quality dual language classrooms. It can be difficult to find excellent bilingual/biliterate teachers. Nationally, there is a shortage of bilingual teachers (Cross, 2017; U.S. Department of Education, 2017), and although in places like Arizona, many teachers may speak both Spanish and English, teaching in bilingual programs requires content knowledge and pedagogical skills in both languages. Early literacy teaching, for instance, is different in English and Spanish, because of the different sound and letter relationships and different word structure between the languages.

It can also be challenging to create a truly bilingual program in an otherwise English-dominated school system. Most commercial curricula are in English, and when they do have an accompanying Spanish version, it may not be of comparable quality. For example, if a leveled reader for young students is translated to Spanish, the translated terms may be at a different reading level than the original. Additionally, high-stakes state tests are typically written only in English. Although students in bilingual programs often outperform those in English-only programs, teachers in bilingual programs may still feel pressure to focus more on English during testing season (Palmer & Lynch, 2008).

In Arizona, the challenges are more extreme. With the passage of Proposition 203 in 2000 and House Bill 2064 in 2006, educational programs available to ELLs changed significantly. The passage of the voter initiative and house bill ended local flexibility, requiring all ELLs in the state to be taught using SEI unless the school obtained a parental waiver, or the individual student was deemed proficient in English. These restrictions, however, do not impact pre-K programs as they are not considered to be part of the education system as defined under Proposition 203. This exemption has allowed for the implementation of the Helios Dual Language Learner Program in two Arizona school districts.

From our research to date, we have been able to identify a set of additional challenges confronting districts and schools seeking to implement TWI dual language programs.

RECRUITING QUALIFIED TEACHERS

While Arizona has a population rich in multiple languages, recruiting early childhood teachers who are proficiently bilingual and biliterate has proven to be difficult. One of the main reasons for this challenge is that there is limited intentionality by institutions of higher education to provide teachers with culturally relevant language and literacy knowledge to create truly engaging bilingual classrooms.

USE OF PROFESSIONALS

Due to the lack of bilingual and biliterate teachers, our project utilized paraprofessionals who were capable of delivering instructional activities in Spanish. Some paraprofessionals were not comfortable in assisting in a lesson activity; others were given limited support by the lead teacher. In addition, the pay variation between the lead teacher and the paraprofessional was significant. Paraprofessionals voiced dissatisfaction with the added responsibility without added compensation. In many classrooms, because of the lack of confidence by the lead teacher and the paraprofessional in delivering the lesson content in Spanish, they did not deliver classroom content in Spanish as frequently. At the same time, our observations showed that instructional practices during Spanish activities were not always of the same quality.

LACK OF CONTINUITY IN ELEMENTARY GRADES

Because of Proposition 203, relatively few Arizona school districts are able to offer DLL programs in the elementary grades. This presents a challenge for those pre-K students who have had the advantage of a bilingual/biliterate program because they do not have the opportunity to maintain the cognitive and social-emotional benefits that directly correlate with greater educational achievement. Howard et al. (2018) consider a clear K-12 dual language pipeline a best practice in dual language education.

FUNDING LIMITATIONS

The state of Arizona provides extremely limited funding to early childhood programs (birth to 5 years old). First Things First, a quasi-governmental agency, is Arizona's only public funding source dedicated exclusively to early childhood. While these funds are quite useful, they fall far short in addressing the needs of all families to have access to high-quality early childhood programs. High-quality early childhood programs have ample age-appropriate materials and books in both languages, and inviting, well-organized environments. They have well-educated teachers and caregivers who know how to foster positive relationships, create interactive hands-on activities, and promote every child's physical, emotional, social, language, and cognitive development. The programs have culturally responsive teachers and, for the TWI programs, teachers who are bilingual and biliterate. Meeting the high costs associated with these elements of quality requires school districts to leverage and combine many funding streams. While the Helios TWI Dual Language Learner Project preschools are based in school districts—which are much better resourced than most community-based preschools—they still struggle to fund the elements of quality outlined above. Obtaining ample, secure funding for preschool programs is imperative for ensuring equal opportunities and outcomes for Arizona's more vulnerable young children.

THE EYEPLAY DUAL LANGUAGE LEARNING PROFESSIONAL DEVELOPMENT

To support language and literacy development in both English and Spanish, the Early Years Educators at Play (EYEPlay) Dual Language Learning Professional Development program integrates drama strategies into literacy practices in DLL preschool classrooms. The program has three goals:

1. To develop teachers' knowledge, performance skills, and dispositions toward using drama strategies (i.e., pantomime, character development, group story building) as tools in literacy practices.

2. To support enhancing young children's literacy and language development in both English and Spanish.

3. To build sustainable personal and professional growth by teachers, such that they continue to employ drama strategies after the completion of the project (Kilinc et al., 2016).

In the EYEPlay DLL program, professional theatre teaching artists work with preschool teachers across a full school year to scaffold teachers' drama facilitation. The program includes three drama frames, or purposeful pairings of a drama strategy (pantomime, character development, and group story building) with specific language and curricular objectives (receptive language, expressive language, and problem–solving). These drama frames are implemented as six units throughout the year (see Figures 1 and 2 in Appendix A).

THE STUDY

For the past 3 years, we have been studying the implementation and outcomes of the EYEPlay DLL strategies within the Helios TWI Dual Language Learner Project. In working with the same group of teachers in 12 DLL preschool classrooms across 3 years, we identified a different focus for each year. The first year centered on building a strong foundation of teachers' drama facilitation skills. The second year aimed to support teachers' instructional strategies while expanding the use of drama within multiple activities (e.g., transition, outdoor, and breakfast time) throughout the day. The third year of the program focuses on (a) extending EYEPlay strategies, particularly inquiry and feedback strategies, outside of story time and into the rest of the school day, and (b) developing and implementing child–centered lesson plans

that meet the diverse needs of teachers' classrooms. In all 3 years, the project has emphasized children's acquisition of robust academic language in both English and Spanish.

In the following sections, we share some of what we found in the first 2 years of the project.

THE FINDINGS

Teachers improved in leading literacy lessons using drama.

A teacher facilitation rubric measured teachers' skills in implementing drama into their dual language literacy settings. The goal of this effort, in part, was to determine the fidelity of the drama professional development and determine if teachers were using the drama skills robustly over time. On each of 14 skills, their teaching artists and an independent observer rated teachers from Beginning (1 or 2) to Developing (3 or 4) to Achieving (rated as 5), in which "the teacher clearly understands the concepts underlying the elements and implements them well with clear evidence of student success."

They scored teachers six times in each language—English and Spanish—throughout the first year. We found that teachers increased their scores over time in both languages (see Appendix A). This provides evidence that the drama professional development was effectively preparing the teachers to understand and deliver the drama strategies to their dual language learners.

The graphs show that gains were made across all the units in both languages, but drama facilitation scores were slightly, yet consistently, higher in English than in Spanish. We discuss this finding below.

Teachers improved on CLASS scores in English and Spanish

The Classroom Assessment Scoring System (CLASS) is an observation tool assessing quality in preschool classrooms. It measures three domains: emotional support (ES), classroom organization (CO), and instructional support (IS). ES focuses on responding to students' social and emotional development through fostering a positive climate, being aware of students' academic and emotional concerns, and building interactions and learning activities around students' interests, motivations, and points of view. The CO domain deals with effective behavior management, levels of classroom productivity, and learning activities that support student engagement and learning. The IS domain is about teachers providing and supporting the use of rich language through concept development, quality of feedback, and language modeling (Pianta, La Paro, & Hamre, 2008). The results from the study for each year are described below.

Year 1. Two certified bilingual assessors scored full CLASS video-based assessments (pre- and post-tests) using a Likert scale. Every CLASS video observation was conducted in cycles of observing and note-taking that lasted 15–20 minutes each.

Complete pre- and post-test CLASS data were obtained for 10 lead teachers in English and six lead teachers in Spanish. Descriptive statistics were used to determine the mean scores for both the pre- and post-tests. As shown in Figures 3 and 4, pre- and post-test mean scores rose slightly for each of the three domains of interest in English and in Spanish, with the IS domain rated the lowest. However, none of these differences were statistically significant.
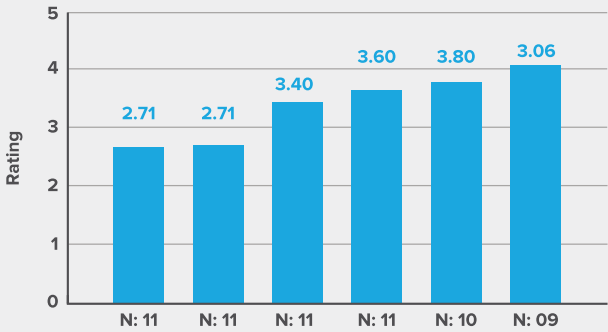
FIGURE 1

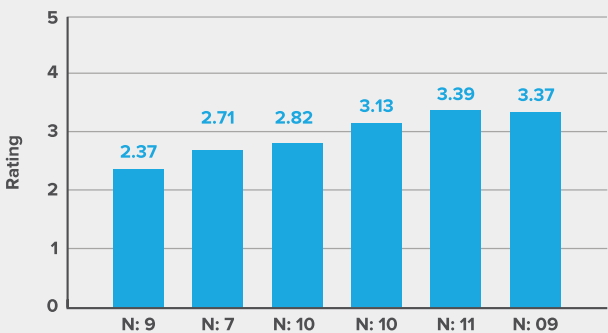**Drama Facilitation in English**

FIGURE 2

Drama Facilitation in Spanish
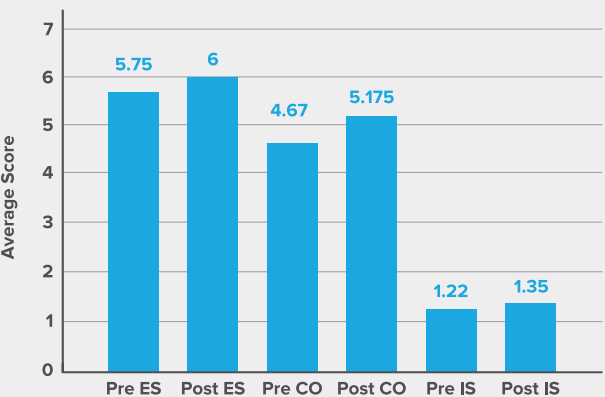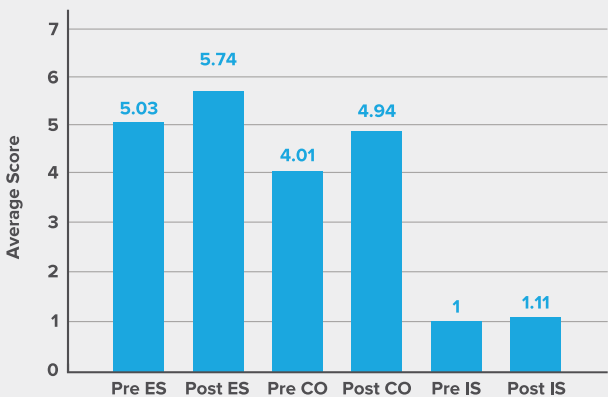
FIGURE 3

CLASS Scores in English

FIGURE 4

CLASS Scores in Spanish

Year 2. Because the scores in IS started and remained low in both English and Spanish, the EYEPlay professional development strategies in Year 2 specifically paired drama with instructional support strategies such as concept development, quality of feedback, and language modeling. Full CLASS video–based assessments (pre– and post–tests) were conducted again. Complete pre– and post–test CLASS data were obtained for 12 lead teachers in English and 12 lead teachers in Spanish. As shown in Figure 5, pre– and post–test means rose slightly for each of the three domains of interest in English, with CO trending toward significance, and the IS domain demonstrating a statistically significant increase. However, the IS domain post–test score was still considered low on the CLASS scale as described earlier.

As shown in Figure 6, pre– and post–test means rose slightly for each of the three domains of interest in Spanish, with the CO and the IS domains demonstrating statistically significant increases.

CLASS Scores in English

CLASS Scores in Spanish
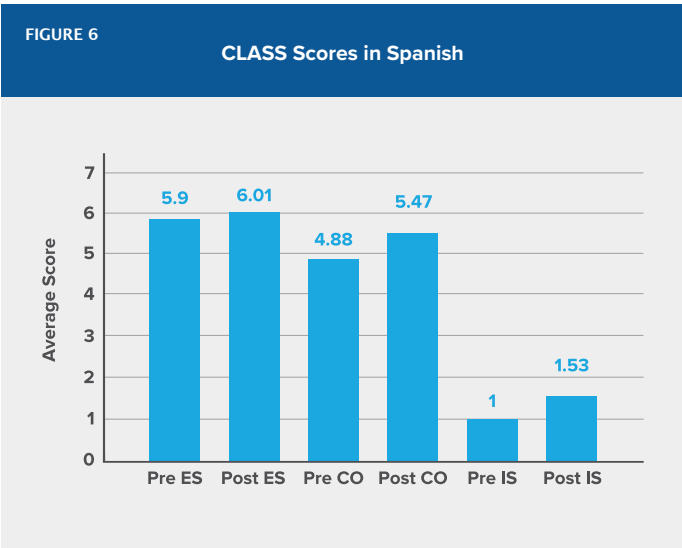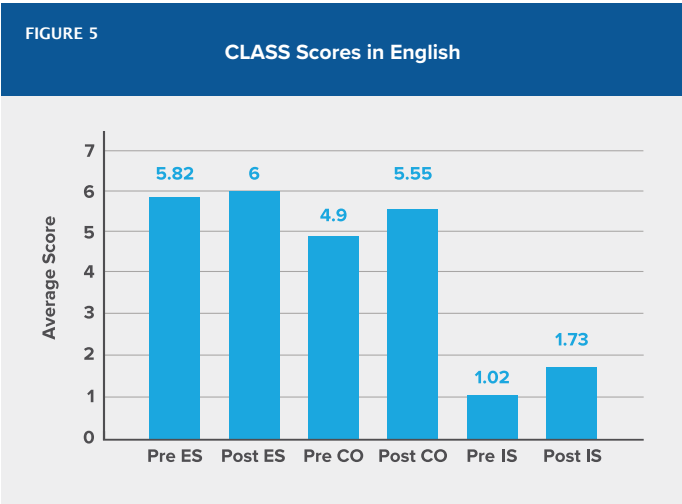
The CLASS results for Year 2 implementation are extremely encouraging. The teachers in both languages are maintaining robust scores for ES and CO across the 2 years of DLL and are beginning to make positive improvements in IS.

TSG Data: Children made gains across both years.

Teaching Strategies GOLD (referred to hereafter as GOLD) is a formative, observation–based assessment system developed to assist teachers in evaluating the skills and knowledge of the birth through kindergarten–aged children whom they teach (Heroman et al., 2010; Lambert, Kim, & Burts, 2015). It is comprised of 51 research–based objectives and accompanying rating scales that are separated into 10 categories of development and learning: social–emotional, physical, language, cognitive, literacy, mathematics, science and technology, social studies, the arts, and English language acquisition (Heroman et al., 2010). The rating scales consist of a 10–point progression of development and learning ranging from not yet (Level 0) to progressing beyond kindergarten expectations (Level 9; Kim, Lambert, & Burts, 2013). Early Head Start, Head Start, pre–kindergarten, and kindergarten teachers use these objectives and rating scales, along with a child assessment portfolio, assessment opportunity cards, and an on–the–spot observation recording tool, while they are observing young children, conducting conversations with children and their families, and evaluating samples of children's work, such as drawings and writing (Kim, Lambert, Durham, & Burts, 2018; Lambert et al., 2015). Eight Spanish language and literacy objectives are also provided (Heroman et al., 2010). Teachers use the collected documents and information to conduct evaluations three times per academic year, typically during the fall, winter, and spring (Kim et al., 2018).

Participating teachers used GOLD to evaluate their students' development and learning in the 10 categories described above. However, as the project focused on providing rich language and literacy experiences to preschool children, only the mean scores for the language and literacy objectives are presented. As seen in Figures 7–10, preschool students made gains across both years.

One limitation of GOLD, however, is that it is not built for DLL. While it does provide domains in Spanish, those sections of the program, which is computer-based, unlock only if a teacher indicates that a child is an ELL. There were additional challenges with assessing in Spanish that were particular to our project. We discuss these in Lessons Learned.
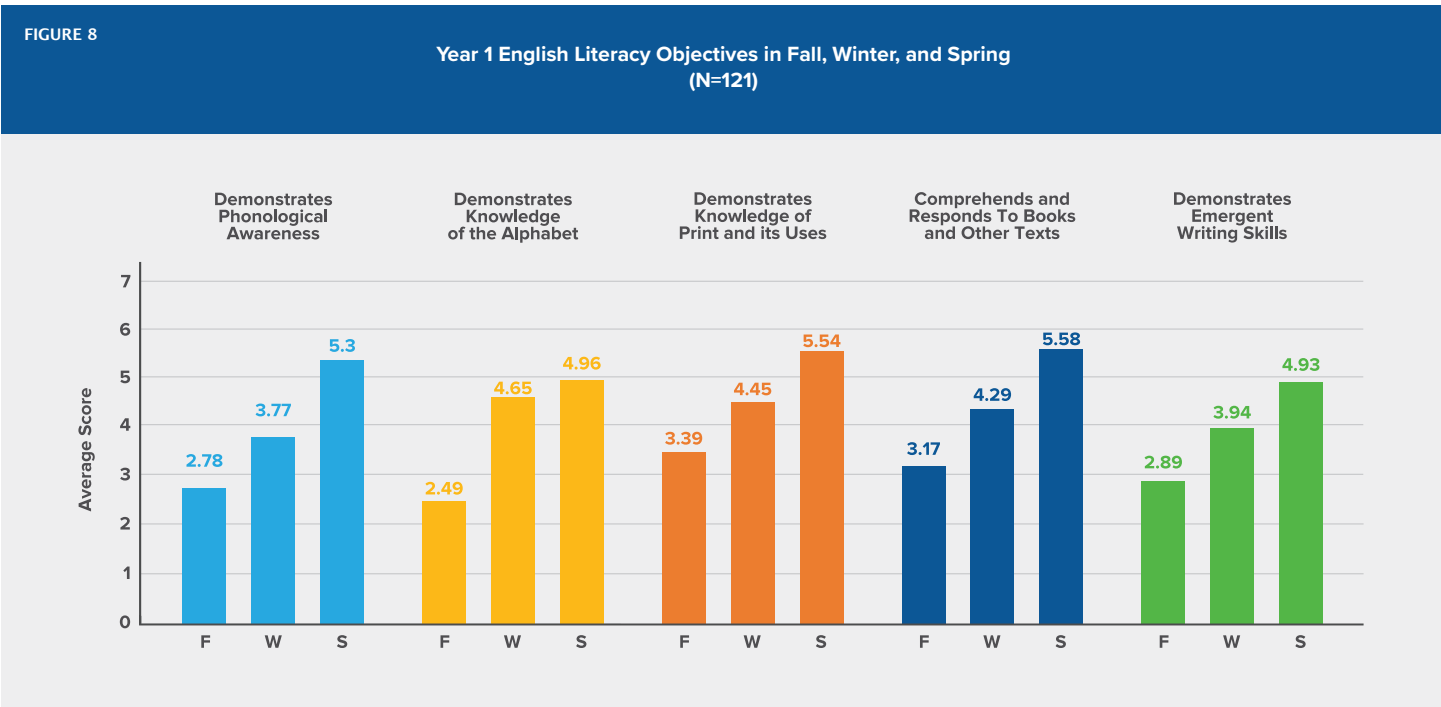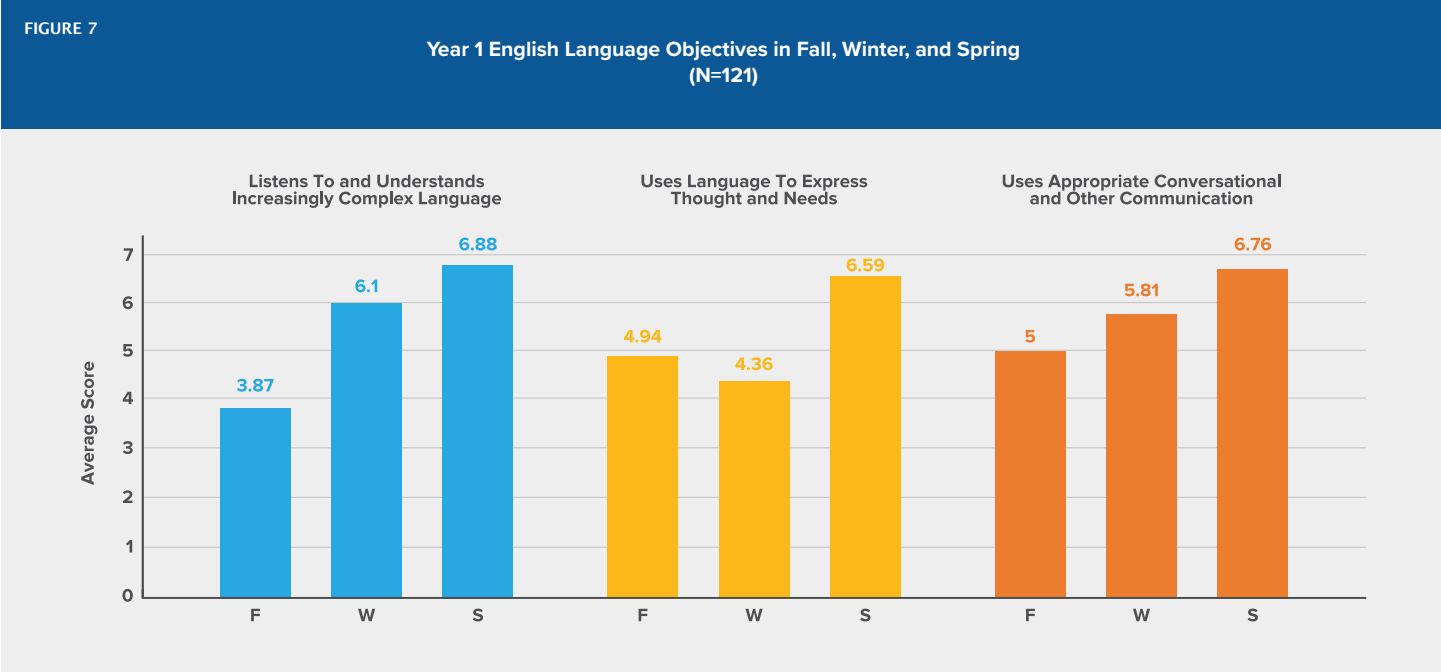
FIGURE 7

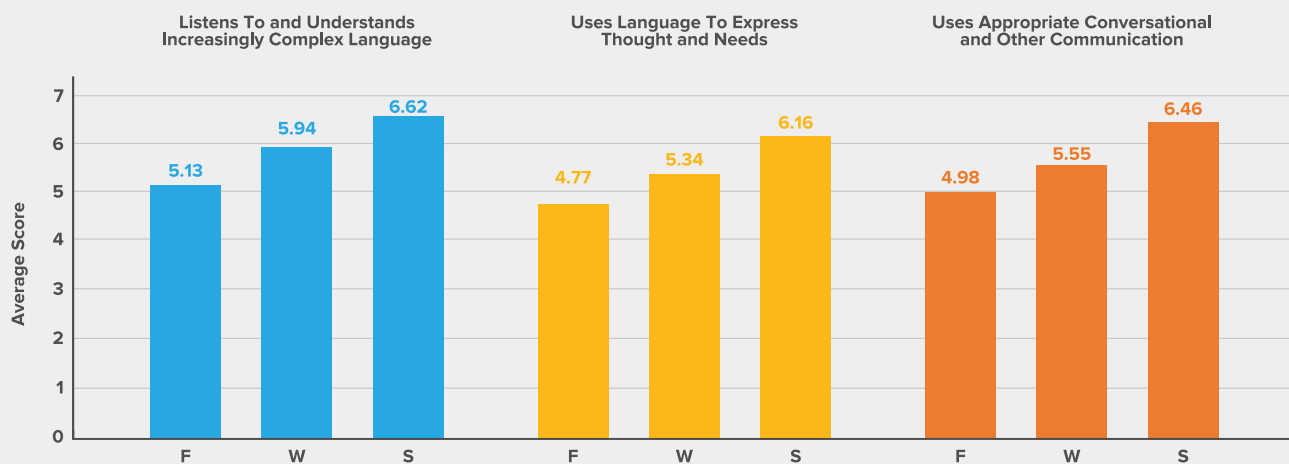**Year 1 English Language Objectives in Fall, Winter, and Spring (N=121)**

FIGURE 8

Year 1 English Literacy Objectives in Fall, Winter, and Spring (N=121)

FIGURE 9

Year 2 English Language Objectives in Fall, Winter, and Spring
(N=179)

Listens To and Understands Increasingly Complex Language

Uses Language To Express Thought and Needs

Uses Appropriate Conversational and Other Communication

Average Score

Listens To and Understands Increasingly Complex Language:
- F: 5.13
- W: 5.94
- S: 6.62

Uses Language To Express Thought and Needs:
- F: 4.77
- W: 5.34
- S: 6.16

Uses Appropriate Conversational and Other Communication:
- F: 4.98
- W: 5.55
- S: 6.46

FIGURE 10

Year 2 English Literacy Objectives in Fall, Winter, and Spring
(N=179)

Demonstrates Phonological Awareness

Demonstrates Knowledge of the Alphabet

Demonstrates Knowledge of Print and its Uses

Comprehends and Responds To Books and Other Texts

Demonstrates Emergent Writing Skills

Average Score

Demonstrates Phonological Awareness:
- F: 2
- W: 2.55
- S: 3.48

Demonstrates Knowledge of the Alphabet:
- F: 1.81
- W: 2.56
- S: 3.54

Demonstrates Knowledge of Print and its Uses:
- F: 3.36
- W: 3.95
- S: 4.71

Comprehends and Responds To Books and Other Texts:
- F: 1.58
- W: 3.28
- S: 2.68

Demonstrates Emergent Writing Skills:
- F: 3.6
- W: 4.85
- S: 7.42

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THE IMPACT OF EYEPLAY DLL STRATEGIES WITHIN THE HELIOS TWI DUAL LANGUAGE LEARNER PROJECT: THE VOICES OF PRESCHOOL TEACHERS

While the quantitative data tell part of the story, teachers' voices provide more detail. Focus groups were conducted with the participating preschool teachers in the fall, winter, and spring of each school year to understand their insights about and experiences in the EYEPlay DLL strategies professional development. One trend in these reflections was that teachers saw using drama in English and Spanish literacy settings as very supportive of students' language and literacy development in both languages. For example:

- "I think it helped the children understand more language and literacy. A lot of them had limited language at the beginning of the year, and it's really, really increased their language ability a lot."

- "I saw huge gains in language development. People come into the classroom, and they listen to the kind of conversations that these students were able to hold and the rich vocabulary, and it's amazing."

Importantly, the teachers reported that integration of drama, in addition to providing education in both languages, created opportunities to participate and learn for all students, including those with disabilities and students perceived as shy:

- "That child who has a speech IEP [Individual Education Plan for a disability]—it really has helped him. At the beginning of the year, I could not understand what the child said, and it really helped him a lot. I have one that's really shy as well, and it's really helped him gain confidence in himself, not being afraid."

- "They—especially when we're doing things in groups—they can [participate]. Even if they don't know exactly what to do at first, they see everybody doing it, so then they can copy. And then the next time, then they know they connect the vocabulary or the phrase or whatever with emotion. I think that helps them all. It helps all the kids, not just the shy kids."

- "Well, I know earlier in the year, we noticed that one of our students who really struggled with forming any words, would switch between languages depending on what word was the easiest to say, and he's come a long way as far as his ability to communicate. He can now speak in much clearer sentences, but we noticed there was a lot of use of whichever language was the simplest, and Spanish often had easier sounds for him to create. So, he was able to tell us a lot more of what he was trying to say when he could find the right Spanish word…That was cool to see."

PART 3: LESSONS LEARNED

Throughout the EYEPlay strategies professional development within the Helios TWI Dual Language Learner Project, we heard and saw again and again that dual language implementation was a positive for children and families, from children's growing metalinguistic awareness to families' increased engagement. Importantly, teachers saw a shift in how Spanish-speaking students felt about their own language and culture, as well as a shift in how English-speaking students felt about Spanish. One teacher told us:

> "From the beginning of the year, my native Spanish speakers, they were really shy, really quiet … I think since we started incorporating Spanish into the classroom a lot more, they are more comfortable, and they're more confident. I also have kids that they're Hispanic, and they do know Spanish, but that's not their main language … I've seen such a huge change specifically in them because I would see, at the beginning, they were like, "I don't want to speak Spanish; I'm better with English anyways." Or like, "I just don't want to." Now, they're okay with it. They're like, "Yes, this is cool. I can speak Spanish and English.""

Another reported:

> "I remember, at the beginning, some of my English-only students refused…But I saw that that change…I was consistent, and I was telling them, 'How rich can be a classroom with a huge diversity.' Because I was telling them about the different cultures that people have and how respectful we need to be about it. If you don't understand a language, it's okay. You can learn. At least you can try. You don't have to force yourself, but at least you can try and try your best. I see a big difference now. They don't have that attitude anymore. They don't have that, 'Aww, it's Spanish again,' but now they love to sing in Spanish. They request songs in Spanish."

Despite these positive reflections, dual language implementation was not always easy for teachers. Although our research showed that most teachers generally held pro-multilingual language ideologies— or beliefs about how languages work and should be used—they had practical concerns with dual language implementation (Bernstein, Kilinc, Deeg, Marley, Farrand, & Kelley, 2018). These practical concerns included balancing district priorities and managing new divisions of labor in the classroom.

For instance, one teacher expressed that she felt like Spanish was competing with the goal of improving their classroom quality rating, which was assessed only in English.

> "We're spending a lot of time because improving our Star Rating is our number one goal, so making that change and then trying to add Spanish in it, has been super challenging for teachers, super frustrating. And sometimes they feel like, I can't do it, I can't do it. So, supports really need to be in place to make this happen for us to meet our program goal of improving our Star Rating. Speaking Spanish in the classroom doesn't improve our Star Rating; it's how we provide instruction and questioning techniques and how we, you know, the pacing of the day, all of that stuff, and that's the goal."

Another teacher worried about dividing responsibilities with her Spanish-speaking paraprofessional:

> "Our Spanish speakers are not teachers…I'm responsible for these students. I'm responsible for their assessments, and I can't not know what people are saying or what's going on in my classrooms. There's huge challenges of how to make a monolingual English-speaking teacher comfortable, or even make the teaching assistants comfortable being the teacher in the classroom."

Thus, we argue that it is essential to listen to teachers' experiences and concerns related to implementing dual language as they are the key stakeholders who enact language policies in daily practices. The practical challenges might limit teachers' administering an effective dual language program, even when they believe in the power of multilingualism and dual language education.

PART 4: TAKEAWAYS

Based on what we learned in this study, there are several takeaways for policy–makers and for district leaders looking to establish dual language preschools.

1) Dual language can work for all students. In classrooms that had students with disabilities, teachers worried that dual language might not be right for them. But, as our data and the teachers' comments showed us, all students, even those with language delays and disabilities, have thrived in the two languages. Additionally, some students began the year speaking neither English nor Spanish. These students—speakers of languages like Somali and Arabic—have also thrived in the program and are on their way to being trilingual.

2) Dual language teaching requires material support. Classroom materials—posters, flyers, lesson plans, alphabet charts, labels, and signs—need to be in both languages. Classroom libraries must expand to include many high–quality books in Spanish: not just translations of English books, but books written in Spanish, representing cultures in which Spanish is spoken.

3) Dual language teaching requires professional support. Dual language education does not mean just speaking English and Spanish. Teachers and paraprofessionals need to understand what dual language is, how it works, and how to carry it out. This support must also continue for several years. In the districts in our project, teachers reported that the most helpful support was in–class coaching: someone to show them how to do dual language planning and teaching, with their own students in their own classroom.

4) Consistent messaging is key. Families, children, and visitors must see right away that this is a dual language space. All signs and notes home should be bilingual, and family meetings should be bilingual as well.

5) Finding the right personnel is key. Ideally, both teachers and paraprofessionals are bilingual. But not all Spanish speakers support dual language education or have the desire or ability to teach in Spanish. Make sure everyone is ideologically in support of dual language.

6) Sometimes bilingual teachers aren't available. But an English–speaking lead teacher and a Spanish–speaking paraprofessional can run an excellent dual language classroom. If the lead teacher speaks English and a paraprofessional provides Spanish, some additional lessons hold:

   a) The paraprofessional needs the support of the teacher in learning to plan and lead lessons.

   b) Teachers will also need to relinquish some control during Spanish time and trust their paraprofessional. As one teacher put it: "You've got to let go. Because I'm not a Spanish speaker, I have to trust that the person that does speak Spanish is going to do the right thing by what they're supposed to do."

   c) Planning should occur together so that lead teachers will know what is taking place during Spanish time and can add support during the lesson, even if they can't understand everything.

   d) Paraprofessionals who engage in planning and teaching are no longer just working in a support role and should ideally be given a stipend or extra compensation for their work.

   e) Teachers must show willingness to learn. One teacher gave the advice: "Just try your best to speak Spanish. Ask the kids because they know. Relax. It's okay if you don't know. Just try to learn."

   f) Finally, collaboration is key: teachers and paraprofessionals must see themselves as partners. A Spanish–speaking paraprofessional working with an English–speaking lead teacher summed it up:

   "We communicate a lot. As a lead teacher, it's really hard to give up your spot [at the front of the class] sometimes. I know at the beginning of the year, it was really hard for my lead teacher … but we got over that by communicating. … I would always ask my lead for advice. Always ask for advice, always ask questions too, like, "You saw me doing this, maybe you didn't understand me, but my facial expression, my tone, what do you think I can improve on?" I think just looking to them because they are the lead teacher for a reason. I really look up to her, and I take her advice, I take her input, and I really put it to work."

7) Perhaps the biggest takeaway—from teachers, from district leaders, and from our research team—is that dual language is worth the effort. We conclude with this quotation from one of our teachers:

   "I had a student who spoke Spanish only. She was really shy. Really, really shy. At the beginning, I saw her really in a shell—completely closed. It was for a long time, but when she started to see that we were consistent in Spanish time, my goodness, it was like, "Wow, this is my language, I understand this language", and she started to participate more, raising her hand, starting little by little, like baby steps, trying to speak in Spanish first. Now I can see that she is speaking in English as well."

PART V. RECOMMENDATIONS

Recognizing the importance of literacy and language acquisition in the United States, we offer a set of recommendations that have implications for stakeholders. These recommendations are based on the findings from this study, prior research, and related literature that contributed to the development of this brief.

1 BOLSTER FUNDING FOR BILINGUAL PRESCHOOL PROGRAMS TO INCREASE EQUITY FOR ALL STUDENTS.

Unfortunately, in Arizona and in most states, there is not the current level of funding needed to provide equity in early childhood experiences. As a result, many children are not exposed to age appropriate materials, well organized environments or quality instructors in the early grades. To really increase the likelihood for success for all students' state policy makers must secure adequate funding so that all children, but especially the most vulnerable, can have access to high quality instruction.

2 INTERVENE EARLIER IN THE EDUCATION OF ENGLISH LANGUAGE LEARNERS.

Educators have long expressed concern that some programs for ELLs slow cognitive, language and literacy development because students are removed for a period of time from traditional classrooms. Yet, our work, and the work of many others have shown that ELLs can excel in multiple languages even before they enter kindergarten. To increase the likelihood for even greater success, we challenge policy makers and educational leaders to intervene in the education of ELLs earlier than kindergarten. We believe that there is ample evidence to support the idea that the earlier we intervene the less likely students will have to be pulled-out of classrooms when they enter grades K–12. As a result, these students should perform at a higher level and be able to compete with those students who were not ELL.
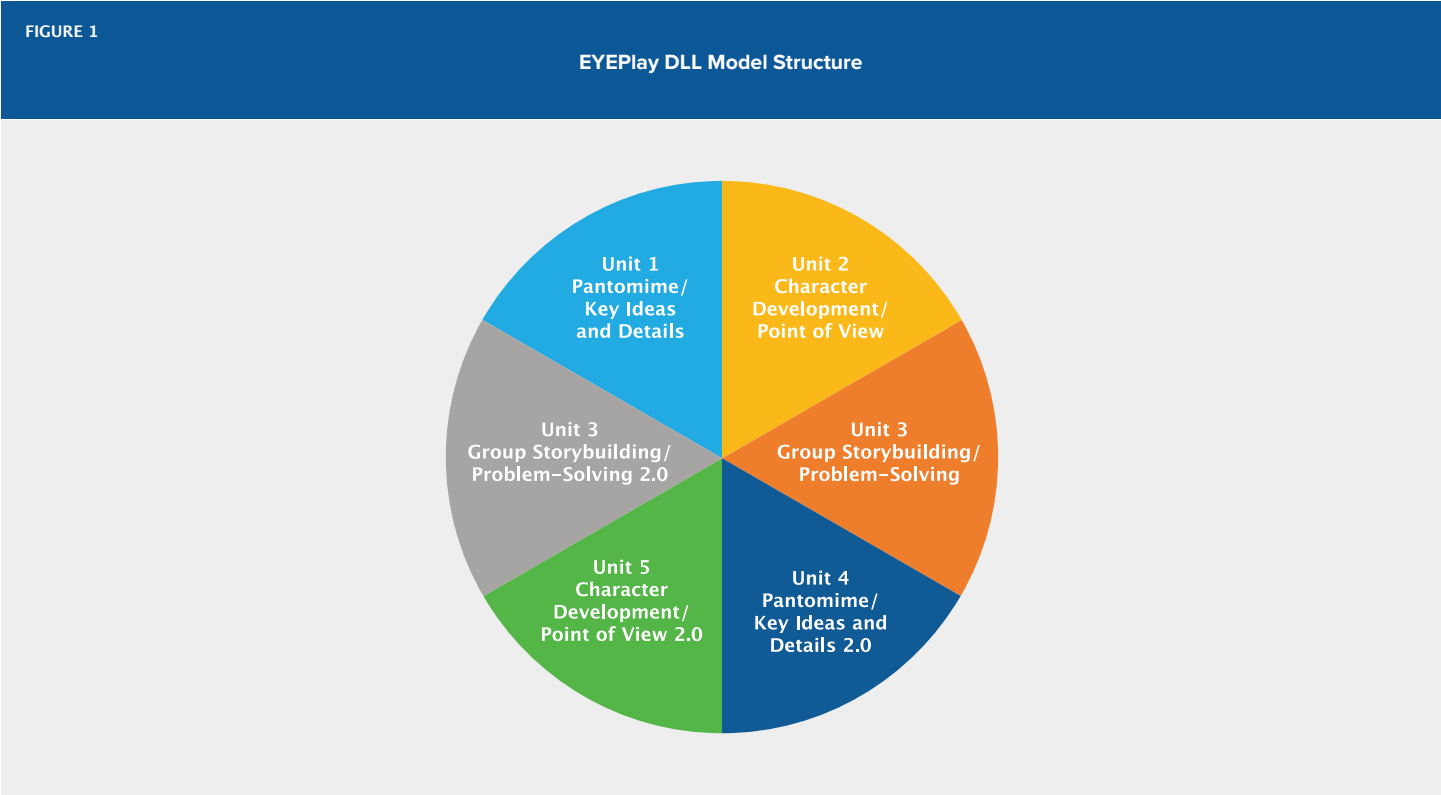
3 CREATE NEW OPPORTUNITIES WITH INSTITUTIONS OF HIGHER-EDUCATION TO OFFER MORE COURSES THAT EDUCATE TEACHERS ON HOW TO EFFECTIVELY TEACH IN BILINGUAL/BILITERATE CLASSROOMS.

It has been evident in our work that most teachers have had very little professional development on how to effectively teach in multilingual classrooms. As a result, teachers often feel inadequately prepared to teach in these environments. In our classrooms this often resulted in one language receiving less attention than the primary language of the instructor. To increase opportunities for success, we call for institutions of higher education to increase and further develop pedagogical opportunities for new teachers to learn how to teach in bilingual/biliterate classrooms. This means expanding opportunities in classroom methods and identifying practices that lead to increased student achievement.

4 MAKE IT EASIER FOR K–12 SCHOOLS TO OFFER DUAL LANGUAGE INSTRUCTION AS AN OPTION.

Districts and schools need to have more flexibility in implementing dual language programs. Currently, policies and practices are too restrictive, often making it impractical for districts and schools to seek out bilingual programs. We call for policymakers to reduce the barriers to implementing bilingual programs in Arizona and the United States.

EYEPlay DLL Model Structure

FIGURE 1

EYEPlay DLL Model Structure

Unit 1
Pantomime/
Key Ideas
and Details

Unit 2
Character
Development/
Point of View

Unit 3
Group Storybuilding/
Problem-Solving 2.0

Unit 3
Group Storybuilding/
Problem-Solving

Unit 5
Character
Development/
Point of View 2.0

Unit 4
Pantomime/
Key Ideas and
Details 2.0

Instructional Approach of EYEPlay DLL Model

FIGURE 2

Instructional Approach of EYEPlay DLL Model

Model
Lesson

In-Service

Reflection

Team
Lesson:
Spanish

Solo
Lesson:
English

Team
Lesson:
English

Solo
Lesson:
Spanish

Planning

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