

How Imagine Español Aligns with Research on Effective Spanish Literacy Instruction



Introduction: The Benefits of Acquiring Spanish Literacy

Current Situation

Classrooms in the United States are becoming increasingly racially and ethnically diverse (U.S. Census Bureau, 2019). Of the country's 50 million public-school students, more than 11 million speak at least one of 400 different languages other than English at home (Goldenberg & Wagner, 2015). For decades, educators, policymakers, academics, and parents have debated whether non-native English-speaking students should be taught in their native languages. More recently, as research has consistently demonstrated the benefits of bilingualism and biliteracy, support for bilingual education has increased significantly. Currently, six states require bilingual education to be offered when the number of students speaking the same language reaches a specific threshold. In 37 states, districts and/or schools may choose educationally sound language-instruction programs to serve English learners, which explicitly include bilingual education (Rutherford-Quach et al., 2021).

Bilingual programs should aim not only to develop students' ability to fluently speak more than one language, but to support literacy proficiency in both home and second languages (Rutherford-Quach et al., 2021). Bilingualism is the ability to speak two languages fluently, and biliteracy is the ability to read and write in two languages (Abraham, 2017). A biliterate student can also be considered bilingual, but a bilingual student is not necessarily biliterate. As bilingualism is viewed as an asset to society, the discourse has shifted toward the benefits of bilingualism for all students—English speakers and students who come from non-English backgrounds (Collier & Thomas, 2017; Goldenberg & Wagner, 2015).

Benefits of Bilingualism and Biliteracy

Recent studies have shown that bilingualism and biliteracy are linked to several positive outcomes, including intellectual, cultural, and economic benefits (Goldenberg & Wagner, 2015; Borman et al., 2019). Development of literacy and language skills in one language influences the development of skills in the other language (Dworin, 2003). Bilingual education can increase student achievement in English as students develop their academic skills in their home language. Students perform as well as, or better than, their peers in English-only classrooms on standardized tests in English across content areas. A meta-analysis concluded that bilingual programs helped boost academic achievement, particularly reading proficiency, among language-minority students across countries and languages (Borman et al., 2019). A holistic view of bilingualism suggests that native English speakers enrolled in bilingual programs benefit as well.

Bilingualism has been associated with cognitive benefits such as executive function efficiency, which manifests as increased control over attention and the ability to focus on relevant, important information (Skibba, 2018). Additionally, bilingualism supports improved working memory, greater awareness of the structure and form of language, and the development of better abstract and

symbolic representation skills (Adesope et al., 2010). Cognitive benefits from bilingualism can begin early in childhood and persist throughout a child's life (Skibba, 2018).

Bilingualism and biliteracy also enhance cultural knowledge. Dual-language curricula need to include multiple opportunities for students to develop sociocultural competence by providing culturally authentic materials in both languages (Howard et al., 2018). As students learn a second language, they are exposed to different cultures and customs linked to that language (Garcia & DeFeo, 2014). Consequently, students develop a deeper appreciation for the culture and language they are studying. These experiences also enable students to make real-life connections and develop a sense of their and others' identities. Research has also shown that bilingual education can have positive effects on intergroup relationships (Genesee & Gándara, 1999). For example, studies have found that white, English-speaking students who participated in Spanish bilingual instruction were more likely than their peers to choose Latinx children as potential friends (Wright & Tropp, 2005).

Bilingualism is also a key component of college and career success in the 21st century (Cooley, 2014). Research suggests that fluent bilingualism is associated with an increased probability of obtaining better, higher-paying employment (Rumbaut, 2014).

Growth of Bilingual Programs

The number of dual-language and immersion programs has grown dramatically over the last decade. There are more than 3,600 dual-language immersion programs across the country (Roberts, 2021). All fifty states and the District of Columbia have, or are working toward establishing, a Seal of Biliteracy program (Seal of Biliteracy, 2022). The Seal of Biliteracy is an award given to graduating students who have studied and attained proficiency in two or more languages.

Programs in which Spanish is the partner language alongside English make up for about 80% of all programs (Roberts, 2021). Successful bilingual education programs focus on developing bilingualism among both English-dominant and Spanish-dominant students (Cooley, 2014).

States such as California and Washington have expanded dual-language programs to more school districts, many of which are designed to serve students from Spanish-speaking families. The latter may be partially attributed to the fact that the percentage of Spanish-speaking students enrolled in public elementary and secondary schools has increased. According to the U.S. Census Bureau (2019), they make up 25% of the student population.

Spanish is the partner language for **80%** of dual-language programs.

Problem Statement

Despite the increased number of bilingual programs nationwide, the needs of both native and non-native English speakers who would benefit from biliteracy instruction in Spanish are still not being met (Ramírez, 2022). Only a small portion of students are enrolled in two-way dual-

language programs. The goal of two-way dual-language programs is to support students in becoming proficient in both English and their native language (Cooley, 2014). An effective dual-language program supports students in developing academic skills in their native language: English learners simultaneously utilize their home language to help them acquire English language skills, while native English-speaking students leverage academic skills in English as they acquire a second language (Goldenberg & Wagner, 2015).

A major barrier is the lack of high-quality instructional resources and materials that address students' language and academic needs (Loewus, 2016). There are not enough highly qualified bilingual instructors with literacy-instruction skills and cultural competence. Also, teachers are highly influential in creating inclusive bilingual classrooms, yet they often lack the professional support and resources to be as effective as possible. Educators agree that the instructional materials for English learners are often too simple and fail to build on students' background knowledge, which is necessary to increase vocabulary. In addition, the materials are too disconnected from grade-level goals.

The dearth of adequate and appropriate learning resources contributes to the consistently widening achievement gap between Spanish-speaking students and English-speaking students in two-way dual-language programs (Cooley, 2014). The widening achievement gap is observed in students' test preparation and performance, as well as in- and out-of-class practice. For students to become academically successful and effectively cultivate literacy in both English and Spanish, it is imperative that high-quality materials are provided.

Specifically, it is critical that Spanish-speaking students have materials readily available in their native language. The few Spanish materials available in bilingual programs lack quality when compared to existing English materials (Cooley, 2014). Frequently, instructional materials used in Spanish programs are originally written in English and then translated into Spanish, which does not provide students access to authentic materials reflecting the Spanish language and Spanish culture. The shortage of adequate and appropriate Spanish resources has an adverse effect on both the native Spanish-speaking students and the English-speaking students who are learning to speak Spanish as their second language in these programs, making the goals of bilingualism and biliteracy unfeasible.

An effective dual-language program must provide adequate and appropriate instructional resources or curricula in both languages. The instructional materials must be culturally responsive and build students' knowledge of diverse people (Armstrong, 2021). Although some progress has occurred, analyses exploring Hispanic and Latinx American characters in instructional content revealed narrow portrayals. Research suggests that materials should include engaging characters who offer complex depictions of Hispanic and Latinx people, demonstrating the cultural nuances and language in context. Incorporating culturally responsive materials helps students engage with the content, and make meaningful connections between the curriculum and real-life experiences, which can improve their academic achievement.

Solution

More high-quality, long-term dual-language programs are needed to advance language and literacy education, and thereby increase the country's linguistic resources. According to Collier and Thomas (2017), in their 32 years of conducting longitudinal studies about bilingual schooling, students enrolled in two-way dual-language programs outperformed students enrolled in other programs, including one-way dual-language programs. They concluded that high-quality, long-term bilingual programs close the achievement gap between English learners and native English speakers, compared to English-only and short-term transitional bilingual programs.

The literature indicates that schools that have effectively implemented dual-language programs are founded on three pillars: bilingualism and biliteracy, academic achievement, and sociocultural competence for all students (Howard et al., 2018). Hence, the purpose of this paper is to highlight the best practices of high-quality dual-language programs to promote literacy development. Given the prevalence of Spanish dual-language programs across the United States, this paper will focus on best practices of Spanish literacy development.

Solution: Imagine Español (Imagine Learning)

Imagine Español is a rigorous and personalized program that accelerates Spanish language and literacy development for students in Grades K–5. Our personalized learning program accelerates Spanish language and literacy development for students in Grades K–5 by immersing them in engaging, culturally diverse, and relevant content that respects and reflects the uniqueness of the Spanish language and the rich, colorful cultural heritage of its speakers.

Imagine Español Logic Model

The logic model below provides a conceptual model of how Imagine Español is intended to work, the resources required to make it effective, and the outcomes that teachers can expect students to demonstrate.

Program Inputs

IMAGINE ESPAÑOL

- Culturally relevant, adaptive Spanish language and literacy program designed for students in Grades K–5
- Program aligns with Spanish Language Arts standards
- In Grades K–2, explicit instruction supports students' Spanish foundational reading skills, vocabulary development, and reading comprehension
- In Grades 3–5, instruction is organized around book studies that reinforce vocabulary, accents, and reading comprehension
- Game-like activities engage and motivate students
- Feedback and scaffolding personalize learning
- Reports display data on student usage and progress
- Professional development available for teachers

Program Inputs (continued)

DISTRICT

- Technology: networked computers or mobile devices, headphones, and supporting hardware and software
- School and district infrastructure to support technology use
- Teacher buy-in and readiness to adopt technology
- School implementation plan

Classroom Activities

STUDENT ACTIVITIES

- Complete at least two sessions per week
 - Kindergarten:
- Grades 1–2:
- Grades 3–5:
- 15 minutes per session 20 minutes per session
- 25 minutes per session

TEACHER ACTIVITIES

- Implement instruction in multiple settings—whole class instruction, small-group rotation, computer lab, device rotation, and/or before or after school
- Use data to monitor student progress, review students' portfolio artifacts to make instructional decisions, and differentiate instruction
- Use offline resources to provide additional practice and/or support

Outputs

STUDENT OUTPUTS

- Student engagement and progress data are tracked in Imagine Español reports
 - Time in program
- Progress by unit
- Skill proficiency

TEACHER OUTPUTS

- Teachers participate in professional development
- Teachers implement and monitor Imagine Español in their classroom
- Teachers analyze data to make instructional decisions

Outcomes

SHORT-TERM OUTCOMES

- Students exhibit increased engagement as measured by usage of and progress through Imagine Español
- Students develop an appreciation for the diversity of the Spanish-speaking world through rich cultural experiences enhanced by music, art, and videos
- · Students have opportunities to read, write, and record themselves speaking in Spanish
- Teachers build understanding of individual students' strengths and opportunities for improvement

LONG-TERM OUTCOMES

- Students improve their Spanish reading skills, language development, and reading comprehension on standardized Spanish Language Arts assessments
- Students are motivated to learn and develop confidence in their abilities
- Teachers are prepared to implement Imagine Español with fidelity

Best Practice 1: Incorporate research-based curricula, instruction, and assessment strategies across the developmental spectrum, from foundational reading through to comprehension.

Recent research suggests that high-performing schools and programs have curricula and instruction that are clearly aligned with standards and assessments (Howard et al., 2018). The newer standards place much greater emphasis on academic language proficiency, which has significant impact on emerging bilingual students (National Academies of Sciences, Engineering, and Medicine, 2017). Therefore, to ensure that emerging bilingual students can learn academic language and develop knowledge across multiple subject areas, it is best practice that oral and written language and literacy are incorporated across the curriculum (Bunch et al., 2012).

To that end, achieving reading-comprehension proficiency is a key outcome for students in bilingual programs. Reading comprehension is a complex skill that is mastered through a developmental process (Chall, 1996). Research has consistently shown that foundational skills are predictive of reading achievement. Subskills along the continuum include phonological awareness, phonics, vocabulary, fluency, and comprehension (Armbruster et al., 2003; Vaughn & Linan-Thompson, 2004). When these components are applied simultaneously, the goal of reading comprehension is achieved. Therefore, incorporating high-quality curricula, instruction, and assessment practices throughout the developmental spectrum to develop Spanish literacy represents best practices.

Phonological Awareness and Decoding Skills

In terms of the developmental continuum for literacy, phonological awareness provides a foundation for learning to read and comprehend text. Phonological awareness—the ability to segment and manipulate words, syllables, and sounds—is a key component of reading development (Denton et al., 2000). Several studies have found that Spanish-speaking students with strong phonemic awareness—a subcategory of phonological awareness that refers specifically to awareness and sensitivity to phonemes, or individual sounds—are generally successful in reading.

Spanish phonemic awareness has been associated with mastering the alphabetic principle (Baker et al., 2014) and spelling (de Manrique & Signorini, 1994). The ability to segment a word into its phonemes is critical in the beginning stages of reading acquisition in Spanish, and correlates with word reading and comprehension ability (Carrillo, 1994; Míguez-Álvarez et al., 2021). Cisero and Royer (1995) confirmed that both English- and Spanish-speaking students appeared to first develop sensitivity to onsets and rimes, and then to individual phonemes. According to Lewkowicz (1980, as cited in Denton et al., 2000), phoneme segmenting and blending tasks are the most deserving of inclusion in phonological-awareness training programs.

Some phonological-awareness activities that may be included in Spanish early-literacy programs are phoneme segmentation and phoneme blending. Early phonological-awareness instruction may include rhyming practice and exposure to songs and poetry, although these skills seem most valuable as preparation for more complex phonemic-awareness skills, and are probably not sufficient in themselves (Carrillo, 1994; Chard & Dickson, 1999). In teaching phonemic-awareness skills, educators should move from simplistic tasks to more complex sound-processing activities.

Reading instruction in Spanish is often based on the recognition and spelling of syllable units, as opposed to single phonemes (Freeman & Freeman, 1998, as cited in Denton et al., 2000). The Spanish language is phonically regular; therefore, the syllable is a central unit in Spanish reading. Some research has shown that syllable awareness is a more important predictor of Spanish reading success than phonemic awareness (Míguez-Álvarez et al., 2021). Training students in spelling, blending, and segmenting syllables and phonemes is important because these skills are closely related to skills used when reading and writing words. Once students learn the basic sound-symbol correspondences, they can easily decode and read most Spanish words with a high degree of accuracy.

In addition to phonological-awareness instruction, early readers need instruction in letter-sound correspondence. Understanding the sound/symbol relationship provides students with a reliable approach for decoding and accurately reading new words. When learning letters and their corresponding sounds, students learning to read in Spanish typically learn to read vowels first, followed by consonants that are easiest to distinguish in terms of their sounds and blending them with vowels (e.g., m, n, b, and p) (Ford & Palacios, 2015). When teaching new letters, teachers should ensure students can differentiate new letters from previously taught letters and sounds (Carnine, 1997). Once students have learned sound/symbol correspondence, they can begin decoding words. Beginning reading instruction in Spanish should simultaneously focus on reading new words, learning new vocabulary, and developing fluency and comprehension skills.

Vocabulary

To comprehend various texts, students need vocabulary knowledge. Comprehension requires accurately reading words and knowing what words mean to understand the meaning associated with the text. Additionally, supporting students in learning Spanish vocabulary helps them not only with comprehension, but with fluency. When students know specific words, they do not need to decode the words and can focus on reading for meaning.

Escamilla (1999) recommended that teachers support vocabulary by teaching students frequently used words and common compound words. Mastering common words allows students to automatically read words, which is necessary for fluency. High-frequency words should be taught in a logical sequence, and students should have multiple opportunities to practice targeted structures. Additionally, teachers can teach new vocabulary using associated

words such as family, animals, and transportation words. Graphic organizers can be used to create word maps of associated words such as father/padre, sister/hermana, and grandfather/abuelo (Ford & Palacios, 2015) to help students expand their vocabularies in specific areas.

When students read new texts, engaging them in interactive read-alouds helps them expand their vocabularies and build comprehension skills (Ford & Palacios, 2015). During interactive readings, students engage with text both by reading and understanding words and by extracting meaning from the text. In digital environments, interactive engagement can include clicking on new vocabulary to learn new words, exploring pictures and other visuals that provide clues for meaning, and answering questions to gauge comprehension.

Fluency

Fluency refers to the ability to read correctly with appropriate expressiveness and rhythm. Reading fluently helps students understand what they are reading. When students are fluent readers, cognitive resources are devoted to extracting meaning from text rather than reading individual words (Álvarez-Cañizo et al., 2015). Practice is required for developing fluency. Students benefit from repeated readings of texts with which they are familiar (Rubin, 2016) and from reading a variety of passages (Rasinski, 2014).

Syntax

Syntax is the grammatical structure of language. It refers to the rules related to word order and the construction of sentences. The National Early Literacy Panel (2008) identified the ability to produce and comprehend grammar as having a substantial impact on later literacy skills, and an understanding of sentence structure contributes substantially to students' ability to comprehend written text (Logan, 2017, Spear-Swerling, 2015). For emergent bilingual students, intervention approaches and instruction that combine vocabulary with syntax show positive effects on students' reading comprehension (Silverman et al., 2020).

Effective strategies for teaching syntax to elementary students include teaching linguistic structures such as parts of speech (e.g., nouns, adjectives, and verbs) (Oakhill et al., 2015), teaching word function by having students answer questions about specific words in sentences, and teaching sentence types and structures (Scott, 2009).

Balanced Literacy and Comprehension

In teaching students to read in Spanish, there is a need for a balanced approach that combines bottom-up and top-down experiences, and supplements other skills that positively affect literacy development—such as language-development activities, letter-sound and letter-name recognition, writing words and phrases, word-recognition activities, and hearing and discriminating rhymes. Goldenberg (1990) describes a successful model that progresses through "vowels, syllables, words, short phrases, and eventually, the basal reader" (p. 595). The principles of appropriate reading material for beginner readers include the use of connected, meaningful, and predictable text. "Opportunities to read, share, and even memorize meaningful texts make important contributions to early literacy development" (Goldenberg, 1990, p. 593).

Meaning-oriented approaches to reading comprehension can significantly impact students' reading-comprehension ability. Approaches that develop background knowledge and vocabulary, introduce new vocabulary, and provide pre-reading previews to orient students to reading passages prepare students to understand what they will read. Additionally, posing questions throughout reading engages readers and promotes comprehension (Howard et al., 2015).

To support comprehension in Spanish, it is particularly important to give students access to texts that reflect the cultural, linguistic, and historical heritage of the Spanish-speaking community. Texts should be meaningful, culturally relevant, and engaging to students. To become literate in Spanish, students need daily opportunities to read and write in Spanish in authentic ways (Escamilla, 1999).

How Imagine Español Incorporates research-based curricula, instruction, and assessment strategies across the developmental spectrum, from foundational reading through to comprehension.

Phonological Awareness: Phonemes

Imagine Español supports the development of phonological awareness in Spanish through songs, rhymes, and activities covering phonemes and syllables. Traditional animated songs provide an opportunity to reinforce rhyming, while also developing cultural competence. For example, *Vocales* is a kindergarten activity that helps students identify a vowel sound in one-syllable words (see Figures 1 and 2). Students select the audio button for the correct vowel sound when shown a picture and given an audio prompt in a viewfinder. In the first part of the activity, students are invited to join children in singing a vowels song. Through singing the song, students review all the vowels they learned, and learn or review new vocabulary as well.





Figure 1. Vocales—Letras Mayúsculas—Students join in singing the vowels.





Figure 2. Vocales—Práctica—Students identify vowel sounds.

Phonological Awareness: Syllables

Imagine Español supports the development of counting, isolating, blending, segmenting, and deleting syllables through multiple activities. The use of visuals, counters, audio buttons, and scaffolds provides students an opportunity to reinforce their phonological-awareness skills as they go through each set of activities. For example, *Quitando Sílabas: Práctica* is a first-grade activity that helps students delete initial and final syllables and identify the new words formed when those syllables are deleted. In this activity, students hear the word "soldado" and see the three counters representing each syllable (see Figure 3). Students then hear, "Si a soldado le quitamos la sílaba sol nos queda…?" Students are then prompted to select the multiple-choice buttons to help them determine the answer, and are shown which new word is formed once they delete the initial syllable.







Figure 3. Quitando Sílabas: Práctica—Students identify a new word after a syllable is removed from a given word.

Alphabetic Principle: Letters and Sounds

Imagine Español provides foundational instruction and practice for learning letters and sounds. Within the program, letters are sequenced to teach students the vowels first, then different sets of consonants. Uppercase and lowercase letters are taught side by side. Imagine Learning Español uses multiple activities to introduce, practice, and assess letter knowledge. For example, Las Letras y Sus Sonidos is a kindergarten activity that helps students review, trace, and practice identifying uppercase and lowercase letters of the alphabet. For example, in Unit 1, students learn the vowels (Aa, Ee, Ii, Oo, Uu). In Lesson 1, students are presented with the capital letter O. The activity starts by showing an uppercase letter O and saying, "Vamos a aprender una nueva letra mayúscula:

O. La letra O se llama y suena igual: O. Di: O" (see Figure 4). Students then advance to the second phase of the activity.

The student is then shown a picture of a bear and hears "Oso." The letter O then appears and students are invited to trace the letter, while repeating again the sound "o." The word "Oso" then appears on the drawing of the bear. In the third and final phase of the activity, students identify a written letter after hearing its sound. In this example, students are presented with a few vowels and are asked to "Haz clic en el sonido 'o'" (see Figure 5).



Figure 4. *Las Letras y Sus Sonidos*— Uppercase vowel O.

Should students select another letter—for example, "A"—the letter they selected disappears as the voice says: "Esta letra suena A. Haz clic en el sonido 'o.'" If students select the O letter, they hear: "O. iBien echo! Haz clic en el sonido 'o" as the letter they selected disappears. In subsequent activities, students learn and practice more letters following a similar instructional sequence.

To help students solidify knowledge of letter sounds, Super Laboratorio de Letras asks students to identify a written letter after hearing its sound. Students hear a letter sound and identify the correct alphabet letter to choose a head, body, legs, and arms to build their own monster or robot. The activity starts with asking the student: "Puedes construir un monstruo o un robot. iHaz clic en el que más te guste!" (see Figure 6).

The student is then asked to select the letter "o." If students select the wrong letter, such as "i," they hear: "Esta letra suena i. Haz clic en el sonido o." If students select the correct letter, they are then allowed to choose feet for their robot: "Haz clic en las piernas que quieras para tu robot."

Students are then asked to select another letter that they have previously learned, and are then allowed to choose another part of their robot's body. This is cyclically repeated until the student completes building their robot (see Figure 7).

Alphabetic Principle: Syllables

Syllabication is a foundational skill for learning to read in Spanish. In Imagine Español, students are explicitly taught



Figure 5. Las Letras y Sus Sonidos— Uppercase vowel O, students click on the letter that says "o."



Figure 6. Super Laboratorio de Letras— Choose to build a monster or a robot.



Figure 7. Super Laboratorio de Letras-Final robot at the end of the activity.

that words are composed of syllables. Students hear syllables in contextualized words and are asked to segment and blend sounds to construct the syllables. They use these syllables to form and read the words they hear. Introductory syllable activities allow students to focus on all the possible syllables that can be made with each consonant. Such activities model how combining consonant sounds with vowels creates a syllable that constitutes a word or can be combined with other syllables to create longer words.

For example, Grabasílabas is a kindergarten activity that helps students spell and read regularly spelled words grouped in syllable families. Phase one of the activity invites students to spell words using consonants and vowels based on the word they hear. The word is shown only after the student has completed the spelling (see Figure 8).







Figure 8. Grabasílabas—Students complete words using the consonant ñ and vowels.

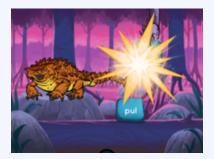
In the second phase of the *Grabasílabas* activity (see Figure 9), students read four words aloud while recording their pronunciation. The words they read use the sounds they just studied. Students can listen to their own recording and choose to do another recording of the same word. Afterward, their recordings are available to the teacher, who can assess each student's progress.

Dividiendo Sílabas is a Grade 1 activity that introduces students to the concept of segmenting words into syllables. In this activity, students learn to segment two- and three-syllable words into syllables (see Figures 10 and 11).



Figure 9. *Grabasílabas*—Students record their pronunciation of words with consonants studied.





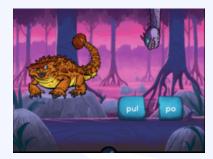


Figure 10. Dividiendo Sílabas—Introducción—Explanation of how the word "pulpo" is segmented into two syllables.

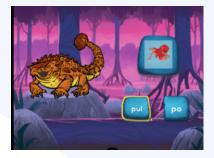


Figure 11. *Dividiendo Sílabas— Introducción—* Visual representation of the word "pulpo."

Word Recognition: Targeted Syllables and High-Frequency Words

As students acquire foundational skills for reading single-syllable and multisyllable words, they need practice to become proficient at reading words in Spanish. In Imagine Español, students develop word recognition with targeted syllable and high-frequency-word practice. *Palabras Frecuentes*, Grade 1 instructional activities, provide opportunities for students to read common and high-frequency words. Within each lesson, students are introduced to three common words. These words are introduced, spelled, and pronounced for students, and then students are invited to repeat and spell the words (see Figure 12).

The student is then shown a sentence with the target word in a sentence and is invited to select the word found in the sentence. The sentence is read to the student with each word highlighted, and the student is invited to read the target word: "El pulpo juega en la playa" "Di 'juega." Students then review words they learn in subsequent activities. Figure 13 illustrates a space-themed game that provides additional practice with targeted and high-frequency words.



Figure 12. Palabras Frecuentes—Introducción—Students are introduced to the word "juega."

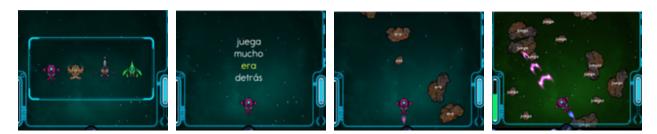
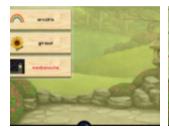
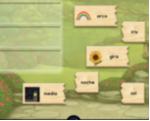


Figure 13. Palabras Frecuentes—Práctica—students identify the words they hear.

Vocabulary

The Imagine Español program provides robust Spanish vocabulary instruction for students. Students learn compound words, Spanish/English cognates, and academic vocabulary within the program. Vocabulary development is supported with instructional sequences that introduce new words and concepts and provide opportunities for practice. For example, in *Palabras Compuestas—Introducción*, students are presented with three words: "Escucha estas palabras." The words then break apart, and students are invited to recompose them: "iAy, no! ¿Me ayudas a formar estas palabras compuestas otra vez?" Students are then taught the structure of compound words with visual cueing (i.e., different colors) used to highlight the words combined (see Figures 14 and 15).





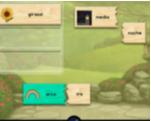




Figure 14. Palabras Compuestas—Introducción—Students compose words.



Figure 15. Palabras Compuestas—Introducción—Compound words are shown with two different colors.

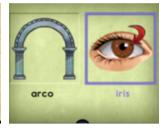
In Palabras Compuestas—Práctica, students are presented with one of the words previously shown: "Te acuerdas de esta palabra: arcoiris?" and then told the meaning of the word (see Figure 16).

With similar instructional sequences, students practice Spanish/English cognates. For example, in Cognados— Introducción, students are presented with a set of cards and are invited to find all the cognates. The first time each card is shown, it has the word and a corresponding image to help students make the connection between the words. The same

activity is then repeated without illustrations to help students recognize the words themselves. Students are then told what cognates are, and they review the cognates they have found. They then practice finding cognates for words shown (see Figures 17 and 18).







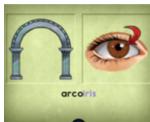


Figure 16. Palabras Compuestas—Práctica—Meaning of compound words is explained.



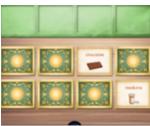






Figure 17. Cognados—Introducción—Memory card game to practice cognates.



Figure 18. Cognados—Introducción— Students may review the cognates they learned in the activity.

In Cognados—Práctica, students are presented with the words they just reviewed and are invited to find their cognates. The student is presented with four different words that have similar sounds; however, only one cognate is correct (see Figure 19).

Multiple strategies are used to engage students in learning academic vocabulary. In *Vocabulario Académico—Introducción*, students are invited to select three different objects in a laboratory: "Presiona cualquiera de estos dibujos." After selecting an object, the student is shown an illustration of the word and provided with a definition. Students are then

invited to record their pronunciation of the word, and are asked a question that uses the word they just learned. Students are then ready to practice learning new words.

Vocabulario Académico—Práctica helps students demonstrate an understanding of academic vocabulary-word meanings. Students are shown pictures and asked to identify the picture that best illustrates a specific academic word. The students move the character Jelly up or down to catch the image related to the word they hear (see Figures 20, 21, and 22).









Figure 19. Cognados—Práctica—Students find the cognate.

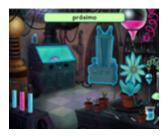








Figure 20. Vocabulario Académico—Introducción—Students see and hear the new word defined.





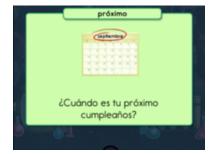


Figure 21. Vocabulario Académico—Introducción—Students record saying the word and answer a question.

In *Vocabulario de Lectura*, a Grades 3–5 activity, students learn vocabulary included in their reading selections. When students begin the lesson, they select where a ball should descend through a wall of screws, and begin learning a new word such as *sintético* (see Figure 23).

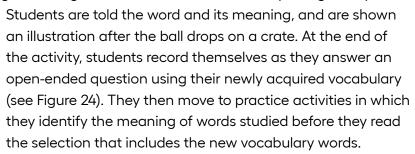


Figure 22. Vocabulario Académico— Práctica—Students catch the image related to the word they hear.





Figures 23 and 24: Vocabulario de Lectura—Introducción—Word meaning and practice recording using newly acquired vocabulary.



Fluency

Imagine Learning Español is designed to support both native and non-native Spanish speakers in becoming fluent readers. For example, *Fluidez Lectura* is a Grades 3–5 lesson that helps students read grade-level text aloud fluently. The Imagine Español online platform invites students to read a text aloud for a minute while recording it. Students can listen to their reading and, if needed, record again. Their recording is then sent to their teacher, who can assess students' progress and provide feedback (see Figure 25).

Syntax: Grammar and Accents

Imagine Español aligns with research recommendations for teaching syntax or grammar to students. Grammar instruction is integrated within reading lessons across Grades K–5 and includes teaching parts of speech, sentence structure (i.e., subjects, predicates), meaning at the sentence level, and sentence types including declarative, exclamations, and questions. Following instruction, students in Grades K–5 practice grammar skills appropriate for their grade levels. For example, after learning about masculine and feminine







Figure 25. Fluidez Lectora—Students record a one-minute read.

nouns, students practice identifying masculine and feminine nouns when given three words to choose from. In this engaging activity (*Grámatica—Práctica*) students are asked to identify either a masculine or feminine noun. To indicate their answer, students launch a football through the target (see Figure 26).

Second-grade lessons focus on teaching Spanish language conventions, including nounadjective agreement, personal pronouns, reflexive verbs, and possessive nouns and adjectives, among other skills. Finally, students in Grades 3–5 learn about different accent types. Specifically, they learn how to identify the stressed syllable, classify words into agudas, graves, esdrújulas, and sobreesdrújulas, and use those patterns to correctly write and place accents when spelling words. In Acentuación—Práctica, students practice identifying the strong syllable in multisyllable words (see Figures 27 and 28).







Figure 26. *Grámatica—Práctica—* Students identify masculine and feminine nouns.

Figures 27 and 28. Acentuación—Práctica—Students select the strong syllable in multisyllable words.

Balanced Literacy Approach

Imagine Learning Español uses a balanced approach to teach reading. As already described, the program fully supports the acquisition of foundational reading skills, while it also showcases connected, meaningful text. Additionally, authentic Spanish texts help students build sociocultural competence. Students read and listen to books about Spanish-speaking countries and territories. Each book is narrated by a native speaker from that country. For example, *Mis Primeros Libritos* is a kindergarten-level activity that demonstrates literal comprehension of an emergent-reader text. For example, an activity focuses on the "Letra o." In this activity, students are told a story about the letter o and are shown drawings accompanied with text, along with other vocabulary words (see Figure 29).









Figure 29. Mis Primeros Libritos—Text.

Comprensión de Lectura—Práctica is a Grades 2-5 activity in which students demonstrate comprehension of grade-level informational and literary texts. For example, one activity focuses on reading a book about dance in the Dominican Republic: Bailando en la República Dominicana. In this activity, students read the book shown. The text is in a book format and students can select the top right of each page to turn the page (see Figure 30). After reading the book, students are asked three multiple-choice questions to assess their reading comprehension: "Vamos a contestar algunas preguntas sobre Bailando en la República Domincana." If students select an incorrect answer, they hear: "No, usa la evidencia del texto. Usa los detalles del texto que te ayudaran a contestar la pregunta" and are then referred back to the book (see Figure 31).







Figure 30. Comprensión de Lectura—Práctica—Reading a book.

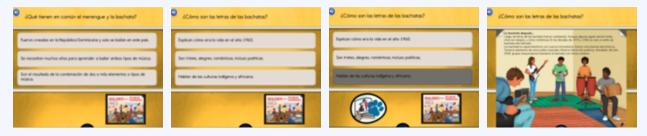


Figure 31. Comprensión de Lectura—Práctica—Answering questions on the text.

In Comprensión de Lectura—Práctica, students are exposed to a wide variety of readingcomprehension questions. These include literal questions, text evidence, making inferences, compare and contrast, author's purpose, story map, story lesson/moral, text types, points and reasons, context clues, topic, main idea, key details, and more. If students miss questions, they are given additional support to remind them of the specific reading-comprehension strategy and prompting them to look back in the book before they answer again.

Best Practice 2: Provide instructional supports such as individualized pathways and scaffolding to facilitate academic achievement.

Today's dual-language classrooms are increasingly focused on developing students' ability to communicate with native speakers so they can use their language learning as a 21st-century skill. To facilitate this learning, some effective instructional practices include: fostering a learner-centered environment; integrating technology as a tool to enhance learning; providing opportunities for students to use the language in and out of class; differentiating instruction to support students' individualized pathways; emphasizing culture and the relationship between perspectives, practices, and products; and assigning comprehensible personalized real-world tasks that can be used to assess learning (National Academies of Sciences, Engineering, and Medicine, 2017).

Technology to Enhance and Personalize Learning

Research has demonstrated that utilizing supplemental digital-literacy programs can have considerable positive impact on students' literacy achievement (Johnson et al., 2017). Computer-adaptive technologies enable educators to provide differentiated and individualized instruction, as programs adjust to student performance in real time based on program data (Campbell et al., 2022). Additionally, when students use digital programs, they can receive automatic feedback on performance, which supports the development of overall literacy skills. In terms of academic outcomes, the use of computer-assisted programs has improved students' reading achievement scores (e.g., Cheung & Slavin, 2013; Kamil & Chou, 2009; SEG Measurement, 2018), vocabulary development, and comprehension (Kamil & Chou, 2009).

For Spanish literacy, incorporating technology that uses authentic materials may help students' motivation for learning Spanish (Arriaza, 2016). Computer games facilitate students' learning while making learning fun. Research has shown that computer-assisted vocabulary instruction with scaffolding through Spanish explanations and repetitions is an effective approach for increasing students' vocabulary knowledge (Wood et al., 2018). Authentic software applications are created for native speakers, and have students apply important skills such as reading, listening, writing, and speaking. Research suggests that authentic computer applications have a positive impact on language skills, and increase students' motivation and engagement to learn a second language.

Instructional Materials and Cultural Relevance

Unfortunately, many dual-language programs do not provide access to authentic materials in Spanish. Many bilingual programs have an abundance of resources in English, but a shortage in Spanish (Cooley, 2016). Therefore, high-quality instructional materials in the partner language should be obtained for the students.

Culturally relevant and authentic materials may have a positive impact on students' motivation for learning Spanish (Arriaza, 2016). Authentic materials, such as videos that show more realistic audio or video clips, help students understand the purpose and relevance of a topic. As learners become genuinely interested, they engage in the material and stay on task. Selecting themes and resources that students find interesting may also increase learning engagement (Garcia & DeFeo, 2014).

Scaffolded Support for Spanish Literacy

As students learn to read in Spanish, they benefit from instructional supports or scaffolding that enable them to experience success. The term scaffolding is often used to describe instructional supports made available as needed—including prompts, questions as prompts, and modeling—to help students carry out tasks until they can do so independently (Molenaar & Roda, 2011). Digital technologies can be designed with embedded scaffolds that support literacy development. Common forms of digital scaffolding include text-to-speech features, which provide read-alouds of text, comprehension tools such as glossaries and background knowledge, interactive visual representations and animations that allow for clicking on images to learn vocabulary, and systematic, consistent design and presentation of instructional materials that ensure all students have comparable access to instruction (Proctor et al., 2007). Research also suggests that text-dependent questions—questions that require students to provide evidence from the text as part of their responses—can provide a predictable structure to help students better comprehend complex texts (Fisher & Frey, 2014). Finally, incorporating graphic organizers, charts, multimedia, and student-friendly dictionaries (with examples and non-examples) can scaffold learning (Baker et al., 2014; Howard & Christian, 2002).

How Imagine Español provides instructional supports such as individualized pathways and scaffolding to facilitate academic achievement.

Imagine Español is a computer-adaptive program that provides individualized learning pathways for students. The program dynamically adjusts to each student's learning needs in response to student performance in the program. Imagine Español accomplishes this by placing students in an adaptive sequences for Grades K–5. These sequences include placement tests, standardsmastery checks, and predictive checkpoints.

Adaptive Initial Placement

Imagine Español placement tests leverage a blend of instructional resources to fit students' needs and meet district learning goals. They measure phonological awareness, spelling, and comprehension skills. Completing the embedded placement test takes an average of 20 minutes. However, though the placement test is designed to be completed in an average of one session, it provides ample flexibility as students can start and complete it at any time.

As students work, the test adapts to their knowledge and skill level, so students who perform below grade level exit earlier—preventing unnecessary frustration and placing them in the

program as soon as possible. Additionally, the Imagine Español placement tests never place students above their grade level. The adaptivity ensures that students are only directed to content they need (see Figure 32).

Adaptive Standards Mastery and Personalized Pathways

Once each student's optimal entry point has been determined, a personalized instructional pathway is generated to build on individual strengths, target foundational Spanish language and literacy skills, and accelerate students toward grade-level mastery.

Since language and literacy acquisition is not a linear process, a student's pathway adjusts based on recent performance and periodic interim checkpoints to determine when to add instruction, remediation, practice, or acceleration.

- **Predictive checkpoints** determine whether an upcoming lesson should be delivered to the student. The decision is based on established proficiency or through a short quiz given just prior to the lesson.
- Evaluative checkpoints look back at the student's performance in prior activities and lessons to determine what type of instructional support should be provided in an upcoming activity.



Figure 32. Imagine Español placement tests and subsequent personalized instructional pathways.

In the Pre-check/Instruction/Practice/Assessment Imagine Español lesson design, students may receive all instruction, some instruction, minimal instruction, or no instruction at all, according to their needs (see Figure 33).

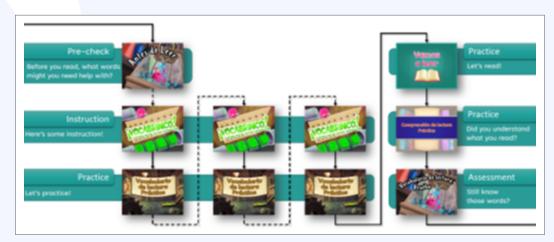


Figure 33. Activity in a Study Book—All instruction, some instruction, minimal instruction, or zero instruction.

Additionally, Imagine Español's strong emphasis on vocabulary ensures all students have a full understanding of key vocabulary found in the text prior to reading the book (see Figure 34). In the pre-check vocabulary activity, *Antes de Leer*, students are tested on vocabulary skills to make sure they are ready to read a given text. During this activity, students demonstrate understanding of words or phrases they will encounter in the upcoming book. If needed, they will then receive instruction and practice the words on which they did not demonstrate understanding.



Vocabulary pre-check ("antes de leer") determines for each student which vocabulary terms need additional instruction, setting them on an individualized pathway. Those who demonstrate a full understanding go directly to practice.



In the vocabulary instruction activity ("vocabulario de lectura—introducción"), students apply metalinguistic skills to build a foundational understanding of a word.



In the practice activity
("vocabulario de lectura—
práctica"), students further
solidify their understanding with
instructional best practices. Since
vocabulary can be nuanced,
especially in different contexts,
all students practice regardless
of their performance on the
pre-check and vocabulary
instructional activities.



During reading practice ("vamos a leer"), students can access an embedded glossary to reinforce their understanding of the key vocabulary words, as well as other academic vocabulary found in the book.



The reading comprehension activity (comprensión de lectura práctica) seeks to answer the overarching question, "Did the student understand what they read?"



Finally, the students engage in an assessment ("vocabulario de lectura—prueba") that gathers information to determine whether they need reteaching in the future.

Figure 34. Example of adaptive instruction in action via an Imagine Español book study for Grades 3-5.

In the Antes de Leer activity (see Figure 35), students first view the book cover and hear about the activity to set the context. They then answer a series of questions to determine whether they need additional vocabulary instruction prior to reading the book (see Figure 36). When a correct answer is chosen, the word appears in the sentence prompt and the machine showers Jelly with rainbow paint. The machine turns Jelly a different color every time students answer correctly.



Figure 35. Antes de Leer—Students view the book cover and hear about the activity to set the context.









Figure 36. Antes de Leer—Answer a series of questions to determine whether students need additional vocabulary instruction prior to reading the book.

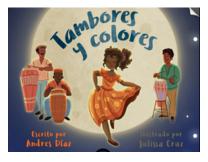
Culturally Relevant Materials

Throughout Imagine Español, students are exposed to interesting, culturally relevant, authentic materials. Reading selections highlight various aspects of Spanish culture, including learning about specific countries such as Cuba, Guatemala, and Colombia. Additionally, the program includes authentic poems, songs, and stories. Grade-level books are also authentic texts selected for their high degree of interest for students across literature and informational texts (see Figures 37–42).













Figures 37–42. Examples of culturally relevant, authentic texts.

Across grades, nonfiction books focus on Hispanic culture and history for specific groups of people, such as the Mayan and Taino, highlight Hispanic individuals who have contributed significantly to their professional fields (e.g., Dr. Domingo Liotta), and expand students' scientific and mathematic knowledge in describing phenomena such as the laws of motion or magnetic forces. Stories and literature address topics relevant to students' experience, such as welcoming a new member to a family or a character's experience playing soccer or participating in a school festival. Fables and folktales include stories of magical fish and of the north wind competing with the sun. Combined, this approach to teaching Spanish literacy is highly engaging and motivating for students. Not only do they receive foundational skills needed to become proficient readers in Spanish, but their interest in consistently sparked with interesting, relevant materials.

Scaffolded Support

Imagine Español is designed to provide students with support needed to experience success learning to read in Spanish. The instructional sequences used for grade-level instruction include research-validated strategies such as modeling new skills or information, providing students with opportunities to practice new learning necessary for mastery and developing fluency, and assessing learning to gauge whether students acquired the targeted skills.

All instructional activities in Imagine Español include various types of scaffolds, including multimedia presentations, audio, and learning supports. Videos and animations are used to illustrate new concepts, explain the meaning of text, and define words. Various types of instructional scaffolding are embedded with learning activities, such as synchronized text highlighting for passages that are read to students, text-to-speech features with read-aloud texts, and options to select buttons to repeat instructions. To support comprehension, vocabulary is taught prior to exposing students to reading selections, and students can access glossaries to look up the meanings of words. Reading selections include questions to engage students and allow them to monitor comprehension. Additionally, interactive visual representations allow students to explore vocabulary and concepts by clicking on images within instructional activities.

Best Practice 3: How Imagine Español offers culturally authentic, relevant, and engaging instructional materials that reflect students' real-life experiences.

The goal of bilingual education is to enable students to communicate in meaningful and appropriate ways, both academically and in real-world communicative exchanges (Garcia & DeFeo, 2014). Therefore, dual-language curricula must promote sociocultural competence by reflecting and valuing students' languages and cultures (Howard et al., 2018). Effective bilingual programs incorporate culturally authentic materials as part of the curriculum. Research has shown that exposing students to culturally authentic, relevant, and engaging instructional materials in the classroom helps them develop their cultural knowledge, in addition to language skills such as listening comprehension, vocabulary, speaking, writing, reading comprehension, and fluency (Arriaza, 2016).

Authentic Versus Non-Authentic Materials

Authentic materials are defined as resources created for native speakers of the language (Arriaza, 2016). Examples of authentic materials include songs, films, poems, cartoons, magazines, computer games, newspaper articles, television shows, and children's books.

Non-authentic materials are resources created to teach a second language (Guo, 2012; Garcia & DeFeo, 2014). These materials may include the examples mentioned above, but which have been manipulated to meet the needs of a second-language learner. Other examples include textbooks, workbooks, audio, and videos. With non-authentic materials, the structure of sentences and dialogues will be very simple so that students can understand the content (Arriaza, 2016).

While studies have shown that both kinds of materials have a positive impact on students' learning (Guo, 2012; Garcia & DeFeo, 2014; Arriaza, 2016), other studies have shown that non-authentic materials such as textbooks contain language that differs from authentic speech and writing—and when students' exposure is limited to textbook language, they miss out on learning how language is applied in the real world (Polio, 2014). For example, one study found that the range of language used in Spanish textbooks regarding giving advice was very limited compared to what Spanish speakers use (Eisenchlas, 2011).

In a Spanish classroom, cultural knowledge and vocabulary development play important roles in acquiring language. As students learn a second language, they are also learning culture and customs that are linked to that language (Garcia & DeFeo, 2014). In a study conducted by Arriaza (2016), the use of authentic materials exposed students to different vocabulary and cultures. Their acquisition of vocabulary went beyond the classroom setting. The authentic materials helped students to begin to understand and appreciate deeper aspects of the culture and

language they were studying, and to make real-life connections and comparisons to their own cultures. Students can see themselves in literary characters and are afforded the opportunity to explore themselves in relation to others, which promotes sociocultural competence (Howard et al., 2018). Authentic materials give students the opportunity to become more conscious of the nuances of the cultures featured (Garcia & DeFeo, 2014).

Research also indicates that using authentic materials helps with language proficiency, vocabulary development, reading comprehension, and fluency (Arriaza, 2016). In one study, students who received authentic materials showed a much higher gain in vocabulary and language proficiency on their tests than those who used non-authentic materials (Guo, 2012). Students are exposed to new words found in authentic materials that they would not have found in non-authentic materials. Repeated exposure to these words promotes vocabulary development by helping to reinforce previously known words and making new vocabulary-word connections. In addition, the more students read authentic materials, the more their reading comprehension and fluency will increase.

How to Bring Authentic Materials into the Classroom

For students to benefit from the use of authentic materials, the type of materials and how they are applied must be considered in conjunction with the language skill being taught. When teaching vocabulary, authentic materials are easily integrated (Polio, 2014). A variety of activities can be applied where the students do not need to use much grammar or have listening-comprehension skills. For example, students can use a Spanish newspaper to look up words that may be cognates with English. Also, the use of cartoons has shown to have a better effect than television news in developing vocabulary, because the words used in cartoons are less complex (Arriaza, 2016). Additionally, authentic materials such as songs and folktales are enjoyable, allowing students to make real-life connections and expand their cultural knowledge while growing their vocabulary. Ultimately, vocabulary development occurs as students are exposed to these materials extensively and consistently (Guo, 2012).

Authentic texts can be used in grammar to show students how various structures are used in real language (Polio, 2014). For beginning students, authentic materials must contain the target structure in a text that is somewhat comprehensible. An example of a grammar activity is to have students scan a text for a specific structure, such as different verb tenses. As students advance, they can engage in grammar activities that involve reading a text while focusing on prepositions or articles. Such activities draw students' attention to the entire text to decide on the correct structure.

For students to develop reading comprehension and fluency, they must spend a significant amount of time reading (Guo, 2012). Therefore, the teacher's oversight and guidance in the selection of these authentic materials is necessary to ensure that students are motivated to read on their own time. Students need to feel a connection between themselves and the reading materials. Research shows that exposing students to simple authentic text—such as menus,

brochures, comic books, and magazines—will help them begin to make real-life connections and slowly show comprehension and fluency (Guo, 2012; Garcia & DeFeo, 2014). As students become comfortable with their beginning materials, they should be challenged with more complex reading materials such as newspapers, poems, and books (Garcia & DeFeo, 2014).

Teachers must select adequate authentic materials to help students gain a full picture of the language while developing cultural knowledge (Arriaza, 2016). For example, to increase awareness of the cultural aspects of Spanish, authentic materials selected can emphasize the customs of certain regions such as music, clothing, and behavior. Also, Spanish is a language with different dialects; therefore, authentic materials can highlight various linguistic features. By incorporating authentic materials from different regions with their respective dialects, students may enhance their cultural knowledge.

Imagine Español offers culturally authentic, relevant, and engaging instructional materials that reflect students' real-life experiences.

Imagine Español is unique in that the program not only supports Spanish literacy instruction, but focuses on the cultures of Spanish-speaking countries. Students gain an appreciation for Hispanic culture as they are learning to read and interact with authentic materials, including texts, songs, and artwork. Specific activities that support cultural awareness and appreciation are *Semillas Culturales* and *Raíces Culturales*.

Semillas Culturales is a Grades K–2 activity that introduces students to Spanish-speaking countries and territories. As an illustration of this activity, in Unit 5, Lesson 90, Imagine Español offers a Semillas Culturales activity to discover the geography, culture, and wildlife of Colombia (see Figures 43–45). In this activity, a Colombian woman invites students to learn about her country. She first briefly describes Colombia's geographical position. She then invites students



Figure 43. Semillas Culturales: Colombia—Students are shown Bogota, Colombia, and the Colombian flag.

to click on a picture of Bogota, a picture of the Colombian flag, and a picture of Colombia to learn more about each topic. Students are then shown animals and flowers found in the Andes mountains. Finally, students are introduced to three national dishes. "La comida colombiana es riquísima. Si vienes a visitarme te invitare a comer mi comida favorita. ¿Quieres saber qual es?"









Figure 44. Semillas Culturales: Colombia—Students are shown fauna and flora in Colombia.









Figure 45. Semillas Culturales: Colombia—Students are presented Colombian dishes.

Raíces Culturales is a Grades 3–5 activity that also introduces students to Spanish-speaking countries and territories. For example, in Lesson 146, students are introduced to the geography, culture, and traditions of Cuba (see Figures 46–48). Students are first introduced to Cuba's geographical location, its capital, its flag, its history, and its traditions. Students are then presented with diverse characteristics of the Cuban culture such as food, games, and cars. Students also answer questions to assess their understanding of what they've been taught about Cuba's culture.

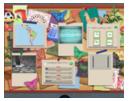










Figure 46. Raíces Culturales: Cuba—Students are presented with Cuba.











Figure 47. Raíces Culturales: Cuba—Students are presented with objects, dishes, games, and animals characteristic to Cuba.





Figure 48. Raíces Culturales: Cuba—Students answer multiple-choice questions about what they learned.

In addition to the instructional activities described, students access authentic materials throughout Imagine Español, such as cultural songs, nursery rhymes, and folktales, including La Cucaracha, El Patio de Mi Casa, Tengo Una Muñeca, La Tía Mónica, Los Pollitos, Pin Pon, Los Elefantes, Cheki Morena, etc. Students learn about the Spanish culture as they sing songs and read authentic Spanish stories.



Los pollitos dicen "pío, pío, pío, pío," cuando tienen hambre, cuando tienen frío. La gallina busca el maíz y el trigo. Les da la comida, y les presta abrigo. Bajo sus dos alas, acurrucaditos, hasta el otro día, duermen los pollitos.

Figure 49. Los Pollitos.

Rhyming Songs

- Los Pollitos is a song about baby chicks in a farm setting.
- Pin Pon is a song about a well-behaved doll named Pin Pon as he goes through his daily routine.

Number Songs

• Los Elefantes is a song about elephants swinging on a spiderweb that teaches the numbers 1–5.

Vocabulary Songs

 Cheki Morena is a Puerto Rican traditional song about a girl who dances to the merecumbé.

Cultural Songs

- La Cucaracha is a traditional Mexican song featuring a cockroach singing about good habits.
- Tengo Una Muñeca is a song about a child's doll and adding numbers.
- El Patio de Mi Casa is a song about playing in a courtyard.
- La Tía Mónica is a song about Aunt Monica's dancing.

Finally, all books found in *Vamos a Leer* are authentic texts that support literacy development while engaging students in cultural experiences. Story characters are easy to identify with and highly engaging for students (see Figure 50).









Figure 50. Grade 4, Unit 1, Lesson 160 book.

Conclusion

Imagine Español aligns with research-recommended practices for Spanish literacy development. The program includes instruction in foundational skills—such as phonological awareness, phonics, vocabulary, and fluency—and supports comprehension with culturally relevant, authentic texts. Students are motivated to learned to read in Spanish as they are exposed to songs, poems, and authentic passages representing Spanish-speaking cultures. The instructional design of the program, along with the adaptive sequences, ensures students have the support they need to experience success with Spanish literacy.

References

- Abraham, S. L. (2017). A teacher's inquiry into bringing in biliteracy in a fifth-grade English-only classroom. *Networks: An Online Journal for Teacher Research*, 19(1). doi.org/10.4148/2470-6353.1009
- Adesope, O. O., Lavin T., Thompson T., & Ungerleider C. (2010). A systematic review and meta-analysis of the cognitive correlates of bilingualism, *Review of Educational Research*, 80, 207–245.
- Álvarez-Cañizo, M., Suárez-Coalla P., & Cuetos, F. (2015). The role of reading fluency in children's text comprehension. Front. Psychol. 6(6). doi. org/10.3389/fpsyg.2015.01810
- Armbruster, B. B., Lehr, F., & Osborn, J. (2003). Put reading first: The research building blocks of reading instruction. Center for the Improvement of Early Reading Achievement (CIERA). https://files.eric.ed.gov/fulltext/ED458536.pdf
- Armstrong, A. L. (2021). The representation of social groups in U.S. educational materials and why it matters: A research brief. https://www.newamerica.org/education-policy/briefs/the-representation-of-social-groups-in-us-education-materials-and-why-it-matters/
- Arriaza, M. (2016). Using authentic materials in a Spanish class: Impact on students. Student Research Submissions, 197. https://scholar.umw.edu/student_research/197
- Baker, S., Lesaux, N., Jayanthi, M., Dimino, J., Proctor, C. P., Morris, J., Gersten, R., Haymond, K., Kieffer, M. J., Linan-Thompson, S., & Newman-Conchar, R. (2014). *Teaching academic content and literacy to English learners in elementary and middle school.* National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. http://ies.ed.gov/ncee/wwc/publications_reviews.aspx
- Borman, T. H., Borman, G. D., Houghton, S., Park, S. J., Zhu, B., Martin, A., & Wilkinson-Flicker, S. (2019). Addressing literacy needs of struggling Spanish-speaking First graders: First-year results from a national randomized controlled trial of descubriendo la lectura. *AERA Open,* 5(3). https://doi.org/10.1177/2332858419870488
- Bunch, G. C., Kibler, A., & Pimentel, S. (2012). Realizing opportunities for English learners in the common core English language arts and disciplinary literacy standards. Stanford University. https://ul.stanford.edu/sites/default/files/resource/2021-12/UL%20Stanford%20Final%205-9-12%20w%20cover.pdf#page=13
- Campbell, L. O., Howard, C., Lambie, G. W., & Gao, X. (2022). The efficacy of a computer-adaptive reading program on grade 5 students' reading achievement scores. *Education and Information Technology, 27,* 8147–8163. doi.org/10.1007/s10639-022-10953-5
- Carrillo, M. (1994). Development of phonological awareness and reading acquisition: A study in Spanish language. Reading and Writing, 6(3), 279-298.
- Carnine, D. W., Silbert, J., Kameenui, E. J., & Tarver, S. G. (1997). Direct instruction reading. Merrill.
- Chall, J. S. (1996) Learning to read, the great debate. Harcourt Brace.
- Chard, D. J., & Dickson, S. V. (1999). Phonological awareness: Instructional and assessment guidelines. Intervention in School and Clinic, 34, 261–270.
- Cisero, C. A., & Royer, J. M. (1995). The development and cross-language transfer of phonological awareness. Longman.
- Cheung, A. C., & Slavin, R. E. (2013). Effects of educational technology applications on reading outcomes for struggling readers: A best-evidence synthesis. Reading Research Quarterly, 48(3), 277–299.
- Collier, V., & Thomas, W. (2017). Validating the power of bilingual schooling: Thirty-two years of large-scale, longitudinal research. *Annual Review of Applied Linguistics*, 37, 203–217. doi:10.1017/S0267190517000034
- Cooley, M. E. (2014). The effect of the lack of resources in Spanish for students in dual language bilingual education programs. http://hdl.handle.net/20.500.12648/5580
- de Manrique, A. M. B., & Signorini, A. (1994). Phonological awareness, spelling and reading abilities in Spanish-speaking children. *British Journal of Educational Psychology*, 64(3), 429–439. doi.org/10.1111/j.2044-8279.1994.tb01114.x
- Denton, C., Hasbrouck, J., Weaver, L., & Riccio, C. (2000). What do we know about phonological awareness in Spanish? *Reading Psychology.* 21. 335–352. doi.org/10.1080/027027100750061958.
- Dworin, J. E. (2003). Insights into biliteracy fevelopment: Toward a bidirectional theory of bilingual pedagogy. *Journal of Hispanic Higher Education*, 2(2), 171–186. doi.org/10.1177/1538192702250621
- Eisenchlas, S. (2011). On-line interactions as a resource to raise pragmatic awareness. Journal of Pragmatics, 43, 51-61.
- Escamilla, K. (1999). Teaching literacy in Spanish. In R. DeVillar & J. Tinajero (Eds.), *The power of two languages 2000* (126–141). McMillan/McGraw-Hill.
- Fisher, D., & Frey, N. (2014). Close reading and writing from sources. International Reading Association.
- Ford, K., & Palacios, R. (2015). Early literacy instruction in Spanish: Teaching the beginning reader. https://www.colorincolorado.org/article/early-literacy-instruction-spanish-teaching-beginning-reader

- Garcia, R. M., & De Feo, D. J., (2014). Finding your "Spanish voice" through popular media: Improving students' confidence and fluency. *Journal of the Scholarship of Teaching and Learning*, 14(3), 110–131. Doi.org/ 10.14434/josotl.v14i3.5033
- Genesee, F., & Gándara, P. (1999). Bilingual education programs: A cross-national perspective. Journal of Social Issues, 55, 665–685.
- Goldenberg, C. (1990). Research directions: Beginning literacy instruction for Spanish-speaking children. Language Arts, 67(6), 590-598
- Goldenberg, C., & Wagner, K. (2015). Bilingual education: Reviving an American tradition. *American Educator, Fall*, 28–44. https://www.aft.org/sites/default/files/ae_fall2015goldenberg_wagner.pdf
- Guo, S. (2012). Using authentic materials for extensive reading to promote English proficiency. English Language Teaching, 5(8), 196-206.
- Howard, E. R., & Christian, D. (2002). Two-way immersion 101: Designing and implementing a two-way immersion education program at the elementary school level. Center for Research on Education, Diversity & Excellence.
- Howard, E. R., Lindholm-Leary, K. J., Rogers, D., Olague, N., Medina, J., Kennedy, B., Sugarman, J., & Christian, D. (2018). Guiding principles for dual language education (3rd ed.). Center for Applied Linguistics.
- Johnson, A. M., Jacovina, M. E., Russell, D. G., & Soto, C. M. (2017). Challenges and solutions when using technologies in the classroom. In S. A. Crossley & D. S. McNamara (Eds.), *Adaptive education technologies for literacy*. Routledge.
- Kamil, M. L., & Chou, H. K. (2009). Comprehension and computer technology: Past results, current knowledge, and future promises. In S. E. Israel & G. G. Duffy (Eds.), *Handbook of research on reading comprehension*. Routledge. doi.org/10.4324/9781315759609-25
- Loewus, L. (2016). Quality learning materials are scarce for English-language learners. *Education Week*. https://www.edweek.org/teaching-learning/quality-learning-materials-are-scarce-for-english-language-learners/2016/05
- Logan, J. (2017). Pressure points in reading comprehension: A quantile multiple regression analysis. Journal of Educational Psychology, 109(4), 451.
- Míguez-Álvarez, C., Cuevas-Alonso, M., & Saavedra, A. (2021). Relationships between phonological awareness and reading in Spanish: A meta-analysis. *Language Learning*, 72(1), 113–157. doi.org/10.1111/lang.12471.
- Molenaar, I., & Roda, C. (2011). Attention management for dynamic and adaptive scaffolding. In I. E. Dros (Ed.), *Technology enhanced learning and cognition* (pp. 51–96). John Benjamins Publishing.
- National Academies of Sciences, Engineering, and Medicine (2017). Promoting the educational success of children and youth learning English: Promising futures. The National Academies Press. doi.org/10.17226/24677
- National Early Literacy Panel. (2008). Developing early literacy: Report of the National Early Literacy Panel. National Institute for Literacy.
- Oakhill, J., Cain, K., & Elbro, C. (2015). Understanding and teaching reading comprehension: A handbook. Routledge.
- Partnership for 21st Century Skills (2011). A framework for 21st century learning. http://www.p21.org/home
- Polio, C. (2014). Using authentic materials in the beginning language classroom. Clear News, 18(1), 1–5. Michigan State University.
- Proctor, C. P., Dalton, B., & Grisham, D. L. (2007). Scaffolding English language learners and struggling readers in a universal literacy environment with embedded strategy instruction and vocabulary support. *Journal of Literacy Research*, 39(1), 71–93.
- Proctor, C. P., Silverman, R. D., Harring, J. R., Jones, R. L., & Hartranft, A. M. (2020). Teaching bilingual learners: Effects of a language-based reading intervention on academic language and reading comprehension in grades 4 and 5. Reading Research Quarterly, 55, 95–122. doi.org/10.1002/rrq.258
- Ramírez, P. C. (2022). Reframing dual language education in the U.S. International Journal of Bilingual Education and Bilingualism. doi.org/10.1080/13670050.2022.2087469
- Rasinski, T. (2014). Fluency matters. International Electronic Journal of Elementary Education, 7, 3-12.
- Roberts, G. (2021). Canvass of dual language and immersion (dli) programs in U.S. public schools. American Councils Research Center (ARC). https://www.americancouncils.org/sites/default/files/documents/pages/2021-10/Canvass%20DLI%20-%20October%202021-2_ac.pdf
- Rubin, D. I. (2016). Growth in oral reading fluency of Spanish ELL students with learning disabilities. Intervention in School and Clinic, 52, 34–38.
- Rumbaut, R. G. (2014). English plus: Exploring the socioeconomic benefits of bilingualism in southern California. In R. M. Callahan & P. C. Gándara (Eds.), The bilingual advantage: Language, literacy and the U.S. labor market (pp. 182–208). Multilingual Matters.
- Rutherford-Quach, S., Gibney, D., Kelly, H., Riccards, J., Garcia, E., Hsiao, M., Pellerin, E., & Parker, C. (2021). *Bilingual education across the United States*. CC Network. https://compcenternetwork.org/sites/default/files/Bilingual%20education%20across%20the%20United%20 States.pdf
- Scott, C.M. (2009). A case for the sentence in reading comprehension. Language, Speech, and Hearing Services in Schools, 40(2), 184-191.
- Seal of Biliteracy. (2022). State laws regarding the seal of biliteracy. https://sealofbiliteracy.org/index.php

- SEG Measurement (2018). An evaluation of the effectiveness of Imagine Learning for improving reading skills. https://cdn-websites.imaginelearning.com/corporate/sites/default/files/2019-01/Imagine%20Learning%202017-2018%20Texas%20Effectiveness%20Study%20 Report%20Final.pdf
- Silverman, R. D., Johnson, E., Keane, K., & Khanna, S. (2020). Beyond decoding: A meta-analysis of the effects of language comprehension interventions on K–5 students' language and literacy outcomes. *Reading Research Quarterly*, 55(81), S207–S233.
- Skibba, R. (2018). How a second language can boost the brain. *Knowable Magazine*. https://knowablemagazine.org/article/mind/2018/how-second-language-can-boost-brain
- Spear-Swerling, L. (2015). The power of RTI and reading profiles: A blueprint for solving reading problems. Brooks.
- U.S. Census Bureau. (2019). Census bureau reports nearly 77 million students enrolled in U.S. schools. https://www.census.gov/newsroom/press-releases/2019/school-enrollment.html#:~:text=Among%20students%20in%20kindergarten%20through,and%209%25%20were%20Asian%20alone
- Vaughn, S., & Linan-Thompson, S. (2004). Research-based methods of reading instruction. ASCD.
- Wright, S. C., & Tropp, L. R. (2005). Language and intergroup contact: Investigating the impact of bilingual instruction on children's intergroup attitudes. *Group Processes & Intergroup Relations*, 8, 309–328.
- Wood, C., Fitton, L., Petscher, Y., Rodriguez, E., Sunderman, G., & Taehyeong, L. (2018). The effect of e-book vocabulary instruction on Spanish-English speaking children. Journal of Speech, Language and Hearing Research, 61, 1945–1969. doi.org/10.1044/2018_JSLHR-L-17-0368
- Wright, S. C., & Tropp, L. R. (2005). Language and intergroup contact: Investigating the impact of bilingual instruction on children's intergroup attitudes. *Group Processes & Intergroup Relations*, 8(3), 309–328. doi.org/10.1177/1368430205053945

