CHAPTER 1

Understanding Assessment with Multilingual Students

Assessment is an essential part of the planning–teaching–reflection cycle for educators. Without assessment, teaching is a disconnected activity that misses its key purpose: to facilitate the acquisition of new knowledge, skills, and abilities for students. Done well, assessment helps educators understand what students already know, how much progress they have made, and what academic tasks they may be ready to tackle next. It is only with this information in hand that educators will be able to tailor their instruction to help all students meet academic goals.

In this first chapter, we present information that provides a foundation for the rest of the book: demographic data on multilingual students in the United States and the educational settings they participate in, a summary of the process of literacy development and how the process might look different for students learning to read and write in a new language, a description of the intertwined relationship between language and literacy development, and an overview of the unique capabilities of multilingual learners. These foundational understandings are key to the detailed and varied discussions of assessment with multilingual students—particularly emergent bilinguals—that follow in later chapters. We conclude the chapter with a set of principles for understanding assessment with multilingual students that frame every chapter in the book and will help educators not only understand *how* particular literacy assessments work and *what* they measure, but also help educators to *set aspirations* for using assessments that create equitable and enriched learning environments for all students.

LANGUAGE LEARNERS AND THEIR SCHOOL SETTINGS

In the Introduction, we provided information about the audience for this book as well as the descriptors we use to identify the students we highlight. Before moving ahead,

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we'd like to talk more specifically about the demographics of emergent bilingual students in the United States and share characteristics about the instructional programs in which they participate. We close this section by making the case that tailoring assessment for emergent bilinguals and students developing literate multilingual proficiencies is an essential knowledge base for every educator.

Students We Highlight in This Book

Many students operate in multilingual worlds. That is, they use various languages to engage with others and accomplish daily tasks both in and out of school. For example, some students speak with their families using a home language and learn English as a new language at school. Others live in bilingual (or multilingual) households, and their schooling is conducted in one of their already known languages. Some students attend dual immersion classroom settings where they follow a structured process for learning content in a new language, while ultimately also developing academic skills in a home language. Students may live in communities where they hear a variety of languages and see a range of scripts in stores, churches, and community centers. Students who speak English with their families and communities use many varieties of the language; these variations can influence the pronunciation, vocabulary, and even the grammar used. Some variations are more or less similar to the language of schooling (academic English); however, all of the variations that communities use are powerful and purposeful.

For many educators, students' rich linguistic background knowledge has been invisible at school. Students are often judged by what they *don't* possess—fluency in oral or written academic English—as opposed to what they *do* bring to the school setting. Instead of digging deeper into students' multilingual capacities, educators lament what they perceive as missing. In this book, we work to provide educators with tools to gain a more comprehensive picture of students' linguistic resources that may be built upon to lead students to **literate bilingualism** (Moll, 2014). The goals of literate bilingualism include becoming proficient orally and in reading and writing for both the language of school and of home.

English learners (ELs) represent approximately 10% of the students in public schools in the United States (U.S. Department of Education, 2017). Table 1.1 highlights 2016 data showing the top-9 student home languages other than English of the approximately 4.95 million K–12 EL students in the United States. Spanish is by far the most predominant home language for multilingual students, but this list shines a light on the amazing language resources that many U.S. students can potentially contribute to the greater society. These emergent bilinguals are already on the path to literate bilingualism because they possess oral skills (and perhaps more) in their home languages.

Many states have implemented policies that encourage their students to achieve biliteracy (cf. *sealofbiliteracy.org*). Steps that have been identified to actively support this outcome include recognizing and honoring biliteracy skills; preparing students for a diverse and multilingual world; and using educational approaches that are responsive to students' needs, set high expectations, and are aligned across grade levels and

TABLE 1.1. Top-9 Home Languages Other Than English of K–12 EL Students, 2016

Language	% distribution
Spanish	76.6
Arabic	2.6
Chinese	2.1
Vietnamese	1.6
Somali	0.8
Hmong	0.7
Russian	0.7
Haitian/Haitian Creole	0.6
Portuguese	0.6

Note. Data from *https://nces.ed.gov/programs/digest/d18/tables/dt18_204.27.asp.*

settings (see the California Department of Education Roadmap Policy at *www.cde. ca.gov/sp/el/rm/elroadmappolicy.asp*). If educators expand on the linguistic resources students already possess, students come to see their assets as valuable at school and are motivated to cultivate their literate bilingualism.

Emergent bilinguals are not a monolithic or homogeneous group. Their diversity is marked by a range of language backgrounds; amount of time in the United States; academic experiences; economic resources; culture, race, and ethnicity; religion; and more. Figure 1.1 provides a graphic representation of some of the ways that emergent bilinguals possess unique capabilities and background experiences even as compared to others considered part of the same group.

As Figure 1.1 elucidates, emergent bilinguals bring unique experiences and aspirations to their language learning at school. Some students have already developed literacy in a home language, which will facilitate learning a new language at school. If their home language and the new language use similar writing systems and sound–spelling correspondences, the learning will be more seamless. Students vary in the amount of time they have spent learning a new language at school; some are newcomers to listening to and speaking the new language, while others have a great familiarity and experience with it. Students vary in their opportunities to practice the new language outside of school and in their real-world purposes for becoming bilingual, such as communicating with friends and family members. All language learners grow when they are motivated and encouraged to become bilingual. When individual emergent bilingual students enter the classroom, educators have much to learn about their capabilities and experiences. Consider the following example that highlights one way in which educators can learn about students.

Kevin immigrated to the upper Midwest with his mother 2 weeks before beginning first grade. He had not had many prior experiences hearing or using English. The classroom
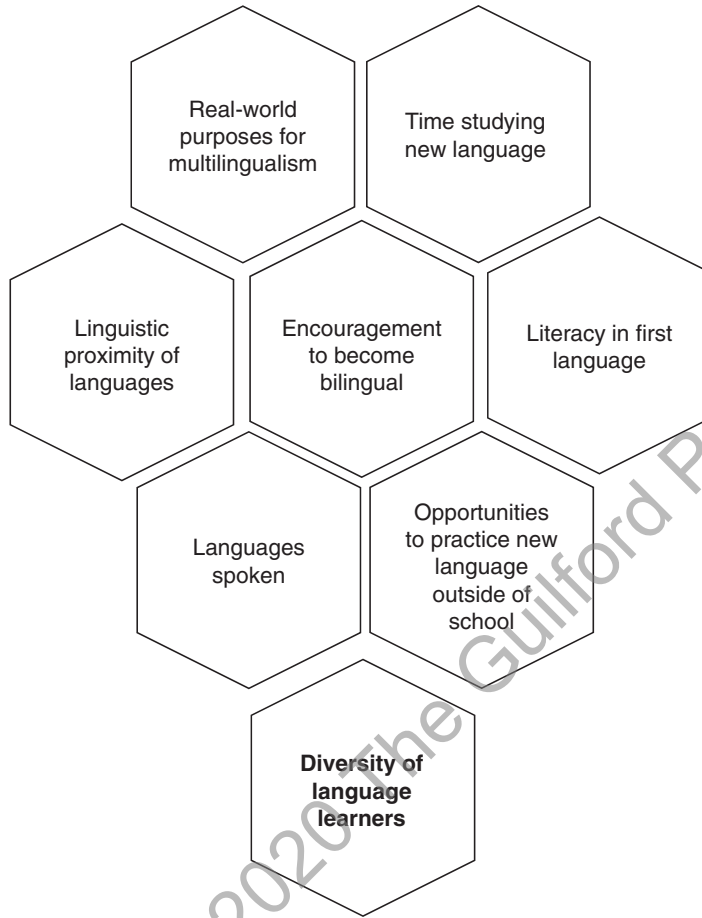
FIGURE 1.1. Diversity of language learners.

he entered provided extra support for newcomer emergent bilinguals, but it would still be difficult for him to follow much of what was going on in class for quite a while. With a little support from the community liaison at school, his teacher was able to learn that Kevin had attended kindergarten in Mexico and knew some letter–sound correspondences in Spanish, a language that shares many phonetic commonalities with English. In discussions with Kevin's mother, the teacher also learned that there was strong encouragement in the home to develop bilingual skills that could be used with the family and in the new English-speaking community. This beginning understanding of Kevin's background helped his teacher to connect and build on previous learning and motivate him to use all of his linguistic resources at school.

School Settings and Instructional Programs

Just as emergent bilinguals vary in the linguistic backgrounds they bring to school, so too do the types of instructional programs they participate in once they get there.

Prior to the 1980s, most students in the United States who spoke a language other than English at home were tacitly or explicitly asked to shroud that language while at school, where all instruction would take place in English. The effect of such programs over time was to erase the student's home language skills, and is often referred to as a **subtractive approach** (Valenzuela, 2010). As the population of emergent bilinguals in many schools grew over time, specialist teachers were sometimes hired to work with students learning English. Typically, these **English as a second language (ESL)** or **English language development (ELD)** educators brought students new to English into separate language classes to fortify their linguistic skills at some point in their school day.

Over the past 40 years, demographic shifts in the national school population have compelled educators and school systems to more formally address the ways they serve emergent bilingual students. Policy guidelines and accountability systems seek to ensure that all students progress in their acquisition of statewide academic standards and experience success on exit measures. Currently, a range of instructional programs operate across the country that support students' English acquisition or literate bilingualism, thus engaging in an **additive approach** to schooling. In this section, we share a brief description of some of these programs that are referred to throughout the book.

Newcomer Programs

Students such as Kevin, described in the last section, are new to the United States and the English-speaking environment. Newcomers have a variety of previous experiences with languages, literacies, schooling, and cultural interactions. Some newcomers to the U.S. school system have had quite similar experiences outside of the country, while others may have been a part of school systems that were very different or may not have had the opportunity to attend school at all. Newcomer programs are specially designed to ease the transition to American schools for newly arrived students, especially those who are just beginning to learn English or who may have limited or interrupted formal schooling. The programs typically focus on learning essential English for communication, becoming familiar with local schooling procedures, backfilling academic content that is necessary for academic success, and potentially bolstering students' native language literacy skills. They are intended to be a short-term experience for students, may serve students across the K–12 spectrum, and can vary in scope or size, depending on the needs of a district or geographical area.

Dual Immersion Programs

An increasingly common structure for developing students' bilingual capacities are dual immersion programs, also known as *bilingual* or *two-way immersion programs.* In these instructional settings, students follow a proscribed pathway of learning in two languages over many years. For example, students in Spanish–English dual immersion programs may begin school by experiencing 90% of their instruction in Spanish and 10% in English. With each consecutive grade level, the balance moves closer to

50% for each language, so that when students exit from the program they are literate bilinguals who also have mastered grade level expectations. In a 50/50 dual immersion program, both languages are used equally throughout the program from the start. Students who speak English at home and enter a dual immersion program in Spanish, for example, are also emergent bilinguals, because they are learning a new language and bring capabilities in their home language to school.

Primary-Language Literacy Instruction

In some educational settings, students who start school speaking languages other than English enroll in programs that develop their home language literacy skills prior to studying in English. This process allows students to connect their reading and writing skills more directly to the oral language resources they already have. Becoming literate in a language that one already speaks is much easier than learning to read in a language that is new (Genesee, Lindholm-Leary, Saunders, & Christian, 2005). In addition, once literacy has been achieved in any language, many skills are transferable to literacy skills in a second or third language (Genesee et al., 2005). For example, students who can track print, understand spaces between words, and use a phonics decoding system in their home language can apply these skills to the new language with minor adjustments. Thus, primary-language literacy instruction reduces some of the linguistic challenges that face students who are immediately enrolled in academic programs that are delivered in a language they don't yet understand.

General Education with English Language Support

Many schools do not have specialized programs for supporting bilingualism but do provide assistance for students as they learn English. These programs may include pullout English classes for emergent bilinguals; push-in services, such as English lessons delivered in class; EL assistant educators or coteachers embedded within classrooms; opportunities for English language development in before-school or after-school programs; or volunteer tutoring programs. In some states, teachers have received professional development to assist them in tailoring instruction for emergent bilinguals through specially designed instructional approaches or, at a minimum, are provided with curriculum materials that describe how to adapt their teaching for students learning English.

No Support—"Sink or Swim"

Unfortunately, many emergent bilingual students do not receive any extra support when they enter classrooms where English is the only language spoken. Students are expected to "pick up" the language by simply being surrounded by it. Referred to as the "sink-or-swim" method, this model is often de facto and unexamined; it ignores research showing that the language needed for school success requires intentional instructional focus and does not develop by osmosis or simply having seat time in a classroom (Saunders & Goldenberg, 2010).

A Pervasive Need

According to current achievement data, ELs perform significantly below students who speak English fluently (National Assessment of Educational Progress [NAEP], 2018). In 2017, NAEP data revealed that reading scores for EL students at the fourth-grade level were 37 points below non-EL students and 43 points lower for eighth-grade students (NAEP, 2018). In the 2013–2014 academic year, the national average high school graduation rate was 82.3%, but for EL students the figure was 62.6% (Office of English Language Acquisition [OELA], 2018). These figures indicate that students do not receive adequate or appropriate instruction to ensure that they succeed. Using assessments that are asset oriented, that identify student learning needs, and that inform instruction is key to improving educational opportunities for all students, but it is especially critical for emergent bilinguals. Throughout this book, we shine a light on assessments that (1) seek to identify what students bring to school and what they are already able to do, (2) help educators to identify the important next steps in literacy development for each student, and (3) make direct connections between what is assessed and what needs to be taught in the language arts. At the same time, we consider how assessment can best capture the strengths and needs of students who have yet to become fluent in the language of the assessment and support both monolingual and multilingual educators to best guide their students' progress.

Now that we have shared some background information about the contexts of schooling for emergent bilinguals, we turn to two other pieces of important foundational information: models of literacy and language development. First, we provide a cohesive summary of how learners move from being emergent readers and writers to developing proficiency and strength. Following this discussion, we take a similar look at language acquisition, and review the intertwined relationship of language and literacy.

LITERACY DEVELOPMENT

Becoming a capable reader and writer occurs when a variety of components work together in unison. Some of these capabilities emerge from within individuals, and others are related to factors in the social and physical world. Watching a student pick up a book and become engrossed in the content or observing the student transcribe thoughts in a personal writing journal may seem effortless and almost magical. In reality, many factors are involved in becoming what an observer would call a proficient "reader" or "writer." To call upon a simple metaphor, reading may be thought of as an operational automobile: it seems to turn on automatically, but there is a lot going on "under the hood." Readers use their knowledge of a language, including words and what they mean, the sounds that go into producing words, and the ways that words and phrases are structured into sentences and larger chunks of meaningful utterances. Readers also bring problem-solving skills to the task; they know how to decode printed text using the sounds, patterns, and the word parts of the written

language. Finally, readers bring purpose or motivation to a reading task. If there is no reason to read, it doesn't happen.

In the simplest of terms, becoming literate involves the ability to decode text and use linguistic and background knowledge to understand it (Gough & Tunmer, 1986; Scarborough, 2001). For emergent bilinguals, this process is more complex for several reasons. First, although emergent bilinguals have language knowledge, it is typically not in the language of instruction. Thus, students are required to learn *what* the words mean at the same time they learn *how* to read them. In addition, because their home language may use sounds that are distinct from English, language learners may have difficulty perceiving phonetic variations that come more easily to a native speaker. For example, distinguishing the short vowel sounds in words such as *pan, pin,* and *pen* could be difficult for students whose home language uses only open vowel sounds, such as in the words *saw, see,* and *so.* Native speakers are immersed in a sea of words that provide a foundation for developing sound–symbol correspondence in the written language. Students learning to read in a new language, however, are unlikely to be able to call upon dozens of examples of "words that begin with . . ." or "words that have the ____ sound" in the same way that native speakers can. Finally, research has shown that, with systematic instruction, emergent bilinguals can learn the decoding skills required to develop reading proficiency in a relatively straightforward manner (Lesaux & Siegel, 2003); however, there is a danger that when language-based skills are not addressed, reading comprehension does not flourish (Mancilla-Martinez & Lesaux, 2011). For these reasons, literacy educators need to be able to identify and address the unique capabilities and challenges that emergent bilinguals bring to the literacy-learning process. To connect back to our previous metaphor, to start the car and help it move down the road, educators will need to know which aspects of students' literacy development systems are connecting, and which need focused attention. This book is designed to help educators identify these components and provide guidance on how to support students as they move forward.

Students do not develop their literacy "engines" overnight; it is a step-by-step process. Throughout this book, we will refer to a developmental model of literacy learning that highlights students' growing insight over time about the complexity of the writing system and how to make meaning from it (Bear, Invernizzi, Templeton, & Johnston, 2020; Ehri, 1995; Templeton & Gehsmann, 2014). We use terms such as *emergent, beginning,* and *transitional* to describe developing readers who call upon particular understandings as they engage with text in predictable ways. In the next few sections, we highlight the reading behaviors of students as they progress from novice to more advanced.

Emergent Readers

Prior to being able to accurately recognize words, yet-to-be readers learn about text by observing others read and write. At first, these **emergent readers** listen to stories; watch people in their world get information or enjoyment from paper or electronic texts; and notice how people use writing to jot down messages to others, make lists for themselves, and much more. Emergent literacy begins from children's first moments

in the world; it is the conscious and unconscious learning about print that happens in their social interactions within their environment.

> **EMERGENT READERS**
>
> ◆ Begin to notice features of print.
> ◆ "Pretend" read and write.
> ◆ Learn the alphabet.
> ◆ Play with the sounds of language.

With experience and guidance, emergent readers develop an awareness of the unique features of print. If they have opportunities to listen to books read aloud, they come to understand that print has permanence. In other words, every time they listen to the same story, it remains consistent. Emergent readers "pretend read" a familiar story, making up their own version of the script and changing pages based on the pictures. Emergent readers begin to distinguish text and, in particular, letters, from other visual information. At this point, young children are often introduced to the alphabet, which opens the door to new learning about the shapes of capital and lower-case letters, and the sounds represented by each one. Early literacy learning happens in formal and informal ways. At home, family members often interact with books, magazines, or digital texts and share these experiences with young ones, answering questions and pointing out relevant information such as "Look, there is an 'M' like in your name, Maya!" At preschool or day care, adults often share books, write messages together, facilitate children's story writing, practice the alphabet, and attend to the sounds in oral language, such as rhymes and **alliteration.** Emergent literacy blossoms when children have opportunities to engage in sound play (**phonological awareness**), learn about letters (alphabet knowledge), notice aspects of the writing system (**concepts about print**), and express themselves on paper (developmental writing) (Johnston, Invernizzi, Helman, Bear, & Templeton, 2015).

With focused attention on the types of learning activities just described, emergent readers discover that letters and sounds are not arbitrary; rather, letters represent particular sounds in predictable ways in the English writing system. This insight, called the **alphabetic principle,** is profound. It enables emergent readers to move from a phase of thinking that reading and writing are "magical' processes in which they pretend read and write or simply memorize a few words, to an understanding that they need to learn the sounds that the letters of the alphabet represent in order to actually decode the message written down. As they learn a growing number of words by sight and begin to use their knowledge of letter sounds to decipher words in text, emergent readers move into the beginning reading stage.

Are all emergent learners in the birth to 5 age range? Definitely not. Emergent literacy is a foundational phase that is strengthened by experiences with print—whether they be opportunities to engage with printed materials or to see oral language in a written form. Preschool and kindergarten settings consistently expose children to print experiences, but not every child has the opportunity to attend these classes. Furthermore, students may start school at later grade levels with limited or

interrupted formal schooling, or the quality of instruction in classes they attended may have been inadequate or the classrooms may have been overcrowded. Emergent bilinguals may bring literate experiences with home languages in which sounds are not used to represent written words. In these cases, it will be important to identify whether students have an understanding of the alphabetic principle, a key to becoming a beginning reader in English. Assessments are outlined in future chapters of this book to guide educators in identifying students' understanding of the sound-based nature of written English.

Beginning Readers

The beginning stage of reading is characterized by a growing understanding of the alphabetic nature of written language and by students' application of sound–symbol relationships in decoding and producing text. **Beginning readers** have typically developed sight recognition of a number of frequently used words and reread familiar memorized texts, although not yet with full one-to-one tracking. With new material, beginning readers attempt to use their **phonics** knowledge to access unknown words. Early on, this process is slow and full of effort—novice readers use their knowledge of phonics to sound out individual letters in words and blend them together with varying degrees of success. All students need instruction in how phonics works (e.g., letter–sound correspondences and blending sounds to make words), and some students will need more **explicit instruction** and intensive guided practice. Beginning readers also need numerous opportunities to read material that is not too difficult, so that they can begin to more automatically decode common words and become more expert at applying their spelling–sound knowledge. Soon they are recognizing word families and using analogies to more efficiently decode unknown words. For example, whereas an early beginning reader might expend a lot of effort to decode the word *pet* by vocalizing and blending each individual sound, a progressing beginning reader will notice that *pet* is part of the *-et* word family and will apply this knowledge to new words, such as *set, met, bet,* or *wet,* by simply substituting a different beginning sound. This knowledge makes reading much more streamlined.

> **BEGINNING READERS**
>
> ◆ Understand the alphabetic principle.
> ◆ Have phonemic awareness.
> ◆ Develop comprehensive knowledge of sound–symbol relationships.
> ◆ Begin to use analogy to decode words.
> ◆ Generally read in a word-by-word manner.

To revert to the automobile analogy, beginning readers are like drivers of cars that are operating only in low gear. Reading is happening, but it takes a while to get where they are going, and it is not a very smooth process. Beginning readers need many opportunities to read texts that stretch but do not overtax their decoding

capacity. Every reading experience provides practice in using important word recognition skills and gaining familiarity and automaticity for a growing number of words. With consistent practice, most beginning readers start to read individual words faster and thereby hold the meaning of phrases and sentences together more cohesively. They are moving into second gear!

How is the beginning reading stage the same or different for emergent bilinguals? First off, it should be noted that learning to decode words alphabetically in English can be a relatively straightforward process, especially if the student's home oral language shares many of the same sounds. Being able to pull apart the individual sounds in words, or **phonemic awareness,** is needed in order to profit from phonics instruction, and it is a skill that transfers across alphabetic languages (Branum-Martin, Tao, & Garnaat, 2014; Durgunoglu, Nagy, & Hancin-Bhatt, 1993). Thus, teaching students to distinguish the sounds within English words and attaching graphemes to these sounds can be effective if it is done clearly and systematically, and is based on the home language sounds students already know. Complications in early phonics instruction may arise when students meet a sound in English that does not exist in their home language. For example, some of the short vowels in English are not present in many other languages. Students attempting to match sounds to letters will find it difficult when they can't distinguish the difference between ĕ and ĭ, as in the words *pen* and *pin*. In future chapters of this book we provide informal assessments and guidance on how to identify letter sounds that may be difficult for students with particular home language backgrounds.

Another challenge for emergent bilinguals at the beginning reading stage is understanding the words they are now able to decode. Word recognition is obviously an important aspect of reading, but both students and their teachers may assume that when they can decode, they have "read" a text. It is critical that even beginning readers seek meaning in what they read, self-monitor to identify when they do not understand, and enact strategies for extracting meaning. Regular comprehension checks are essential to confirm that students are understanding, not simply decoding, the texts they read.

Transitional Readers

As decoding becomes more automatic, students move beyond the word-by-word reading that is characteristic of beginning readers. They process text more quickly and efficiently and become **transitional readers** who are now moving along in a higher gear—no longer fledglings, but not yet completely proficient either (Bear et al., 2020). Transitional readers have the phonics skills to decode most single-syllable words in a straightforward way, testing out a word's pronunciation by using their knowledge of spelling patterns and matching it to a real word that they think would fit in the text. At this level, students apply what they know about decoding to longer multisyllable words, which sometimes trip them up. Reading longer words also presents the challenge that this vocabulary is typically more complex and less known to developing readers.

> ### TRANSITIONAL READERS
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> ◆ Are becoming more fluent in their reading.
> ◆ Read and write words with more complex spelling patterns.
> ◆ Will likely need to focus on phrasing and expression and attending to cues from punctuation.

A key reading skill that transitional readers need to work on is the development of **fluency.** Samuels defined fluency as the ability to decode and understand text at the same time (Samuels, 2006). Fluent reading grows as students see words over and over in the texts they read and can read them quickly. Returning to the automobile analogy, transitional readers are like novice drivers who can put their foot on the gas pedal but the ride doesn't yet feel smooth. These readers may read quickly one moment and then slowly during a patch containing difficult words. They may "run through" punctuation marks and not yet chunk the text into meaningful phrases. Transitional readers profit from being guided to read in phrasal units, a task that is helped by paying attention to punctuation marks. Students are also helped by repeated readings of the same material and from encouragement to use expression as they read.

When emergent bilinguals get to the transitional stage of reading they likely are good decoders, but it is possible that their vocabulary and language comprehension hasn't progressed at the same pace as their word recognition abilities. Students may be able to produce what sounds like fluent reading, but may not have a full understanding of the meaning of a text. For this reason, it is critical to check for understanding with readers at the transitional level and not assume that quick reading equates to comprehending the material. In future chapters we discuss the use of fluency measures for assessing reading progress and how educators can ensure that these assessments are tailored for students learning a new language. It is critical that students never doubt that real reading is more than pronouncing the words, but involves taking in meaningful content and engaging with it in a personal way.

Advancing Readers

Intermediate readers have developed good fluency in materials at the upper elementary level and, because of their speed in processing text, generally prefer reading silently. Intermediate readers can grasp online and print materials that have robust amounts of text, although these materials may still be oriented to children and young adults. For example, early intermediate readers may take on R. L. Stine's *Goosebumps* books, while more established intermediate readers can devour larger volumes such as J. K. Rowling's *Harry Potter* series. On the nonfiction side, intermediate readers seek out information from encyclopedias and websites geared toward youth, how-to books, biographies, and books and websites that help them learn about topics they are studying or interested in. In the analogy we have been using, intermediate readers handle the car well, and they now have plenty of preferences about what make and model they are driving. The ride is pretty smooth when the topic is familiar, and

the reader has a high interest level. Reading can get challenging when complex or unknown language enters the scene, such as in driving in an unknown city.

INTERMEDIATE READERS

◆ Read grade-level materials with fluency.
◆ Prefer to read silently.
◆ Become lifelong readers when they are engaged with particular topics, genres, or purposes for reading.
◆ Continue to be challenged by unfamiliar and complex academic vocabulary and language structures.

During the intermediate stage of reading, students get pulled into becoming lifelong readers (or not) and begin to identify themselves as "readers" (or not). It is an important growth period in literacy that can be enhanced by educators who share engaging texts, connect materials to students' interests, and scaffold difficult language and concepts so that reading materials make sense and help students to take on more challenges. When instruction is motivating and students have plentiful opportunities to engage in reading for purposeful activities and enjoyment, intermediate readers evolve into **advanced readers**—the level of efficient adult readers.

Emergent bilinguals who reach the level of intermediate readers have the same challenges as native language speakers, including understanding complex and highly technical texts, especially when readers have limited background experiences in the topic. However, emergent bilinguals' language proficiency at this point should be quite good in social settings, so gaps in academic vocabulary may go unnoticed in the classroom. In a longitudinal study of seven emergent bilinguals from first through sixth grades, Helman and colleagues found that although several of the students reached advanced proficiency in reading, they demonstrated significant gaps in their **academic language** skills—the words and phrases encountered in schooling and in written texts—as compared to national norms for their age group (Helman, Rogers, Frederick, & Struck, 2016).

LEARNING AN ADDITIONAL LANGUAGE

Humans are hardwired to learn language right from the start. Beginning in the third trimester, unborn babies react differently to native and non-native vowel sounds, recognize their mothers' voices, and have been shown to learn pseudowords that they were exposed to in utero (Partanen et al., 2013). Language development in one's home language is a natural process that unfolds through engagement with family members and others as the newest members of society attempt to engage with their community. Language learning is multifaceted and may be classified into five key areas (see Figure 1.2): **phonology** (the sounds of the language); **semantics** (the meanings of words and concepts and the schemas that hold them together); **syntax** (how meaningful
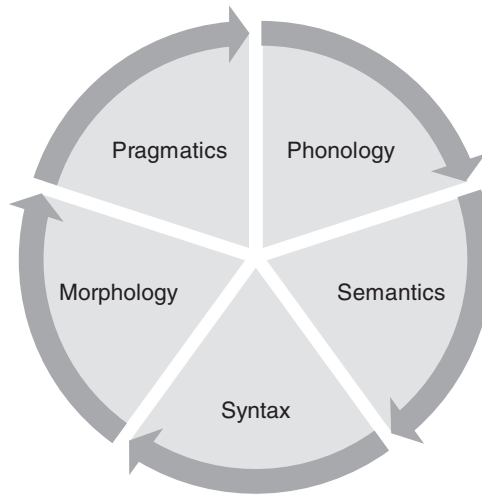
FIGURE 1.2. Key areas of language learning.

phrases and sentences are put together); **morphology** (how words are put together and changed with meaningful parts such as *kind–kinder–kindness*); and **pragmatics** (how language is used in particular contexts) (Otto, 2017).

During the first 2 years of life, babies play with sounds and refine their speech to more closely match the language(s) they hear in their environment. Their **receptive language** (what they understand) develops more quickly than their **expressive language** (what they are able to produce). Infants and toddlers develop purposeful communication strategies and advance in their ability to interact with others (Hoff, 2013). As they approach the age of 2 years, children typically experience a spurt in their expressive word vocabulary, begin to combine words into phrases, and start adding morphemes to words, such as *go-ing*. During the next 2 years of life (ages 2–4 years), children typically experience a surge of language learning: they develop narrative and conversational skills, create longer phrases and use negatives and questions, complete learning the phonemes of their language(s) and begin to acquire phonological awareness, exponentially expand their vocabulary, and create sentences with more complex grammatical structures (e.g., *We're playing*) (Brown, 1973; Hoff, 2013).

Learning an additional language at school does not occur in precisely the same way as initial language development, and it is harder to talk about "typical" development because of the variety of potential contexts that exist for this learning. Additional language learning depends on the age of the learner, the context of the language environment and instruction, the purposes for the new language use, what literacy skills the learner possesses, and the similarities or differences between the new language and other languages in students' repertoires (Collier, 1987; McLaughlin, 1985). School-age learners, for example, will not start at the beginning of language learning as if they were infants. They bring with them a knowledge of all of the systems of language—phonology, semantics, syntax, morphology, and pragmatics—from their home language. As they learn a new language, emergent bilinguals call upon oral

communication in their home language and apply it to English. Figure 1.3 presents some of the skills within the five areas of language learning that emergent bilinguals need to acquire to become proficient speakers.

Without being overly technical, Figure 1.3 highlights some of the many aspects of a new language that speakers acquire from within or outside of the classroom setting using more or less formal instruction. For students who enter school at a young age as emergent bilinguals, development will tend to progress along a continuum from basic survival language, to the highly contextualized language of social interactions, to learning the decontextualized language of academic contexts found in texts, lectures, and procedural directions. Hakuta, Butler, and Witt (2000) found that for students learning English at school it typically took 3 to 5 years to develop oral

Language area	What needs to be learned in a new language?
Phonology	• Sounds used in the new language need to be matched to sounds already known. • Sounds that do not exist in the home language need to be perceived and approximated. • The sound qualities of words in the new language, including stress patterns, need to become familiar. • The speaker needs to produce words that don't follow the structure of words in the home language (e.g., ending a word with a consonant blend such as *west*).
Semantics	• Words in students' vocabularies need to be learned in the new language and matched to already known meanings and conceptual understandings. • Unknown words and concepts used in the classroom (including academic language) need to be learned for the first time.
Syntax	• Differences in grammatical rules between the home language and new language need to be applied (e.g., word order such as *red car* vs. *carro rojo*). • Differences in sentence structure between the home language and new language need to be applied (e.g., subject–verb–object vs. subject–object–verb). • The speaker needs to learn how questions and negative statements are formed.
Morphology	• Verb conjugation needs to be learned. • Differences in affixation between the home language and new language need to be applied (e.g., *longer* vs. *más largo*). • An understanding of cognates and how they can support word learning should be developed (e.g., *art/arte*).
Pragmatics	• What is seen as "appropriate" interpersonal spacing, eye contact, and gesturing in the new language needs to be figured out. • The tone of speech, amount of self-disclosure, use of apology, and much more will vary with cultural norms. • How children speak to adults or the respect that is used in dialogue with elders varies across cultures and is noted during conversations.

FIGURE 1.3. Examples of skills needed in a new oral language.

proficiency, and they found that developing academic English proficiency can take 4 to 7 years. We discuss the differences between **basic interpersonal communicative skills** (BICs; Cummins, 1979) and more abstract academic language, or the language of schooling and other decontextualized and technical settings, in depth in Chapters 4 and 6.

Students who start school having already developed literacy in their home language often are able to bootstrap their academic knowledge from their first language to English. In a study of the age and rate of academic language learning, Collier (1987) found that 8- to 11-year-old emergent bilinguals progressed the most quickly in academic development, reaching the 50th percentile on national academic norms in 2–5 years. Cummins was the first to describe a theory of interdependence that explains why students who have more advanced language proficiency in their home language may develop academically demanding language skills in a new language more readily than younger students: their academic knowledge is able to be transferred across languages (1981).

Collier's (1987) study of academic language learning had another interesting finding: English learners who began schooling in the United States between the ages of 12 and 15 years took the longest to achieve academic proficiency. She postulated that perhaps because of the rapid increase of academic content in the secondary grades, students who begin schooling in a new language at age 12 or later cannot afford the loss of a year of more of content that they cannot adequately comprehend while they develop advanced language proficiency (Collier, 1987).

Acquiring an additional language for success at school is a multifaceted and context-based process that is influenced by linguistic, psychological, sociocultural, and educational factors (Helman, 2016). Each student brings his or her background experiences, communicative capabilities, feelings of comfort or temerity in trying out a new language, and purposes for using the home and new languages. The relationship or distance between the linguistic characteristics and pragmatic usage of the two languages will also influence how easy or hard it might be for a student to acquire a new language. The more that educators learn about the language and literacy histories and goals of their students and families, the more likely this multifaceted acquisition process can be explored for each individual, and students can be provided the support they need to boost their learning. In this book, we highlight the role that assessment has in informing educators' understanding of language and literacy learning in relation to all of these important areas.

THE SYMBIOTIC RELATIONSHIP BETWEEN LANGUAGE AND LITERACY

As must be clear by this point in the chapter, when discussing literacy learning with emergent bilinguals it is impossible to separate the role of language development from the holistic processes of reading and writing. Students cannot read or write in a non-linguistic space; literate acts are always infused with language. A written word *means something* in an oral language. A letter or symbol represents *a sound, syllable, or meaning* in a given oral language. In the automobile analogy we have referenced throughout

the chapter, language is the fuel that powers the vehicle. Without language, the literacy engine simply cannot run.

Language permeates all literate behaviors. Yet, for many educators, this simple idea has gone uninvestigated in their work with students. In other words, even as their students became more linguistically diverse, educators may have looked past the need to be knowledgeable about language development as the foundation for helping learners develop and use literacy for meaningful purposes in the world. Our goal in this book is to consistently shine a light on the symbiotic relationship between language and literacy and to remind educators that there is never a time in assessment or instruction when language can be taken for granted.

THE UNIQUE CAPABILITIES OF MULTILINGUALS

People who speak more than one language have access to more ideas than monolinguals. Flora Lewis, a longtime foreign correspondent, wrote, "Learning another language is not only learning different words for the same things, but learning another way to think about things." As multilinguals attach words from one language to concepts known in another, they gain a deeper sense of the meaning of the concept and how it takes shape in the world. For example, the word *spark* in English can be both a noun and a verb, meaning a fiery particle or the act of emitting such a particle; the act of ignition, including in a figurative sense; or a small quantity. The word can be translated into Spanish as *chispa,* which holds the same meanings, but may also be used to represent anger (*echar chispas*) or vivaciousness. As emergent bilinguals make connections across their two languages, they potentially develop a deeper understanding of vocabulary, conceptual meanings, diverse cultural perspectives, and an increased cognitive flexibility (Bialystok, Craik, & Luk, 2012). The cross-linguistic connections that emergent bilinguals make also assist them in developing **metalinguistic awareness,** the ability to think *about* language in a general way, beyond the concreteness of words used in a specific language. For example, certain aspects of grammar, such as subject–verb agreement, come quite naturally in one's home language (the child plays/the children play), and it may only be through learning a new language that the concept of subject–verb agreement as a linguistic category becomes conscious knowledge in a speaker's mind.

Multilinguals have a repertoire of two or more languages to engage with as they communicate with others. A multilingual person will probably interact in only one language with a monolingual interlocutor, because they know what words that person is likely to understand. However, when speaking with someone with whom the speaker shares more than one language in common, especially in informal settings, the multilingual speaker may call upon more of his or her linguistic resources. García and Kleifgen (2010) describe the process wherein emergent bilinguals create structures for using interdependent language systems as developing "complex multicompetence" (p. 45). Multilinguals who use hybrid language practices (code switching, code meshing, translation, etc.) to enhance meaning and communication are **translanguaging**—enacting features of more than one language within the cohesive and

interdependent language systems under their control (García, 2009). This multilingual capacity is becoming more widely recognized in classrooms and is currently leading to informal assessment and instruction practices that have the potential to more fully highlight the complex multicompetence of students who bring more than one language to schooling (García, Johnson, & Seltzer, 2017; Lee & Handsfield, 2018). Figure 1.4 highlights the idea that the languages students know contribute to an interdependent system and build metalinguistic knowledge. Additional languages learned in the future join this complex and interdependent system and further support the speaker's metalinguistic awareness.

Throughout the book, we suggest many ways for educators to assess students who speak more than one language, for example, by exploring their home language and literacy skills, their new language and literacy skills, and also their multilingual capabilities. The goal is to understand in a more comprehensive way how emergent bilinguals use their interdependent language systems to communicate, make meaning, learn skills, and problem solve.

PRINCIPLES FOR UNDERSTANDING ASSESSMENT WITH EMERGENT BILINGUAL STUDENTS

As we continue with the more specific, content-based chapters that follow, it is important to acknowledge the problematic situation that currently exists in many educational settings, where emergent bilingual students are assessed using measures that may be unreliable for language learners and are often not validated for use with their populations. Current assessments underestimate what emergent bilinguals can do, because the level of language or background knowledge needed to demonstrate success may only be available to those students in their home languages. The following guiding principles, culled from professional organizations and researchers who study students who are linguistically diverse, serve as touchstones for reducing bias and perceiving emergent bilinguals in more holistic ways.
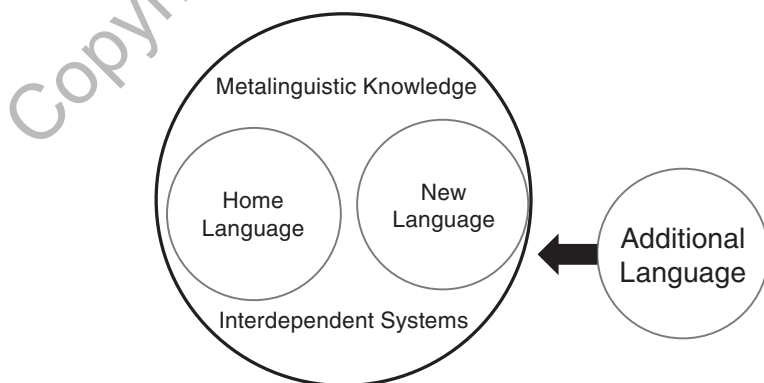

FIGURE 1.4. Interdependence of language systems for bilinguals.

Assessment with emergent bilinguals:

• Should be asset focused. Students bring resources and capabilities to school that may or may not be recognized institutionally, such as linguistic knowledge, and ways of being in the world and interacting with others based on their cultural frameworks, interests, goals, and on family **funds of knowledge** (Gee, 2015; Moll, Amanti, Neff, & González, 1992; Vygotsky, 1978).

• Should fairly assess the construct being examined and not be clouded by other factors, such as linguistic or cultural characteristics. Also, when tests are constructed, assessment should take into account validity with varied groups of students, including emergent bilinguals (Abedi, 2002; American Educational Research Association [AERA], 2014).

• Should acknowledge that it does not reflect a student's "ability." Ability is dynamic, not fixed, and varies based upon many things, including context (Cohen & Ball, 1999).

• Should not limit students' access to high-quality learning settings or opportunities (García & Kleifgen, 2010).

• When possible, should tap into the complexity of students' bilingual knowledge and the ways they use language in the school and community (Escamilla et al., 2013; Valdés & Figueroa, 1994).

• Should make it possible for students to demonstrate what they know and can do, not simply what they have yet to develop (Gottlieb, 2012). In order to make use of assessment data, students must have information about how their performance relates to expected or desired accomplishment in class. This information is key feedback for learning (Hattie, 2008).

• Should use multiple measures. No single assessment is foolproof or comprehensive in and of itself. To gain confidence in the results of a given assessment, and especially when high-stakes decisions are being made, it is important to triangulate results with multiple sources (NWEA & Grunwald Associates, 2012). In particular, culturally and linguistically diverse students may experience confusion if they do not understand the procedural language of the assessment with which they are engaging. For example, a student who is able to summarize her reading in class with a partner may not be able to demonstrate this behavior when asked to respond to a standardized prompt in a testing situation. In addition, the test may ask students to think or respond in culturally unfamiliar ways, such as presupposing that families participate in the same activities regardless of cultural background.

• Should ensure that a balanced assessment framework is in place that provides the appropriate information to the varied stakeholders who need it, including

students and families, classroom educators, school and district leaders responsible for program improvement, and policymakers (Stiggins, 2017). Each form of assessment is used for the purpose it was designed.

Stiggins (2017) outlines a "Student's Bill of Assessment Rights" that sets guidelines for transparency and ethics in using assessments. This set of aspirational guidelines recommends transparency in explaining the purposes of an assessment and how its results will be used, in understanding the learning targets and scoring rubrics, in describing good and poor performance and how to self-assess, in using quality assessments that are dependable, and in effectively communicating the assessment results to students and/or their families (Stiggins, 2017). For many emergent bilingual students and families, clarity in understanding what classroom and school assessments mean and how students can work to improve their learning will only come about if educators share the information in child- or parent-friendly ways, including by using the family's home language.

SUMMARY

In this first chapter, we presented foundational knowledge that showcases the interconnectedness between language and literacy learning and how they must be assessed in tandem for emergent bilingual. Emergent bilinguals are diverse in so many ways, including their language backgrounds, length of time in the United States, academic experiences, economic resources, race and ethnicity, religion, and more. Assessments should provide useful information on what students are able to do and on what they have learned or have yet to learn, and should provide guidance for instruction. Because language constraints may affect students' abilities to show what they know and cultural norms vary across groups, educators must take into account cultural and linguistic perspectives as they consider the assessments they use with emergent bilinguals.

We dedicated a substantial section of this chapter to describing the development of literacy from the emergent stage, to the characteristics of beginning readers and writers, to outlining a period of transition to proficiency, along with the behaviors of more advanced readers. At each stage, we described reading and writing tasks that may prove especially challenging for emergent bilinguals. Similarly, we provided background information on language development in a home or an additional language. Many factors influence learning a new language at school, including students' ages, the educational context, the goals for the new language use, prior literacy skills, and the relationship between the new language and other languages in students' repertoires.

Multilinguals use information from all of their linguistic resources to interact socially and garner information from the world. Because emergent bilinguals are in the process of learning a new language at school, assessments that are administered must take into account the inherent limitations on gathering accurate data

on this population. We shared a set of helpful ethical principles gleaned from the research to guide the work of educators as they use assessments with emergent bilinguals. These guidelines aim to generate assessments that focus on students' assets, that show what students *can* do, that do not limit students' opportunities, and that examine the complexity of students' multilingual knowledge. In the next chapter we share the different types of and purposes for literacy assessments that are used for instructional decision making in schools and connect them to effective practices for emergent bilinguals.