Research Summary:

Language and Literacy Development in Spanish (SPAN) Domain in the DRDP-K (2015) and KIDS (2015) Kindergarten Assessment Instruments

The SPAN measures are presented as a set of developmental continua, focusing on qualitative differences in development that are observable in the context of a kindergarten class. The measures draw from research on young Spanish-English bilingual children in the United States as well as young monolingual Spanish-speaking children in Spain and the Americas.

SPAN 1: Language Comprehension in Spanish (Receptive)

The language comprehension in Spanish (receptive) measure focuses on the child's understanding of language used in conversation and in narratives. Developmentally, children initially respond to vocabulary words and phrases in simple interactions with others in the context of routines and activities. As children are exposed to sequences of events, they develop an understanding of events that are temporally related (e.g., what happens when they go to the store) and respond to questions and follow directions in the classroom. Learning about causes and consequences and about the use of language to communicate feelings and intentions increases their comprehension of stories. As noted by Van den Broek et al. (2005), understanding "is not a unitary phenomenon but rather a family of skills and activities" (p. 28). These skills are directly related to future success in reading comprehension during the school years (Kendeou, Van den Broek, White, & Lynch, 2007; Perfetti, 2007).

The progression starts with the comprehension of simple requests, comments, or questions within the school environment and continues with understanding two- to three-step instructions and sentences or phrases that communicate two or more ideas. These skills are necessary for understanding school routines and scripts (V. F. Gutiérrez-Clellen, 2012, personal communication). The understanding of temporal sequence is followed by the understanding of words related to spatial concepts, given their importance at this stage in cognitive development (Simms & Gentner, 2008). At the next developmental level, the focus is the understanding of words that refer to causal relationships (Flores d'Arcais, 1978; Trabasso, Secco, & Van den Broek, 1984), as the main way to establish connections between different events (Grasesser, Singer, & Trabasso, 1994). Also, this level addresses the understanding and integration of feelings and intentions to come to a coherent understanding of the dynamics of a story or sequence of events (Astington, 1990; De Villiers, 2007). The last level describes the further elaboration on the different meanings of words and phrases that may vary across contexts or the intentions of the speaker.

SPAN 2: Language Production in Spanish (Expressive)

This measure evaluates the child's ability to use increasingly complex language to communicate. The measure addresses the integration of form (sentence structure and grammar), content (semantics and vocabulary), and use (pragmatics and discourse). At the beginning of the progression, the child uses simple phrases to express needs, interests, and experiences; these phrases may show some grammatical

errors. As the child progresses to the next level, the child expands the length of his or her utterances using multi-word sentences; these phrases or sentences show minimal or no errors. Then, at the next level the child uses a variety of sentences to communicate and describe a sequence of events. The child communicates the needs, feelings, and experiences of others at the following level. This information is then used to indicate causes, consequences, goals, and opinions at the last level of the progression.

Similar to the other measures, this developmental progression presumes that the child is exposed to a rich Spanish learning environment. If the quality and intensity of Spanish input change, the child may not continue to progress from one level to the next. Also, children who prefer to use English or who do not use Spanish regularly are likely to show limited Spanish development.

SPAN 3: Phonological Awareness in Spanish

The phonological awareness measure was developed based on our review of the available research studies that focus on Spanish-speaking dual language learners in the United States as well as studies conducted with monolingual Spanish-speaking children in other countries. This research shows that both Spanish and English follow a similar developmental progression, from word to syllable to individual sound awareness (Carrillo, 1994; Cisnero & Royer, 1995; Denton, Hasbrouck, Weaver, & Riccio, 2000; Durgunoglu, Nagy, & Hancin-Bhatt, 1993; Goikoetxea, 2005; Gorman & Gillam, 2003; Jimenez Gonzalez, 1992; Jimenez Gonzalez & Haro Garcia, 1995; Jimenez Gonzalez & Ortiz, 1993), and a strong correlation between phonological awareness and literacy acquisition within and across the two languages (Farver, Lonigan, & Eppe, 2009).

The rate and pattern of phonological awareness development in Spanish-speaking children is influenced by its linguistic, phonological, and orthographic system (Gorman & Gillam, 2003). In Spanish, children develop spelling skills early, even before they can read (Manrique & Signorini, 1994), due to the fact that the language is considered to have a transparent orthography. Spanish differs from English in rhyming patterns and intrasyllabic awareness. For example, Spanish presents a consistent syllabic structure (CV syllable prevalence) and most content words in Spanish are multisyllabic. Unlike English, Spanish consonant clusters are not common, and the onset-rime unit characteristic of English (e.g., *h-ot, n-ot*) does not have a significant role in Spanish early literacy development (Jimenez Gonzalez & Haro Garcia, 1995; Jimenez Gonzalez et al., 2000).

As children develop phonological awareness in Spanish, the developmental progression addressed by this measure moves from the awareness of large units of words within phrases or sentences, to syllables, and then individual sounds within a syllable.

SPAN 4: Emergent Writing in Spanish

Young Spanish-speaking children gradually immerse themselves in experiencing the written system by slowly integrating language conventions and meaning (Ferreiro & Teberoski, 1982). This measure describes how the symbolic representations usually begin with drawing, followed by some

form of representation that resembles writing (e.g., strings, zigzag lines) or letters (conventional or invented), then specific approximations to conventional writing focused on individual syllable units (e.g., representing a syllable with one letter and later addressing more sounds within a syllable) until the child reaches the alphabetic stage, when most sounds are represented by a letter. While this progression represents emergent writing, the rate and pattern of development vary significantly by each individual child. Spanish-speaking children demonstrate syllabic awareness in their writing dispositions in the early stages and gradually discover that each syllable includes a variety of sounds. Emerging research with dual language learners in the United States suggests that, when focusing on syllabic units for written representation (whether using letters from own name or an extended repertoire that includes consonants and vowels), dual language learners tend to incorporate consonants (Rubin & Galvan Carlan, 2005). This is in contrast to monolingual Spanish-speaking children in Spanish-speaking countries who early on tend to represent syllables only with vowels. Children's development is also influenced by their own interests, adult support, early language and literacy curriculum, environmental print, and level of instructional emphasis on emergent writing (Meier, 2011).

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