

FASTfact: Spanish Benchmark and Norms

As defined in the in the *FastBridge Learning Benchmarks and Norms Interpretation Guide* (2016), standards of performance require the use of both data analysis and expert judgment. In general, FAST™ benchmarks predict proficiency on nationally normed assessments and state-level accountability tests. There is substantial variability in the definition of *proficiency* across states, so the default expectation of proficiency on most FAST™ measures approximates the 40th percentile. The high-risk benchmark approximates the 15th percentile. State-specific custom benchmarks can be developed at the request of users. Users may also develop and customize their own benchmarks.

The norms and benchmarks on Spanish measures have been more difficult to develop and refine, in part, because performance in Spanish does not predict performance on English accountability tests. As a result, developers used performance on a nationally normed measure of broad reading in Spanish along with the expert input of researchers and native Spanish speaking teachers.

Materials and Benchmarks

The initial materials and benchmarks for assessment in Spanish were developed at the University of Minnesota in 2013 and 2014. The research and development team included Dr. Theodore Christ, Dr. Lori Helman¹, native Spanish-speaking teachers from English-to-Spanish immersion settings, and Spanish-speaking doctoral students. The materials are not translations of the English assessments. Instead, they were originally developed as Spanish measures with specifications that were substantially similar to the English materials whenever appropriate.

Validation and benchmark studies were established with the *Aprenda-3* (Pearson, 2005). These studies were conducted to determine what level of reading automaticity in Spanish predicts success on broader Spanish measures that include vocabulary and reading comprehension. The *Aprenda-3* is a culturally inclusive, group-administered, standardized test developed by Hispanic educators who modeled it on the Stanford Achievement Test-10 (Pearson, 2005). It test was normed on Spanish-speaking students from the United States, Mexico, and Puerto Rico in spring and fall of 2004. Criterion validity ranged from about .40-to-.75 across measures. The Spanish *CBMreading*™ and *earlyReading*™ composites generally met the highest standards of the [National Center for Response to Intervention](#) for both diagnostic accuracy and criterion validity.

The initial results for *earlyReading*™ *Spanish* indicated a mid-year composite of 48, which corresponded with 15 Letter Sounds, 13 Onset Sounds, 10 Syllables, and 18 Word Segments. The initial results for *CBMreading*™ *Spanish* indicated mid-to-late year standards of 100, 106, 107, 132, and 134 for grades first-to-fifth respectively. Those standards predicted proficiency at the 40th percentile of international norms for native Spanish-speaking students on the *Aprenda-3*. As with *CBMreading*™ *English*, FAST *CBMreading*™ *Spanish* benchmarks are higher those for other passage-sets. This is because of the specifications used for passage development.

FAST™ oral reading passages were written with lower text complexity compared to other passage-sets. This optimizes the validity of automaticity/fluency scores. More-skilled readers tend to slow down as text complexity increases while less-skilled readers, who do not monitor their comprehension, do not slow down. That confounds the measurement of passage reading automaticity/fluency because lesser-skilled readers over-perform and more-skilled readers under-perform. That is why (a) passages were constructed with less text complexity, (b) students read more words per minute on FAST™ passages, and (c) benchmarks tend to be higher for FAST *CBMreading*™.

Automatic Passage Reading

Automatic passage reading is a foundational skill, which is necessary—but not sufficient—for comprehension to occur during reading. This widely used and well-established fact is founded in substantially convergent theories and evidence, which include the Simple View of Reading (Savage, 2001), Information Processing Model (Palmer et al., 1985), Automaticity Theory (LaBerge & Samuels, 1974), and Unitization Theory (Ehri, 2005). This applies to *both* English and Spanish reading.

Here is why. It is typically necessary to automate the lower-level skill of word identification before higher-order comprehension skills are established and consistent (LaBerge & Samuels, 1975). The reason for this is that humans have restricted cognitive capacity. We can hold about six units of information in working memory, and that information degrades very quickly. As a result, readers can focus on the meaning of a passage only if decoding and word identification processes are automatic. As text complexity increases, comprehension processes require more working memory. Once automatized, word identification uses little-to-no working memory, which frees it for use to monitor, integrate, and store the meaning of text with other background knowledge.

The limits of working memory have a direct and immediate implication on benchmarks. They are set as progressive target-levels of automatic passage reading to enable comprehension. Although automaticity often reaches 200-to-250 words correct per minute among literate adults, the initial goal is to achieve 150-to-200 words read correct per minute by the spring of fourth grade. That seems to be the transition point from “learning to read” to “reading to learn.”

For students learning to read in Spanish, the fluency-comprehension association may be more complex. Word identification in Spanish is easier to achieve (and thus less taxing on working memory due to fewer sounds and a very consistent phonics pattern), while at the same time native Spanish speaking ELLs may have relatively weak Spanish oral language skills. (Mancilla-Martinez, & Lesaux, 2011).

Alignment of English and Spanish Passage Reading Benchmarks

The limits of working memory and benefits of automaticity function similarly for both English and Spanish reading. As of fall 2015, the *FastBridge*TM research and development team began to adjust the FASTTM Spanish benchmarks to align better with the English standards. This process was completed for *CBMreading*TM in 2016. As of 2016, review and analysis was ongoing to consider further alignment of *earlyReading*TM Spanish benchmarks with English, which set higher expectations for achievement.

Spanish Benchmarks are Distinct from Spanish Norms. As described in this document, the typical use of the term “benchmark” indicates broad reading proficiency among native Spanish speakers and the developmental progress toward requisite levels of automatic passage reading. The Spanish benchmarks do not align with the Spanish norms.

The majority of students assessed with FastBridge Learning’s Spanish materials are native English speakers in English-to-Spanish immersion settings. The norms are not indicative of native Spanish-speakers. For this reason, the FASTTM Spanish benchmarks do not align with the 15th and 40th percentiles of *FastBridge*TM student norms.

District or school managers who prefer alternate benchmarks can *customize* their benchmarks. For example, they may use the scores at 15th and 40th percentiles from FASTTM norms. This would align the norms and benchmarks to the typical performance of (mostly) native English-speaking students in English-to-Spanish immersion settings. The *FastBridge*TM research and development team believes those benchmark standards are too low if the goal is Spanish-reading proficiency.

References

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