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## Initial Norms for the easyCBM® Spanish Language Vocabulary Assessments

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#### Abstract

This technical brief describes the easyCBM® Spanish language Vocabulary assessments added to the easyCBM® system in the fall of 2018 and provides the initial norms for the fall and winter assessments. These norms should be interpreted with caution, as the sample was smaller than ideal, particularly for the Winter norms.


Initial Norms for the easyCBM® Spanish Language Vocabulary Assessments
The easyCBM® Spanish Language Vocabulary Assessments were initially written by a team of native Spanish speaking educators working closely with assessment developers from the University of Oregon in the summer and fall of 2016. The item writers were teachers and paraprofessionals, all of whom had grown up in Spanish-speaking households and were at the time employed by a school district to provide instruction to Spanish-speaking and bilingual students. All item writers had experience working with students enrolled in the grade ranges for which they wrote items (e.g., educators with experience teaching elementary grade students contributed items for grades 2-5 while educators with experience teaching middle school students contributed items for grades 6-8).

Prior to beginning their work on this project, item writers met with the author of this technical brief for a four-hour workshop to receive training on item writing. The training included ways to reduce bias in items, the need to use words and phrases that would be readily understood by Spanish speakers from different countries and regions (consciously avoiding regional dialects and contextual features that might make items differentially accessible to students from different backgrounds). In addition, the training covered the need to write original items rather than translating existing English language items. Item writers were instructed to create an item stem (a sentence where the meaning of the selected vocabulary word could be interpreted from its use in the sentence) and three possible answer choices: the correct word or phrase, a near distractor, and a far distractor.

Item writers were organized into small teams of two to three educators per grade band (grades 2-3, grades 4-5, grades 6-8). Teams were overseen by another educator in the district hired for this project as Lead Item Developer. The Lead Item Developer was a native Spanish
speaking teacher who had grown up in South America, where she earned a Master's degree in Spanish literature prior to moving to the United States and becoming a teacher. She had extensive experience in both elementary and middle school teaching in Spanish language immersion and transitional bilingual programs and had previously worked as the Lead Translator providing Spanish language translations for all of the easyCBM® mathematics items.

Once the Spanish Vocabulary Items were written and reviewed by both the Lead Item Developer and the lead author on this paper (who has overseen the development of all previously-published easyCBM® assessments), items were piloted online in School Years 2017 and 2018. The results of the item piloting were analyzed using Item Response Theory (IRT) in the spring of 2018. IRT results were used to create 13 comparable alternate forms of the tests at each of grades $2-8$. Three of these forms were designated for use and Benchmark Screening Assessments, with the remaining ten retained for use as progress monitoring measures. Both Benchmark Screening and Progress Monitoring Assessments were added to the easyCBM® system in August of 2018 and were publicly available for the first time in the Fall of 2018. Data gathered during their first year of use were used to calculate the initial norms, reported in this technical brief. Because these data represent a convenience sample and because the sample, particularly for the Winter Benchmark Assessments, was quite small, caution is warranted in interpreting these results. A more comprehensive analysis of student performance will be conducted as more data become available. Data from all students who had taken the Fall 2018 and Winter 2018 Benchmark Assessments were included. The easyCBM system constrains benchmark assessment to on-grade administration only; thus, the initial norm samples include only on-grade students whose districts administered the Spanish Language Vocabulary assessments to them during the Fall and Winter Benchmark Assessment windows set by the
districts (generally August/September for the Fall assessments and November/December for the Winter assessments).

Students in the sample were attending districts in the following states: Alabama,
California, Georgia, Idaho, Iowa, Illinois, Kentucky, Maryland, New Jersey, Ohio, Oregon,
Pennsylvania, South Carolina, Tennessee, Texas, Washington, West Virginia, Wisconsin, and Wyoming. Demographics of the sample are provided in Table 1.

Table 1
Sample Demographics, by Grade, for Fall and Winter Benchmark Spanish Vocabulary Tests

|  | Gr. 2 |  | Gr. 3 |  | Gr. 4 |  | Gr. 5 |  | Gr. 6 |  | Gr. 7 |  | Gr. 8 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F | W | F | W | F | W | F | W | F | W | F | W | F | W |
| Male | 411 | 24 | 377 | 55 | 321 | 50 | 284 | 34 | 138 | 27 | 131 | 24 | 143 | 26 |
| Female | 435 | 23 | 398 | 50 | 326 | 38 | 274 | 28 | 119 | 19 | 87 | 9 | 108 | 11 |
| Hispanic | 586 | 16 | 520 | 65 | 436 | 57 | 369 | 23 | 120 | 25 | 96 | 14 | 95 | 7 |
| Not Hispanic | 256 | 29 | 244 | 40 | 205 | 30 | 187 | 39 | 134 | 20 | 122 | 18 | 155 | 29 |
| Unknown | 5 | 2 | 6 | 1 | 4 | 1 | 2 | 1 | 3 | 0 | 0 | 0 | 0 | 1 |
| American Indian/Alaskan Native | 49 | 1 | 32 | 10 | 25 | 20 | 27 | 5 | 17 | 3 | 23 | 4 | 20 | 0 |
| Asian | 6 | 1 | 16 | 7 | 11 | 0 | 5 | 1 | 1 | 0 | 1 | 0 | 2 | 0 |
| Black/African American | 57 | 16 | 31 | 20 | 28 | 6 | 35 | 14 | 24 | 10 | 19 | 1 | 48 | 16 |
| Native <br> Hawaiian or Other Pacific Islander | 8 | 0 | 6 | 2 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| Two or More Races | 16 | 0 | 21 | 5 | 20 | 14 | 10 | 2 | 17 | 2 | 11 | 1 | 16 | 3 |
| White | 685 | 27 | 646 | 61 | 525 | 46 | 471 | 39 | 164 | 31 | 138 | 27 | 141 | 18 |
| SpEd | 60 | 4 | 92 | 16 | 91 | 11 | 90 | 14 | 62 | 20 | 58 | 11 | 106 | 27 |
| EL | 494 | 14 | 441 | 61 | 295 | 57 | 226 | 22 | 72 | 23 | 61 | 19 | 62 | 8 |

## Results

The following tables present the percentile ranks associated with each possible raw score for the Fall and Winter Benchmark assessment periods. Table 2 presents the percentile ranks for Grade 2 students.

Table 2
Grade 2 Spanish Vocabulary Benchmark Assessments

| Raw Score | Fall | Winter | Spring |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 4 | TBA |
| 1 | 5 | 15 | TBA |
| 2 | 15 | 43 | TBA |
| 3 | 25 | 64 | TBA |
| 4 | 38 | 81 | TBA |
| 5 | 51 | 87 | TBA |
| 6 | 62 | 96 | TBA |
| 7 | 73 | 98 | TBA |
| 8 | 82 | 99 | TBA |
| 9 | 91 | 99 | TBA |
| 10 | 98 | 99 | TBA |
| 11 | 99 | 99 | TBA |

Table 3 presents the percentile ranks for Grade 3 students.
Table 3
Grade 3 Spanish Vocabulary Benchmark Assessments

| Raw Score | Fall | Winter | Spring |
| :---: | :---: | :---: | :---: |
| 0 | 5 | -- | TBA |
| 1 | 15 | 6 | TBA |
| 2 | 29 | 25 | TBA |
| 3 | 47 | 42 | TBA |
| 4 | 63 | 59 | TBA |
| 5 | 75 | 73 | TBA |
| 6 | 83 | 83 | TBA |
| 7 | 90 | 91 | TBA |
| 8 | 96 | 93 | TBA |
| 9 | 99 | 96 | TBA |
| 10 | 99 | 99 | TBA |
| 11 | 99 | 99 | TBA |

Table 4 presents the percentile ranks for Grade 4 students.
Table 4
Grade 4 Spanish Vocabulary Benchmark Assessments

| Raw Score | Fall | Winter | Spring |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 3 | TBA |
| 1 | 7 | 12 | TBA |
| 2 | 13 | 19 | TBA |
| 3 | 24 | 32 | TBA |
| 4 | 37 | 40 | TBA |
| 5 | 51 | 55 | TBA |
| 6 | 64 | 61 | TBA |
| 7 | 75 | 70 | TBA |
| 8 | 86 | 82 | TBA |
| 9 | 94 | 94 | TBA |
| 10 | 99 | 99 | TBA |
| 11 | 99 | 99 | TBA |

Table 5 presents the percentile ranks for Grade 5 students.
Table 5
Grade 5 Spanish Vocabulary Benchmark Assessments

| Raw Score | Fall | Winter | Spring |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 5 | TBA |
| 1 | 8 | 18 | TBA |
| 2 | 22 | 25 | TBA |
| 3 | 41 | 54 | TBA |
| 4 | 59 | 65 | TBA |
| 5 | 76 | 80 | TBA |
| 6 | 86 | 94 | TBA |
| 7 | 94 | 97 | TBA |
| 8 | 96 | 98 | TBA |
| 9 | 98 | 99 | TBA |
| 10 | 99 | 99 | TBA |
| 11 | 99 | 99 | TBA |

Table 6 presents the percentile ranks for Grade 6 students.

Table 6
Grade 6 Spanish Vocabulary Benchmark Assessments

| Raw Score | Fall | Winter | Spring |
| :---: | :---: | :---: | :---: |
| 0 | 2 | $<1$ | TBA |
| 1 | 7 | 4 | TBA |
| 2 | 13 | 15 | TBA |
| 3 | 22 | 28 | TBA |
| 4 | 34 | 63 | TBA |
| 5 | 42 | 74 | TBA |
| 6 | 51 | 89 | TBA |
| 7 | 63 | 91 | TBA |
| 8 | 74 | 94 | TBA |
| 9 | 83 | 96 | TBA |
| 10 | 94 | 98 | TBA |
| 11 | 99 | 99 | TBA |

Table 7 presents the percentile ranks for Grade 7 students.
Table 7
Grade 7 Spanish Vocabulary Benchmark Assessments

| Raw Score | Fall | Winter | Spring |
| :---: | :---: | :---: | :---: |
| 0 | 2 | $<1$ | TBA |
| 1 | 6 | 30 | TBA |
| 2 | 15 | 48 | TBA |
| 3 | 30 | 49 | TBA |
| 4 | 46 | 76 | TBA |
| 5 | 62 | 82 | TBA |
| 6 | 74 | 88 | TBA |
| 7 | 85 | 91 | TBA |
| 8 | 95 | 97 | TBA |
| 9 | 97 | 99 | TBA |
| 10 | 99 | 99 | TBA |
| 11 | 99 | 99 | TBA |

Table 8 presents the percentile ranks for Grade 8 students.
Table 8
Grade 8 Spanish Vocabulary Benchmark Assessments

| Raw Score | Fall | Winter | Spring |
| :---: | :---: | :---: | :---: |
| 0 | $<1$ | 5 | TBA |
| 1 | 9 | 27 | TBA |
| 2 | 17 | 43 | TBA |
| 3 | 30 | 51 | TBA |
| 4 | 42 | 73 | TBA |
| 5 | 55 | 87 | TBA |
| 6 | 64 | 92 | TBA |
| 7 | 71 | 97 | TBA |
| 8 | 80 | 99 | TBA |
| 9 | 90 | 99 | TBA |
| 10 | 99 | 99 | TBA |
| 11 | 99 | TBA |  |

## Conclusion

These initial norms can provide some guidance in interpreting student performance on the easyCBM® Spanish language Vocabulary measures, but additional studies with much larger samples are needed before these results should be used to make significant decisions that might impact student instruction. Until such additional studies become available, educators are encouraged to use data from other sources, such as classroom assessments and observations, to supplement the information provided by these assessments.

