

Cognia Student Engagement Survey: Reading Level Analysis

COGNIA



Reading Level Analysis

Methodology

The Cognia™ Student Engagement Survey measures three domains (behavioral, cognitive, and emotional) with seven items per domain. Each survey item's stem and corresponding responses were grouped and analyzed together to determine the reading level for that item. Text complexity was evaluated using Lexile Scale Scores and Flesch-Kincaid Grade Level. The following MetaMetrics® guidelines were used to interpret the Lexile Scale Scores by grade level.

Grade	Lexile Band (Beginning of Year to End of Year)
K	BR40L-230L
1	190L-530L
2	420L-650L
3	740L-940L
4	830L-1010L
5	925L-1070L
6	970L-1070L

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Conclusion

All items in each of the Student Engagement Survey (elementary, middle, and high school) fell within the appropriate difficulty measures by grade bands (i.e., 3-5, 6-8, and 9-12) for both metrics. The middle and high school items increased in reading difficulty slightly compared to the elementary items. The charts below provide a more detailed examination of the item analysis by grade level and item number.



Elementary School Student Engagement Survey (Grades 3–5)

The Lexile Scales Scores indicated all items on the elementary survey had a score of 600L or less, indicating each item was written at a second-grade or lower reading level. The Flesch-Kincaid Grade Level measure indicated the survey items ranged from grades 0.6 to 4.5. Using this measure, 14 of the 21 items were identified at reading levels lower than third grade. Six items were identified within the third-grade readability span and one item within the fourth-grade readability span.

The one item identified at the fourth-grade level using the Flesch-Kincaid Grade Level measure used the word *activity*, which Flesch-Kincaid identified at a tenth-grade readability level. The decision was made to keep the word *activity* in this item because K–12 learners in the United States would be more familiar with this word compared to alternative synonymous, such as events, occurrences, and actions. Please note this item earned a readability level of first grade on the Lexile Scale Scores.

Elementary Survey Items Frequency Distribution by Lexile Scale Scores

Survey Item	SS*	Lexile Grade Band	Frequency (Pct.)
2, 3, 12, 13, 17, 20	10L–200L	K–1	6 (29%)
1, 4, 5, 6, 7, 8, 9, 11, 10, 14, 16, 18, 19, 21	210L–400L	K–1	14 (67%)
15	410L–600L	1–2	1 (5%)

*Scale Score

Elementary Survey Items Frequency Distribution by Flesch-Kincaid Grade Level

Survey Item	Grade	Month	Frequency (Pct.)
7, 8	K (0)*	6, 6	2 (10%)
9, 13, 16, 21	1	2, 3, 3, 8	4 (19%)
3, 5, 6, 10, 14, 11, 17, 18	2	0, 0, 0, 3, 5, 5, 5, 8	8 (38%)
1, 2, 4, 9, 12, 15	3	0, 4, 6, 7, 7, 9	6 (29%)
20	4	5	1 (5%)

*Key: 1 | 2 = 1.2 (1st grade 2nd month)



Middle School Student Engagement Survey (Grades 6–8)

All items on the middle school survey earned a Lexile Scale Score of 600L or less, indicating these items were at a second-grade or lower reading level. The Flesch-Kincaid Grade Level measure indicated the survey items ranged from grades 0.9 to 5.8. All items were identified at readability levels lower than sixth grade.

Items in the middle school survey are arranged similarly to items in the elementary school survey (i.e., behavioral, cognitive, and emotional). Survey items are comparable but incorporate language more appropriate to the experiences of middle-school students. As such, the reading levels for these items were slightly more difficult than the elementary survey items.

Middle School Survey Items Frequency Distribution by Lexile Scale Scores

Survey Item	SS*	Lexile Grade Band	Frequency (Pct.)
12	10L–200L	K–1	1 (5%)
2, 3, 4, 5, 7, 8, 11, 13, 18, 19, 20, 21	210L–400L	K–1	12 (57%)
1, 6, 9, 10, 14, 15, 16, 17	410L–600L	1–2	8 (38%)

*Scale Score

Middle School Survey Items Frequency Distribution by Flesch-Kincaid Grade Level

Survey Item	Grade	Month	Frequency (Pct.)
7	K (0)*	9	1 (5%)
-	1	-	0 (0%)
16, 21	2	4, 4	2 (10%)
5, 8, 9, 12, 13, 18, 19	3	0, 1, 1, 3, 4, 8, 9	7 (33%)
1, 2, 3, 6, 10, 11, 15	4	0, 0, 0, 4, 4, 4, 4	7 (33%)
4, 14, 17, 20	5	1, 6, 8, 8	4 (19%)

*Key: 1 | 2 = 1.2 (1st grade 2nd month)



High School Student Engagement Survey (Grades 9–12)

Because high school students have different experiences than elementary or middle school students, the item stems and response options were written to reflect the increasing levels of students' maturity. However, items were not written with the intent of being more difficult simply for the sake of textual difficulty. As such, these items' reading levels were marginally more difficult than the elementary or middle school items.

However, all items on the high school survey earned a Lexile Scale Score of 810L or less, indicating each item was written at a third-grade or lower readability level. The Flesch-Kincaid Grade Level measure indicated these items ranged from grades 2.4 to 7.0. All items were identified at readability levels lower than eighth grade.

High School Survey Items Frequency Distribution by Lexile Scale Scores

Survey Item	SS*	Lexile Grade Band	Frequency (Pct.)
2, 3, 5, 7, 10, 12, 13, 18, 19, 20, 21	210L–400L	K–1	11 (52%)
1, 4, 9, 11, 14, 15, 16, 17	410L–600L	1–2	8 (38%)
6, 8	610L–810L	2–3	2 (10%)

*Scale Score

High School Survey Items Frequency Distribution by Flesch-Kincaid Grade Level

Survey Item	Grade	Month	Frequency (Pct.)
7, 16, 18, 21	2*	4, 4, 9, 9	4 (19%)
5, 13, 19	3	1, 3, 8	3 (14%)
1, 3, 9, 15	4	0, 1, 1, 4	4 (19%)
2, 4, 10, 11, 20	5	1, 3, 6, 8, 8	5 (24%)
8, 12, 14, 17	6	2, 2, 4, 5	4 (19%)
6	7	0	1 (5%)

*Key: 1 | 2 = 1.2 (1st grade 2nd month)



