Cognia eProve Student Engagement Survey: Reading Level Analysis
Reading Level Analysis

Methodology
The eProve Student Engagement Survey measures three domains (behavioral, cognitive, and emotional) using a range of five to 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. In all cases, text complexity was calculated based on Lexile scores and the measure from ETS's TextEvaluator.

Conclusion
All items in each grade band survey fall within the appropriate difficulty measures by grade bands (i.e., 3–5, 6–8 and 9–12) for both metrics. The charts below provide a more detailed examination of the item analysis by grade band and item number.

Elementary School Student Engagement Survey (Grades 3–5)

Note: There is no missing value for Item 3. The baseline of the x-axis indicates a kindergarten/basic grade-level score.
Note: A subsequent analysis of Item 4 considered the stem and each survey response separately. This revealed that the reading levels were considered beginning reader for a kindergartner with the exception of one survey response, which is believed to be the cause of the discrepancy in the reading levels observed between the Lexile grade range and the text complexity grade.
Middle School Student Engagement Survey (Grades 6–8)

Items in the middle school survey are arranged similarly to the elementary school survey (i.e., behavioral, cognitive, and emotional). Survey items are comparable but incorporate language more appropriate to the experience of a middle school student.

Note: Scores found to be below grade level were still deemed appropriate based on qualitative inspection. Item 2 was disaggregated by question stem and response, revealing Lexile scores that ranged from seventh grade to beginning reader, leading to the inconsistencies between the Lexile grade range and the text complexity grade to this factor.

Note: Analyses of items in this domain revealed wider discrepancies than those for the other domains. However, none of the items exceeded the grade levels that correspond to the survey (i.e., 6, 7, and 8).
Note: A closer examination of Item 3 shows the Lexile scores for the stem and responses are within the range of 700L to 800L, the fourth and fifth grade range. TextEvaluator places the grade as below target grade 3. Given the range of grades, it is difficult to evaluate the exact grade for which this question is appropriate, but it has been concluded that a middle school student should be able to answer the question without difficulty.
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 are written to reflect the increasing levels of students’ maturity. However, items are not written with the intent of being more difficult simply for the sake of textual difficulty. As such, item analyses may not appear substantively different from those for the middle school survey.

Note: The 900L to 1000L Lexile score for Item 3 can be categorized anywhere between grades 4 to 8. These scores can be difficult to interpret as a grade-level standard due to its representation of a norm group’s median score. However, all interpretations still point to levels at which high school students should still be comfortable.
**Note:** Differences between text complexity and Lexile measures for items in the cognitive domain spanned a range of one to five grade levels. Due to this trend, the analysis was extended to include a third measure (Flesch-Kincaid) for added scrutiny. While no clear pattern emerged, for each item, there was consistency between at least two of the measures. Readability levels remain appropriate for most high school students.

**Note:** No clear explanation emerged regarding the difference of four grade levels for Item 5. However, both measures indicate the item is appropriate for a high school audience in terms of text difficulty.