

FAIR Reporting Questions

Relationship Between Assessments –

- “The Lexiles on FAIR seem way too elevated and out of whack with the other scores.” The following data shows the SRI Lexile from a class using Read 180 as well as the FAIR Lexiles. “These fifth grade students are reading below grade level, yet the FAIR Lexiles do not reflect this. When I look at school reports, the median Lexiles by grade level are way higher than any of the other data and I am wondering why.”

Student Name	SRI Lexile	FAIR Lexile
Joseph	260	730
Juliann	469	745
Nathaniel	553	635
Brianna	695	855
Faith	502	815
Pearl	594	800

As a practice it is always better to have multiple observations to understand a student’s true reading ability. In addition, all assessments—national norm-referenced tests, state-level criterion-referenced tests, interest inventories, diagnostic surveys—have some inherent measurement error. The source of the measurement error may be the test, the reader, or the interaction between the test and the reader.

Every test has some inherent measurement error related to the how the test questions are developed and calibrated, the number of questions that are asked, and how the construct is defined and measured (e.g., general reading ability, reading interpretation and comprehension). When looking at the Lexile measures of a student on two different tests, there are two major factors to keep in mind:

- First, the Lexile measure is a reflection of the underlying test. Even though Lexile measures are being reported for both tests, that doesn’t mean that the tests are identical. For example, some tests are designed to assess whether a student has learned enough to be promoted to the next grade, while other tests are designed to measure a broad range of ability levels, and still others are designed to measure the likelihood that a student will succeed in college. Each of these tests defines reading in a unique way.
- Second, a more concrete way of conceptualizing the variability of scores is the standard error of measurement (SEM), a number that is expressed in the same metric used to report the scores. Williamson (2004) presented a table that showed ranges of the SEM for selected reading tests, by grade. The SEMs ranged from 72L (72 Lexiles) to 153L. From psychometric theory, we know that we can be very (95 percent) confident that, with repeated testing, observed scores will fall in a band that is four SEMs wide. However, even for very reliable tests (e.g., SEM = 72L), this band might be large (i.e., 288L wide). For less reliable tests, we might expect to see observed score variation that exceeds 600L on retesting.

In addition, the reader always provides some level of measurement error, e.g. prior knowledge, health, and motivation. It is advisable to go back and review the testing experiences of these

students to better understand what is happening. As with any test, teacher judgment as to the validity of the testing session and the results should be reviewed. There are days when students are not in the mood to take a test and, therefore, do not take the test.

Because of these issues, MetaMetrics suggests that when different tests are used that report Lexile measures, to not focus on each score separately, but to combine scores from multiple tests into a better assessment of that student's "true" ability. Informally this can be done in several ways:

- Average the scores from tests given at approximately the same time (within the same week).
- Ask the student to read a selection at each Lexile level. Use the "five-finger test" to help the student determine what his/her "true" Lexile measure is.
- Determine which score is most consistent with other available information about the student (e.g., grades, student classwork).

Formally, results from multiple tests can be combined by using the Lexile Multiple Measures Calculator (go to www.lexile.com/tools). This tool combines the results from multiple tests by weighting each of the Lexile measures based on the reliabilities of the tests.

Over time, each student will build a "portfolio" of Lexile measures which enable students, parents, and teachers to develop a more comprehensive understanding of what a student's true reading ability level is, and how it's changing over time. In this context, an unexpectedly high or low score can be recognized as an anomaly, rather than a true reflection of that student's ability.