Assessment Literacy MAKING SENSE OF K-12 ASSESSMENT FOR LEARNING

Measurement Concepts Simplified

Educators need to be able to make meaning of the results so that they can quickly adjust instructional strategies. Below is a sample report that illustrates several of the measurement concepts an educator is likely to encounter on larger-scale assessments.

Annotated Assessment Report

Sample class report from an interim assessment. Names and data have been anonymized.

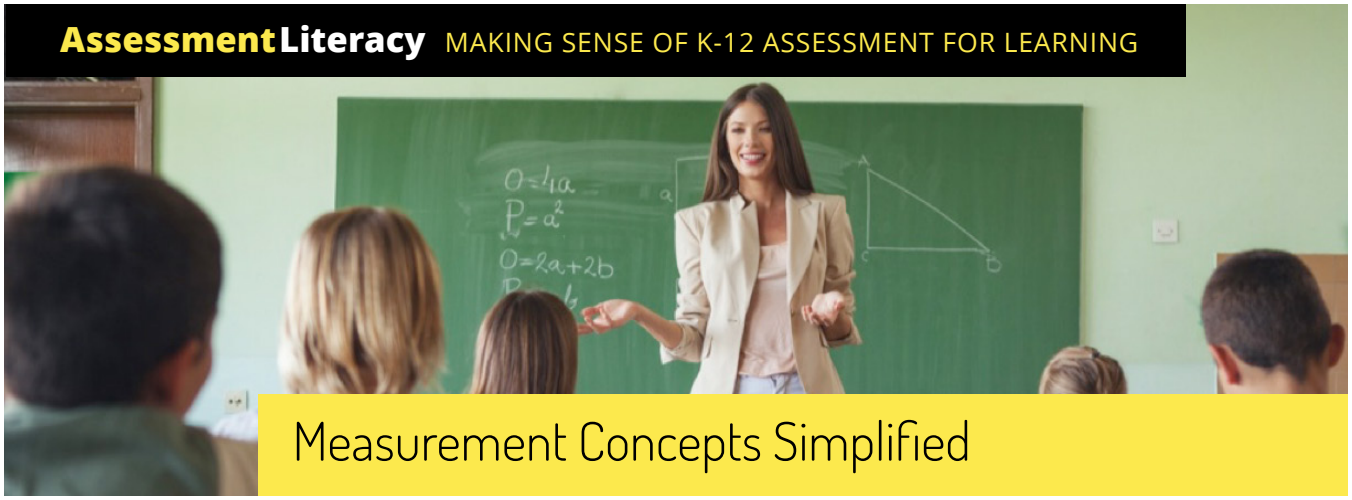
CLASS REPORT- **FALL 2014 READING TEST**

SCHOOL:	**Eastland Junior High**
CLASS:	**Jones Reading Period 3**
TEST:	**Reading Exam**

STUDENT NAME	GRADE	TEST DATE	1 SCORE	2 SEM	SCORE RANGE	3 PERCENTILE	PERCENTILE RANGE
ELIZABETH, M.	7	3/15/15	**207**	**3.3**	204-210	**27**	21-36
GARY, J.	7	3/15/15	**215**	**3.3**	212-218	**47**	39-56
COURTNEY, K.	7	3/15/15	**216**	**3.2**	213-219	**50**	42-62
JORIAN, M.	7	3/15/15	**216**	**3.2**	213-219	**50**	42-62
WALTER, D.	7	3/15/15	**220**	**3.6**	217-223	**62**	53-74
LAVONA, G.	7	3/15/15	**221**	**3.3**	218-224	**65**	56-76
ROBERT, W.	7	3/15/15	**222**	**3.2**	219-225	**68**	59-76
TABITHA, B.	7	3/15/15	**222**	**3.3**	219-225	**68**	59-76

	STUDENT COUNT:	**8**
4	**MEAN SCORE:**	**217.4**
5	**MEDIAN SCORE:**	**218**
6	**STANDARD DEVIATION:**	**5.1**

1. **SCORE** – the overall score for a student. Measurement scales can vary by assessment type and purpose, so scores will derive from the scale being used.
2. **SEM** – short for Standard Error of Measurement, this value is an estimate of a test's precision. The smaller the SEM, the more precise the measurement.
3. **PERCENTILE** – some tests will compare student scores with students from another group, such as a national "norm" sample. This value indicates how the student's score ranks relative to his or her peers.
4. **MEAN** – the average score of students within this class
5. **MEDIAN** – the middle score for this class of students
6. **STANDARD DEVIATION** – this value indicates the variability of the scores from this class of students. A higher standard deviation typically indicates a wider range of scores.



Measurement Concepts Simplified

Applying Data to Instruction

With all of the data available from assessment results, teachers may have information overload. Therefore, it is useful for teachers to understand how to apply the data to instructional strategies. Below are some examples of the ways that teachers use assessment data to inform decisions in the classroom.

SCORES

- Offer at-a-glance insight into the strengths and weaknesses of student learning. Best paired with other sources of information, such as classwork, additional assessments and communication to frame a complete picture of student understanding.
- Helpful when setting goals with students, monitoring student growth and learning patterns over the course of the year.

SEM

- A high SEM highlights how much confidence should be associated with a score. Useful for following up with students to discuss their results after an uncharacteristically low or high performance on an assessment.

PERCENTILES

- Useful to understand how students in a class are performing relative to their peers, particularly when setting goals with students, creating flexible groupings or evaluating program effectiveness.

MEAN AND MEDIAN

- Provides central points of reference when setting goals with students or reviewing performance of a group, whether a class, grade or larger sample.
- Valuable when comparing and organizing student assessment results to inform instructional groupings or programs.

STANDARD DEVIATION

- Can be useful when determining how diverse student performance is within a group. An important factor when determining why an average (mean) score is higher or lower for a group, and whether whole group or small group instruction might be more effective.