



Interpretation and Use of Scores and Achievement Levels

Achievement levels serve as a starting point for discussion about the performance of individual students and groups of students in mathematics and English language arts. There are other measures that students, teachers and parents can also use to help evaluate the academic progress of students and schools, such as scale scores, growth models, and portfolios of student work.

Scale scores are the basic units of reporting on all score reports. These scores, which fall along a continuous vertical scale (from approximately 2000 to 3000) that increases across grade levels, can be used to illustrate students' current level of achievement and their growth over time in a relatively fine-grained fashion. When aggregated, these scores can also describe school- or district-level changes in performance on the tests and can measure gaps in achievement among different groups of students.

Smarter Balanced has developed a set of initial, reporting **achievement level descriptors** (ALDs) for English language arts/Literacy and mathematics that are aligned with the Common Core State Standards and the Smarter Balanced assessment claims. The purpose of these descriptors is to specify, in content terms, the knowledge and skills that students display at four levels of achievement.¹

Level 4, Advanced:	The student has exceeded the achievement standard and demonstrates advanced progress toward mastery of the knowledge and skills needed in the content area tested.
Level 3, Proficient:	The student has met the achievement standard and demonstrates progress toward mastery of the knowledge and skills in the content area tested.
Level 2, Partially Proficient:	The student has nearly met the achievement standard and may require further development to demonstrate the knowledge and skills in the content area tested.
Level 1, Novice:	The student has not met the achievement standard and needs substantial improvement to demonstrate the knowledge and skills in the content area tested.

Defining these levels of achievement (“Achievement Levels”) is a reporting feature that is federally required under the No Child Left Behind Act, and one that has become familiar to many educators. However, characterizing a student’s achievement solely in terms of falling in

one of four categories is an oversimplification. Achievement Levels should serve only as a starting point for discussion about the performance of students and of groups of students.

That is, the Achievement Levels should not be interpreted as infallible predictors of students' futures. They must continuously be validated, and should be used only in the context of the multiple sources of information that we have about students and schools. Achievement level descriptors do not equate directly to expectations for "on-grade" performance; rather, they represent differing levels of performance for students within a grade level. Additionally, the Achievement Levels do not preclude or replace other methods of evaluating assessment results, including measures of year-to-year growth that use the underlying scale scores.

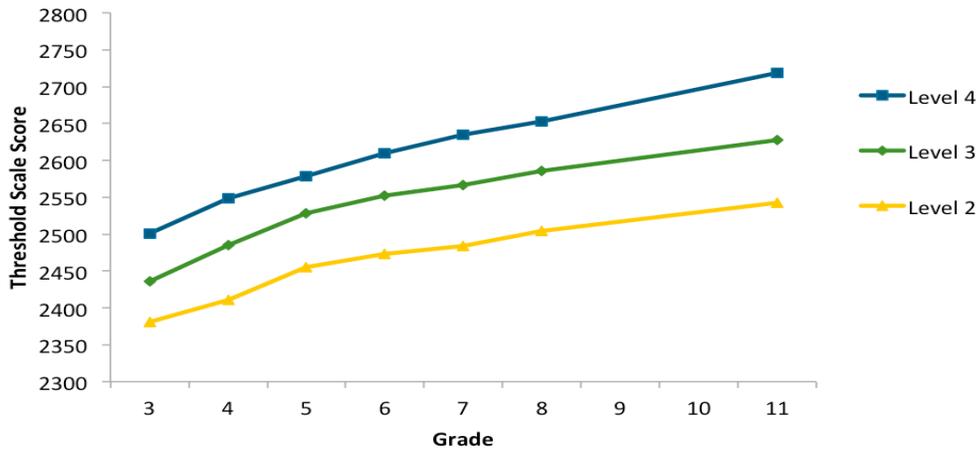
Although the Achievement Level Descriptors are intended to aid interpretation of Achievement Levels, they will be less precise than scale scores for describing student gains over time or changes in achievement gaps among groups, since they do not reveal changes of student scores within the bands defined by the achievement levels. Furthermore, there is not a critical shift in student knowledge or understanding that occurs at a single cut score point. Thus, the achievement levels should be understood as representing approximations of levels at which students demonstrate mastery of a set of concepts and skills, and the scale scores just above and below an achievement level as within a general band of performance.

As the North Dakota Department of Public Instruction considers these Achievement Levels, the department will continue to investigate and apply a variety of methods of analyzing and reporting the data that provide information to our students, parents and teachers, including but not limited to student and student subgroup averages, medians, and other descriptive statistics that utilize the underlying vertical scale.

Because the new North Dakota content standards set higher expectations for students and the new assessments are designed as a measure of student performance against those standards, there is an expectation that fewer students score at a level of proficiency as in previous administrations of the NDSA. There is expected to be a period of adjustment as teachers and students get accustomed to the new standards and assessment. It is important to note that lower proficiency rates do not mean that schools are performing worse or that students are learning less. Instead, the bar has been raised on performance expectations in order to adequately prepare our students for college and careers.

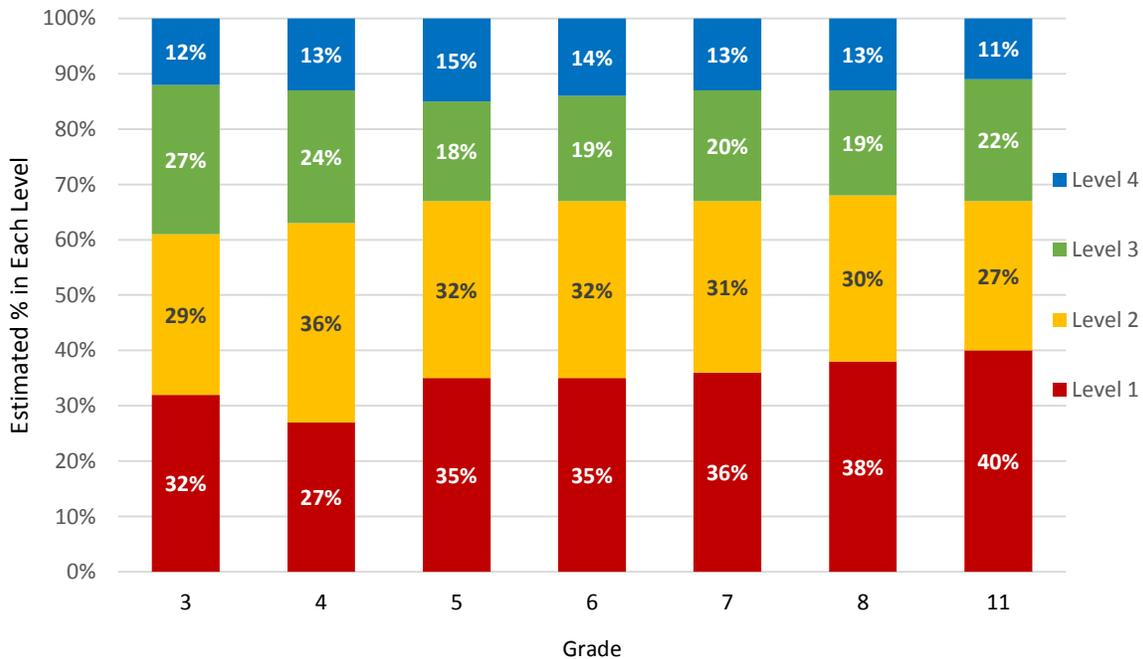
The following charts display the threshold scale scores (cut scores) that distinguish the four achievement levels and the initial anticipated percentages of students at each achievement level.

Mathematics: Threshold Scale Scores



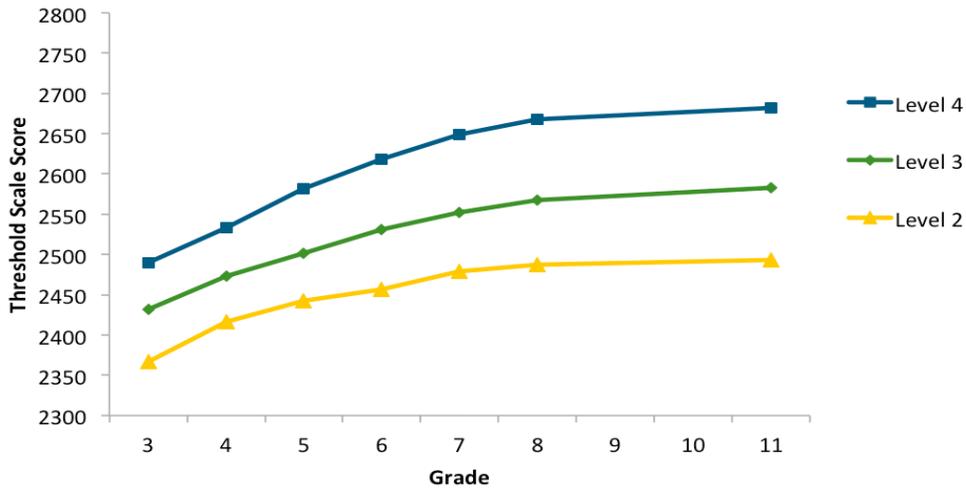
Mathematics: Threshold Scale Scores			
Grade	Level 2	Level 3	Level 4
3	2381	2436	2501
4	2411	2485	2549
5	2455	2528	2579
6	2473	2552	2610
7	2484	2567	2635
8	2504	2586	2653
11	2543	2628	2718

Mathematics: Estimated % of Students Scoring at Each Achievement Level



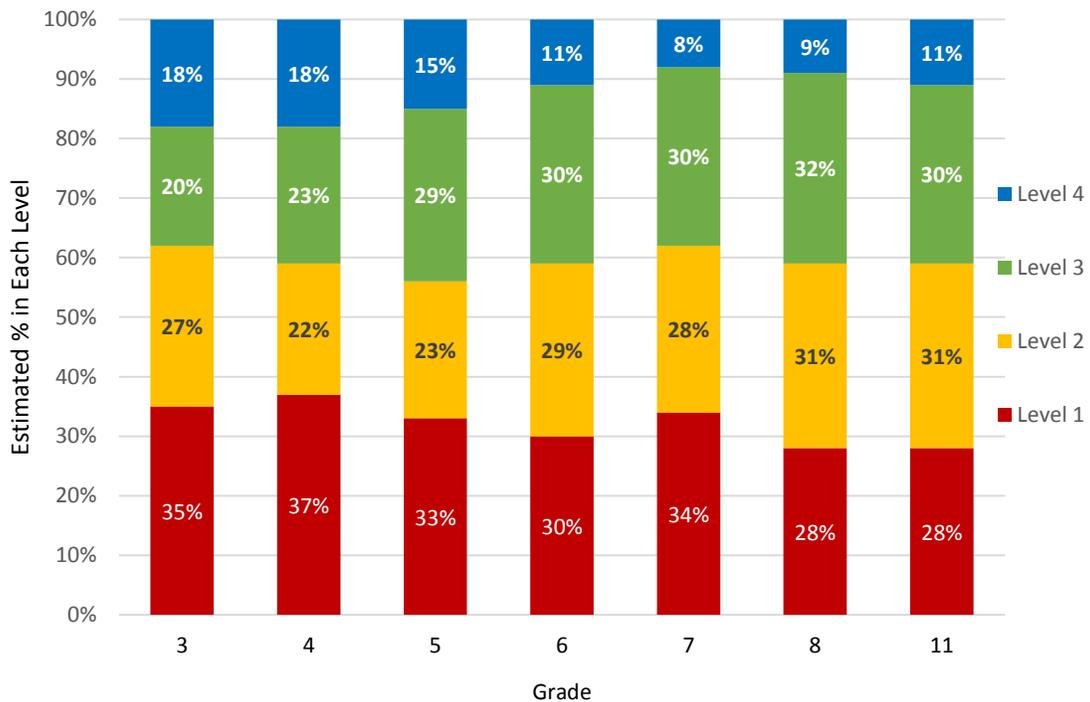
Estimated percentages based on impact data derived from the achievement level cut scores, determined by a national committee of educators

English Language Arts/Literacy: Threshold Scale Scores



English Language Arts/Literacy Threshold Scale Scores			
Grade	Level 2	Level 3	Level 4
3	2367	2432	2490
4	2416	2473	2533
5	2442	2502	2582
6	2457	2531	2618
7	2479	2552	2649
8	2487	2567	2668
11	2493	2583	2682

ELA: Estimated % of Students Scoring at Each Achievement Level



Estimated percentages based on impact data derived from the achievement level cut scores, determined by a national committee of educators

The Achievement Level Descriptors are linked to an operational definition of **college content-readiness** to inform score interpretation for high schools and colleges. In particular, a score at or above “Level 3” in 11th grade is meant to suggest conditional evidence of readiness for entry-level, transferable, credit-bearing college courses. Since college readiness encompasses a wide array of knowledge, skills, and dispositions, only some of which can be measured by the Smarter Balanced assessments, “college readiness” in this context is defined as “content-readiness” in the core areas of ELA/Literacy and mathematics.

High schools may combine scores at 11th grade with additional data (courses completed, grades, portfolios, performance assessments, other test data) to determine appropriate courses of study and supports for students in the 12th grade. Similarly, as colleges interpret scores on Smarter Balanced assessments, they are encouraged to evaluate additional data (courses completed, grades, portfolios, performance assessments) to determine admissions, advisement, and placement in developmental or credit-bearing courses.

For more detailed explanations of achievement levels, achievement level descriptors, and the achievement level setting process, refer to the following Smarter Balanced web page: <http://www.smarterbalanced.org/achievement-levels/>.

¹ The Achievement Level Descriptors were developed based on the feedback of reviewers who engaged in a validation process based on examining the Common Core State Standards in each content area and the items on the examination. Additional research will be needed to validate the achievement level descriptors in relation to the actual success rates of students when they enter college and careers.