

FUNCTIONAL GRADE LEVELS (FGL) FOR STAR READING

ENTERPRISE

Note: *Currently, the Functional Grade Level (FGL) score does not appear on the Diagnostic Report. RLI Research is in the process of determining an accurate measure of FGL. Use the table on page 4 for guidance in determining whether a student is performing on grade level, below grade level, or above grade level, with respect to mastery of grade-specific Common Core standards or skills.*

This document introduces a new concept for the Reading Functional Grade Level (FGL). Its intent is to provide teachers with information as to whether a student is performing on grade level, or above or below it, with respect to mastery of grade-specific Common Core standards or skills. In this revised concept, Functional Grade Level is a classification, not a numeric score. Given a STAR Reading Enterprise scale score for a student who is in a specific grade, the teacher can easily classify the student as being below, on, or above grade level in terms of their proficiency on standards or skills that are appropriate to their current grade.

Functional Grade Level is a criterion-referenced classification. The criteria it employs are specific to the knowledge, skills, and abilities expected at each grade level as expressed in formal sets of grade level standards or skills. For students in states that have adopted the Common Core State Standards (CCSS) (http://www.corestandards.org/assets/CCSSI_ELA%20Standards.pdf) the FGL classifications are best made with reference to those standards. For students in other states, the FGL classifications might be made with reference to grade-level skills embodied in Core Progress for Reading, Renaissance Learning's compilation of reading learning progressions. This document deals with CCSS standards only.

This concept of FGL says that a student is on grade level if they have satisfied minimum end-of-school-year expectations for the next lower grade. For example, for a 4th-grade student to be on grade level, they should have knowledge and skills equivalent to mastery of the 3rd-grade standards. We determine whether they have mastered those knowledges and skills by inference, based on their STAR Reading Enterprise scale score.

While the FGL, like any test result, is an estimate, not a certainty, it provides a useful indication of the level of material on which the student should be receiving instruction in a curriculum based on CCSS. For example, if a beginning 4th grade student receives a STAR Reading FGL classification of "on grade level," this indicates that the student has likely mastered most third-grade material, and is probably prepared to learn without experiencing too many difficulties when using materials appropriate at the start of fourth grade.

In effect, the STAR Reading FGL references each student's STAR Reading performance to the difficulty of material appropriate for instruction. This is a valuable piece of information in planning the instructional program for individuals or groups of students.

What Does a STAR Reading FGL Classification Mean?

STAR Reading FGL classifies students into three broad categories of knowledge and skills, depending on their school grade and STAR Reading scale score. Scale scores are used to calculate the expected percent correct on sets of test items that measure a wide array of knowledge and skills aligned to the CCSS.

A student is considered "on grade level" if he/she appears proficient on the standards or skills of the next lower grade. For example, a 4th grader on the first day of the school year would be considered "on grade level" if his/her STAR scale score indicated satisfactory proficiency in the

knowledge and skills specified in the standards to be learned by the end of 3rd grade. A STAR Reading scale score lower than the proficiency threshold would classify the student as “below grade level.” A score at or above the threshold for the next higher grade would earn a classification of “above grade level.”

“Satisfactory proficiency” is something that Renaissance Learning cannot define for users of STAR Reading Enterprise, because proficiency standards typically vary from state to state, district to district, or even school to school. However, within this document, we are defining a student with satisfactory proficiency—on grade level—if he/she has an average proficiency level of at least 70%, calculated across the previous grade’s CCSS standards. Users of STAR Reading Enterprise may prefer to set a different proficiency standard for “on grade level.” The *STAR Reading Enterprise Technical Manual* will contain several alternatives to the criteria applied here.

Table 1 displays the minimum STAR Reading Enterprise scale scores (“cut” scores) for classifying students as “on grade level” according to the criteria applied here. Later, Tables 2 and 3 will display more detailed data, including scale score ranges that define “below grade level,” “on grade level,” and “above grade level” classification at every grade, and at different points within the school year.

Note that these grade level classifications are not norm-referenced like the well-known grade equivalent (GE) score. They are based on evidence that the student knows and can do the things that the CCSS standards expect to be taught and successfully learned at each grade level.

Table 1: Minimum STAR Reading Scale Scores for CCSS On-Grade Level Classification at Each Grade, K–12

Grade	Minimum Scale Score
K	0
1	138
2	179
3	219
4	299
5	392
6	474
7	563
8	672
9	804
10	920
11	1053
12	1191

Practical Impact of These Cut Scores

If these cut scores are used to classify students as “on grade level,” how many students would qualify at the beginning of each school year? To answer this question, tables of STAR Reading norms for the start of the school year in grades K–12 were consulted. Table 2 displays the percentages of students who would qualify in each grade by achieving an average proficiency level of at least 70%, calculated across the CCSS standards for the next lower grade. As the table shows, the percent of students “on grade level” at the beginning of the school year may range from as little as 25% (grade 1) to as high as 85 percent (grade 4.) (It’s 100% at grade K because, for Kindergarten, there are no previous grade standards.)

Table 2: The Impact of the Cut Scores in Table 1: Expected Percent of Students Qualifying as “On Grade Level” at the Beginning of the School Year by Method, Mastery Criterion, and Grade

Grade	Expected Percent on Grade Level
K	100
1	25
2	56
3	84
4	85
5	79
6	78
7	77
8	70
9	68
10	64
11	56
12	49

Cut Scores at Different Times of the School Year

Students who are on grade level are expected to improve in knowledge and skills during the course of the school year. Recognizing this, we have calculated scale score ranges that represent on-pace performance during the fall trimester (first 3 months of the school year), the winter trimester (months 4–6), and the spring trimester (months 7–9). These appear in Table 3, below. It lists the STAR Reading scale score ranges for below-, on-, and above-grade level performance for grades K–12 on the Common Core State Standards for Reading, including scale score ranges for on-grade level classifications for each of the three trimesters.

Table 3: STAR Reading Enterprise CCSS FGL Cut Scores Based on an Average of 70% Mastery Across Standards

Grade	Below Grade Level		On Grade Level						Above Grade Level	
			On Pace, Fall		On Pace, Winter		On Pace, Spring			
	Low	High	Low	High	Low	High	Low	High	Low	High
K	na	na	0	46	47	91	92	137	138	1400
1	0	137	138	151	152	165	166	178	179	1400
2	0	178	179	192	193	205	206	218	219	1400
3	0	218	219	245	246	272	273	298	299	1400
4	0	298	299	330	331	360	361	391	392	1400
5	0	391	392	419	420	446	447	473	474	1400
6	0	473	474	503	504	533	534	562	563	1400
7	0	562	563	599	600	635	636	671	672	1400
8	0	671	672	716	717	759	760	803	804	1400
9	0	803	804	842	843	881	882	919	920	1400
10	0	919	920	964	965	1008	1009	1052	1053	1400
11	0	1052	1053	1098	1099	1144	1145	1190	1191	1400
12	0	1190	1191	1244	1245	1298	1299	1351	1352	1400

What Does the STAR Reading FGL Classification Imply for Instructional Planning?

The FGL classifies students into one of three broad categories, based on their STAR Reading scale scores.

On Grade Level

Students in this category have attained scale scores that indicate they have equaled or surpassed the CCSS end-of-year grade level expectations for the previous grade. Students in this category should be ready to be taught the knowledge and skills inherent in the Common Core State Standards for their current grades.

1. Students in this category can be expected to expand their knowledge and skills mastery as the school year progresses. Table 3 above, includes three on-grade-level scale score ranges for each grade that indicate progress that is approximately proportional to the time of year.
2. Students may require instructional intervention who start the year with STAR Reading scores that classify them “on grade level,” but later fall behind the pace indicated for the fall, winter, or spring trimesters. Ideally, such intervention should be preceded by a deeper assessment of strengths and weaknesses, and followed by ongoing progress monitoring.

Example: A student whose STAR Reading FGL is “on grade level” appears to have mastered the knowledge and skills taught at lower grades, and should be expected to be ready for instruction at their current grade level.

Below Grade Level

Students in this category have scale scores that indicate they have not attained the CCSS end-of-year grade level expectations for the previous grade. They may lack knowledge or skills that comprise one or more of the previous grade's CCSS standards. A deeper assessment of knowledge and skills, followed by appropriate intervention, may be needed to bring these students up to grade level and prepare them to master the CCSS standards of their current grade.

Example: A fifth-grade student with a STAR Reading FGL classification of “below grade level” may have some gaps in fourth- or even lower-grade knowledge and skills. These gaps may need to be closed if the student is to fully benefit from instruction in fifth-grade topics.

Above Grade Level

Students in this category have scale scores that indicate they have exceeded the minimum CCSS end-of-year grade level expectations for their current grade. A deeper assessment of knowledge and skills may be called for here, too, to verify their attainments of specific standards. Instruction of these students should probably aim at confirming or reinforcing their mastery of the current grade's CCSS standards, expanding that mastery beyond the minimum end-of-year goals, and perhaps providing advanced-level instruction on skills one or more grade levels above the current grade.

Example: A student whose STAR Reading FGL is “above grade level” appears to have mastered the current grade's knowledge and skills at the minimum 70% level, and perhaps more. This student may be ready to benefit from instruction in Reading skills at a higher grade level. Teachers or administrators should verify this, based on additional assessment and their own knowledge of the student.