

Quick Score Calculations, Raw Scores, and Cut Scores for 2014-15

In fall 2014, the department decided to remove performance levels from quick score releases. In this year’s regional assessment meetings, the office of assessment logistics communicated this change to testing coordinators. However, the office did not produce a formal memo to ensure that this change was broadly communicated and codify the discussion in the regional meetings. Thus, we understand that many district and school personnel were unaware of this change.

The department made the decision to remove performance levels from quick scores to address several concerns. The first was potentially delaying the availability of quick scores during assessment transitions. If quick scores are tied to student performance levels, then the release of quick scores would have to be completed after the standards setting process and cut score determinations during the first year of a new assessment. Typically, standards setting does not occur until well into the summer, and it is clear that districts and schools have come to expect the release of quick scores in advance of Memorial Day. In addition, if the post-equating process were to result in an adjustment to the raw score to scale score conversation tables, quick scores that included performance levels would be incorrect. Finally, rounding to the nearest whole number can lead to two students having the same quick score on a 100-point grading scale, but because they have different underlying raw scores, the students may be at different performance levels.

For all these reasons, the department determined that tying quick scores to performance levels on TCAP was not a best practice. Indeed, quick scores were intended for use only in calculating student grades. Quick scores should not be used for accountability, with schools and districts relying on these scores to determine if AMO targets were met or using them to make personnel decisions. We will need to engage in a larger discussion regarding quick scores as we transition to TNReady. We will be calling on our TOSS Working Group and Superintendent’s Study Council to determine what are the appropriate policies regarding quick score release, calculation, and interpretation in the future.

It is important to note that quick scores were historically linked to cut scores, but those cut scores are set independently of the quick score calculation. Cut scores are determined based on a TCAP 300-point (ACH) or 400-point (EOC) scale score range. TCAP scale scores are derived from the raw score. Teacher work groups determine the cut score for performance levels during the standards setting process. So, as described earlier in this memo, cut scores must be set before you can assign quick scores that align to performance levels. The equating tables (Figure 1 and Figure 2) that show raw score and scale score cut-points for TCAP performance levels are posted online for [3-8 achievement](#) and [high school EOCs](#). ***There were no changes to cut scores in 2015, as the 2014 equating tables were used again this year.***

Figure 1: 2015 Cut Score Equating Tables for 3-8 Reading Language Arts

Content Area	Grade	Scale Score Ranges				2015 Number Correct Score Ranges			
		Below Basic	Basic	Proficient	Advanced	Below Basic	Basic	Proficient	Advanced
Reading/ Language Arts	3	600-708	709-759	760-796	797-900	0-24	25-42	43-52	53-60
	4	600-708	709-759	760-798	799-900	0-26	27-43	44-52	53-60
	5	600-705	706-754	755-802	803-900	0-26	27-42	43-54	55-60
	6	600-707	708-751	752-802	803-900	0-26	27-42	43-55	56-62
	7	600-717	718-759	760-797	798-900	0-29	30-43	44-54	55-62
	8	600-706	707-759	760-798	799-900	0-25	26-45	46-56	57-62

Figure 2: 2015 Cut Score Equating Tables for EOC

Spring 2015 Scale Score Ranges					Spring 2015 Raw Score Ranges				
Content Area	Below Basic	Basic	Proficient	Advanced	Content Area	Below Basic	Basic	Proficient	Advanced
Algebra I	500-656	657-711	712-751	752-900	Algebra I	0-18	19-27	28-37	38-50
Algebra II	500-683	684-731	732-770	771-900	Algebra II	0-20	21-30	31-40	41-50

Historically, as quick scores were purposefully tied to proficiency as a policy decision, a 93 (A) was equivalent to the cut score for advanced, an 85 (B) was equivalent to the cut score for proficient, and basic and below basic cut scores were also fixed to an equivalent quick score (C and D, respectively). This meant that performance levels on TCAP were directly linked to our A – F uniform grading policy in high school. However, in the absence of having set cut scores (in the case of a new assessment) or intentionally tying quick scores to existing cut scores (a policy decision), there will not necessarily be a consistent relationship between quick scores and performance levels for achievement from year to year.

In the 2013-14 school year, the department calculated quick scores for EOCs based upon the student’s raw score, using a cubed-root grading scale process. This new methodology generated a quick score for students based on a 100-point grading scale that had no pre-determined relationship to TCAP performance levels and, consequently, did not link performance levels to the A – F grading system. However, in 2013-14, the quick scores for 3 – 8 achievement were still tied to TCAP performance levels in alignment with the A – F grading scale.

Once the decision was made in fall 2014 to break the link between quick scores and student performance levels for both 3-8 achievement and EOCs, the department had to settle on a new method of calculating quick scores for all tests. In 2014-15, both 3-8 achievement and EOCs generated quick scores based on raw scores using the cubed-root grading scale method. Again, this was the method used for EOCs in 2013-14, and this year the same method was adopted for grades 3 – 8. As such, the historical practice that a quick score of 93 being equivalent to the advanced performance level and an 85 being equivalent to proficient is no longer true on any TCAP exam. Again, cut scores have not changed and are the same as they were in 2014. However, the quick score relationship to the performance levels have changed. Figure 3 shows the raw score cut points for proficiency in 2015 and 2014 for 3-8 RLA. In addition, the corresponding quick score is displayed. Notice that the raw score cut-points are the same in both years. The quick scores are the only difference based on the switch to the cubed-root method to generate a 100-point grading scale based on the raw score.

Figure 3: 2015 versus 2014 Raw Score Cuts to Quick Scores

2015 Proficient Raw Score Cuts				2014 Proficient Raw Score Cuts			
Subject	Grade	Proficient Raw Cut	Corresponding Quick Score	Subject	Grade	Proficient Raw Cut	Corresponding Quick Score
RLA	3	43	89	RLA	3	43	85
	4	44	90		4	44	85
	5	43	89		5	43	85
	6	43	89		6	43	85
	7	44	89		7	44	85
	8	46	91		8	46	85

In the spreadsheet that follows this narrative on page four, *2015 Raw Score Cuts to Quick Scores*, we have provided the quick score that corresponds to the raw score cut for proficiency for all subjects 3-8 achievement

and EOCs. Therefore, districts can *estimate* proficiency rates in advance of summary data releases for accountability in early July 2015. The file includes a notation of those grades where rounding to the nearest whole number generates the same quick score for two different raw scores, meaning that students may be classified as proficient or non-proficient based on the underlying raw score. For example, in 3rd grade RLA, a raw score of 43, the cut-point for proficiency, rounds to an 89 quick score. Yet, a raw score of 42 also rounds to 89, but a raw score of 42 is actually at the basic performance level. Our quick score release does not include any raw score information for students. Individual student reports will be sent in paper copy and uploaded to PearsonAccess in late June. At that time, districts can confirm the correct student performance level for any students who earned a quick score that is borderline based on rounding. Figure 4 is an excerpt of the raw score to quick score conversion tables.

Figure 4: Raw Score to Quick Score Conversion Table for 3-8 RLA

Subject	Grade	Proficient Raw Cut	Corresponding Quick Score	Rounding Issue
RLA	3	43	89	42==>89
	4	44	90	
	5	43	89	42==>89
	6	43	89	
	7	44	89	43==>89
	8	46	91	

2015 Raw Score Cuts to Quick Scores

Regular/ELSA Test				
Subject	Grade	Proficient Raw Cut	Corresponding Quick Score	Rounding Issue
RLA	3	43	89	42==>89
	4	44	90	
	5	43	89	42==>89
	6	43	89	
	7	44	89	43==>89
	8	46	91	
Math	3	36	90	
	4	37	90	36==>90
	5	35	89	
	6	37	90	36==>90
	7	34	88	
	8	37	90	36==>90
Science	3	45	89	
	4	46	90	
	5	45	89	
	6	41	86	
	7	40	85	39==>85
	8	42	87	

Braille Test				
Subject	Grade	Proficient Raw Cut	Corresponding Quick Score	Rounding Issue
RLA	3	41	88	
	4	46	92	
	5	42	89	41==>89
	6	43	89	
	7	43	89	
	8	45	90	
Math	3	38	91	
	4	37	90	36==>90
	5	37	90	36==>90
	6	35	89	
	7	34	89	
	8	39	92	
Science	3	45	89	
	4	44	88	43==>88
	5	44	88	43==>88
	6	40	85	39==>85
	7	43	88	
	8	44	88	43==>88

Regular Test				
Subject	Grade	Proficient Raw Cut	Corresponding Quick Score	Rounding Issue
Algebra I	All	28	82	
Algebra II	All	31	85	
Biology I	All	26	78	
Chemistry	All	35	86	
English I	All	33	84	
English II	All	32	83	31==>83
English III	All	35	86	

Braille Test				
Subject	Grade	Proficient Raw Cut	Corresponding Quick Score	Rounding Issue
Algebra I	All	31	85	
Algebra II	All	32	86	
Biology I	All	32	83	31==>83
Chemistry	All	39	89	
English I	All	33	84	
English II	All	32	83	31==>83
English III	All	27	86	