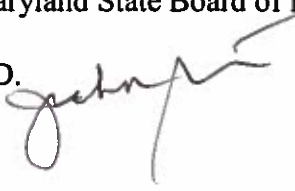




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TO: Members of the Maryland State Board of Education
FROM: Jack R. Smith, Ph.D. 
DATE: January 26, 2016
SUBJECT: Use of Impact Data in Setting Performance Standards for the PARCC Assessments

PURPOSE:

To address the question whether the PARCC assessments should be considered criterion-referenced or norm-referenced tests due to introducing impact data during the performance level setting process.

BACKGROUND:

When reviewing the PARCC performance level setting process as well as the scores, the Board questioned whether the performance level setting process should be considered norm-referenced in nature due to the fact that impact data was introduced during the process. This question was posed to the PARCC psychometric Technical Advisory Committee. A response is included as an attachment.

EXECUTIVE SUMMARY:

The methodology for setting performance levels for the PARCC assessments was primarily criterion-referenced in nature.

A purely normative method would be one in which cut scores were determined such that they placed a certain percent of students into each performance level without regard to the knowledge and skills mastered by those students. A purely criterion-referenced method would be one in which cut scores were determined such that they placed students into each performance level based on the knowledge and skills mastered by those students without regard to how many students would be in any performance level.

PARCC utilized a Modified Angoff procedure. Performance levels were derived from educator judgments on each item based on the required knowledge and skills mastered by the students as defined within the performance level descriptors. Impact data does introduce a normative data element to the standard setting process; however, given the inferences that were intended from PARCC test scores (i.e. degree of content mastery in the Common Core State Standards), the process of leveraging judgments based on student knowledge and skills, the timing of when the impact data was introduced (not until the third round of judgments), and the overall influence the impact data had on the process as a whole, the process utilized by PARCC is considered criterion-referenced in nature.

Members of the State Board of Education
January 26, 2016
Page 2

ACTION:

For information only. No action required.

Attachment



Use of Impact Data in Setting Performance Standards

The process of determining cut scores that place students into performance levels on a test is called "standard setting" or "performance level setting." There are a variety of methods which may be used to set performance standards on a test ranging from those which are purely normative to those which are purely criterion-referenced with most methods used in large scale K-12 assessment falling on a continuum somewhere between the two. A purely normative method would be one in which cut scores were determined such that they placed a certain percent of students into each performance level without regard to the knowledge and skills mastered by those students. A purely criterion-referenced method would be one in which cut scores were determined such that they placed students into each performance level based on the knowledge and skills mastered by those students without regard to how many students would be in any performance level. For a full review of different methods for setting performance standards, please see **Setting Performance Standards: Foundations, Methods, and Innovations** (Cizek, 2012).

Given the inferences that were intended from PARCC test scores (i.e. degree of content mastery in the Common Core State Standards), PARCC implemented a method for setting performance standards which was primarily criterion-referenced in nature. The method was an extension of the Modified Angoff procedure (Plake, Ferdous, Impara, & Buckendahl, 2005) which asks educators to make a judgment about the number of points a student would need to obtain on each test item to be placed into performance levels as described the PARCC performance level descriptors. Three rounds of judgment are made based on the knowledge and skills required by each item. In between each round, educators are provided feedback to help them refine their judgments and allowed to discuss their judgments with other educators.

One type of feedback that is typically provided to educators is "impact data" which provides educators with the percent of students who would be classified into each performance level based on their current judgments. The purpose of providing this information is to serve as a reality check for educators check (Green, Trimble, & Lewis, 2003). It is often the case that actual student performance on individual items or on the test as a whole may be different than what might be expected based on observations made in a classroom setting. Panelists may use impact data to consider whether the cut scores resulting from their judgments provide reasonable results. While impact data does introduce a normative data element to the standard setting process, PARCC introduced this information later in the process (prior to the third round of judgments) such that educators already had an opportunity to develop a solid understanding of the knowledge and skills of students at each performance level and needed for each item. Cizek (2012) supports that the timing of when this information is introduced is critical to maintaining educator judgments that are criterion-referenced since the later in the process this it is introduced the less influence it is likely to have.

Inclusion of impact data within the performance level setting process is very common within K-12 educational assessment (e.g. NAEP, NY, TX) and all decisions about how and when this information would be introduced for PARCC's performance level setting were discussed with members of PARCC's technical advisory committee.



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TO: Members of the Maryland State Board of Education

FROM: Jack R. Smith, Ph.D. *JRS*

DATE: January 26, 2016

SUBJECT: Partnership for Assessment of Readiness for College and Careers (PARCC) Assessment Phase II Reporting and new PARCC Memorandum of Understanding (MOU)

PURPOSE:

To provide an update to the State Board on the status of PARCC Phase II Reporting in Maryland for the 2015-2016 PARCC testing administration

To provide the State Board with the new PARCC Memorandum of Understanding (MOU) for discussion and approval

BACKGROUND:

PARCC Phase I reporting of student scale scores and performance levels has concluded through the dissemination of student home reports and summary reports of aggregated student performance provided to the districts and other stakeholders. Phase II of PARCC Assessment data reporting will occur over the next four weeks. Phase II includes more instructionally related information.

The original Memorandum of Understanding between the Maryland State Board of Education and PARCC expired at the end of December 2015. The new MOU is attached (Attachment 4) for review, discussion and approval.

EXECUTIVE SUMMARY:

PARCC Phase II consists of the following data analysis reports; Item-Analysis Reports (Attachments 1 and 3) and Performance Level Summary Reports (Attachment 2).

The Item-Analysis Reports are district, state and PARCC level reports that show the points earned on each individual PARCC Evidence Statement. The report shows scores for test items aligned to a variety of evidence statements as well as detailed information for each item.

The Performance Level Summary Reports will be provided at a State, District and School level that show aggregate data in detailed categories. The report will display and summarize performance data in eight different subgroup populations as well as by grade level and subject area.

The Item-Analysis Reports and Performance Level Summary Reports will include:

- **Explanation of student level data:** A two to three page report that includes a chart on page one with an analysis of percent of average points earned for each PARCC Evidence Statement, as well as an item-analysis evaluated at a district, state and PARCC level. For ELA items that are aligned to multiple Evidence Statements, those items will be included in all buckets applicable. The second page will list the Evidence Statements including more detailed information and a description.
- **Disaggregation of data:** Reporting capabilities include the ability to disaggregate data by performance level. Data can be broken down into performance by the categories of Gender, Ethnicity, Primary Disabilities, Economically Disadvantaged, IEP, and 504 Plan. This report will be provided by grade and by subject.
- **Reporting Levels:** Reporting will be available at the State, District and School levels and can be exported into PDF through Pearson Access Next (PAN).

Pearson will provide MSDE with the **Performance Level Summary Reports** two weeks after approval (tentatively January 29th). Pearson will provide MSDE with the **Item Analysis Reports** less than two months after approval (tentatively February 22nd).

The new MOU (Attachment 4) between the consortium states and PARCC was approved by the PARCC Governing Board late December 2015. The new MOU expires June 30, 2016, and affirms the principles of cooperation among the PARCC states and continues to keep all states in charge of their own data and tests. It was crafted in a way that takes into account the transition to a new structure giving more flexibility to the states, while removing sections of the MOU that are no longer relevant (e.g. references to the fiscal agent of the United States Department of Education grant, the grant itself, etc. that are no longer applicable). The new MOU only requires the signature of the State Superintendent with approval of the State Board. The previous MOU was originally a federal requirement and this new partnership with consortium states is no longer connected to requirements by the United States Department of Education and therefore only requires the signature of the State Superintendent.

CONCLUSION:

PARCC state data for the Phase II reporting period will be utilized through the Pearson Item-Analysis Reports and Performance Level Summary Reports. School administrators, leadership teams, and central office staff will review, analyze, and interpret these reports, share them with their school communities, and use them as a planning tool to guide actions to improve the learning of all students.

The new Memorandum of Understanding between the Maryland State Department of Education and the PARCC consortium gives Maryland the opportunity to analyze the new structure that the PARCC consortium will put in place in the coming months. We can then make a decision about the assessment program that will best meet the needs of Maryland students and school systems for 2017 and beyond.

Members of the State Board of Education
January 26, 2016
Page 3

ACTION:

For information only: PARCC Phase II Reporting: No action required.
For approval: PARCC Memorandum of Understanding

Attachments



Colorado Measures of Academic Success

Item Analysis Reports - Student Level

Tab E2 Attachment 1

Grade 3

SAMPLE SCHOOL NAME
 SAMPLE DISTRICT NAME
 COLORADO

MATHEMATICS

Grade 3 Assessment, 2014–2015

The colored cells represent the number of points achieved.

- above PARCC average
- same as PARCC average
- below PARCC average

STUDENT	PBA FORM				EOY FORM				Number & Operations - Base Ten	Number & Operations - Fractions	Measurement & Data			
	3.OA.A.2, 3.OA.A.3, 3.OA.A.4	3.OA.B.5, 3.OA.B.6	3.OA.C.7	3.OA.D.8, 3.OA.D.9	3.NF.A.1, 3.NF.A.2, 3.NF.B.1	3.NF.A.1, 3.NF.A.3, 3.NF.A.3	3.MD.A.2, 3.MD.A.2	3.MD.B.3, 3.MD.B.4			3.MD.C.5, 3.MD.C.6, 3.MD.C.7	3.MD.D.8		
Student 1	15MT03PBE0001	15MT03EYEP0001	3	n/a	1	3	2	3	3	3	3	3	3	3
Student 2	15MT03PBE0002	15MT03EYEP0002	1	2	2	2	3	3	3	3	3	3	3	3
Student 3	15MT03PBE0003	15MT03EYEP0003	2	3	3	3	3	3	3	3	3	3	3	3
Student 4	15MT03PBE0004	15MT03EYEP0004	3	1	1	1	1	2	2	2	2	2	2	2
Student 5	15MT03PBE0005	15MT03EYEP0005	1	3	3	3	3	3	3	3	3	3	3	3
Student 6	15MT03PBE0006	15MT03EYEP0006	2	1	1	1	1	2	2	2	2	2	2	2
Student 7	15MT03PBE0007	15MT03EYEP0007	3	3	3	3	3	3	3	3	3	3	3	3
Student 8	15MT03PBE0008	15MT03EYEP0008	1	3	3	3	3	3	3	3	3	3	3	3
Student 9	15MT03PBE0009	15MT03EYEP0009	2	1	1	1	1	2	2	2	2	2	2	2
Student 10	15MT03PBE0010	15MT03EYEP0010	3	2	2	2	2	3	3	3	3	3	3	3
Student 11	15MT03PBE0011	15MT03EYEP0011	1	2	2	2	2	3	3	3	3	3	3	3
Student 12	15MT03PBE0012	15MT03EYEP0012	2	1	1	1	1	2	2	2	2	2	2	2
Student 13	15MT03PBE0013	15MT03EYEP0013	2	2	2	2	2	3	3	3	3	3	3	3
Student 14	15MT03PBE0014	15MT03EYEP0014	1	3	3	3	3	3	3	3	3	3	3	3
Student 15	15MT03PBE0015	15MT03EYEP0015	2	1	1	1	1	2	2	2	2	2	2	2
Student 16	15MT03PBE0016	15MT03EYEP0016	1	2	2	2	2	3	3	3	3	3	3	3
Student 17	15MT03PBE0017	15MT03EYEP0017	2	3	3	3	3	3	3	3	3	3	3	3
Student 18	15MT03PBE0018	15MT03EYEP0018	3	1	1	1	1	2	2	2	2	2	2	2
Student 19	15MT03PBE0019	15MT03EYEP0019	1	2	2	2	2	3	3	3	3	3	3	3
Student 20	15MT03PBE0020	15MT03EYEP0020	2	3	3	3	3	3	3	3	3	3	3	3
Student 21	15MT03PBE0021	15MT03EYEP0021	3	1	1	1	1	2	2	2	2	2	2	2
Student 22	15MT03PBE0022	15MT03EYEP0022	1	2	2	2	2	3	3	3	3	3	3	3
Student 23	15MT03PBE0023	15MT03EYEP0023	2	3	3	3	3	3	3	3	3	3	3	3
Student 24	15MT03PBE0024	15MT03EYEP0024	3	1	1	1	1	2	2	2	2	2	2	2
Student 25	15MT03PBE0025	15MT03EYEP0025	1	2	2	2	2	3	3	3	3	3	3	3
Student 26	15MT03PBE0026	15MT03EYEP0026	2	3	3	3	3	3	3	3	3	3	3	3



Colorado Measures of Academic Success
Item Analysis Reports - Evidence Statement

Grade 3

SAMPLE DISTRICT NAME
 COLORADO

MATHEMATICS
 Grade 3 Assessment, 2014–2015

FORM	Operations & Algebraic Thinking				Number & Operations In Base Ten				Number & Operations - Fractions				Measurement & Data				Geometry				Modeling					
	# Items per Standard per Form	Total Max Points Possible	PARCC Average # Points	State Average # Points	District Average # Points	# Items per Standard per Form	Total Max Points Possible	PARCC Average # Points	State Average # Points	District Average # Points	# Items per Standard per Form	Total Max Points Possible	PARCC Average # Points	State Average # Points	District Average # Points	# Items per Standard per Form	Total Max Points Possible	PARCC Average # Points	State Average # Points	District Average # Points	# Items per Standard per Form	Total Max Points Possible	PARCC Average # Points	State Average # Points	District Average # Points	
PBA																										
15MT03PBE00001	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00002	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00003	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00004	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00005	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00006	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00007	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBSF00001	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBEA00001	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00001	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00002	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00003	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00004	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00005	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00006	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00007	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00007	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00008	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00009	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00010	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00011	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00012	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00013	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00014	5	22	15	17	10	2	10	3	7	5	7															
15MT03PBE00015	5	22	15	17	10	2	10	3	7	5	7															

SAMPLE



STATE PERFORMANCE LEVEL SUMMARY

Grade 7

STATE

MATHEMATICS Grade 7 Assessment, Spring 2015

Purpose: This report describes group achievement in terms of performance levels.

	Number of Valid Scores	Average Scale Score	Performance Levels					≥ Level 4 Met or Exceeded Expectations				
			Level 1 Did Not Yet Meet Expectations	Level 2 Partially Met Expectations	Level 3 Approached Expectations	Level 4 Met Expectations	Level 5 Exceeded Expectations					
			#	%	#	%	#	%	#	%	#	%
PARCC	9,999,999	999	9,999,999	999.9%	9,999,999	999.9%	9,999,999	999.9%	9,999,999	999.9%	9,999,999	999.9%
State	999,999	999	999,999	999.9%	999,999	999.9%	999,999	999.9%	999,999	999.9%	999,999	999.9%
Gender												
Female	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Male	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Ethnicity/Race												
Hispanic or Latino	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
American Indian or Alaska Native	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Asian	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Black or African-American	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Native Hawaiian or Other Pacific Islander	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
White	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Two or more races	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Not Indicated	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Primary Disabilities												
None	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Intellectual Disability	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Specific Learning Disability	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Hearing Impairment, Including Deafness	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Visual Impairment, Including Blindness	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Speech or Language Impairment	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Deaf-Blindness	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%
Multiple Disabilities	99,999	999	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%	99,999	999.9%

SAMPLE



STATE PERFORMANCE LEVEL SUMMARY

Tab E2 Attachment 2

Grade 7

STATE

MATHEMATICS

Grade 7 Assessment, Spring 2015

Purpose: This report describes group achievement in terms of performance levels.

	Number of Valid Scores	Average Scale Score	Performance Levels					≥ Level 4 Met or Exceeded Expectations						
			Level 1 Did Not Meet Expectations	Level 2 Partially Met Expectations	Level 3 Approached Expectations	Level 4 Met Expectations	Level 5 Exceeded Expectations							
			#	%	#	%	#	%	#	%	#	%	#	%
Autism Spectrum Disorders	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Traumatic Brain Injury (TBI)	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Orthopedic Impairment	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Other Health Impairment	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Developmental Delay	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Emotional Disability	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Not Indicated	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Economic Disadvantage														
Yes	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
No	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Gifted/Talented														
No	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Yes	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
IEP														
No	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Yes	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
504 Plan														
No	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Yes	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Migrant														
No	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Yes	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%



SCHOOL PERFORMANCE LEVEL SUMMARY

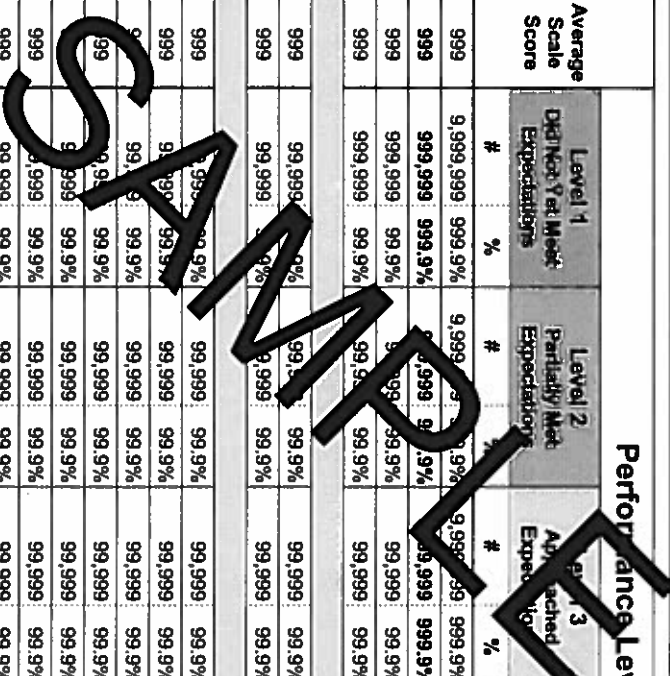
Grade 7

SCHOOL NAME
DISTRICT NAME
STATE

MATHEMATICS Grade 7 Assessment, Spring 2015

Purpose: This report describes group achievement in terms of performance levels.

	Number of Valid Scores	Average Scale Score	Performance Levels					≥ Level 4 Met or Exceeded Expectations		
			Level 1 Did Not Yet Meet Expectations	Level 2 Partially Met Expectations	Level 3 Approached Expectations	Level 4 Met Expectations	Level 5 Exceeded Expectations			
	#	%	#	%	#	%	#	%	#	%
PARCC	9,999,999	999	9,999,999	999.9%	9,999,999	999.9%	9,999,999	999.9%	9,999,999	999.9%
State	999,999	999	999,999	999.9%	999,999	999.9%	999,999	999.9%	999,999	999.9%
District	999,999	999	999,999	99.9%	999,999	99.9%	999,999	99.9%	999,999	99.9%
School	999,999	999	999,999	99.9%	999,999	99.9%	999,999	99.9%	999,999	99.9%
Gender										
Female	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Male	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Ethnicity/Race										
Hispanic or Latino	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
American Indian or Alaska Native	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Asian	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Black or African-American	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Native Hawaiian or Other Pacific Islander	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
White	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Two or more races	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Not Indicated	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Primary Disabilities										
None	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Intellectual Disability	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Specific Learning Disability	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Hearing Impairment, including Deafness	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Visual Impairment, including Blindness	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Speech or Language Impairment	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Deaf/Blindness	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Multiple Disabilities	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%





SCHOOL PERFORMANCE LEVEL SUMMARY

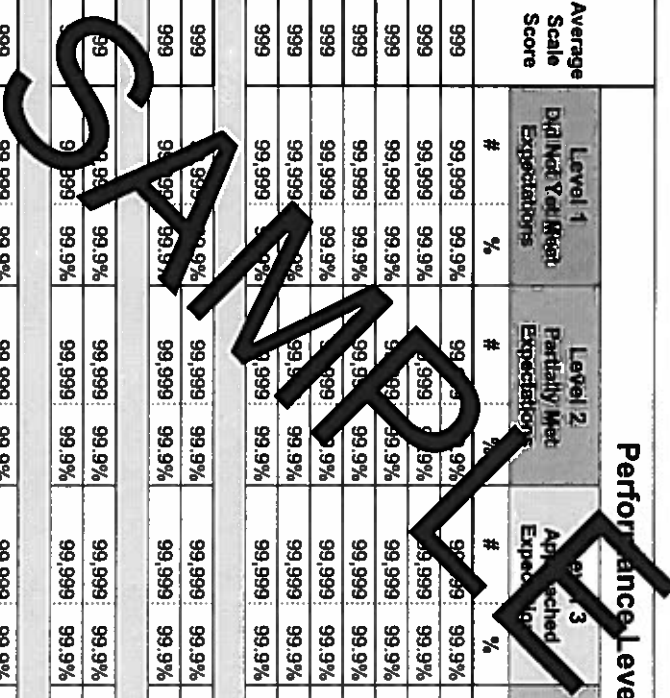
Grade 7

SCHOOL NAME
DISTRICT NAME
STATE

MATHEMATICS Grade 7 Assessment, Spring 2015

Purpose: This report describes group achievement in terms of performance levels.

	Number of Valid Scores	Average Scale Score	Performance Levels					≥ Level 4 Met or Exceeded Expectations								
			Level 1 Did Not Meet Expectations	Level 2 Partially Met Expectations	Level 3 Approached Expectations	Level 4 Met Expectations	Level 5 Exceeded Expectations									
			#	%	#	%	#	%	#	%	#	%	#	%	#	%
Autism Spectrum Disorders	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Traumatic Brain Injury (TBI)	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Orthopedic Impairment	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Other Health Impairment	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Developmental Delay	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Emotional Disability	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Not Indicated	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Economic Disadvantage																
Yes	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
No	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Gifted/Talented																
No	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Yes	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
IEP																
No	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Yes	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
504 Plan																
No	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Yes	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Migrant																
No	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%
Yes	99,999	999	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%	99,999	99.9%





Colorado Measures of Academic Success District Released Item Evidence Statement Analysis

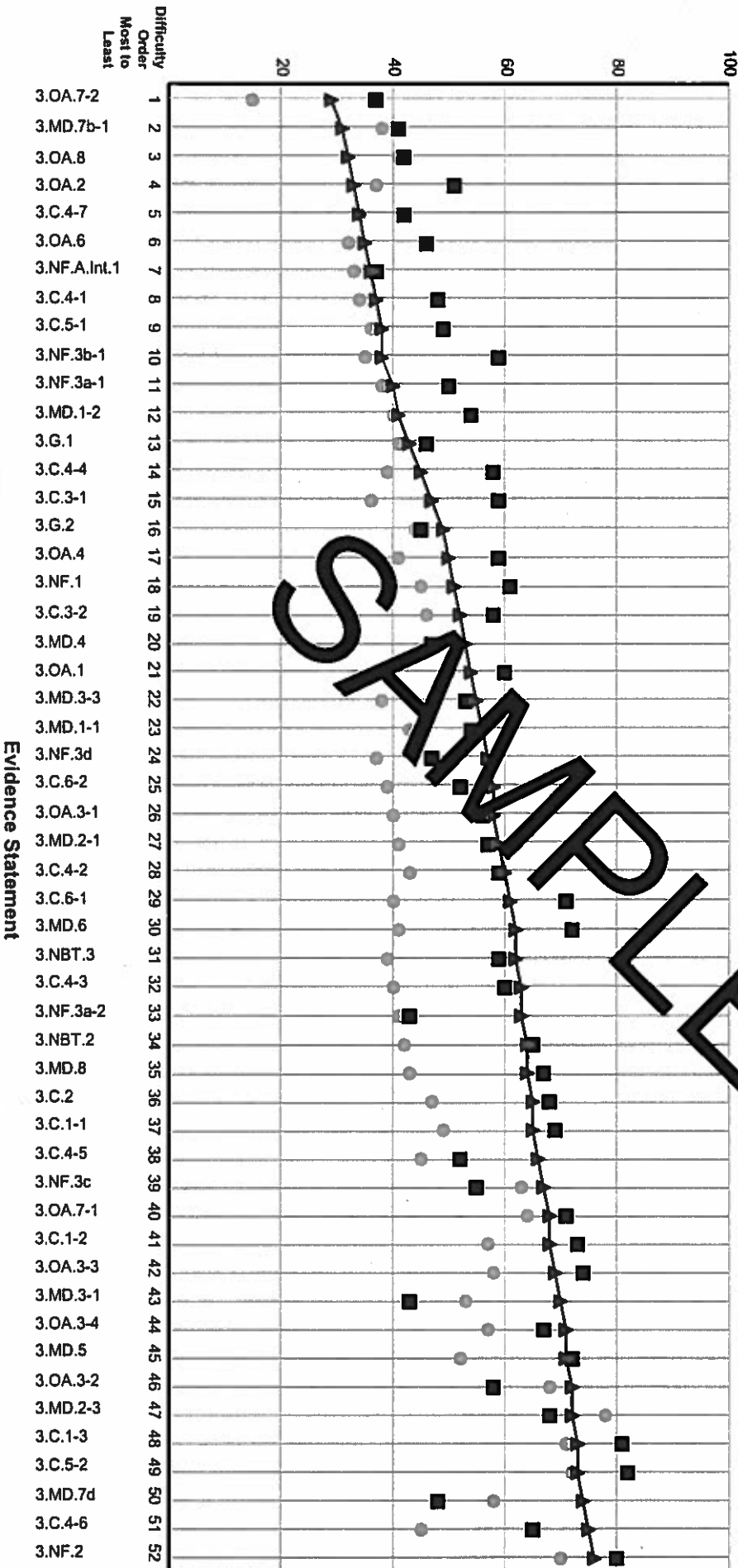
SAMPLE DISTRICT NAME

MATHEMATICS Grade 3 Assessment, Spring 2015

Students with Valid Scores (999)

Students testing on paper are not included.

Purpose: This report presents the average percent correct by item for school, district and state.





Colorado Measures of Academic Success

District Released Item Evidence Statement Analysis

This report shows the operational Evidence Statements for the given grade and subject sorted by difficulty

MATHEMATICS

Grade 3 Assessment, Spring 2015

Difficulty Order Most to Least	Evidence Statement	CCSS with Cluster headings	Domain
1	3.OA.7-2	3.OA.C.07	Operations & Algebraic Thinking
2	3.MD.7b-1	3.MD.C.07.b	Measurement and Data
3	3.OA.8	3.OA.D.08	Operations and Algebraic Thinking
4	3.OA.2	3.OA.A.02	Operations and Algebraic Thinking
5	3.C.4-7	2.NBT	Numbers and Operations in Base Ten
6	3.OA.6	3.OA.B.06	Operations and Algebraic Thinking
7	3.NF.A.int.1	3.NF.A	Numbers and Operations - Fraction
8	3.C.4-1	3.OA.B.05	Operations and Algebraic Thinking
9	3.C.5-1	3.OA.D.08	Operations and Algebraic Thinking
10	3.NF.3b-1	3.NF.A.03.b	Numbers and Operations - Fraction
11	3.NF.3a-1	3.NF.A.03.a	Numbers and Operations - Fraction
12	3.MD.1-2	3.MD.A.01	Measurement and Data
13	3.G.1	3.G.A.01	Geometry
14	3.C.4-4	3.NF.A.03.b 3.NF.A.03.d	Numbers and Operations - Fraction
15	3.C.3-1	3.NF.A.03.b 3.NF.A.03.d	Numbers and Operations - Fraction
16	3.G.2	3.G.A.02	Geometry
17	3.OA.4	3.OA.A.04	Operations and Algebraic Thinking
18	3.NF.1	3.NF.A.01	Numbers and Operations - Fraction
19	3.C.3-2	3.MD.C.05 3.MD.C.06 3.MD.C.07	Measurement and Data
20	3.MD.4	3.MD.B.04	Measurement and Data
21	3.OA.1	3.OA.A.01	Operations and Algebraic Thinking
22	3.MD.3-3	3.MD.A.03	Measurement and Data
23	3.MD.1-1	3.MD.A.01	Measurement and Data
24	3.NF.3d	3.NF.A.03.d	Numbers and Operations - Fraction
25	3.C.6-2	3.MD.C.01	Measurement and Data
26	3.OA.3-1	3.OA.A.03	Operations and Algebraic Thinking
27	3.MD.2-1	3.MD.A.02	Measurement and Data
28	3.C.4-2	3.OA.B.06	Operations and Algebraic Thinking
29	3.C.6-1	3.NF.A.02	Numbers and Operations - Fraction
30	3.MD.5	3.MD.C.06	Measurement and Data
31	3.NBT.3	3.NBT.A.03	Numbers and Operations in Base Ten
32	3.C.4-3	3.OA.D.08	Operations and Algebraic Thinking
33	3.NF.3a-2	3.NF.A.03.a	Numbers and Operations - Fraction
34	3.NBT.2	3.NBT.A.02	Numbers and Operations in Base Ten
35	3.MD.8	3.MD.D.08	Measurement and Data
36	3.C.2	3.OA.B.06	Operations and Algebraic Thinking
37	3.C.1-1	3.OA.B.05	Operations and Algebraic Thinking
38	3.C.4-5	3.MD.C.07	Measurement and Data
39	3.NF.3c	3.NF.A.03.c	Numbers and Operations - Fraction
40	3.OA.7-1	3.OA.C.07	Operations and Algebraic Thinking
41	3.C.1-2	3.OA.D.09	Operations and Algebraic Thinking
42	3.OA.3-3	3.OA.A.03	Operations and Algebraic Thinking
43	3.MD.3-1	3.MD.B.03	Measurement and Data
44	3.OA.3-4	3.OA.A.04	Operations and Algebraic Thinking
45	3.MD.5	3.MD.C.05	Measurement and Data
46	3.OA.3-2	3.OA.A.03	Operations and Algebraic Thinking
47	3.MD.2-3	3.MD.A.02	Measurement and Data
48	3.C.1-3	3.MD.C.07	Operations and Algebraic Thinking
49	3.C.5-2	3.MD.C.07.b 3.MD.C.07.d	Measurement and Data
50	3.MD.7d	3.MD.C.07.d	Measurement and Data
51	3.C.4-6	3.OA.D.09	Operations and Algebraic Thinking
52	3.NF.2	3.NF.A.02	Numbers and Operations - Fraction

MEMORANDUM OF UNDERSTANDING

**Among the State Members Of The
PARTNERSHIP FOR ASSESSMENT OF READINESS FOR COLLEGE AND
CAREERS**

December 15, 2015

I. Parties

This Memorandum of Understanding (“MOU”) is made and effective as of this 15th day of December 2015, (the “Effective Date”) by and between the current member states of the Partnership For Assessment of Readiness for College and Careers (“Consortium” or “PARCC”) who have also executed this MOU.

This MOU continues and perpetuates the Consortium established by the “Memorandum of Understanding for the Race To The Top -- Comprehensive Assessment Systems Grant” dated June 3, 2010 among the then members of PARCC, but replaces and supersedes that June 3, 2010 MOU in its entirety.

II. Scope, Background and Objectives

This MOU constitutes an understanding between and among the Consortium member states regarding their voluntary participation in the Consortium and the conduct of the Consortium’s affairs. This document describes and explains the Consortium’s purposes and goals, its organizational and governance structure, and the responsibilities and benefits of participation in the Consortium.

In 2010, the then state members of PARCC joined together in order to secure initial grant funding that they used to develop a new comprehensive student assessment system which measures student knowledge and skills against a state-developed set of college- and career-ready standards in mathematics and English language arts. The consortium has successfully completed the development of the state-created assessment system -- the PARCC Assessment -- and the initial grant funding has been expended. The Consortium states now seek to continue their collaborative activities directed towards high-quality assessments and greater student achievement.

States continuing to participate in the PARCC consortium enter into this revised and replacement MOU in order to pursue collective efforts to maintain and evolve the assessment system, to support the purposes and goals that brought them together in this undertaking, and to engage in other consistent activities that they may agree upon. Though the governance provisions set out here, the PARCC Consortium states will collectively establish the principles that govern the assessment system, determine their respective contributions to the undertakings, and assure the continuing, long-term ability to benefit from their respective investments in this enterprise.

III. Purpose and Goals

The state signatories to the MOU seek to pursue collectively the following goals.

- A. Assure the development, maintenance and availability of state-directed student assessment systems that:
 - 1. Are comparable across states;
 - 2. Meet and apply internationally rigorous benchmarks;
 - 3. Provide models to educators of instructional practices that support teaching and learning for all students;
 - 4. Allow valid measures of growth in student achievement from year to year.
 - 5. Provide opportunities for all students to demonstrate proficiency according to state-developed academic standards, including English learners and students with disabilities, and regardless of income or family background.
- B. Support educators in their efforts to improve classroom teaching and learning for every child and to close achievement gaps.
- C. Measure students' college and career readiness by the end of high school and progress toward this target. Students meeting the college and career readiness standards may be eligible for placement into entry-level credit-bearing, rather than remedial, courses in public 2- and 4-year postsecondary institutions in all Consortium member states.
- D. Support additional uses for the assessment system, for implementation as may be determined by an individual state, including by way of example one or more (or none) of the following:
 - 1. public reporting of results to parents, educators and the public;
 - 2. school and district accountability determinations;
 - 3. determinations of principal and teacher effectiveness and professional development and support needs;
 - 4. decisions about promotion and graduation for individual students; and
 - 5. teaching, learning, and program improvement.

IV. Consortium Membership

A. Membership Types, Roles and Responsibilities

- 1. **Governing State:**

a. A State is considered a "Governing State" if it meets the following eligibility criteria:

- (i) The PARCC-developed summative student assessments are administered to students in the state, using the test forms developed and approved by Consortium states;
- (ii) Supports efforts to maintain, improve and innovate the assessment system, including continued development of high quality assessment items in ELA/literacy and mathematics for grades 3-8 and high school;
- (iii) Participates in a shared leadership model in which the chief state school official serves as a member of the PARCC Governing Board, consistent with the Consortium By-Laws.
- (iv) Contributes to the Consortium's activities by providing such staff, financial, and/or other resources as the PARCC Governing States collectively agree will be expected of a Governing State;

b. Governing States have the following rights and privileges:

- (i) A Governing State has authority to participate with other Governing States to approve the design, modification and evolution of the assessment system developed by and for the Consortium;
- (ii) A Governing State has authority to participate with other Governing States to determine and/or to modify the major policies and operational procedures of the Consortium, including the Consortium's work plan and theory of action;
- (iii) A Governing State has authority to participate with other Governing States to provide direction to any Project Management Support Contractor (PMSC) with which the Governing States may engage, to any other contractors or advisors retained by or on behalf of the Consortium that are compensated funds contributed by the Governing States, and to Parcc, Inc. with regard to management of intellectual property that was developed by and for the Consortium.

2. Participating State

- a. A Participating State commits to administer the PARCC-developed and approved student assessments to students in the state
- b. A Participating State is invited to provide staff, advice and other resources to support the Consortium's efforts to maintain, develop and improve the assessment system, but does not participate in the Consortium's governance.

3. Common Commitments and Responsibilities of Governing and Participating States

- a. Implement strict item and test security policies and procedures, as defined and approved by the Governing Board, that protect the security and integrity of the assessment items;
- b. Implement common test administration practices, as defined and approved by the Governing Board, that enable the reporting of comparable results;
- c. Provide accommodations and accessibility features that ensure the assessment is open and accessible to all students, including students with disabilities and English learners, as defined and approved by the Governing Board.

B. Application Process For New Members

A State that wishes to join the Consortium may apply for membership in the Consortium at any time, provided that the State meets the prevailing eligibility requirements associated with its desired membership classification in the Consortium. The state's Chief State School Officer must sign a copy of the most recent iteration of this MOU, as it may have been amended.

C. Membership Opt-Out Process

At any time, a State may withdraw from the Consortium by providing written notice to the chair of the Governing Board, signed by the chief state school officer, at least ten (10) days prior to the effective date of the withdrawal, including an explanation of reasons for the withdrawal.

V. Consortium Governance

- A. The Consortium's policies, business and practices will be determined and directed collectively by the states through a Governing Board.
- B. The Governing Board shall be comprised of the chief state school officer or designee from each Governing State;

- C. The Governing Board shall make decisions regarding major policy, design, operational and organizational aspects of the Consortium's work, including:
1. Overall design of the assessment system;
 2. Common achievement levels;
 3. Consortium procurement strategy;
 4. Modifications to governance structure and decision-making process;
 5. Policies and decisions regarding control and ownership of intellectual property developed by or for the Consortium (including without limitation, test specifications and blue prints, test forms, item banks, psychometric information, and other measurement theories/practices), provided that such policies and decisions:
 - a. will provide equivalent rights to such intellectual property to all Governing states participating in the Consortium;
 - b. assure that any Governing State that withdraws from the Consortium will continue to have access to assessment items developed during its tenure in the Consortium, through such licensing and test security agreements as the Governing Board establishes to manage and protect the intellectual property;
- D. The Governing Board shall be chaired by a chief state school officer from one Governing State.
1. The Governing Board Chair shall serve a one-year term, which may be renewed.
 2. The Governing States shall nominate candidates to serve as the Governing Board Chair, and the Governing Board Chair shall be selected by majority vote.
 3. The Governing Board Chair shall have the following responsibilities:
 - a. To provide leadership to the Governing Board to ensure that it operates in an efficient, effective, and orderly manner. The tasks related to these responsibilities include:
 - (i) Ensure that the appropriate policies and procedures are in place for the effective management of the Governing Board and the Consortium;
 - (ii) Assist in managing the affairs of the Governing Board, including chairing meetings of the Governing

Board and ensure that each meeting has a set agenda, is planned effectively and is conducted according to the Consortium's policies and procedures and addresses the matters identified on the meeting agenda;

- (iii) Represent the Governing Board, and act as a spokesperson for the Governing Board if and when necessary;
- (iv) Ensure that the Governing Board is managed effectively by, among other actions, supervising the Project Management Partner; and
- (v) Serve as in a leadership capacity by encouraging the work of the Consortium, and assist in resolving any conflicts.

E. Participating States may provide input for Governing Board decisions, as described below.

F. Governing Board decisions shall be made by consensus; where consensus is not achieved among Governing States, decisions shall be made by a vote of the Governing States. Each State has one vote. Votes of a supermajority of the Governing States are necessary for a decision to be reached.

1. The supermajority of the Governing States is currently defined as a majority of Governing States plus one additional State;
2. The Governing Board shall, from time to time as necessary, including as milestones are reached and additional States become Governing States, evaluate the need to revise the votes that are required to reach a decision, and may revise the definition of supermajority, as appropriate. The Governing Board shall make the decision to revise the definition of supermajority by consensus, or if consensus is not achieved, by a vote of the supermajority as currently defined at the time of the vote.

G. The Governing Board shall meet at least quarterly to consider issues identified by the Board Chair, including but not limited to major policy decisions of the Consortium.

VI. Binding Commitments and Assurances

A. **Binding Assurances Common To All States – Participating and Governing**

Each State that joins the Consortium, whether as a Participating State or a Governing State, hereby certifies and represents that it:

1. Has all requisite power and authority necessary to execute this MOU;
 2. Will cooperate fully with the Consortium and will carry out all of the responsibilities associated with its selected membership classification;
 3. Will actively promote collaboration and alignment between the State and its public elementary and secondary education systems and their public Institutions of Higher Education (“IHE”) or systems of IHEs. The State will endeavor to:
 - a. Engage faculty and leadership from IHEs or IHE systems to participate in the design and development of the Consortium’s high school summative assessments;
 - b. Obtain commitments from IHEs or IHE systems to use the assessment in the state’s postsecondary institutions, along with any other placement requirement established by the IHE or IHE system, as an indicator of students’ readiness for placement in non-remedial, credit-bearing college-level coursework.
- B. The PARCC consortium member states have collaborated on the development of assessment content funded through the Race to the Top Grant. This assessment content is available for any state to use on a royalty-free basis for student assessments administered in their states subject to security requirements. The PARCC consortium member states have contracted to develop additional assessment content for use in student assessments with the understanding that it will be available for any member state’s use in connection with student assessments administered in that state subject to security requirements.

VII. Financial Arrangements

This MOU does not constitute a financial commitment on the part of the Parties. Any financial arrangements associated with the Consortium will be covered by separate project agreements between the Consortium members and other entities, and subject to ordinary budgetary and administrative procedures. It is understood that the ability of the Parties to carry out their obligations is subject to the availability of funds and personnel through their respective funding procedures.

VIII. Personal Property

Title to any personal property, such as computers, computer equipment, office supplies, and office equipment furnished by a State to the Consortium shall remain with the State furnishing the same. All parties agree to exercise due care in handling such property. However, each party agrees to be responsible for any damage to its property which occurs in the performance of activities in support of the Consortium, and to waive any claim against the other party for such damage, whether arising through negligence or otherwise.

IX. Liability and Risk of Loss

- A. To the extent permitted by law, with regard to activities undertaken pursuant to this MOU, none of the parties to this MOU shall make any claim against one another or their respective instrumentalities, agents or employees for any injury to or death of its own employees, or for damage to or loss of its own property, whether such injury, death, damage or loss arises through negligence or otherwise.
- B. To the extent permitted by law, if a risk of damage or loss is not dealt with expressly in this MOU, such party's liability to another party, whether or not arising as the result of alleged breach of the MOU, shall be limited to direct damages only and shall not include loss of revenue or profits or other indirect or consequential damages.

X. Resolution of Conflicts

Conflicts which may arise regarding the interpretation of the clauses of this MOU will be resolved by the Governing Board, and that decision will be considered final and not subject to further appeal or to review by any outside court or other tribunal.

XI. Modifications

The content of this MOU may be reviewed periodically or amended at any time as agreed upon by vote of the Governing Board.

XII. Duration, Renewal, Termination

- A. This MOU will take effect upon execution of this MOU by at least five States as "Governing States" and will have a duration through June 30, 2016, unless otherwise extended by agreement of the Governing Board.
- B. This MOU may be terminated by decision of the Governing Board, or by withdrawal or termination of a sufficient number of Governing States so that there are fewer than five Governing States.
- C. Any member State of the Consortium may be involuntarily terminated by the Governing Board as a member for breach of any term of this MOU, or for breach of any term or condition that may be imposed by the Consortium Governing Board, or of any applicable bylaws or regulations.

XIII. Points of Contact

Communications with the State regarding this MOU should be directed to:

Name:

Mailing Address:

Telephone:

Fax:

E-mail:

Or hereafter to such other individual as may be designated by the State in writing transmitted to the Chair of the Governing Board or the Chair's designee.

XIV. Signatures and Intent To Join in the Consortium

The State of [INSERT] hereby joins the Consortium as a [Participating OR Governing] State, and agrees to be bound by all of the assurances and commitments associated with the [Participating OR Governing] State membership classification. Further, the State of [INSERT] agrees to perform the duties and carry out the responsibilities associated with the [Participating OR Governing] State membership classification.

State of:	
Signature of the Chief State School Officer:	
Printed Name:	Date: