Assessment Materials Evaluation - Student Standards Review

Louisiana educators engaged in a professional review of the state's academic standards for English language arts (ELA) and mathematics to ensure they continue to maintain strong expectations for teaching and learning aligned with college and workplace demands. The new ELA and math standards will be effective beginning with the 2016-2017 school year. As part of the Louisiana Department of Education's support for a seamless transition to these new standards, the LDOE identified the major changes of the standards and their potential impact upon criteria used to review instructional materials.

Title: **MAP Assessments** Grade: **6-8**

Publisher: **Northwest Evaluation Association (NWEA)** Copyright: **2014**

Overall Rating: **Tier III, Not representing quality**

This Mathematics review has been examined for the following major shifts in alignment resulting from the Louisiana Student Standards Review:

- Include standards for money in grades K, 1, and 3 to ensure connections that provide smooth transitions from one grade to the next
- Provide developmentally appropriate content for all grades or courses while maintaining high expectations:
    - Additive area is moved to grade 4 from grade 3
    - The Statistics - Conditional Probability and the Rules of Probability (S-CP) domain is moved from Algebra II to Geometry
    - The standards provide extra clarity around the distinction between Algebra I and II

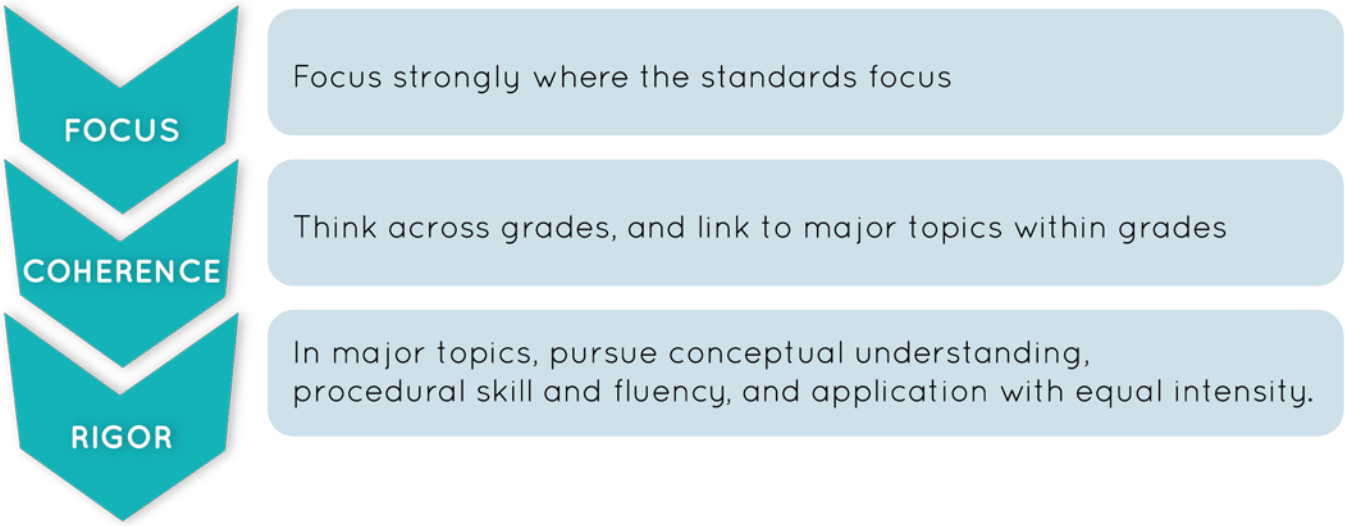
The following two indicators may be impacted:

- Focus on Major Work (Non-Negotiable)
- Focus in K-8 (Non-Negotiable)

This review remains a Tier 3 rating. As a result of these changes, the following chart identifies the potential impact on the current review. The LDOE recommends that district curriculum staff, principals, and teachers take these findings into consideration when using these benchmark assessments.

Criteria	Currently in the Rubric	Next Steps for Educators
Focus on Major Work (Non-Negotiable)	This program currently is reviewed as "No" for this criterion because barely half of all assessment items are aligned to major work of their corresponding grade.	Since these materials received a "No" for this indicator, the current weakness will likely remain and should be addressed by adjusting or supplementing with stronger programs.
Focus in K-8 (Non-Negotiable)	This program currently is reviewed as "No" for this criterion because progression within the assessment was based on the student's ability level and therefore the student may or may not be working on grade level material. A majority of items addressed standards outside of grades 6-8. Individual items that address knowledge of topics found in future grade level are also included in the set.	Since these materials received a "No" for this indicator, the current weakness will likely remain and should be addressed by adjusting or supplementing with stronger programs.

Strong mathematics instruction contains the following elements:



Title: **MAP Assessments** Grade: **6-8**

Publisher: **Northwest Evaluation Association (NWEA)** Copyright: **2014**

Overall Rating: **Tier III, Not representing quality**

Tier I, Tier II, Tier III Elements of this review:

STRONG	WEAK
	1. Alignment of Test Items (Non-Negotiable)
	2. Focus on Major Work (Non-Negotiable)
	3. Focus in K-8 (Non-Negotiable)

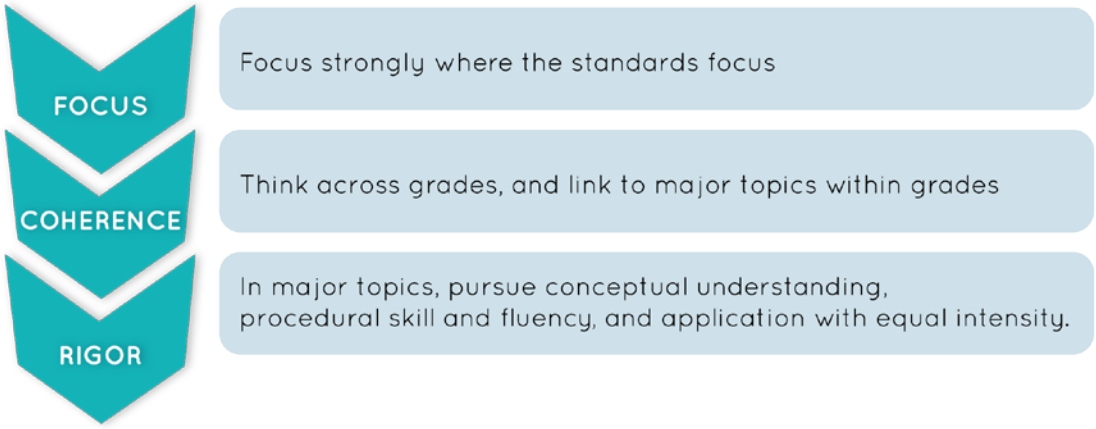
Each set of submitted materials was evaluated for alignment with the standards beginning with a review of the indicators for the non-negotiable criteria. If those criteria were met, a review of the other criteria ensued.

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 11.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 3), a "Yes" in Column 1 for Criteria 4 in Section II, but at least one "No" in Section III.
Tier 3 ratings receive a "No" in Column 1 in Section I or Section II.

Click below for complete grade-level reviews:

Grade 6 (Tier 3) Grade 7 (Tier 3) Grade 8 (Tier 3)

Strong mathematics instruction contains the following elements:



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STRONG	WEAK
	1. Alignment of Test Items (Non-Negotiable)
	2. Focus on Major Work (Non-Negotiable)
	3. Focus in K-8 (Non-Negotiable)

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a "Yes" for all indicators in Column 2 for Section I, then the materials receive a "Yes" in Column 1. If there is a "No" for any indicator in Column 2 for Section I, then the materials receive a "No" in Column 1.

In Section II, begin by reviewing the indicators in Column 2 for each criterion. If there is a "Yes" for all indicators in Column 2, then the materials receive a "Yes" in Column 1. If there is a "No" for any required indicators in Column 2, then the materials receive a "No" in Column 1. For Section III, review each indicator individually.

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 11.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 3), a "Yes" in Column 1 for Criteria 4 in Section II, but at least one "No" in Section III.
Tier 3 ratings receive a "No" in Column 1 in Section I or Section II.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all non-negotiable criteria in order for the review to continue.			
Non-Negotiable 1. ALIGNMENT OF TEST ITEMS: 90% of test items and/or sets of items exhibit alignment to the full intent of the CCSSM for that grade or course[1 2] by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s). *This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. All items and/or sets of items should reflect the metric.* ☐ Yes ☒ No	**1a)** Items and/or sets of items directly reflect the language of individual standards. • For example, 6.EE.3 puts the emphasis on applying properties of operations and generating equivalent expressions, not just mechanically simplifying. • Most items aligned to a single standard should assess the central concern of the standard in question.	**No**	Numerous items are included that do not directly reflect the language of individual standards. Items associated with 6.EE.C.9 did not aligned to this standard, which requires writing equations; the items only require students to recognize expressions. Only one item associated with standard 6.G.A.2, which requires "fractional edge lengths," was found and used decimal side lengths. One item associated with standard 6.G.A.1, but is really aligned to 4.MD.A.3. None of the 4 items associated with standard 6.G.A.3 address the portion of the standard that requires students to "use coordinates to find the length of a side." Another example is the set of problems aligned to 6.NS.C.7. Although these items require students to order numbers, they do not require students to show understanding of the ordering of rational numbers. Also, although nine items are aligned to 6.RP.A.3a, none of these items require students to plot pairs of values on the coordinate plane or use table to compare ratios. Additional examples found in seventh grade includes numberous items associated with standard 7.EE.A.1 but focus on simplification instead of generating equivalent expressions. One item associated with standard 7.EE.B.4a, does not present the equations in the form required by the standard. Another item associated with standard 7.G.B.4 simply requires students to identify the formula for the area of a circle (which is readily available on the PARCC Assessment Reference Sheet for Grade 7) and not to use the formula to solve problems as indicated in the standard.

[1] Refer also to the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013) and the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[2] See the Quality Criteria Checklist for Mathematics.

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			Additional examples found in eighth grade include items associated with 8.EE.A.1 that focus on simplification instead of generating equivalent expressions.
	1b) Items and/or sets of items align with PARCC's evidence tables for grades 3-8 and adhere to content limitations outlined in that document. All limitations for all grade K-HS provided in footnotes of the CCSSM are also followed. For example, in Grade 3 denominators for fractions are limited to 2, 3, 4, 6 and 8.	**Yes**	Most items reviewed align with PARCC's Evidence Tables, but numerous others no not. For example, items associated with 6.NS.C.3 that include context, should not. Items associated with standard 6.RP.A.3a should use whole numbers, but instead use decimals.
	1c) The overall set of items reflect the progressions in the Standards. • For example, multiplication and division items in grade 3 emphasize equal groups, with no rate problems (grade 6 in CCSS).	**No**	The overall set of test items available does not address each standard within the 6-8 grade band. With insufficient standards present, progression is not shown through the grade band. Therefore, the overall set of items does not reflect the progressions in the standards for grades 6-8. For example, the Statistics and Probability domain is introduced in Grade 6. No items are provided for the entire first cluster of standards (6.SP.A), and no items are provided for 6.SP.B.5a, 6.SP.B.5b, and 6.SP.B.5d. Another example is found at Grade 8. The Functions domain is introduced. No items are provided for 8.F.A.2 and 8.F.A.3. Only 2 items are provided for 8.F.A.1, and only 1 item is provided for 8.F.B.5.
	1d) Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.	**No**	For 6th grade there are no problems for standards 6.EE.2b, 6.EE.4, 6.EE.6, 6.NS.6a, 6.NS.6b, 6.SP.1, 6.SP.2,and 6.SP.3. For 7th grade there are no problems for standards 7.G.3, 7.G.5, 7.NS.2b, 7.RP.1, 7.SP.3, 7.SP.4, and 7.SP.8c. For 8th grade, there are no problems for standard

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			8.F.3. Without all standards being present, the hieracry of content is not present.
	1e) Using the number system appropriate to the grade level. • For example, in grade 3 there are some items involving fractions greater than 1; in the middle grades, arithmetic and algebra use the rational number system, not just the integers.	**Yes**	The appropriate number system for grades 6-8 is present within the items provided. For example, rational and irrational numbers are included as apporpriate grade level standard for this grade band.
Non-Negotiable 2. FOCUS ON MAJOR WORK*: The large majority of points in each grade K–8 are devoted to the major work of the grade, and the majority of points in each High School course are devoted to widely applicable prerequisites.[3] *This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.* ☐ Yes ☒ No ***As applicable to the grade level assessment being reviewed.**	**FOR GRADES K–8 ONLY** **For grades K–8**, each grade/course's assessments **meet or exceed** the following score-point distributions for the major work of the grade. • 85% of the total points in grades K–2 align exclusively to the major work of the grade. • 75% of the total points in grades 3–5 align exclusively to the major work of the grade. 65% of the total points in grades 6–8 align exclusively to the major work of the grade.	**No**	Approximately 44% of the items at Grade 6 are aligned to major work of the grade. Approximately 50% of the items at Grade 7 are aligned to major work of the grade. Approximately 82% of the items at Grade 8 are aligned to major work of the grade. Overall, approximately 56% of all items aligned to Grades 6-8 are aligned to major work of the grade.
	FOR HIGH SCHOOL ONLY **For high school**, aligned assessments or sets of assessments **meet or exceed** the following score-point distribution: • 50% of the total points in high school align to content of Common Core State Standards identified as widely applicable prerequisites for a range of college majors, postsecondary programs, and careers.[4]	**N/A**	
Non-Negotiable 3. FOCUS IN K–8: No	90% of items on an assessment address only knowledge of	**No**	Progression within the assessment was based on the student's ability level and therefore the student

[3] Refer also to criterion #1 in K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013) and criterion #1 in the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[4] Refer also to page 8 in the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES
item assesses topics directly or indirectly before they are introduced in the CCSSM.[5] *This criterion applies to fixed form or CAT assessments, whether a summative assessment or a set of interim/benchmark assessments. All Items also should reflect the metric.* ☐ Yes ☒ No	topics found in the CCSSM in the specified grade level. Commonly misaligned topics include, but are not limited to: • **Probability,** including chance, likely outcomes, probability models**.** (Introduced in the CCSSM in grade 7) • **Statistical distributions**, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and **statistical association or trends**, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grades 6–8; see CCSSM for specific expectations by grade level.) • **Similarity, congruence, or geometric transformations.** (Introduced in the CCSSM in grade 8) • **Symmetry** of shapes, including line/reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)		may or may not be working on grade level material. 27% of the items in the bank address only knowledge of topics found in the 6-8 CCSSM. The remaining items addressed standards outside of grades 6-8. Individual items that address knowledge of topics found in future grade level are also included in the set. For example, there is only 1 item aligned to 6.EE.B.5. There are multiple issues with this item. First, at grade 6 less than or equal to signs are appropriate, but this problem uses a less than or equal to sign. Also, this problem requires students to subtract numbers and find a solution of -1; this is not appropriate for grade 6. Items associated with standard 6.EE.B.7 include equations that are too advanced for the sixth grade. Items associated with 6.EE.B.8 require students to write a compound inequality to represent a graph which is also too advanced for sixth grade. In addition, some items include answer choices that are beyond the scope of sixth grade (e.g., compound inequality, less than or equal to, and greater than or equal to). Still other items reference the term 'function table,' a standard that should not be addressed until 8th grade.
SECTION II: Balance: Submissions must meet Rigor and Balance criterion in order for the review to continue.			
4. RIGOR AND BALANCE: Each grade/course's assessments reflect the balances in the Standards and help students meet the Standards' rigorous expectations by helping students develop conceptual understanding,	**4a)** ***For Conceptual Understanding:*** ***K–High School*:** At least 20% of the total score-points on the assessment(s) for each grade or course explicitly require students to demonstrate conceptual understanding of key mathematical concepts, especially where called for in specific content standards or cluster headings.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[5] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES

procedural skill and fluency, and application.[6]
 	
This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.
 	
☐ Yes ☐ No
	4b) ***For Procedural Skill and Fluency:***
	• ***K–6:*** At least 20% of the score-points on the assessment(s) for each grade explicitly assess procedural skill and fluency requirements in the Standards.
	• ***7–8 and High School:*** At least 20% of the score-points on the assessment(s) for each grade or course explicitly assess procedural skill and fluency/culminating standards.
	  • Grade 7: 7.EE.3, 7.EE.4, 7.NS.1
	  • Grade 8: 8.EE.7, 8.G.9
	High School: See PARCC Model Content Frameworks, pages 46, 49, 53, 54
		Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.

	4c) ***For Applications*** • ***K–5:*** At least 20% of the total score-points on the assessment(s) for each grade explicitly assess solving single- or multi-step word problems. • ***6–8:*** At least 25% of the total score points on the assessment(s) for each grade explicitly assess solving single- and multi-step word problems and simple models. ***High School:*** At least 30% of the total score-points on the assessment(s) for each high school course explicitly assess single- and multi-step word problems, simple models, and substantial modeling/application problems.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	4d) ***Grades 3-High School***: PARCC Type II and Type III Performance-Based Tasks [7] • At least two items on each assessment for each grade or course align with PARCC's Type II (Subclaim C) Evidence Statements. One item is a 3-point item and the second a 4-point item. A rubric for hand scoring any part of an item that cannot be machine scored is provided. At least two items on each assessment for each grade or course	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

[6] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013) and criterion #2 in the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

[7] See page 2 of PARCC's Evidence Tables - High Level Overview and the PBA Evidence tables for each grade. An example of a Subclaim C evidence staement is 4.C.2. An example of a Subclaim D evidence statement is 4.D.1. To view PARCC's prototype Type II and Type III items, go to http://www.parcconline.org/samples/mathematics/grade-4-mathematics.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	align with PARCC's Type III (Subclaim D) Evidence Statements. One item is a 3-point item and the second a 6-point item. A rubric for hand scoring any part of an item that cannot be machine scored is provided.		
SECTION III: ADDITIONAL INDICATORS OF QUALITY			
5. Practice-Content Connections. Each grade/course's assessments include items that meaningfully connect the Standards for Mathematical Content and Standards for Mathematical Practice. However, not all items need to align to a Standard for Mathematical Practice. And there is no requirement to have an equal balance among the Standards for Mathematical Practice in any set of items or test forms.[8]		**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
6. Assessing Supporting Content. Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course.[9]		**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
7. Addressing Every Standard for Mathematical Practice. Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course.		**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
8. Expressing Mathematical Reasoning. There are sufficiently many points on the assessment(s) for each grade or course that explicitly assess expressing and/or communicating mathematical reasoning.		**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
9. Constructing Forms Without Cueing Solution Processes. Item sequences do not cue the student to use a certain solution process during problem solving and assessments include problems requiring different types of solution processes within the same section.		**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
10. Calling for Variety in Student Work. Items require a variety in what students produce. For example, items require students to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.[10]		**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
11. Quality Materials. The assessment items, answer keys, and documentation are free from mathematical errors.		**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
FINAL EVALUATION ***Tier 1 ratings*** receive a "Yes" in Column 1 for Criteria 1 – 3, a "Yes" in Column 1 for Criteria 4, and a "Yes" for all additional indicators 5 – 11. ***Tier 2 ratings*** receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 3), a "Yes" in Column 1 for Criteria 4, but at least one "No" for additional indicators 5 – 11. ***Tier 3 ratings*** receive a "No" in Column 1 for at least criteria in Section I or Section II.			

[8] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013) and criteria #5 High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[9] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[10] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013) and criteria #7 High School Publishers' Criteria for the CCSSM (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**
I: Non-Negotiables	1. Alignment of Test Items	**No**	The overall set of test items available does not address each standard within the 6-8 grade band.
	2. Focus on Major Work	**No**	Based on the test items provided for grades 6-8, the mandatory 65% of work required for the major work of the grade band is not present.
	3. Focus in K-8	**No**	There is no way to guarantee that students are on the appropriate grade level for the 6-8 grade band.
II. Balance	4. Rigor and Balance	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
III: Additional Indicators of Quality	5. Practice-Content Connections	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	6. Assessing Supporting Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7. Addressing Every Standard for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	8. Expressing Mathematical Reasoning	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	9. Constructing Forms Without Cueing Solution Processes	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	10. Calling for Variety in Student Work	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	11. Quality Materials	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: Tier III, Not representing quality			

Appendix I.

Publisher Response

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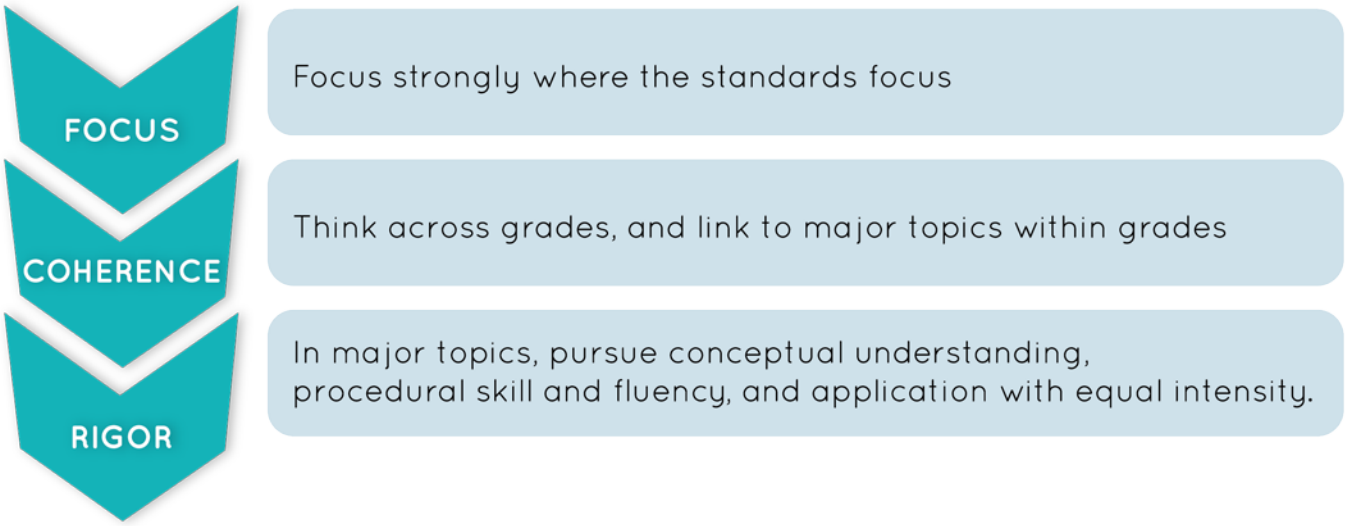

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	1. Alignment of Test Items (Non-Negotiable)
	2. Focus on Major Work (Non-Negotiable)
	3. Focus in K-8 (Non-Negotiable)

Each set of submitted materials was evaluated for alignment with the standards beginning with a review of the indicators for the non-negotiable criteria. If those criteria were met, a review of the other criteria ensued.

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 11.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 3), a "Yes" in Column 1 for Criteria 4 in Section II, but at least one "No" in Section III.
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Click below for complete grade-level reviews:

Grade 6 (Tier 3) Grade 7 (Tier 3) Grade 8 (Tier 3)

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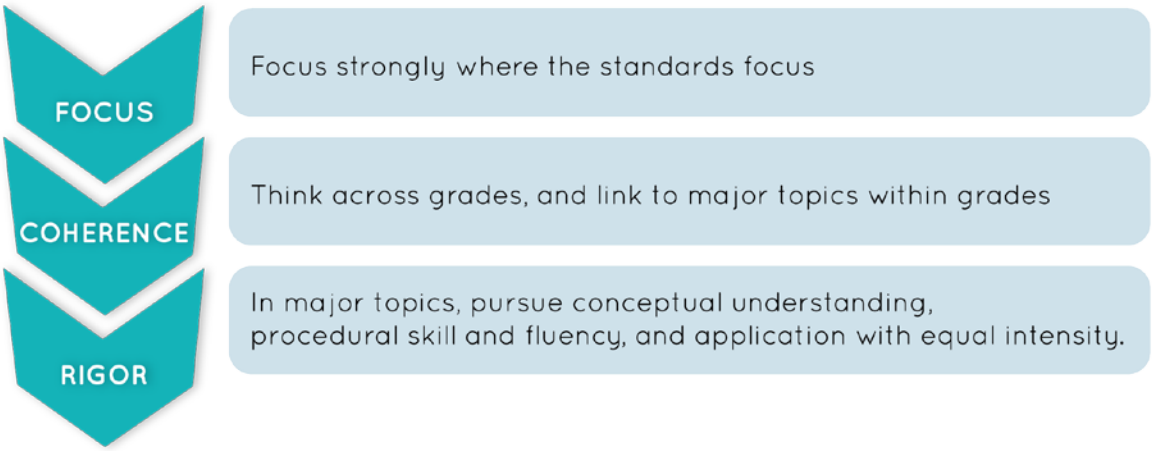

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In Section II, begin by reviewing the indicators in Column 2 for each criterion. If there is a "Yes" for all indicators in Column 2, then the materials receive a "Yes" in Column 1. If there is a "No" for any required indicators in Column 2, then the materials receive a "No" in Column 1. For Section III, review each indicator individually.

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CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES	PUBLISHER COMMENTS
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all non-negotiable criteria in order for the review to continue.				
Non-Negotiable 1. ALIGNMENT OF TEST ITEMS: 90% of test items and/or sets of items exhibit alignment to the full intent of the CCSSM for that grade or course[1] [2] by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s). *This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. All items and/or sets of items should reflect the metric.* ☐ Yes ☒ No	**1a)** Items and/or sets of items directly reflect the language of individual standards. • For example, 6.EE.3 puts the emphasis on applying properties of operations and generating equivalent expressions, not just mechanically simplifying. • Most items aligned to a single standard should assess the central concern of the standard in question.	**No**	Numerous items are included that do not directly reflect the language of individual standards. Items associated with 6.EE.C.9 did not aligned to this standard, which requires writing equations; the items only require students to recognize expressions. Only one item associated with standard 6.G.A.2, which requires "fractional edge lengths," was found and used decimal side lengths. One item associated with standard 6.G.A.1, but is really aligned to 4.MD.A.3. None of the 4 items associated with standard 6.G.A.3 address the portion of the standard that requires students to "use coordinates to find the length of a side." Another example is the set of problems aligned to 6.NS.C.7. Although these items require students to order numbers, they do not require students to show understanding of the ordering of rational numbers. Also, although nine items are aligned to 6.RP.A.3a, none of these items require students to plot pairs of values on the coordinate plane or use table to compare ratios. Additional examples found in seventh grade includes numberous items associated with standard 7.EE.A.1 but focus on simplification instead of generating equivalent expressions. One item associated with standard 7.EE.B.4a, does not present the equations in the form required by the standard. Another item associated with standard 7.G.B.4 simply requires students to identify the formula for the area of a circle (which is readily available on the PARCC Assessment Reference Sheet for Grade 7) and not to use the formula to solve problems as indicated in the standard. Additional examples found in eighth grade include	The item pool for the MAP for Mathematics test aligned to the Common Core State Standards (CCSS) in grades 6 and above has approximately 4,000 items. The items in the MAP for Mathematics assessments have been hand aligned to the CCSS by NWEA's Content Specialists, all of whom have expert knowledge of the standards and regularly participate in professional development about the standards to maintain this knowledge. An external alignment study carried out by WestEd on a representative sample of Reading, Language Usage, and Mathematics items in 2012 provided further validation of alignment to the CCSS. The items identified in the reviewer comments represents a very small subset of NWEA's entire CCSS-aligned item pool. Many of these comments point out the fact that an item does not address the entire standard to which it is aligned. NWEA items only assess one concept or skill in each item. This ensures that the item's calibrated RIT score (difficulty level) accurately reflects the level of the skill or concept assessed by the item. For example, with regard to the comment about the items aligned to 7.EE.A.1 and 8.EE.A.1, there are items aligned to these standards where the student simplifies while generating equivalent expressions. There are other items where the students will generate equivalent expressions without simplification. In both cases, the students are applying the appropriate properties as described in the standards. It is important to note that over the past six months, the NWEA math content specialists have reviewed the entire CCSS item bank. Based on more public

[1] Refer also to the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013) and the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[2] See the Quality Criteria Checklist for Mathematics.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES	PUBLISHER COMMENTS
			items associated with 8.EE.A.1 that focus on simplification instead of generating equivalent expressions.	standards clarifications, there were instances where the CCSS alignment was either removed or changed based on these clarifications.
	1b) Items and/or sets of items align with PARCC's evidence tables for grades 3-8 and adhere to content limitations outlined in that document. All limitations for all grade K-HS provided in footnotes of the CCSSM are also followed. For example, in Grade 3 denominators for fractions are limited to 2, 3, 4, 6 and 8.	**Yes**	Most items reviewed align with PARCC's Evidence Tables, but numerous others no not. For example, items associated with 6.NS.C.3 that include context, should not. Items associated with standard 6.RP.A.3a should use whole numbers, but instead use decimals.	
	1c) The overall set of items reflect the progressions in the Standards. • For example, multiplication and division items in grade 3 emphasize equal groups, with no rate problems (grade 6 in CCSS).	**No**	The overall set of test items available does not address each standard within the 6-8 grade band. With insufficient standards present, progression is not shown through the grade band. Therefore, the overall set of items does not reflect the progressions in the standards for grades 6-8. For example, the Statistics and Probability domain is introduced in Grade 6. No items are provided for the entire first cluster of standards (6.SP.A), and no items are provided for 6.SP.B.5a, 6.SP.B.5b, and 6.SP.B.5d. Another example is found at Grade 8. The Functions domain is introduced. No items are provided for 8.F.A.2 and 8.F.A.3. Only 2 items are provided for 8.F.A.1, and only 1 item is provided for 8.F.B.5.	The item pool for the MAP for Mathematics assessments aligned to the CCSS for grades 6 and above has approximately 4,000 items. The 1,497 items submitted to the state for review were from simulated test events. Because MAP tests select items based on an individual student's performance on the test, the simulated test events did not include items aligned to the standards listed in the reviewer comments. However, this does not mean that NWEA does not have items aligned to those standards. We have items aligned to 8.F.1, 8.F.2, and 8.F.5. NWEA is currently developing items to fill the remaining gaps as mentioned by the reviewers. Further, even if a student does not see an item aligned to a particular standard, NWEA's RIT scores still provide educators with a very accurate estimate of whether a student is developing understanding of the skills in the standard or has a strong understanding of the skills in all of the standards assessed regardless of whether a student actually answers an item aligned to that standard. The Learning Continuum reports that accompany MAP assessments provide these data to educators. Although our RIT scores provide estimates of student ability, they are proven to be extremely reliable. A MAP test takes approximately 45-50

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES	PUBLISHER COMMENTS
				minutes to complete, meaning that educators can get an accurate snapshot of a student's math, reading, and language usage ability in approximately 2 hours and 15 minutes.
	1d) Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.	**No**	For 6th grade there are no problems for standards 6.EE.2b, 6.EE.4, 6.EE.6, 6.NS.6a, 6.NS.6b, 6.SP.1, 6.SP.2,and 6.SP.3. For 7th grade there are no problems for standards 7.G.3, 7.G.5, 7.NS.2b, 7.RP.1, 7.SP.3, 7.SP.4, and 7.SP.8c. For 8th grade, there are no problems for standard 8.F.3. Without all standards being present, the hieracry of content is not present.	NWEA's MAP assessments are designed to assess students where they are, regardless of grade level.. This way, if a student is performing below grade level, the test can identify those specific skills and concepts. We have items aligned to 6.EE.6, 6.NS.6.a, 7.G.3, 7.G.5, 7.RP.1, 7.SP.3, and 7.SP.4. Please see the response above for more information about why items aligned to these standards did not show up in the items we pulled for review. NWEA is currently developing items to fill the remaining gaps as mentioned by the reviewers.
	1e) Using the number system appropriate to the grade level. • For example, in grade 3 there are some items involving fractions greater than 1; in the middle grades, arithmetic and algebra use the rational number system, not just the integers.	**Yes**	The appropriate number system for grades 6-8 is present within the items provided. For example, rational and irrational numbers are included as apporpriate grade level standard for this grade band.	
Non-Negotiable 2. FOCUS ON MAJOR WORK*: The large majority of points in each grade K–8 are devoted to the major work of the grade, and the majority of points in each High School course are devoted to widely applicable prerequisites.[3] *This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.*	**FOR GRADES K–8 ONLY** **For grades K–8**, each grade/course's assessments **meet or exceed** the following score-point distributions for the major work of the grade. • 85% of the total points in grades K–2 align exclusively to the major work of the grade. • 75% of the total points in grades 3–5 align exclusively to the major work of the grade. 65% of the total points in grades 6–8 align exclusively to the major work of the grade.	**No**	Approximately 44% of the items at Grade 6 are aligned to major work of the grade. Approximately 50% of the items at Grade 7 are aligned to major work of the grade. Approximately 82% of the items at Grade 8 are aligned to major work of the grade. Overall, approximately 56% of all items aligned to Grades 6-8 are aligned to major work of the grade.	NWEA does not currently weight our tests based on PARCC's "major" standard designation. The items presented to a student in any given test event are determined by the individual student's achievement level and by the test's goal structure. Goal structures are test frameworks that group all assessable standards into goal areas that represent content domains and sub-goals that represent common groupings of grade level expectations that cover related topics along the learning continuum within each standard. Each student is administered a balanced number of items in each goal area to estimate an overall score and goal scores. Because

[3] Refer also to criterion #1 in K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013) and criterion #1 in the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES	PUBLISHER COMMENTS
☐ Yes ☒ No ***As applicable to the grade level assessment being reviewed.**				MAP assessments are adaptive and designed to provide data about students across the achievement continuum--including students who are performing below grade level or above grade level--the item pools that support these tests are very large and include items that may range in complexity from the most basic "building block" aspect of a skill to analytical or evaluative aspects of the skill.
	FOR HIGH SCHOOL ONLY **For high school**, aligned assessments or sets of assessments **meet or exceed** the following score-point distribution: • 50% of the total points in high school align to content of Common Core State Standards identified as widely applicable prerequisites for a range of college majors, postsecondary programs, and careers.[4]	**N/A**		
Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.[5] *This criterion applies to fixed form or CAT assessments, whether a summative assessment or a set of interim/benchmark assessments. All Items also should reflect the metric.* ☐ Yes ☒ No	90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level. Commonly misaligned topics include, but are not limited to: • **Probability,** including chance, likely outcomes, probability models**.** (Introduced in the CCSSM in grade 7) • **Statistical distributions**, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and **statistical association or trends**, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grades 6–8; see CCSSM for specific expectations by grade level.) • **Similarity, congruence, or geometric transformations.** (Introduced in the CCSSM in grade 8) • **Symmetry** of shapes, including line/reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)	**No**	Progression within the assessment was based on the student's ability level and therefore the student may or may not be working on grade level material. 27% of the items in the bank address only knowledge of topics found in the 6-8 CCSSM. The remaining items addressed standards outside of grades 6-8. Individual items that address knowledge of topics found in future grade level are also included in the set. For example, there is only 1 item aligned to 6.EE.B.5. There are multiple issues with this item. First, at grade 6 less than or equal to signs are appropriate, but this problem uses a less than or equal to sign. Also, this problem requires students to subtract numbers and find a solution of -1; this is not appropriate for grade 6. Items associated with standard 6.EE.B.7 include equations that are too advanced for the sixth grade. Items associated with 6.EE.B.8 require students to	NWEA's MAP assessments are designed to assess students where they are, regardless of grade level. The MAP for Mathematics assessments for grades 6 and above include items aligned to some of the CCSS standards below grade 6 and above grade 8. This way, if a student is performing below sixth grade or above eighth grade, the test can identify those specific skills and concepts. It is important to note that NWEA items aligned to 6.EE.B.7, for example, are written at a variety of complexity levels to address the entire continuum of learning for each standard. Meaning, the complexity level of the items aligned to a standard do not exceed the skill level of the standards at that grade. Over the past six months, the NWEA math content specialists have reviewed the entire CCSS item bank. Based on clarifications gathered from the writers of

[4] Refer also to page 8 in the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[5] Refer also to criterion #2 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES	PUBLISHER COMMENTS
			write a compound inequality to represent a graph which is also too advanced for sixth grade. In addition, some items include answer choices that are beyond the scope of sixth grade (e.g., compound inequality, less than or equal to, and greater than or equal to). Still other items reference the term 'function table,' a standard that should not be addressed until 8th grade.	the CCSS and from the consortia interpretations, there were instances where the CCSS alignment was either removed or changed based on these clarifications. The MAP for Mathematics test does include items that assess probability, statistical distribution, similarity, congruence, transformations, or symmetry. However, those items will only be seen by students potentially performing above grade level.
SECTION II: Balance: Submissions must meet Rigor and Balance criterion in order for the review to continue.				
4. RIGOR AND BALANCE: Each grade/course's assessments reflect the balances in the Standards and help students meet the Standards' rigorous expectations by helping students develop conceptual understanding, procedural skill and fluency, and application.[6] *This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.* ☐ Yes ☐ No	**4a)** ***For Conceptual Understanding:*** ***K–High School***: At least 20% of the total score-points on the assessment(s) for each grade or course explicitly require students to demonstrate conceptual understanding of key mathematical concepts, especially where called for in specific content standards or cluster headings.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

	4b) ***For Procedural Skill and Fluency:***
	• ***K–6:*** At least 20% of the score-points on the assessment(s) for each grade explicitly assess procedural skill and fluency requirements in the Standards.
	• ***7–8 and High School:*** At least 20% of the score-points on the assessment(s) for each grade or course explicitly assess procedural skill and fluency/culminating standards.
	  • Grade 7: 7.EE.3, 7.EE.4, 7.NS.1
	  • Grade 8: 8.EE.7, 8.G.9
	High School: See PARCC Model Content Frameworks, pages 46, 49, 53, 54
		Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.	

	4c) ***For Applications*** • ***K–5:*** At least 20% of the total score-points on the assessment(s) for each grade explicitly assess solving single- or multi-step word problems. • ***6–8:*** At least 25% of the total score points on the assessment(s) for each grade explicitly assess solving single- and multi-step word	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

[6] Refer also to criterion #4 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013) and criterion #2 in the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES	PUBLISHER COMMENTS
	problems and simple models. ***High School:*** At least 30% of the total score-points on the assessment(s) for each high school course explicitly assess single- and multi-step word problems, simple models, and substantial modeling/application problems.			
	4d) ***Grades 3-High School***: PARCC Type II and Type III Performance-Based Tasks [7] • At least two items on each assessment for each grade or course align with PARCC's Type II (Subclaim C) Evidence Statements. One item is a 3-point item and the second a 4-point item. A rubric for hand scoring any part of an item that cannot be machine scored is provided. At least two items on each assessment for each grade or course align with PARCC's Type III (Subclaim D) Evidence Statements. One item is a 3-point item and the second a 6-point item. A rubric for hand scoring any part of an item that cannot be machine scored is provided.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
SECTION III: ADDITIONAL INDICATORS OF QUALITY				
5. Practice-Content Connections. Each grade/course's assessments include items that meaningfully connect the Standards for Mathematical Content and Standards for Mathematical Practice. However, not all items need to align to a Standard for Mathematical Practice. And there is no requirement to have an equal balance among the Standards for Mathematical Practice in any set of items or test forms.[8]		**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
6. Assessing Supporting Content. Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course.[9]		**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
7. Addressing Every Standard for Mathematical Practice. Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course.		**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
8. Expressing Mathematical Reasoning. There are sufficiently many points on the assessment(s) for each grade or course that explicitly assess expressing and/or communicating mathematical reasoning.		**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
9. Constructing Forms Without Cueing Solution Processes. Item sequences do not cue the student to use a certain solution process during problem solving and assessments include problems requiring different types of solution processes within the same section.		**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
10. Calling for Variety in Student Work. Items require a variety in what students produce. For example, items require		**Not Evaluated**	This section was not evaluated because the non-	

[7] See page 2 of PARCC's Evidence Tables - High Level Overview and the PBA Evidence tables for each grade. An example of a Subclaim C evidence staement is 4.C.2. An example of a Subclaim D evidence statement is 4.D.1. To view PARCC's prototype Type II and Type III items, go to http://www.parcconline.org/samples/mathematics/grade-4-mathematics.
[8] Refer also to criterion #7 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013) and criteria #5 High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[9] Refer also to criterion #3 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES	PUBLISHER COMMENTS
students to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.[10]			negotiable criteria were not met.	
11. Quality Materials. The assessment items, answer keys, and documentation are free from mathematical errors.		**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL EVALUATION ***Tier 1 ratings*** receive a "Yes" in Column 1 for Criteria 1 – 3, a "Yes" in Column 1 for Criteria 4, and a "Yes" for all additional indicators 5 – 11. ***Tier 2 ratings*** receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 3), a "Yes" in Column 1 for Criteria 4, but at least one "No" for additional indicators 5 – 11. ***Tier 3 ratings*** receive a "No" in Column 1 for at least criteria in Section I or Section II.				
Compile the results for Sections I and II to make a final decision for the material under review.				
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**	
I: Non-Negotiables	1. Alignment of Test Items	**No**	The overall set of test items available does not address each standard within the 6-8 grade band.	The item pool for the MAP for Mathematics test aligned to the CCSS in grades 6 and above has approximately 4,000 items. The 1,497 items submitted to the state for review were from simulated test events. Because MAP tests select items based on an individual student's performance on the test, the simulated test events did not include items aligned to the standards listed in the reviewer comments. However, this does not mean that NWEA does not have items aligned to those standards. We have items aligned to 8.F.1, 8.F.2, and 8.F.5. NWEA is currently developing items to fill the remaining gaps as mentioned by the reviewers. Further, even if a student does not see an item aligned to a particular standard, NWEA's RIT scores still provide educators with a very accurate estimate of whether a student is developing understanding of the skills in the standard or has a strong understanding of the skills in all of the standards assessed regardless of whether a student actually answers an item aligned to that standard. The Learning Continuum reports that accompany MAP assessments provide these data to educators.

[10] Refer also to criterion #9 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013) and criteria #7 High School Publishers' Criteria for the CCSSM (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES	PUBLISHER COMMENTS
	2. Focus on Major Work	**No**	Based on the test items provided for grades 6-8, the mandatory 65% of work required for the major work of the grade band is not present.	NWEA does not currently weight our tests based on PARCC's "major" standard designation. The items presented to a student in any given test event are determined by the individual student's achievement level and by the test's goal structure. Goal structures are test frameworks that group all assessable standards into goal areas that represent content domains and sub-goals that represent common groupings of grade level expectations that cover related topics along the learning continuum within each standard. Each student is administered a balanced number of items in each goal area to estimate an overall score and goal scores. Because MAP assessments are adaptive and designed to provide data about students across the achievement continuum--including students who are performing below grade level or above grade level--the item pools that support these tests are very large and include items that may range in complexity from the most basic "building block" aspect of a skill to analytical or evaluative aspects of the skill.
	3. Focus in K-8	**No**	There is no way to guarantee that students are on the appropriate grade level for the 6-8 grade band.	NWEA's MAP assessments are designed to assess students where they are, regardless of grade level. The MAP for Mathematics assessments for grades 6 and above include items aligned to some of the CCSS standards below grade 6 and above grade 8. This way, if a student is performing below sixth grade or above eighth grade, the test can identify those specific skills and concepts.
II. Balance	4. Rigor and Balance	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
III: Additional Indicators of Quality	5. Practice-Content Connections	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	6. Assessing Supporting Content	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	7. Addressing Every Standard for Mathematical Practice	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	8. Expressing Mathematical Reasoning	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES	PUBLISHER COMMENTS
	9. Constructing Forms Without Cueing Solution Processes	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	10. Calling for Variety in Student Work	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
	11. Quality Materials	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.	
FINAL DECISION FOR THIS MATERIAL: Tier III, Not representing quality				

Appendix II.

Public Comments

There were no public comments submitted.