EQuIP Review Feedback

Lesson/Unit Name: Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10
Content Area: Mathematics
Grade Level: 3

Overall Rating:

E

Exemplar

Dimension I – Alignment to the Depth of the CCSS

The lesson/unit aligns with the letter and spirit of the CCSS: ✓ Targets a set of grade-level CCSS mathematics standard(s) to the full depth of the standards for teaching and learning. ✓ Standards for Mathematical Practice that are central to the lesson are identified, handled in a grade-appropriate way, and well connected to the content being addressed. ✓ Presents a balance of mathematical procedures and deeper conceptual understanding inherent in the CCSS.	The module reviewed presents a targeted set of 3rd grade standards, to the full depth of the standards. These standards are 3.OA.1-3.OA.8, which deal with multiplication and division, the core fluency standards for grade 3. The Standards for Mathematical Practice are evident and central to each of the lessons within the module. They are presented in the module overview, and then again within each lesson. Specific connections between the MPs and the content are made within the lessons, so that teachers can guide teaching and learning, as well as assess student outcomes. The module presents a balance of mathematical procedures and deeper conceptual understanding that is inherent in the CCSS. This balance takes place from lesson to lesson, throughout the module as a whole.
Rating: **3 – Meets most to all of the criteria in the dimension**	

Dimension II – Key Shifts the CCSS

The lesson/unit reflects evidence of key shifts that are reflected in the CCSS: ✓ **Focus:** Lessons and units targeting the major work of the grade provide an especially in-depth treatment, with especially high expectations. Lessons and units targeting supporting work of the grade have visible connection to the major work of the grade and are sufficiently brief. Lessons and units do not hold students responsible for material from later grades. ✓ **Coherence:** The content develops through reasoning about the new concepts on the basis of previous understandings. Where appropriate, provides opportunities for students to connect knowledge and skills within or across clusters, domains and learning progressions. ✓ **Rigor:** Requires students to engage with and demonstrate challenging mathematics with appropriate balance among the following: – **Application:** Provides opportunities for students to independently apply mathematical concepts in real-world situations and solve challenging problems	The module focuses on standards 3.OA.1-3.OA.8, foundation standards for students to build concepts and fluency for multiplication and division. These standards are considered major work of the grade. The module does not hold students responsible for material from later grades. Coherence is evident both in the overview, as well as in the individual lessons. In the overview, connections are made to 2nd grade foundation standards that students should have coming into 3rd grade. Throughout the lessons, connections are made to these foundation standards, as well as connections to other standards and clusters within 3rd grade. Concepts build from lesson to lesson and these connections are key for students to progress through the concepts. An appropriate balance of rigor is found throughout the module. Each lesson contains components of conceptual understanding, fluency, and application. One note is that the Sprints (timed fact assessments) could be scaled back. "Timed tests" in this sense can be useful, but can also be used too often. This type of repetitive assessment can be biased and does not always give an accurate picture of student mastery. A variety of fluency assessments should be used with students.

with persistence, choosing and applying an appropriate model or strategy to new situations. – **Conceptual Understanding:** Develops students' conceptual understanding through tasks, brief problems, questions, multiple representations and opportunities for students to write and speak about their understanding. – **Procedural Skill and Fluency:** Expects, supports and provides guidelines for procedural skill and fluency with core calculations and mathematical procedures (when called for in the standards for the grade) to be performed quickly and accurately.	
Rating: **3 – Meets most to all of the criteria in the dimension**	

Dimension III – Instructional Supports

The lesson/unit is responsive to varied student learning needs: ✓ Includes clear and sufficient guidance to support teaching and learning of the targeted standards, including, when appropriate, the use of technology and media. ✓ Uses and encourages precise and accurate mathematics, academic language, terminology and concrete or abstract representations (e.g., pictures, symbols, expressions, equations, graphics, models) in the discipline. ❒ Engages students in productive struggle through relevant, thought-provoking questions, problems and tasks that stimulate interest and elicit mathematical thinking. ✓ Addresses instructional expectations and is easy to understand and use. ✓ Provides appropriate level and type of scaffolding, differentiation, intervention and support for a broad range of learners. – Supports diverse cultural and linguistic backgrounds, interests and styles. – Provides extra supports for students working below grade level. – Provides extensions for students with high interest or working above grade level. <u>*A unit or longer lesson should:*</u> ❒ Recommend and facilitate a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share). ✓ Gradually remove supports, requiring students to demonstrate their mathematical understanding independently.	The module presents clear and sufficient guidance for teaching and learning, addresses instructional expectations and is easy to understand and use. The module does encourage and use precise and accurate mathematics and academic language and terminology. Scaffolding is included in the module, and notes are made for students that are struggling, or for students that need extensions. However, the differentiation that is presented needs to include more support for teachers of students with special needs and ELL. There is very little support for students with different learning styles and backgrounds other than a change in terminology or an extension questions for advanced learners. This criteria could be better presented. There is also a lack of variety in instructional approaches and multiple representations. Arrays are used repeatedly, which is an important strategy in learning multiplication and division, and there are a few additional representations included near the end of the module, but more representations should be included.

✓ Demonstrate an effective sequence and a progression of learning where the concepts or skills advance and deepen over time. ✓ Expect, support and provide guidelines for procedural skill and fluency with core calculations and mathematical procedures (when called for in the standards for the grade) to be performed quickly and accurately.	
Rating: **3 – Meets most to all of the criteria in the dimension**	

Dimension IV – Assessment

The lesson/unit regularly assesses whether students are mastering standards-based content and skills: ✓ Is designed to elicit direct, observable evidence of the degree to which a student can independently demonstrate the targeted CCSS. ✓ Assesses student proficiency using methods that are accessible and unbiased, including the use of grade-level language in student prompts. ❒ Includes aligned rubrics, answer keys and scoring guidelines that provide sufficient guidance for interpreting student performance. *A unit or longer lesson should:* ✓ Use varied modes of curriculum-embedded assessments that may include pre-, formative, summative and self-assessment measures.	Assessments are included in the module, and are of high quality. These assessments are able to provide feedback on student progress toward mastery, and there are a variety of modes included. However, no answer keys or rubrics are included for the student questions, student work, or exit tickets. Mid-module assessment tasks are included at the end of the module, and these contain extremely informative rubrics. However, these are the only rubrics provided. Teachers have no guidance on how to assess student performance outside of these tasks.
Rating: **2 – Meets many of the criteria in the dimension**	

Summary Comments

Although this module is rated an Exemplar, there are some revisions that should be made. The module contains strong foundations for building fluency in multiplication and division, which is important for both 3rd grade and subsequent grades. The module also contains strong evidence of the mathematical shifts and quality instruction and assessment. However, additional support for struggling learners and rubrics for assessing mastery throughout the lessons should be added.

Rating Scales

Rating Scale for Dimensions I, II, III, IV:

3: Meets most to all of the criteria in the dimension
2: Meets many of the criteria in the dimension
1: Meets some of the criteria in the dimension
0: Does not meet the criteria in the dimension

Overall Rating for the Lesson/Unit:

E: Exemplar – Aligned and meets most to all of the criteria in dimensions II, III, IV **(total 11 – 12)**
E/I: Exemplar *if* Improved – Aligned and needs some improvement in one or more dimensions **(total 8 – 10)**
R: Revision Needed – Aligned partially and needs significant revision in one or more dimensions **(total 3 – 7)**
N: Not Ready to Review – Not aligned and does not meet criteria **(total 0 – 2)**

Rating Descriptors

Descriptors for Dimensions I, II, III, IV:

3: **Exemplifies CCSS Quality -** meets the standard described by criteria in the dimension, as explained in criterion-based observations.
2: **Approaching CCSS Quality -** meets many criteria but will benefit from revision in others, as suggested in criterion-based

observations.

1: **Developing toward CCSS Quality -** needs significant revision, as suggested in criterion-based observations.

0: **Not representing CCSS Quality -** does not address the criteria in the dimension.

Descriptor for Overall Ratings:

E: Exemplifies CCSS Quality – Aligned and exemplifies the quality standard and exemplifies most of the criteria across Dimensions II, III, IV of the rubric.

E/I: Approaching CCSS Quality – Aligned and exemplifies the quality standard in some dimensions but will benefit from some revision in others.

R: Developing toward CCSS Quality – Aligned partially and approaches the quality standard in some dimensions and needs significant revision in others.

N: Not representing CCSS Quality – Not aligned and does not address criteria.