EQuIP Review Feedback

Lesson/Unit Name: Addition and Subtraction Within 100
Content Area: Mathematics
Grade Level: 2

Dimension I – Alignment to the Depth of the CCSS

<table>
<thead>
<tr>
<th>The lesson/unit aligns with the letter and spirit of the CCSS:</th>
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</thead>
<tbody>
<tr>
<td>✓ Targets a set of grade-level CCSS mathematics standard(s) to the full depth of the standards for teaching and learning.</td>
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<tr>
<td>✓ 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.</td>
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<tr>
<td>✓ Presents a balance of mathematical procedures and deeper conceptual understanding inherent in the CCSS.</td>
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This unit targets a set of grade level standards and has the standards for mathematical practice central to the unit and individual lessons. The unit presents a balance of mathematical procedures and activities that build students’ conceptual understanding. One of the strengths of this unit is the descriptors that list how the mathematical practices are used within a lesson. This unit could be strengthened to include such descriptors targeted in each lesson, rather than just a few.

Rating: 3 – Meets most to all of the criteria in the dimension

Dimension II – Key Shifts the CCSS

<table>
<thead>
<tr>
<th>The lesson/unit reflects evidence of key shifts that are reflected in the CCSS:</th>
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<tbody>
<tr>
<td>✓ 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.</td>
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<tr>
<td>✓ 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.</td>
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<tr>
<td>✓ Rigor: Requires students to engage with and demonstrate challenging mathematics with appropriate balance among the following:</td>
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<tr>
<td>- Application: Provides opportunities for students to independently apply mathematical concepts in real-world situations and solve challenging problems with persistence, choosing and applying an appropriate model or strategy to new situations.</td>
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<tr>
<td>- Conceptual Understanding: Develops students’ conceptual understanding through tasks, brief problems, questions,</td>
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This unit has made a concentrated effort to show the key shifts that are reflected in the CCSS with much evidence to support the shifts. This unit is focused on a second grade critical area; adding and subtracting numbers within 100. The unit also provides a clear road map of what knowledge students gained in the previous grade and what students will see in future grades pertaining to addition. This unit also does an excellent job at connecting knowledge across domains. For example in module 2, session 1, students incorporate number lines with the two measurement standards which is an excellent way to provide opportunities for students to make connections with everyday situations and with addition. Coherence in this module is seamless and allows educators to help students make mathematical relationships across domains.

This unit also has an appropriate balance of application-type problems, activities that build conceptual understanding, as well as tasks that strengthen and build procedural skill and fluency. Students have many opportunities in their work places, or stations, to practice skills as well as deepen their understanding of the concepts presented.

One thing that could strengthen this unit is for common errors and common student misconceptions to be addressed throughout the unit. Much of the modules’ sessions have a scripted teacher student conversation. The unit doesn’t address teacher expectations if students do not respond in the same way the students’ teacher conversation appears in the unit. By adding this, the unit’s overall coherence could be strengthened so educators who do not have students that respond in the suggested fashion would still be able to help students make mathematical connections and find mathematical relationships.

Overall Rating: E Exemplar
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.

**A unit or longer lesson should:**
- 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.
- 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

One of the strengths of this unit is that it is very clear, easy to navigate, with guidance to support teaching and learning of the targeted standards. The components needed are specified and provided. Technology resources are located throughout the lesson as apps that teachers could use in the classroom or students with access could practice at home. (Web and mobile versions of the geoboard, number line, base ten pieces, and number rack are available from The Math Learning Center.)

The tasks and models in the unit provide many varied opportunities for students to work through some productive struggle in order to take ownership of new knowledge gained.

Some scaffolding is provided throughout the various modules in the form of Support or Challenge opportunities along with a couple of ELL opportunities. There is listed a Support and Intervention Strategies book, but that is not available in this module.
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.

Adding in specific “look-fors”, a student/teacher check-list regarding assessment could strengthen this unit. While there appears to be many strong formative assessments built in, the lessons and unit are unclear about what a teacher should look for regarding student proficiency. This unit would be strengthened if pre- and post- assessments also addressed this issue. An educator may wonder, "What do I do if my kids don't do well on the assignment?"

One thing to note is that in this unit, formative assessment is done either through the use of observation or the occasional exit ticket. The Resource book is listed but not provided for this module.

Answer Keys are provided but interpreting student performance is missing.

**Rating:**

3 – Meets most to all of the criteria in the dimension

2 – Meets many of the criteria in the dimension

Rating: 2 – Meets many of the criteria in the dimension

Summary Comments

Overall, this unit is focused, coherent, and addresses the major work of second grade. The tasks and activities build a deep understanding of number while using a variety of hands on and critical thinking tasks. This unit also has an excellent start to address assessment of the standards taught within the unit, however could be strengthened by adding specific observational and written components a teacher should look for to demonstrate proficiency, as well as next steps an educator could take for those students who do not show proficiency.

**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.