EQuIP Review Feedback

Lesson/Unit Name: Shape Detective
Content Area: Mathematics
Grade Level: K

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.	This lesson targets K.G.A.1 and K.G.A.2. As a stand-alone lesson this does a good job of reaching the depth required of a single lesson. However, it would be helpful if the teacher had noted that this lesson should be one in a series of lessons on shapes or this is a culminating lesson after a series of lessons on shapes. Standard for Mathematical Standards 6, attending to precision, is targeted in this lesson. This is an appropriate SMP for this lesson. However, there is not an explanation of how it connects to the lesson content. How might a teacher bring this mathematical practice into the lesson to discuss the importance of precision with students? This lesson is very conceptual which is appropriate for the standard.
Rating: **2 – Meets many 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 with persistence, choosing and applying an	Focus: This lesson targets two kindergarten standards: K.G.1 and K.G.2. Students spend much of the lesson finding shapes in their environment (K.G.2) and much less time actually naming the object and describing its location, as is required in K.G.1. In fact, students may only need to tell the name and location of one object during the entire lesson. In addition, the teacher model includes reference to K.G.3 but not a clear model for K.G.1. Consider adding in more opportunities for students to practice describing the shapes they found and their location, such as having students work in pairs and take turns finding and describing objects. The lesson does not hold students responsible for material from later grades. Coherence: It would be helpful if the teacher had noted that this lesson should be one in a series of lessons on shapes or this is a culminating lesson after a series of lessons on shapes. The lesson states it builds off of vocabulary previously taught, however it does not state that it builds off of content knowledge previously taught. It would be helpful to know whether or not the students already know how to identify shapes. The reviewers are assuming there has been previous lessons on shapes before this lesson. However, a teacher just picking out this lesson might not know that and without content knowledge previously taught this lesson would not work as a stand-alone. It would be helpful to add where this lesson fits into the bigger picture. What lesson came before this? What would come next? Rigor: This lesson address the application level well. Students are applying what they know about shapes and finding them in their environment.

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: **1 – Meets some 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.
	Clear and sufficient guidance: This lesson clearly lays out the flow of the lesson and what students and teacher should be doing in each part.
	
	Precise and accurate mathematics: Correct terminology is referenced and the teacher expects students to use correct vocabulary for shapes and their locations. Students are asked to find concrete examples of shapes in their environment.
	
	Productive struggle and stimulating excitement: This task will appeal to kindergarteners. However, having to recognize shapes in the room may not provoke mathematical thinking and struggle on its own. Consider adding in more conversation initially around the attributes of each shape so that students are thinking about applying those traits to their search. For example, the writer might want to consider changing the shape sheet from simply checking when they find the shape to having them write "I found a circle hiding on the table. It was hiding a counter."
	
	Addresses instructional expectations: What is expected of students is clear, as are the materials for teacher use.
	
	Scaffolding and differentiation: Many suggestions are provided for how the lesson could be modified and specific accommodations for students. The only additional scaffolding the writer might consider would be language frames to support students, particularly ELLs, in communicating the description of the shapes. For example, "I found a (shape name) on (object). I found it (prepositional phrase)."

☐ 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.	Direct, observable evidence: Three opportunities for assessment are provided: informal observation and check ins while students search for shapes, the one minute that each student has to describe the shape and location found on one classroom object, and the written description for the class book at the end. Accessible and unbiased: Given the accommodations that were mentioned, and the observational nature of most of the assessments, there is little bias there. Students may struggle write on their own, so a note can be made that teachers can have students "read" what they wrote as an additional check. Scoring guides: A checklist is provided to use while observing students. Directions on how to use this checklist and how to interpret and use the data generated would make this tool more useful. For example, should students identify all the shapes in the environment or just one? There is also a list of the components of a strong description that students should be looking for.
Rating: **2 – Meets many of the criteria in the dimension**	

Summary Comments

This lesson scored the strongest on Dimension III: Instructional Supports. The lesson is clearly laid out, comprehensive, and easy to follow. An area for further development is Dimension II in the areas of Focus and Coherence. Our key recommendations are: 1. Increase the focus on K.G.1 by adding in more opportunities to practice naming shapes and describing their locations, possibly through more partner work. 2. Indicate clearly where this lesson fits into a larger unit so that the prerequisite knowledge and skills are clear to teachers who might want to use this lesson plan.

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.