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 Observation #4
 Math- Perimeter
 EDI 430-01

EFFECTIVE INSTRUCTIONAL DESIGN – STANDARDS BASED LESSON PLAN

Elements of the Lesson	Evidence that Documents the Elements
Standard MDE grade level or CCSS	CCSS.MATH.CONTENT.3.MD.D.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.
Objectives/Targets – I can statements What am I going to teach? What will the students be able to do at the end of the lesson? How will the objectives be assessed? How will they use/apply their new knowledge? What formative assessments will I use to inform instruction?	I can... I can create polygons with different length straws and twist-ties. I can identify the perimeter of different polygons. I can measure the perimeter of different polygons.
Lesson Management: Focus and Organization What positive strategies, techniques and tools will I use? What are my ideas for on task, active and focused student behavior?	During this particular lesson, the students will be using straws and twist-ties as manipulatives in order to review different types of polygons and begin to learn about perimeter. Students will be working with their table partners for the activity and throughout the lesson we will be having a whole group discussion. Students who are on task are following directions on when and how to create polygons using the provided materials. When directed, they are discussing questions with their table partner and also with the class as a whole.
Introduction: Creating Excitement and Focus What will I do to capture student interest? What prior knowledge needs to be accessed? In what practice/review will students participate?	Using straws and twist-ties to introduce perimeter will capture student interest. The prior knowledge that needs to be accessed are types of polygons, their sides, their angles, and how to measure those polygons. Students will talk amongst their table partner and the whole class as a review.
Input: Setting up the Lesson Task analysis: <ul style="list-style-type: none"> • What information does the learner need? If needed how will it be provided? • How is the lesson scaffolded? [step-by-step] 	Task Analysis: The learner needs the content knowledge about perimeter and how to measure perimeter for different shapes. This information will be provided by throughout the lesson as students are building polygons and listening to me as I explain how to measure perimeter. First, students will form into table partner groups (if a student doesn't have a table partner, they will move to find one). After students have a partner, I will disperse straws and twist-ties to each group and model

<p>Thinking levels: questions to engage students' thinking</p> <ul style="list-style-type: none"> • Remembering • Understanding • Applying • Analyzing • Evaluating • Creating <p>Accommodations: implementing differentiation principles</p> <ul style="list-style-type: none"> • Remediation/Intervention • Extension/Enrichment • Learning styles <p>Methods, Materials and Integrated Technology</p> <ul style="list-style-type: none"> • Instructional methods • Engagement strategies • Materials needed and prepared • Integrated technology list 	<p>how to connect two straws by a twist-tie. Together as a whole group we will make various polygons and review their names, similarities, and differences. The first two polygons are triangles, then a square and rhombus, rectangle and parallelogram are next, and lastly is a trapezoid. Students will be asked how to compare and contrast the two shapes made at one time. After all shapes are made, I will explain the definition of perimeter and then together we will create a chart in our notebook in order to write down the perimeter of the various shapes we made. After the chart is completed, students will answers a few questions about perimeter on a worksheet. Toward the end of the lesson, I will review the "I can" statements with the class.</p> <p>Thinking Levels: Remembering- What are the names of the polygons we created?</p> <p>Understanding- How do we measure perimeter?</p> <p>Applying- Students will use their understanding of perimeter and apply it to figure out the perimeter of various polygons.</p> <p>Creating- Students will create different polygons.</p> <p>Accommodations: By working with another partner, I intend for students to remediate the lesson for each other. As for an extension, the worksheet at the end of the lesson will provide further practice with the concept of perimeter. The learning styles in this lesson are linguistic, visual/spatial, interpersonal, logical, and kinesthetic.</p> <p>Methods, Materials, and Integrated Technology: I will use both lecture and class discussion for my instruction. Group work will also be used as an instructional method. I will engage students by providing them with materials to manipulate throughout the lesson. Prior to the lesson, I need straws (44 4-inch, 22 6-inch, and 22 8-inch), about 70 twist-ties, and 11 sandwich bags. The students will need a pencil, a ruler, their math notebooks, 4 4-inch straws, 2 8-inch straws, 2 6-inch straws, and 6 twist-ties. In addition, students will need a copy of the worksheet when the chart has been completed. The technology used in this lesson is the ELMO.</p>
<p>Modeling: "I DO" Show/Tell: visual/verbal input (i.e. demonstrate/tell)</p>	<p>I will show students how to connect straws with twist-ties in order to form different polygons. I will</p>

<p>How/What: questioning and redirecting techniques</p>	<p>also model how to create the first two polygons: different shaped triangles. I will then ask myself questions about how the two triangles are similar and different. After we talk about the polygons, I will draw a chart in my math notebook filling out the information for the triangles.</p>
<p>Checking for Understanding Teach some – stop and check – resume teaching Ways in which students will respond and be engaged Formative assessment strategies to be implemented</p>	<p>For checking understanding, I will have students hold up their straw polygons after each shape so I know students are correctly forming their polygons. I will also wander around the room and look at charts when students are working on them independently.</p>
<p>Guided Practice: “WE DO” What do the teacher and student do together? Modeling first then with a gradual release of responsibility</p>	<p>The class and I will continue to create polygons together and then fill out our chart according to their perimeter. We will also answer questions about the polygons together as a class. I will complete half of the chart with them and then let complete the rest with their table partner.</p>
<p>Collaborative (“YOU DO TOGETHER”) and/or Independent Practice (“YOU DO”) What practice(s) will be demonstrated/modeled? How will connections be made? How will students demonstrate target?</p>	<p>Students will continue working with their table partner to complete the remaining portion of the chart. Then students will work independently on the worksheet provided. Students will practice measuring perimeter of polygons. After the chart is completed, the worksheet reinforces the steps to measure perimeter and even extend the lesson by creating a shape with a certain perimeter. Students will demonstrate the target by creating polygons and measuring their perimeter.</p>
<p>Closure How will I review the I can statements? How will connections be made to future learning?</p>	<p>At the end of the lesson, the class and I will discuss what we did throughout the lesson (create polygons, compare and contrast the shapes, measure perimeter, and answer questions about perimeter on their own). I will read the “I can” statements and then discuss with the class how we will continue learning about perimeter and introduce area too.</p>
<p>Assessment What evidence supports that the objective(s) were met? What do my students know, understand and are able to do? What formative assessments informed your instruction?</p>	<p>Creating the polygons, filling in the chart, and completing the worksheet are all pieces of evidence that the objectives were met. The students know how to build polygons, recognize different types of polygons, measure their perimeter with a ruler, and create their own shapes to meet a certain perimeter. The formative assessment that informed by instruction was the polygon shapes, the chart, and the worksheet.</p>
<p>Reflection Using your assessment data, what will you change?</p>	

<p>How well did the students perform? Were all students engaged? How was my timing? How many students struggled? What will I do to help those who struggled? What will I do to extend the learning for those who met target? What did everyone know? What did no one know? Were there any surprises?</p>	
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