


Name(s): <span style="background-color: black; color: black;">[REDACTED]</span>		
Grade Level: 3rd	Subject: Math	Lesson Length: 45min.

I. Standards (IC1, IC2, IC4)	
Utah State Core Curriculum Strand(s) and Standard(s):	<p>Standard 3.MD.3</p> <p>Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent five pets.</p>
Summative Assessment:	End of the week quiz. Lesson 19 Quiz
Goal Statement/Rationale:	<p>In this lesson, students will learn to read and interpret bar graphs, and understanding how to solve one- and two-step problems related to the data presented. They will understand how to look at data and answer questions based on the information shown in the graph. Learning to interpret bar graphs is important because it helps students understand information they see in everyday life, like surveys. This skill helps them make better decisions based on data. This lesson builds on what students have already learned about counting and grouping. As well with, how to solve one- and two-step problems. They will connect this new learning to their past experiences. In the future, students will use their understanding of bar graphs when they work with other types of graphs, such as, pie charts. They will also apply these skills in other subjects, such as, science.</p>

II. Intended Learning Outcomes (IC1, IC2)	
Learning Objective/Goal:	<p>Know: Students will be able to know how read and interpret bar graphs.</p> <p>Do: Students will read a bar graph and answer questions about the given bar graph.</p>

III. Assessment of Student Progress	
Pre-assessment:	N/A
Informal assessment(s):	Class and group discussions
Formal assessment:	Word problem worksheet <a href="#">Session3 - Lesson19</a>

IV. Preparation (LL2, IC4, IP8)	
Students' prior knowledge, skills and assets:	<p>Prior Knowledge: Students know have seen a bar graph before.</p> <p>Prior Skills: Students know how to count and group items.</p> <p>Students know how to create simple tally marks to represent quantities.</p> <p>Students can perform basic addition and subtraction.</p> <p>Personal Assets: Students have mentioned their love for ice cream and what flavor is their favorite.</p> <p>Cultural Assets: All students know what ice cream is, and what a bar graph looks like.</p> <p>Community Assets: Word problem is based on the students school.</p>
Student preparation:	Pencil
Teacher preparation:	<p>Bar graph</p> <p>Worksheet with questions about the bar graph.</p> <p> Session3 - Lesson19</p> <p>Markers &amp; White Board</p>
Technology integration:	N/A

V. Instructional Procedures (LL6, IC3, IC7, IP2, IP7*)	
*We recommend you label the appropriate competency, using the codes, within your instructional procedure to make that visible to your university supervisor.	
<p><b>Word Problem:</b></p> <p>Harvest Elementary School wants to buy an ice cream machine. The graph shows how the number dollars each grade has raised to buy the school an ice cream machine. Third grade and fourth grade combined want to raise \$300. How much more money do they need to raise?</p> <p>Start by getting their attention by asking, <i>Wouldn't it be cool if our school had an ice cream machine?</i></p> <p><b>Question:</b> What is a bar graph? What do you know about bar graphs?</p> <p>After talking about what a bar graph is, I will then continue to explain the important parts of a bar graph. Such as, the title, the information on the bar graph and what it's telling us.</p> <p><b>Bar Graph:</b></p> <p>I will give everyone a bar graph.</p> <p><i>I want you to analyze this bar graph, and try to figure out with your table what this bar graph is about.</i></p> <p>Give students like 1-2 minutes to talk with their table about the bar graph given. Walk around and assess students conversations.</p>	

Talk about and go over what this bar graph is about with students.

**Questions to Support Making Sense of the Problem/Task:**

- What does each bar from the bar graph represent?
- What do the numbers on the left of the bar graph represent?

With the given bar graph, introduce to the students this word problem:

**Harvest Elementary School wants to buy an ice cream machine. The graph shows the number of dollars each grade has raised to buy the school an ice cream machine. Third grade and fourth grade combined want to raise \$300. How much more money do they need to raise?**

Have students solve this word problem with their tables. After students are done working on this problem, ask them what they did to solve this word problem. Solve the word problem together.

**Questions to Support Making Sense of the Problem/Task:**

- Look at the third grade bar: How much money has third grade raised?
- Look at the fourth grade bar: How much money has fourth grade raised?
- What operation do we need to use to find out how much money third and fourth grade raised in total?
- What operation do we need to use to find out how much more money third and fourth grade need to raise \$300?

**Have students solve by themselves:**

Using the same bar graph, how much money did all grades raise in total for the ice cream machine?

## VI. Academic Language

Language Function:		Describe and Analyze Students will describe the data presented in the bar graph and analyze the
Language Supports		
	Vocabulary:	<b>Bar Graph</b>
	Syntax:	Encourage students to use complete sentences when discussing the graph and their answers to the questions.
	Discourse:	Students will have a visual of a bar graph to describe and analyze with their groups.

## VII. Addressing Learners' Needs (LL4, IP1)

Differentiation/ Individualization:	Differentiated worksheet: <a href="#">Differentiated Session3 - Lesson19</a>
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<p>Support for ELLs:</p> <p>Fluency Stage Specific Support:</p> <ol style="list-style-type: none"> <li>1. Entering</li> <li>2. Emerging</li> <li>3. Developing</li> <li>4. Expanding</li> <li>5. Bridging</li> <li>6. Reaching</li> </ol>	<p>Provide sentence frames:</p> <ul style="list-style-type: none"> <li>- The bar graph shows that...</li> <li>- The third grade raised _____ dollars</li> <li>- The fourth grade raised _____ dollars</li> </ul>
<p>Accommodations/ Modifications for IEPs/504s:</p>	<p><b>N/A</b></p>