

INSTRUCTIONAL DESIGN PROJECT (Artifact 2)

<p>Content. It is about the main ideas of the lesson</p>	<p>Describe: content here. (COMMON CORE STANDARDS)</p>
	<p>CCSS.MATH.CONTENT.HSF.LE.B.5</p>
	<p>Interpret the parameters in a linear or exponential function in terms of a context.</p>
	<p>Describe: Standards of mathematical Practice (common core)</p>
	<p>CCSS.MATH.PRACTICE.MP2 Reason abstractly and quantitatively.</p>
	<p>CCSS.MATH.PRACTICE.MP3 Construct viable arguments and critique the reasoning of others.</p>
	<p>CCSS.MATH.PRACTICE.MP4 Model with mathematics.</p>
	<p>CCSS.MATH.PRACTICE.MP5 Use appropriate tools strategically.</p>
<p>Pedagogy. Pedagogy includes both what the teacher does and what the student does. It includes where, what, and how learning takes place. It is about what works best for a particular content with the needs of the learner.</p>	<p>1. Describe instructional strategy (method) appropriate for the content, the learning environment, and students. This is what the teacher will plan and implement.</p>
	<p>I will use the exploration lesson plan for this lesson. I will provide the students with subtle questions to guide them through the exploration.</p>
	<p>2. Describe what learner will be able to do, say, write, calculate, or solve as the learning objective. This is what the student does.</p>
	<p>The students will be able to explain the properties of a power function and how the different variables of the function have different affects on the graph.</p>
	<p>3. Describe the 21st century skill you will address in your lesson</p>
	<p>The students will use the 21st century skill of evaluating information. The students will need to be able to evaluate their conjectures from the beginning of the lesson.</p>
<p>Technology.</p>	<p>1. Describe the technology: What is the technology and what are the different functionalities of the technology you will use for the lesson</p>
	<p>The technology is TI-Nspire computer software. This technology will allow students to compare and contrast functions by using sliders, and multi-function-displays.</p>
	<p>2. Describe how you will use the technology as a tool to enhance the lesson, transform the content, and/or supports pedagogy (NCTM, 2003).</p>
	<p>The students will create sliders for the function—this allows them to investigate the different ways the variables of the functions affect the graph. Then they will create a</p>

	<p>graph with multiple functions displayed on it simultaneously—this allows the students to compare/contrast the graphs.</p>
	<p>3. Describe how the technology will affect student’s thinking processes (NCTM, 2000)</p>
	<p>Ti-Nspire will allow the students to explore the different ways the values can affect the graph. Students will likely wonder how the graph looks under different conditions. Ti-Nspire allows them to investigate their thinking on a deeper level than if they had to hand draw these graphs.</p>
<p>Representations.</p>	<p>1. Describe the different representations you will use in your lesson</p>
	<p>I will mainly use a numeric representation and graphical representation. The numeric representation will show the students the individual number differences, while the graphical representation gives the students a visual to see.</p>
	<p>2. Describe how you will use the different functions of multiple representations in your lesson to enhance the lesson</p>
	<p>The students will have the numeric representation as well as the graphical representation. Students could also create a table for a third representation. These representations provide the students immediate feedback to compare/contrast the differences in the graphs.</p>