

Evaluator NOAH MARTIN Team Number 85 Topic DRAFT LIFT

### Engineering Lesson – Dress Rehearsal Evaluation

**Directions:** Mark Xs to indicate whether the following elements were included in the lesson.

**Teachers** = ODU presenting student; **Students** = Elementary School students

<b>Introduction to Engineering</b>	<b>YES</b>	<b>Somewhat</b>	<b>NO</b>
Teachers provided examples of problems engineers attempt to solve	✓		
Teachers provided description of at least one field of engineering	✓		
Teachers explained the engineering design process	✓		
Comment:			
<b>Engineering Design Process &amp; STEM</b>	<b>YES</b>	<b>Somewhat</b>	<b>NO</b>
Teachers presented a clearly-stated engineering design challenge	✓		
Teachers connected at least one science concept to the engineering design challenge	✓	✓	
Students imagined unique solutions to a problem	✓		
Students selected a solution	✓		
Students created a model based on their own design	✓		
Students tested a model	✓		
Students revised a model after testing	✓		
Comment:			
<b>5E Instructional Model</b>	<b>YES</b>	<b>Somewhat</b>	<b>NO</b>
Engage (Short activities promoted curiosity and elicited prior knowledge)	✓		
Explore (Students used the engineering design process to test their own ideas)	✓		
Explain (Students explained what they observed. Teachers clarified ideas and introduce new vocabulary)	✓		
Extend/Elaborate (Students applied new understandings in a re-design or new context)	✓		
Evaluate (Teachers helped students determine and reflect on what they learned during the lesson)	✓		
Comment:			
<b>Pedagogy &amp; General Presentation</b>	<b>YES</b>	<b>Somewhat</b>	<b>NO</b>
Teachers <i>guided</i> student learning through questioning (rather than lectured)	✓		
Teachers solicited learners' ideas and reflections	✓		
Teachers asked provocative questions that prompt students to reason (compare, contrast, analyze, synthesize, predict, classify, evaluate, etc.)	✓		
Teachers communicated clearly and effectively to students	✓		
All Teachers actively participated in the lesson	✓		
All Teachers participated <u>equitably</u> in the lesson	✓		
Most or all (elementary aged) students were engaged in the lesson <i>we acted like it :)</i>	✓		
Most or all (elementary aged) students appeared to understand the concepts presented	✓		
Comment:			

(Turn over to provide additional feedback→)

Strengths	Suggestions
<p>What was the best part of the lesson and why was it effective?</p> <ul style="list-style-type: none"> <li>- Collaborating w/ my fellow students as we sought to make better airplanes</li> <li>- There was high energy from both the presenters &amp; the audience</li> </ul>	<p>What part(s) of the lesson could be enhanced? Why do these parts need development: were you confused? bored? What suggestions can you provide to improve these aspects?</p> <ul style="list-style-type: none"> <li>- a "hands-on" example of what we're discussing would be better.</li> </ul>
<p>Describe specific actions (e.g. preparing supplies in baggies, asking questions as students build, etc.) that worked well.</p> <ul style="list-style-type: none"> <li>- the choice of different colored origami paper was an excellent choice</li> <li>- the array of supplies on the table was neat &amp; readily accessible</li> </ul>	<p>Suggest specific actions that the group could take to make the lesson more effective.</p> <ul style="list-style-type: none"> <li>- Associate their teaching concepts with better examples</li> </ul>