

The lesson plan I would like to modify would be NGSS Kindergarten Topic Model - Bundle 1 Pushes and Pulls. The link to the lesson plan can be found here: <https://www.nextgenscience.org/sites/default/files/K%20Topics%20Model%20Bundle%201.pdf> For the purposes of this assignment and the Integrated Arts Lesson Plan, I will be focusing on the push and pull elements of this lesson and focusing on the weather pattern standard at a different time.

I have started work on organizing the lesson into the 5E template below. It is far from finished, as I will need peer and instructor feedback plus additional instruction along the way. I needed the template as a way to start organizing my thinking around the lesson I have chosen, and to see the potential of the art forms I am choosing to integrate. It is there for your reference.

When I first started reading the NCAS standards for kindergarteners, I saw that play, experimentation, and exploration were themes found throughout the art disciplines. Play, experimentation, and exploration are what I philosophically believe kindergarteners need to foster most to make learning meaningful. Visual arts, dance, and theatre incorporate all of these could relate to this current lesson. I think that the arts could enhance this lesson because it would be a way for the students to demonstrate what they know about pushes and pulls through a skit based on movement. They can add dialogue if they wish, or keep it silent. The visual arts element would be allowing students to “engage in exploration and imaginative play with materials” (NCAS, VA:Cr1.1.Ka). Multiple dance and theatre standards would be addressed as well. They will have to plan the skit based on their knew knowledge, collaborate with others, and be purposeful in their movement choices and choreography to portray what they are thinking. All of this will let students further explore the concepts of pushes and pull, show what they know, and interpret what others are doing in their performances.

5E Lesson Plan	
<p>Engage The purpose for the ENGAGE stage is to pique student interest and get them personally involved in the lesson, while pre-assessing prior understanding.</p>	<p>Discuss phenomena: A swing moves when it is pushed. How do objects move and what happens when they interact?</p>

5E Lesson Plan	
<p>Explore The purpose for the EXPLORE stage is to get students involved in the topic; providing them with a chance to build their own understanding.</p>	<p>K-PS2-1. Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.</p> <p>How can pushing or pulling on an object change the speed or direction of its motion?</p> <p>How can pushing or pulling on an object start or stop it?</p> <p>Students will use a variety of objects (toy cars, different size and weight balls, boxes; string attached to cars or boxes for pulling).</p> <p>Students collaboratively make observations that would allow them to compare the effect on the motion of the object caused by changes in the strength or direction of the pushes and pulls and record their data. They will record their data through drawn pictures, photographs, or videos.</p> <p>K-PS2-2. Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.</p> <p>Students organize given information using graphical or visual displays (e.g., pictures, pictographs, drawings, written observations, tables, charts).</p>
<p>Explain The purpose for the EXPLAIN stage is to provide students with an opportunity to communicate what they have learned so far and figure out what it means.</p>	<p>Students will be able to explain how the relative strength of a push or pull affects the speed or direction of an object. They will share this out from their groups or partnerships to the class. The teacher will be the recorder of what each group reports. After each group has shared, the teacher will work with the students to develop common understandings based on their findings.</p>

5E Lesson Plan	
<p>Elaborate/Extend The purpose for the EXTEND stage is to allow students to use their new knowledge and continue to explore its implications.</p>	<p>Create a skit/performance demonstrating the effects of different strengths or different directions of push and pulls on the motion of an object. Use a prop (i.e., ball, rope, box) or just interact with other group members. This will enable students to continue to explore while also using their new knowledge.</p> <p>*Visual Arts, Dance and Theatre standards from Wyoming and NCAS can be applied here. *NCAS Anchor standards can be applied here.</p>
<p>Evaluate The purpose for the EVALUATION stage is for both students and teachers to determine how much learning and understanding has taken place.</p>	<p>Students reflect on the fact that their investigation began with the question: How do objects move and what happens when they interact?</p> <p>Students can describe how scientific knowledge [about how] pushing or pulling on an object can change the speed or direction of its motion and can start or stop it informs us about the world.</p>