

**Audience:** 6th Grade Students

**Materials needed:** Jars of different kinds of Peanut Butter, A Sack of Bread, Butter Knives, Paper Plates, Computers

**Current performance level:**

- Familiarity with the basics of a sandwich.
- They are able to use a knife.
- Some students have made a sandwich of some kind before.

**Desired performance level:**

- Make an edible peanut butter sandwich.

**Motivation for change in behavior:**

- Increased independence and confidence.
- Ability to prepare something on their own when hungry.

**Critical/common errors:**

- Using too much/not enough peanut butter
- Taking too much peanut butter on the first spread and not using it all
- Smashing, ripping the bread
- Licking the knife after the first spread.
- Eating one slice before finishing
- Spreading the peanut butter on the other group member

**Strategies/Concepts to apply from the theory chapter:**

- A) Reasoning
- B) Critical thinking
- C) Understanding and use of knowledge
- D) Self-regulation
- E) Mindful reflection
- F) Relevant learning environment
- G) Social Negotiation
- H) Multiple perspectives/modes of learning
- I) Ownership in learning
- J) Self-awareness of knowledge construction

Instructional Goal	Conditions of Learning	Methods of Instruction
<p><b>Reasoning</b> <b>Critical thinking</b></p>	<p><b>(Complex, realistic and relevant environments that incorporate authentic activity)</b></p> <p>Students enter the classroom finding a variety of environments. They will find a kitchen with all of the necessary supplies. They will find computers with three different activities in a computer generated micro-world. Each student will have the opportunity to work at each station.</p>	<p>A micro-world including: The PBS game called PB Steps, the PBS Modeler, and a PBS History website. The kitchen activity will be problem based. <b>PBStep:</b> A game designed to have students learn the steps to make a peanut butter sandwich. The student will have to collect clues in a platform type game. <b>PBS modeler:</b> Allows the student to make a peanut butter sandwich. <b>PBS History website:</b> outlines the history of a PBS. Goes in to depth about each supply i.e. peanut butter, bread.</p>
<p><b>Retention, understanding, and use</b></p>	<p><b>(Social negotiation)</b></p> <p>Each student comes to this activity with their own perspective having participated on their own in the other activities. Group work in groups of 4.</p>	<p>Students will work in groups after participating in each environment to develop a group PBStep level. The teacher will present a PBStep level and the PBStep leveler and how to create a level. The students will then create their own as a group.</p>

<p><b>Cognitive flexibility</b></p>	<p><b>(Multiple perspectives and multiple modes of learning)</b></p> <p>Having already been exposed to the micro-world students will enter the kitchen. This will change their perspective and give them a chance to work with other members of the class.</p> <p>Students will work in groups of 2.</p>	<p>During this activity they will make a sandwich with student that wasn't in a group with them before. Students will have to solve the problem: having to make a peanut butter sandwich with no knife, plate, napkins, or peanut butter jar (there is a glob of peanut butter in a bowl).</p> <p>Available tools: a straw, ruler, bread, and peanut butter in a bowl.</p>
<p><b>Self-regulation</b></p>	<p><b>(Ownership in learning)</b></p> <p>Create a high-level of ownership in learning by allowing access to the micro-world after they complete the kitchen activity. Students can explore those activities they enjoyed the most.</p>	<p>Students can create a new PBS model, or a new PBStep level. Explore the PBS History website. Design a problem in the kitchen.</p>
<p><b>Mindful reflection, epistemic flexibility</b></p>	<p><b>(Self-awareness in knowledge construction)</b></p> <p>Discuss with students all types of sandwiches and give the student time to think of their favorite sandwiches. Discuss some of the reasons why you are having them go through this process.</p>	<p>Students will discuss with a peer their favorite sandwiches and then they will find another student in the class that doesn't like that sandwich and describe to them why they like it.</p>

I choose to move away from the Gange's model or nine events because constructivist learning and Gange's model seem to be incompatible.