**Extreme Demo Experience Instructions**

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Demonstrations are often conducted as a teacher centered activity. Demonstrations are entertaining and students often enjoy watching “live action”. My interest in revisiting the demonstration model for instruction was to evaluate the “learning”. I was interested in maximizing the learning experience for my students.

**Part A: Teacher Led Demonstration**

It is important that the following demonstration or similar is completed “live” by the teacher using a PEOE (Predict, Explain, Observe, Explain) model. A YouTube clip of the demonstration is NOT the same! Students love to see their teachers “doing things”.

The **PEOE** will be conducted while the students document the experience. Each student documents the experience using the following format.

**Documentation of the PEOE:**

1. Picture of Demonstration Set Up with labels and a statement of what the demonstration involves. What will be done? [C]
2. Prediction and Explanation: When the teacher \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, I think \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. [K/U][C]
3. Observation: State of what has happened. [C]
4. Explanation: Why do you think this happened? Explain and discuss with your group. [K/U][T/I][C]

**Teacher Led Demonstration Option 1:**

**Materials Required:**

* Silky square scarf (A smooth light cloth without a thick trim)
* Place setting of plate, cup, fork, spoon (Ensure that the bottoms of the items are smooth)
* Table (student desk works well)

1. Place the scarf on the table and put the place setting on the table.
2. Inform the class that you will pull the scarf out and ask them to predict what will happen
3. You will pull the scarf from under the table quickly. Pull down while you pull the scarf towards you with a single rapid pull.



**Teacher Led Demonstration Option 2:**

**Materials Required:**

* Cup with water
* Round cake pan
* Toilette paper roll
* Raw egg
* Large flat metal tray (I use my pizza pan)

1. Set up as shown in the diagram.
2. Use the PEOE model to ask students to predict what will happen when you hit the cake pan with the large metal tray (as illustrated)

**Part B:**

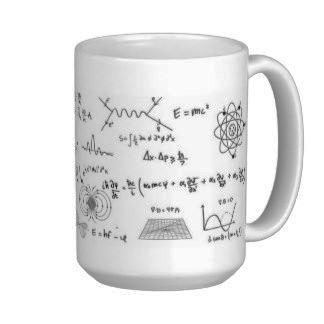
**Cooperative Group Problem Solving Challenge**

The second stage is to provide students with an opportunity to use what they may have learned in the demonstrations and to apply them in a new context. The challenge is to work in a team to develop a plan that is carefully thought out using the ideas learned from the demonstrations.

**Students are presented with the following set up and asked to get the quarter in the cup without physically “touching” the set up.**

Quarter

Cardboard roll

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Playing Card

Mug or Cup

**Documentation of the Challenge:**

1. Picture of the set up. [C]
2. Statement that describes the challenge. [C]
3. Brainstorming and Planning with reasoning for the plan. Theory must be used to support their plan. [T/I][A][K/U][C]
4. Test and Reflect [T/I][K/U][C]