

Lesson Plan 10 Title: "Let's observe our building"

Concept / Terminology / Topic to Teach: Electricity, water, observing, buttons, switches, pipes, function.

Class Goal(s)/Objectives: There is a lot of discussion regarding how much inspiration and creativity observing our environment is stimulating. Most of us are so used to our environment we are not even identifying fundamental engineering features that exist around us. In today's class we want the children to start observing and identifying engineering features in their buildings, and start making connections between action and effect. e.g. pressing buttons.

Required Materials: 2 gender neutral puppets, a paper to list the features identified, pictures from the previous walk. Furthermore one image similar to the one presented below should be placed on the cardboard. The image should be presenting the place children visited during their last sketching trip.

Setting: Classroom, Large group time, small group time.

Step-By-Step Procedures: During large group time you will start with revisiting what happened in the last classes (always using the puppets that are talking about it). Sam is going to tell Andy that during the walk that they did last time the children came up with some great observations (here you can mention a couple of observations that had come up during the children last walk. i.e. architectural features, mechanical features, electrical features. Better pick up observations that reflect to different types of engineering). After every observation mentioned Andy will prompt the children to comment/explain. Then, Andy will suggest that the children go for a small walk in the building and try to see if they will observe anything interesting there.

Andy: You know guys!! This button in the entrance of that building seemed really cool!! I wonder if there are any other cool stuff in our building. Why don't we go for a small walk in the building and try to see what's here!! Maybe we can start by trying to see how many buttons our building has and what they do!!

Plan For Independent Practice: Since this is walk within the school, during the walk you can ask every child to show and probably use the button (or show how other features work) and take a photo for future class discussions and documentation.

VERY IMPORTANT:

A good starting point would be to work from the entrance of the building to your way in. Be looking for specific themes (i.e. electrical features, or water features) to give some structure in the building exploration, but let children discuss other possible features they might find interesting. Don't forget to always ask the children to justify what something is interesting, what it does, and how they think this is happening.

Closure (Reflect Anticipatory Set): End the class by revisiting the list with the engineering features the children have identified in the building.

Assessment Based On Objectives: since this is a group discussion we are assessing group participation here. children should have come up with observing at least three different features they are already familiar with, because of everyday usage i.e. a switch that turns on a light, a button that sets something in motion, a water element.

Possible Connections To Other Subjects: motor skills improvement, language (while discussing the elements in their sketches).

Image to be placed on the cardboard:

