

Lesson Plan 8 Title: “Let’s show our ideas differently”

Concept / Terminology / Topic to Teach: Design representations, drawing, sketch, floor plan, miniature model, maquette, improve, consult.

Class Goal(s)/Objectives: Engineers are using different representations in order to communicate their ideas with clients/other engineers/constructors ect. Today children will discuss these representations and work on their maquettes.

Required Materials: 2 gender neutral puppets, different types of representations of a building, Popsicle sticks and glue, the floor plans of a simple building children had created in Lesson 7, an improved maquette of the floor plan with the popsicle sticks that was presented in class last time, colored papers, magazine pages, scissors, glue.

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 last classes the children came up with some great designs and models in order to help her with the toys situation. Last time Andy had suggested that they should see other designs and models to get more ideas, so Andy is showing to Sam more sketches, drawings, block models, and some of the children models too. When showing the images to the children ask them what they see on the image, and ask them what they like or don’t like. At the end ask them which type of representation they prefer (sketches, drawings, block models or maquettes and why.

Plan For Independent Practice: During small group time Andy asks the children to try to create their own popsicle maquette. children will get to revisit their Popsicle sticks construction and add interior or exterior elements.

Closure (Reflect Anticipatory Set): End the class by asking the children to explain what exactly they have been building. Take photos.

Assessment Based On Objectives: children should come up with some elements added in their maquettes that at least one of Sam's toys is using.

Possible Connections To Other Subjects: motor skills improvement, language (while discussing the representations and while explaining their construction), art (while constructing and in case they will decide to color or stick anything to use in their construction).

Example of a maquette to be shown in class:

