

Lesson Plan 21 Title: "Let's see how we can improve it"

Concept / Terminology / Topic to Teach: test, improve, decorate

Class Goal(s)/Objectives: When having constructed the final model, engineers revisit it to test and improve it even further, and then start to add decorative elements to provide more context.

Required Materials: 2 gender neutral puppets, paper wraps (either plain colored or presenting a building material), materials that children had brought from home, paint, glue, 4 dolls, 3 cars, 1 ball, 1 dog (per group)

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

Step-By-Step Procedures: During large group time you will start with revisiting what the final goal is by discussing what the children built in the last session. While having the children see their constructions let the children see what the other groups built, test for stability and come up with improvement ideas. Andy can ask the children what their constructions are made of and propose fixing and decorating them, either by coloring them, or by sticking paper wrap on them. Other improvement ideas from the children are of course highly encouraged and should be facilitated.

Plan For Independent Practice: In the small groups have the children improve their construction in the way their group chose to. Have the dolls, cars etc on the table so that children can use them when discussing if they think the dolls etc fit in this boxes, or how they are going to use the space etc. Take pictures during the process to use in future lesson plans.

Closure (Reflect Anticipatory Set): End the class by repeating all the new ideas and showing to the children which one was the most popular. Hang the most popular ideas discussed on the class wall (even better if pictures exist).

Assessment Based On Objectives: Every child should have brought up one new idea and explain why it is a good idea to the other children in the small group, and also participate in the model improvement.

Possible Connections To Other Subjects: language and reasoning (while presenting the new ideas), science (when testing and choices are getting discussed), art (while deciding how to decorate and provide context).