Interdisciplinary Lesson – Art and Math

Topic/Lesson Title: Claes Oldenburg - inspired Diorama / Larger than Life Pop Art!

Grade: 7^{th} – 10^{th} (Can be adjusted for primary or secondary)

New York State Art Standard(s):

Standard 1: Creating, Performing and Participating in the Arts:

Students will actively engage in the process that constitute creation and performance in the arts and participate in various roles in the arts.

Standard 2: Knowing and Using Arts Materials and Resources:

Students will be knowledgeable about and make use of the materials and resources available for participation in the arts in various roles.

Standard 3: Responding to and Analyzing Works of Art:

Students will respond critically to a variety of works in the arts, connecting the individual work to other works and to other aspects of human endeavor and thought.

New York State Math Standard(s):

Standard 1: Analysis, Inquiry, and Design

Students will use mathematical analysis, scientific inquiry, and engineering designs, as appropriate, to pose questions, seek answers, and develop solutions.

Standard 2: Information Systems

Students will access, generate, process, and transfer information using appropriate technologies.

Standard 3- "The Math Standard"

Students will: understand the concepts of and become proficient with the skills of mathematics; communicate and reason mathematically; become problem solvers by using appropriate tools and strategies; through the integrated study of number sense and operations, algebra, geometry, measurement, and statistics and probability.

Standard 6: Interconnectedness: Common Themes

Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.

Standard 7: Interdisciplinary Problem Solving

Students will apply the knowledge and thinking skills of mathematics, science, and technology to address real-life problems and make informed decisions.

Objective(s):

Art Production: Students will create a background scene in a diorama fashion and create an outdoor sculpture with model magic representative to the large scale sculpture of Claes Oldenburg.

Perception: Students will look at books, magazine pictures of architecture, and pictures of large scale sculpture from Claes Oldenburg. Students will then use math to figure out the scale of their own sculpture to be able to create a sculpture representative to sculpture done by Oldenburg.

Visual References-annotated:

- Magazine pictures of architecture – this will help students understand the scale of buildings related to Claes Oldenburg's large scale sculpture.
- Pictures of Claes Oldenburg's large scale sculpture (websites and books below). These pictures will demonstrate the scale that Oldenburg worked at and will help students think about what they would want to create.

Other Motivational References and Materials-annotated:

Big stuff. (1999). http://www.agilitynut.com/mim/old.html. - This Reference is a helpful tool because there are large detailed pictures of Claus Oldenburg's large scale sculptures.

How to do just about anything. (2007).http://www.ehow.com/how_12761_make-diorama.html. – This Reference is good to help students and teachers understand how to make a diorama.

Rose, Barbara. (1970). Claes Oldenburg: Museum of Modern Art – Students will be able to see Claes Oldenburg's artwork in context to the space around and to scale.

Claes Oldenburg. Retrieved October 22, 2006.
http://artnetweb.com/oldenburg/index.html - This is a good reference because it talks about the scale of Claes Oldenburg's artwork as well as showing images of his work for examples.

Materials and Supplies:
Magazine pictures
Model magic
Small shoe box or cardboard box
Rulers
Scissors
Elmer's glue or tacky glue (whichever is available)
Graph paper
Pencils

Ideas to Emphasize:
What is scale?
Compare the scale of Oldenburg's sculpture to its setting
Compare the scale of Oldenburg's sculpture to the scale of the students sculpture
Show how every centimeter equals a foot and how to measure that out

Techniques to Demonstrate:

- How to create a proper scale
- How to create a believable environment
- How to glue magazine clippings down without having the glue bubble up
- How to cover the whole space, leaving no blank areas
- How to arrange the Oldenburg-inspired sculpture within the diorama
- How to arrange composition within the piece

Topics to Discuss while Working:

- What does the word sculpture mean?
- Have you ever seen a big sculpture? Where? What did it look like?
- Does Oldenburg sculpt weird things, or everyday things?
- What do you think he is trying to get you to think by building these?
- How do you think Oldenburg decided on his subjects? How do you think he built them?

Topics to discuss when Work is Complete:

- How do you think your sculpture would look if it was installed in a public place?
- How big would your sculpture be in real life?

Adaptation for special needs:
For students diagnosed as having ADD or ADHD, one might decide to have some pre-cut magazine pictures ready, so that students aren't flipping through magazines when they are supposed to be working. It might be a good idea to provide ample visual references so that students who need a little extra help can refer back to them. Of course, all extra materials will be made available to all students in the class.

Possible Follow-up Lesson Idea:
After the diorama is complete, students might combine efforts to design a large scale sculpture in the Claus Oldenburg style, drawing up plans or blueprints as if they were going to actually build it.

Step-by-step instructions:

1. Students become familiar with Oldenburg's style of sculpture (slide shows or handouts).

2. Students decide on subject matter of sculpture that they will be designing, measuring out the box itself and creating a scale of 1cm = 1m. Students may draw a grid on the box if they'd like.
3. Students use shoebox or other small box to begin diorama, using cut out magazine pictures, glue, and other paper materials.
4. Students then use ruler to measure out how big they would like their sculpture to be in life, and in theory (using proportion and scale).
5. Students sculpt their idea from Model Magic.
6. Students permanently attach their sculpture using glue to the bottom (ground) of their diorama.