

Application of Architectural Concepts



## Age Level:

Third grade and up

# **Subjects:**

Art Social Studies Math Language Arts Career Education

#### Time:

60 to 90 minutes

#### **Materials:**

- Overhead copy of, Who Are All These People?
- Copy of the Client Sheet and Architect Sheet for each student
- One large grocery bag (big enough to go over the head) for each student
- Scissors, gluestick, tape, felt pens and colored paper

#### **Learning Objectives:**

- To understand the use of a process
- To record and communicate information in both verbal and visual form
- To utilize information in a three-dimensional form
- To evaluate results
- To understand specialized career roles

## **Design Professional:**

This activity offers a great opportunity to give the students a career education lesson on how an architect works with clients and contractors while taking them through a process they find very enjoyable.

#### **Teacher:**

This is a very good activity for the design professional to lead. However, you should be very familiar with the way it is implemented, so that you can clarify the instructions. The process is apt to be a little confusing to the students, so you should have worked it through in your own mind before hand.

#### Rationale:

Designing and constructing a paper bag mask is a quick project in which every student has the opportunity to experience the role of an architect, a client (owner) and a contractor (builder). It involves communication both verbally and visually and interpretation of information.

## **Presenting the Activity:**

Suggested dialogue...

"You have been invited to a party and you will be required to wear a mask. You think it would be fun to design and make your mask, but you are not quite sure how to go about it.

"Let's try doing it the same way architects go about designing buildings.

"In the process of designing and building your mask, you will have the opportunity to be the architect, the client and the contractor."

Put a copy of the sheet, Who Are All These People? on the overhead projector. Go over the sheet with the students emphasizing the various roles and elaborating on how the process works in the practice of architecture.

From this point on this activity will be easier to implement if the desks are pushed back and the students are seated on the floor in one large circle.

Bring pencils.

Hand out copies of the Client Sheet and the Architect Sheet to each student and give them a few minutes to look them over.

"You will each have an opportunity to be a client and to be an architect. If you are the client, you will need to tell the architect what your design problem is-that means what it is that you want to have designed and how you want it to look. If you are the architect, you will try to include all the things the client has asked for in your design solution. The architect will talk with the client about the design and offer suggestions and make sketches of the mask to see if it will look the way the client wants it to look.



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"You can see that a lot of communication needs to take place between the client and the architect. Each one will have to listen carefully to what the other one is saying. Usually the client has a budget, which limits the materials the architect may use. In the building of the mask, the budget will allow only these materials:

- One large grocery bag
- Colored paper
- Felt pens

Your tools will be:

- Scissors
- Gluestick
- Tape

"Since the budget is limited, you will have to be very creative about the design.

"Let's play a little game to help you get ideas going in your head The game is called, Mask Mind Trip."

Ask the students to close their eyes. In a soft and leisurely voice, lead them through the following mind trip about the mask. This game might be best if led by the teacher.

"Think about your paper bag... How will you put it on your head? Will it have a nose... ears... hair... teeth... eyes? How will you decide where the eyes will go to be sure you will be able to see out? Will the mask look like some kind of a character... an animal... a vegetable... something from outer space? Could you cut parts out?

"Would you want to attach the cut-outs someplace else on the mask? Could you make folds in it... draw patterns on it? Is it the same on all sides? Is it only one color? Add some color to your mask. If you think it is finished, put it on your head How does it feel? Will it be fun to wear? Wear it to a party. How does every-one look in their masks? Oh! The party is over... make the mask disappear out the window!"

Give the students a few minutes to share their visions of their masks. Have the students number off in groups of three. There will be three parts to the lesson: client time, architect time and contractor time.

"For this first round, all of you are clients. Using the sheet 'The client (owner) is \_\_\_\_\_' at the top, begin writing down your ideas about what you want your mask to look like. Just as with real architectural clients, you may find yourself doing some drawings and sketches to communicate what you want, but most of what you communicate to your architect will be verbal."

The design professional and the teacher should circulate around answering questions and helping the communication process.

"Now it is time for you all to be architects. The architect will begin interviewing the client. Each of you will be the architect to a client who is seated on his or her right. First write the name of your client on the architect sheet.

"Now the clients must tell the architect what they want their mask to look like. Take turnsbeing the architect in your circle of three. You should refer to your client sheet, so you don't forget anything. The architect should make notes, ask questions and make sketches to show the client, so they will both have the same picture of the mask in their minds. The more information you can exchange, the more likely you will be to have a good design for your mask.

"It will be important to find out just where the eyes should be located. How far apart are they? How far up from the shoulders or down from the top of the head are they? A mask the client cannot see out of will not be a success, because it will not meet the need of the client to see.

"As a good architect, you will try to provide a design solution that will meet most of the client's needs and criteria. You may feel that you can't do everything the way the client wishes, so you could make compromise suggestions that might be acceptable. Remember that you are the designer, so you will offer suggestions that will make the mask seem very creative, or more aesthetically pleasing, or maybe more scary."

Continue as long as the conversations seem to be productive. Give a one or two-minute warning before calling time.



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Review the information that was given before and repeat the procedure. Again give a warning before calling time.

Ask the students to check both of their sheets to be sure their names are in the proper places. Ask them to place their client sheet on the floor in front of them and then put their architect sheet on top.

"Now we are about ready to get started building this mask. As you remember when we looked at the chart about the way an architect works, that after the architect has received all the information from the client and made drawings the client has approved, there is another step before the actual building starts. What is that step? That's right, the architect takes the plans to the contractor and the contractor builds the building according to the architect's plans.

"Now we come to the fun part! All of you are now going to become contractors. Hold up your Architect's Sheet. Does it have your name and the name of your client on it? Now you, the architect, will pass the sheet to the contractor. When I say 'now,' pass your sheet to the person on your right. You will be the contractor for the mask described on the sheet you now have in your hand. Make sure that you are now holding a sheet from someone other than yourself - where you are neither the architect nor the client."

There is usually considerable consternation at this point, as the students realize they are not going to be making their own masks.

"You are probably a little surprised you are not going to be building your own mask, but remember, the client doesn't build the building. The contractor does the building according to the information received from the architect. Read over the sheet you have just received and, if you don't understand something, you may ask the architect about it.

"You are now ready to start construction. What do you think is the first thing you should do? Yes, you should assemble the materials you will need. "Remember that as the contractor, you must build only what the architect has told you the client wants not what you think you would like to build."

Determine the time to be allowed for the construction. With about 20 minutes remaining, warn them that they now have 10 minutes left to complete the masks. After the 10 minutes have passed, inform them that the mask-sharing time has been delayed and that they have an additional 10 minutes to finish the masks. After 10 minutes, end construction.

"Now it is time for the contractors to present their constructions to the clients. Even if you are not finished, you will have to stop work. Often in the construction world, the contractor does not meet the deadline!"

A pretty lively discussion usually occurs at this point. Many clients will not be pleased. They usually feel it would have been easier if they could have made their own masks. Architects often feel that, too! Initiate a discussion about...

"How do the masks feel? Do they look the way you described? Was the craftsmanship good? Do you think it was a creative solution?"

When the students have expressed their reactions, have a little party with the students wearing their masks.

Display the masks with both the Client and Architect Sheets near them.



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#### Closure:

"This is what may happen when a building is built, if not enough time is spent in the planning process. A lot of communication and listening needs to be done, and everyone must play their role the best way they can. The same kind of process should take place when something is to be done in our community."

Put the sheet, Who Are All These People? on the overhead again.

"The people need to explain their needs or ideas to the officials, who need to see that the government does the things that reflect the ideas of the people. When people learn to assume responsibility for cooperating with others, much more and better things can be accomplished."

### Teacher's Comment on the Activity:

"The project itself was self-motivating, and the students were enthusiastic and cooperative. Communication between the client and the architect was lively, and for the most part, pretty thorough. The clients seemed to know what they wanted. The problem was in communicating what they had in mind in terms simple enough to be written down so the contractor could read and understand the directions.

"Most of the masks were considered to be acceptable. The ones that were not completed or not completed correctly were the ones where the client specifications were unclear or nonexistent. One student ordered and had constructed a mask just to cover the eyes.

"We decided a very unique solution. In critiquing this exercise, the students decided that if they did this again they would:

- 1. Be more specific in giving instructions.
- 2. The architect would have to write so the words were legible.
- 3. Use more measurements.
- 4. Specify colors, shapes, and patterns.

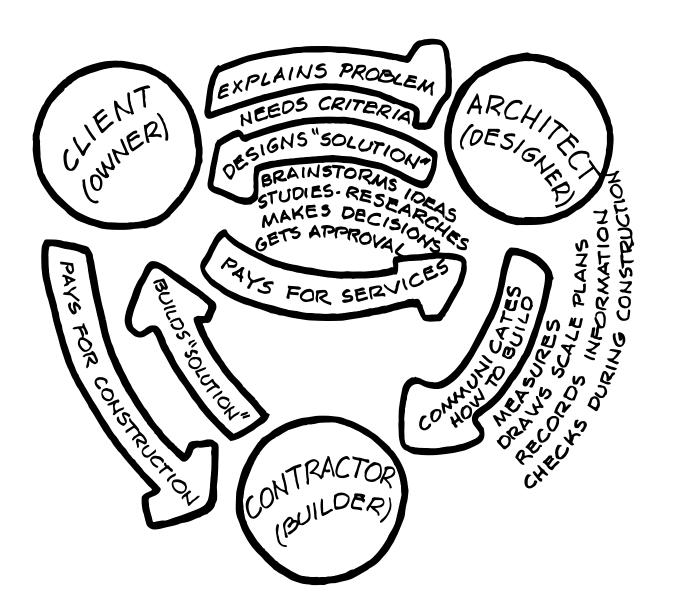
The students said they would like to do the activity again, and felt they had learned how to do a better job next time."

This activity was developed by Jim and Martha Andrews, Andrews Architects, Architects-in-Residence, Portland Public Schools

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# Who Are All These People?



A R C H I T E C T S I N S C H O O L S	CURRICULUM		
CLIENT SHEET	4.13	3	
So You Thought Designing a Mask Would be Simple!			
NAME	DATE		

The client (owner)			
The client lowners	10		
THE CHEFT (OVVIICI)	13		

Make notes about how you want your mask to look: (Keep in mind what your materials are)

Suggestions: (Use the back of the sheet, if needed)

Funny Scary Surprised Angry From outerspace
Sad Happy Smiling Making a face From under the sea
Old Person Baby Sleepy A Worker (astronaut, race driver, veterinarian)

A Character (story-book, TV, cartoon)

Make notes about what the client is telling you the mask should look like. Ask questions, draw pictures, and keep in mind what your materials are:

Suggestions to tell the contractor what to build, think about: (Use the back of the sheet, if needed)

Eyeglasses Eyes Mouth Ears Eyebrows Teeth Hair Lips Hat Nose Tongue Jewelry Other? Mustache Collar Colors Clothing Designs Cut-Outs Bows Shapes Scarf Paste-ons Openings Earrings

<sup>\*</sup>Very important! Measure how far apart your clients eyes are, and how far down the head.