

Dramatic Straw SCULPTURE TOWERS

Ken Vieth

Images of linear architecture such as the Eiffel Tower in Paris and sculptures such as *Endless Tower* by Constantin Brancusi offered motivation to look at the repetitive yet unified elements of design found in three-dimensional structures. This project aims to make visual connections between architecture and sculpture while focusing on the principles of design. It also provides an unexpected use for ordinary paper straws.

Students need to understand the various reasons for how and why three-dimensional structures are created. Architecture and sculpture can both be created for a special

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place, have thematic qualities, or commemorate an event. I also wanted students to understand the celebrative and aesthetic qualities connected to both architecture and monumental sculpture.

Visual Problem

Students will develop a three-dimensional linear tower, showing visual unity in its overall form, while demonstrating the principles of design.

Materials

- white paper straws
- white illustration board, 6" or 7" square
- white glue
- tracing paper

Process

Students are shown the work of Constantin Brancusi and various linear architectural structures in order for them to see the relationship between line and form. Explain that lines connect to create shapes, that repeated shapes develop visual planes, and that repeated shapes and planes add to visual unity.

Ask students to think about what kind of structure they would like if one were created to celebrate them as a person; to imagine being told that an artist or architect was going to celebrate their life by building a three-dimensional structure. What would it look like? Would it be tall, short, symmetrical, or asymmetrical? What shapes would be used to create the form you choose?

Review the principles of design so that students understand how to create coherent visual images. Discuss balance, emphasis, unity, contrast, pattern, and movement.

Introduce these two ways to approach construction using 16" white paper straws (other lengths could also be used). One way is to construct directly on an illustration board base—one straw at a time. This works well as long as only a small amount of white glue is used. The process moves surprisingly



Josh Kirch, age fifteen.

quickly. The second way is to build flat units of repeated shapes on the flat table surface. When each unit has dried, all can be connected with other flat panels by standing and gluing to create a three-dimensional form.

First, ask students to select a shape to repeat, because repetition creates visual unity. The straws are seen as lines in space that, when connected, become shapes. These combined shapes can be seen as visual planes that, in turn, come together to develop the overall visual form. As students progress they will make a variety of decisions as they think and rethink their overall design.



Above: David Jou, age fifteen. Below: David's 4'1" high tower.



Dana Golborg, age seventeen.



When the linear aspects of the structure are complete, ask students to emphasize the visual planes they have created. They will accomplish this by adding tracing paper to the various shapes they select in order to help the viewer see the direction, or visual flow, of their structure. The aim is for the viewer's eye to move smoothly through the sculpture. Instruct students to draw lightly, in pencil, on the tracing paper leaving no graphic lines visible on the completed work. Students use white glue to adhere the tracing paper shapes. The number of paper shapes is determined by what creates the best visual flow and unity.

Evaluation

Ask students: What creates unity in your work? What elements help the viewer visually move through your work?


Results and Observations

The process of using simple materials such as straws and tracing paper to create sculptural structures can produce dynamic results. Understanding the physical qualities and limitations of any material is important in both sculpture and

architecture. Due to the load-bearing strength of paper straws, the tower sculptures became unstable at a height of about five feet. This

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was unknown at the beginning of the process. This knowledge began a significant discussion as students

were introduced to the idea that technical engineers are a significant part of creating built structures. 

Ken Vieth is the author of From Ordinary to Extraordinary and Engaging the Adolescent Mind and coauthor of The Visual Experience, all from Davis Publications. He is currently an art educational consultant from Rosemont, New Jersey and a contributing editor for SchoolArts magazine.

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Students initiate, define, and solve challenging visual arts problems independently using intellectual skills such as analysis, synthesis, and evaluation.

WEB LINK

Eiffel Tower, www.tour-eiffel.fr/teiffel/uk