Platte River Corridor Project: Level Two Math

Cherry Cañas, Cozad Middle School Nebraska Math Standard 8.4.1

Sixth Grade Math Lesson



Nebraska Standard 8.4.1: By the end of eighth grade students will identify, describe, compare and classify two- and three-dimensional geometric figures such as plane figures like polygons and circles; solid figures such as pyramids, cones, spheres, and cylinders; and lines, line segments, rays, angles, parallel and perpendicular lines.

Content Objectives:

This is an introduction to geometry. Students will identify describe, compare, and classify two-dimensional geometric figures such as plane figures (polygons).

Language Objectives:

Students will correctly use the vocabulary taught to identify polygons both orally and in writing. Students will listen to and follow instructions for drawing various polygons and for making origami folds. Students will participate in small groups, describing steps for folding origami paper and negotiating meaning with their peers.

Task Analysis

Students should be able to identify basic two-dimensional polygons (squares, rectangles, triangles) and circles. This lesson will introduce students to more complex polygons such as pentagons.

Comprehensible Input:

There is a lot of new vocabulary in geometry, not just for ELL students. I recommend using Michael Eaton's Math vocabulary cards/chants. The more students hear things the better they will remember it. There are actions that go along with the words and definitions. (Michael Eaton vocabulary cards are on display at the workshop.)

Background Building

Ask students to name real-life examples of polygons:

I make this a game like *Scattergories*. Students are to name as many real-life objects as they can for each type of polygon discussed. Bonus points are given for answers that no one else has. If two or more people name the same object, no points are given. This could be changed so everyone gets points for the object named if the teacher so desires.

Show slide presentation: I display slides that show how geometric figures, both man-made objects and items found in nature, are used in our world. (This slide show is available for viewing at the workshop.)