Glymphs Lesson Plan

One of my favorite STEM activities to do with our youngest learners is glyphs. Glyphs are perfect for Pre-K and Kindergarten students, and they can be adapted to nearly any theme or season. In Information Technology, a glyph (from the Greek, meaning “carving”) is a graphic symbol that provides the appearance or form for an encoded character. At its very basic, creating glyphs is an exercise in following directions; however, it is far more than that, as glyphs give students an early look at computer coding.

Students ponder “If and Then” statements, listen for instructions, and use the information to create an image. (“If you are 5 years old, then color the hat blue. If you are 6 years old, then color the hat green.”)

Let’s use the example of a pumpkin glyph for Fall/Halloween. I explain to the students that we are going to each create a fun jack-o-lantern, but it will be in “secret code” (they LOVE that)! We begin by picking out tall pumpkins (boys) or wide pumpkins (girls). Then we decorate our pumpkins in our own unique way:
- Stem color is based on your favorite candy
- Number of leaves = number of siblings
- Number of teeth = how old you are
- Eye shape asks whether or not you like candy corn
- Nose shape asks if Fall is your favorite season

I pre-cut all parts and have them separated into zippy bags, and then we work in small groups to create our glyphs. I read each characteristic as an “If and Then” statement, and students decide which items they need to add to their creation. When we are finished, we hang them in the hall (along with the instructions) so others can try to de-code our jack-o-lanterns!

Here are some other glyph ideas to consider:
- First week of school/getting to know you … begin with a house cut-out, students use colored stickers to show who lives in their house. (For example: How many brothers do you have? Add blue dots. How many pets do you have? Add green dots.)
- Snowmen … begin with the basic three circles, then embellish. (For example: How old are you = number of buttons. Is Winter your favorite season? Yes = red scarf. No = yellow scarf.)
- Springtime flowers … create a “daisy” based on your name. (For example: Number of letters = number of flower petals. Number of syllables = number of leaves along the stem).

A quick Pinterest search will yield plenty more ideas to get you started.

The advantages of creating glyphs are many:
- It is a flexible activity that can be customized to your class population.
- It encourages number sense, data collection/interpretation, and early computer coding skills.
- It provides a visual representation for beginning/emergent readers.
- The “If and Then” structure helps promote ordered thinking.
- It features process over product since the construction can be so creative.
- It is a low-tech way to introduce a high-tech concept.
- It results in an engaging and interactive student display.

I hope you enjoy creating your class glyphs!
Tami Daniels
STEM Instructor
Museum of Aviation Education Department
Favorite color = legs
1 eye = boy
3 eyes = girl
Age = strips of hair, etc.
Red shirt = girl
Green shirt = boy
Age = number of buttons
Eye color matches your eye color
Number of people in your home = number of patches, etc.
Assorted other glyph images to give you some great ideas!