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Journal 2

Using one of the activities we did in class in my teaching someday may be a slight stretch, but if I work in collaboration with my students' math teacher, it is more feasible. I have adapted an activity we did in class into a lesson that will increase the students' art skills and creativity as well as their understanding of several concepts in math, especially finding patterns. I would first meet with my students' math teacher to find out exactly when they will be studying patterns and more specifically, Pascal's Triangle. I will then do the lesson on or as soon after the day when they study it in math class as possible. I will then talk to the math teacher to see if it is all right if the students can have their work displayed in the math classroom; considering that they do a good job on their project (this will encourage accuracy of the mathematical concepts).

The project will consist of creating three different versions of Pascal's Triangle. Each version must be in a different medium (preferably three that we have used in class already that year). Some examples of these available mediums might be: silk screen, wood block, acrylic paint, graphite, chalk, photo, pastels, graphic design, sculpture, or mixed media. These choices in medium will allow the student to get excited about the project because they can express themselves through what they enjoy or they can experiment with something new. The three versions of Pascal's Triangle will differ because they will each portray a different visual pattern. A visual pattern would be, for example, filling in all of the triangles that are multiples of two.

Multiples of two, three, four, five, six, seven, eight, nine, and ten all have unique visual patterns. For the third and last version of Pascal's Triangle, the student must see if they can find any visual patterns besides the multiples, and they must portray the unique pattern they find. The mathematical challenge for the students then is to find the patterns just like we did in class, and the artistic challenge is coming up with a clear and appealing way to depict these patterns. So, when the students are finished with this project, they will each have three versions of Pascal's Triangle, each in a different medium, and each portraying a different pattern with the last pattern being the one that they found themselves.

The students will be using several NCTM standards when working on this project. Communication is a very important one because they have to make sure that their designs clearly communicate the information (the pattern and why it is a pattern) while still being a good design. Also, they will be using connections because they are connecting math to art. They are connecting the things that they learned about patterns with visual models or illustrations. The students are also connecting design with pattern which is a key concept in composition. Representation is another standard that the students will employ through this project because they are working to effectively create a visual representation of the patterns that they found in Pascal's Triangle that will convey the patterns in a way that is easy to understand and is also appealing.

Students who complete this project will be graded on three things. First, they will be graded on how they picked out a pattern to portray in their third version of the triangle, as well as the correctness of the pattern. Second, on their use of medium; did they use the mediums they chose effectively, or did they simply pick one because they thought it easy? Third, the overall effectiveness of the piece; do they portray the pattern in a clear and appealing way the leaves no

question as to what the pattern is, and how it works? Students will also be told these things that they will be graded on so that they know what to expect.

I think this would be a good way for students to learn about math, because they can apply it to something that they like to do. Visual learner will especially be inclined to remember what they learned about patterns and Pascal's Triangle because they were able to see and create the patterns visually. Also, not only art students will profit from this project if the math teacher allows them to hang their work in her room. Then all of the students will benefit from the pieces my students created.