Lesson Plan by: Amanda Nordmann, Erica Gibson, and Crystal Thomas
Lesson: Color Mixing Cookie Exercise
Length: 1 day
Grade: 5th-6th grade art class

Academic Standards:
6.8 Students understand and apply elements and principles of design effectively in their work.
6.8.2 Students will discriminate between types of colors (primary and secondary) in their own work as well as in the work of others.
6.10.1 Demonstrate evidence of reflection, thoughtfulness, and care in selecting ideas and completing work.

Performance Objectives:
1. Using food coloring and water, the students will learn how primary colors create secondary colors with 100% accuracy.
2. After a brief lesson, the students will incorporate their knowledge of primary and secondary colors by creating various colors of frosting accurately.
3. Given the cookie shape, the students will complete a decoration plan for how they will design their cookie.

Advanced Preparation by the Teacher:
- gather the supplies (food coloring, water, icing, cookies, bowls, knives, decorations, paper towel, markers, etc)
- create the cookie design and print off copies
- divide the class into three groups

Procedure:

Introduction:
Begin by asking what color they think the sun gives off (knowledge). Assuming they say yellow or orange, tell them that it actually gives off every color, but when combined it appears white. Explain that if they take a prism it can actually separate all of the colors and appear to be a rainbow. Then take the prism and while standing in the sunlight show them how it separates the colors and reflects them all over the room.

Step-by-Step:
1. Begin explaining to the class that all the colors can be made from the three primary colors.
2. Tell them that the colors created by mixing two primary colors are called secondary colors.
3. Discuss with them what colors they think are made from mixing certain colors (knowledge) (Interpersonal). Example: ask them what color they would get if they mixed red and yellow, blue and red, or blue and yellow (Knowledge).
4. Do a demonstration showing the mixing process by mixing the food coloring with water in glass jars.
5. Once they see how the colors are mixed ask them if they have any questions.
6. Go on to explain that they are going to use this information in a few minutes, but they need to design a cookie first. They can use markers or crayons to do this. Show them what they will have to work with once they actually begin to decorate, so they know what they will be able to use.
7. Pass out the patterns and have them get needed materials.
8. Have the class go ahead and decorate their cookies (Intrapersonal).
9. When they are done, separate them into the three groups, so each teacher can work with a smaller of students.
10. Each group will mix up various colors of icing using food coloring. Each student will be responsible for making a color with the teachers help (Application).
11. Have the students go ahead and decorate their cookies with the icing and the sprinkles.

Closure:
At the end review which primary colors will create the secondary colors when they are mixed together. They can go ahead and eat their cookies once all the materials are returned to the table and everything is cleaned up.

Adaptations:
- have the agenda for the day written on the board
- be sure to let the students know at the beginning of the class that they will be moving around and working in small groups so that they are prepared and not surprised
- when giving cues in class make sure to express yourself verbally and not facially
- be sure to do a demonstration of what is expected of them
- make sure the class follows a normal routine

Self-Reflection: