Portfolio Activity 10.4

DRAW A SCIENTIST

Materials Needed:

- Paper and drawing materials
- The following chart
- A group of students
- A. Give children drawing paper and drawing materials and ask them to draw pictures of scientists. Do not give them any other directions.
- B. Analyze the students' pictures according to the following list. How many students draw their pictures with these characteristics?

Gender
Male
Female
Race or Ethnic Background
White
Hispanic
Asian
African American
Other
Work Environment
Laboratory
Office
Outdoors
Other
Personal Characteristics
Frizzy/wild hair
Eyeglasses
Pocket protector with pens/pencils
Bald head
Mean or sinister look
Other

C. Ponder this: In 1957, Margaret Mead and Rhoda Metraux published a report entitled "Image of the Scientist Among High-School Students" in Science (vol. 126, p. 387). They found that

The scientist is a man who wears a white coat and works in a laboratory. He is elderly or middle aged and wears glasses. He is small. He may be bald or may be unshaven or unkempt. He may be stooped or tired. He is surrounded by equipment: test tubes, Bunsen burners, flasks and bottles, a jungle gym of blown glass tubes and weird machines with dials. The sparkling white laboratory is full of sounds: the bubbling of liquids in test tubes and flasks, the squeaks and squeals of laboratory animals, the muttering voice of the scientist. He spends his days doing experiments. He pours chemicals from one test tube into another. He peers aptly through microscopes. He scans the heavens through a telescope (or a microscope!). He experiments with plants and animals, cutting them apart, injecting serum into animals. He writes neatly in black notebooks.

- D. Has the image of a scientist changed since 1957? Why do you suppose it has or has not? Why are these images so hard to displace?
- E. Where do you suppose these images come from?
- F. Who benefits or suffers from the maintenance of these images? What effect do you think these images have on girls' and minorities' career aspirations? What might a classroom teacher do to counter these images?
- G. Record your ideas in your portfolio.