



Introduction

This seminar was based on the assumption that the student's creation of art enriches his/her learning in the sciences. Much of the history of art is dominated by depictions of the human body. From the earliest caveman drawings to Da Vinci to the contemporary digital images of the Visible Human, there is a rich history of efforts to understand our own bodies through art. The use of art encourages tactile and visual learners to express themselves as well as develops spatial and artistic skills in students with other learning styles. The seminar was designed to appeal to teachers at all levels in subjects ranging from the health sciences, biology and psychology to art.

Topics in the seminar included:

1. How depiction of the human body has evolved through the ages and how the social, cultural and scientific environment has affected that depiction.
2. How schematic diagrams of the body may be used to clarify complexity.
3. How cross-sectional representations of the body are understood and how they can enhance our ability to see three-dimensionally.
4. How X-ray, CAT scans and MRIs are obtained and what they reveal about the structure and function of the body.

The variety of curriculum units developed in this seminar reflects the broad range of interests of the Fellows as well as the wide range of target populations. The first unit, developed by Wendy Decter, uses the compelling image of the Vitruvian Man by Da Vinci to "hook" her high school students on a multidisciplinary study of the proportions of the body. Alison Kennedy's unit uses art exercises to teach elementary students about their bodies and how health can be enhanced by making good decisions. Barbara Natale focuses on art projects that teach the skeletal system to fourth and fifth grade students. She ties one of her units to a school-wide celebration of the "Day of the Dead." Marisa Ferrarese's unit is the first of three that concentrate on the

brain and the senses. Her unit uses examination of art and medical imaging to stimulate inquiry about the five senses. It is targeted to fifth grade students. Heidi Everett's unit examines the brain and senses at a level appropriate for high school students. Her lessons are written to maximize the involvement of Gardner's multiple intelligences. Justin Boucher's unit is designed to introduce the connections of the brain in an AP psychology course. He uses schematic diagrams to simplify the complexity of the brain. These diagrams involve minimal artistic skill but require active involvement by the student. Sara Thomas, an art teacher, has developed a stop animation unit for high school students that examines the musculoskeletal basis of movement. Knowledge of structure of joints and their range of movement will allow the student to produce realistic depictions of motion.

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