Ruffling the Feathers of Controversy in the Biology Classroom


To ignore the controversy is to ignore a significant part of the scientific process employed by scientists all over the world. The contemplation of ideas, the consideration of pros and cons, the ambiguity of ideas are paramount in taking in points of views and considering the value of issues. As future voters and jury members, where else will our young adults get practice at dealing with vital issues such as weighing DNA evidence in a jury trial (must I bring up the OJ Simpson trial yet again?).

Isn’t one of the primary purposes of adolescence to practice the skills needed in adulthood? Shouldn’t our classrooms be filled with opportunities to contemplate difficult issues facing society? We as teachers must remain neutral but our students must consider both sides of these issues and examine the pros and cons if they are to become educated about the many controversies facing the biology community. After all, controversy is part of the process by which society comes to grip with scientific progress. In order to teach any particular controversy, certain criteria should be used.

The controversy must interest students. The controversy needs to relate to their adolescent lives as well as to their lives as future citizens. Examining the issue of human cloning is of inherent interest to teens. To avoid addressing it in the biology classroom is to miss an opportunity to explore a piece of fascinating biological study. There are too many interesting questions surrounding this topic to let our students miss the opportunity to contemplate the science behind it. Invariably the question arises: Could another Hitler emerge? And other questions follow: What if my clone commits murder? Will I be charged? What relationship would my clone be to me? Would we have the same fingerprints? How are clones the same as identical twins? What about South Korean stem cell researcher Hwang Woo-suk’s attempts with human embryo stem cells in an attempt to help cure Alzheimer’s and Parkinson’s? What are the benefits? Do they outweigh the costs? Providing students the opportunity to play with these ideas gives them the chance to consider issues outside the realm of curriculum and to afford them the chance to apply their knowledge.

The controversy must be scientific rather than primarily moral, social, or religious. After all, this is a science class. The controversy needs to focus on a science topic. By definition, the controversies will have moral and ethical components but at their core, they must be scientific. One scientific controversy that is valuable to explore at the beginning