

An Overture

FREEDOM IN SCIENCE TEACHING

Our concern with freedom in science teaching has been focused primarily on protecting science teachers from being compelled to teach such nonscientific topics as the Biblical interpretation of creation. We have forthrightly opposed the efforts of the creationists, thus demonstrating that we are capable of responsibly exercising our freedom. While that issue is still of concern to many NABT members, it will no longer receive extensive coverage in the pages of this journal. With the exception of articles that will assist teachers in applying the scientific method to the creationist theories they are forced to include in their curricula, the editorial policy of this journal will be to give priority to other issues of freedom in science teaching.

Our contemporary society abounds with issues that pose a threat to our freedom. Many of these issues are of such import that the creationist issue pales by comparison. For example, there is much controversy about the accessibility of birth control information and the legality of abortion. Yet the rate of increase in human population compels us to consider various alternatives for population control. There are no simple answers; there are many complex questions. Biology teachers are better prepared than most citizens to provide pertinent information and to responsibly interpret that information to those in decision-making positions.

We can explain how natural population-control mechanisms operate and assess the probable biological effects of different man-made mechanisms. In light of the serious consequences of unchecked population growth, I believe we are morally obligated to make responsible use of the information at our disposal to further our students' understanding of the problem. Any efforts to prevent our doing so would be an infringement on freedom in science teaching.

Freedom in science teaching is part of a larger freedom—the freedom of science teachers to speak out as concerned professionals on issues about which our training qualifies us to speak. We must be guaranteed the right to do this without fear of reprisal of any kind. To protect this right, we must be careful not to abuse it. We must never use our freedom to restrict the freedom of others. We must be willing to check our facts in order to avoid mis-

representations, and we must be willing to present, in a fair and unbiased manner, all sides of an issue about which there is conflicting scientific evidence. In short, we must defend our right to freedom as science teachers by accepting fully the responsibilities and trust implied in that freedom.

If, for example, the school system is using or considering using mind-altering drugs to control the behavior of disruptive children, we must demand the right to present the scientific information bearing on the known and possible but not yet fully understood effects of such drugs. We should be able to expect that our views will be given careful consideration without fearing that we may lose our jobs or be passed over for promotion.

If, in the course of field studies with our students, we discover sources of environmental pollution, we should be free to make the facts known, without any fear of harassment. Each of you must know of an incident or two of a teacher and his or her students being told by the school administration to “cool it,” usually because the administration fears some form of political reprisal. In such cases the freedom of the teacher, the students, and the administration are threatened.

In some school systems, racial and ethnic minorities are singled out for genetic screening. In other situations, minorities are discriminated against because of their performance on intelligence tests that may be biased in favor of other subgroups. As biologists we should know the value of genetic diversity in a population and we should be prepared to articulate our positions on such matters. We should be able to assume that our freedom to do so is fully protected.

Undoubtedly, there are many areas in which freedom in science teaching is in danger of being thwarted or denied. The examples cited here serve only to dramatize the need for constant vigil. When free people fail to exercise their freedom, there is a tendency for that freedom to be lost. The right to address social issues as they pertain to our area of expertise, either as teachers in the classroom or as citizens in society, is protected by our Constitution. We have the right to responsibly interpret the findings of science to our students and to the lay public—without fear of reprisal. That is what freedom in science teaching is all about.

Joan G. Creager, Editor