BOOK REVIEW


One of the reasons for the current crisis in education can be attributed to the "dumbing down" of textbooks, as Secretary of Education Terrel Bell put it. The nationwide decline in biology textbook rigor can be traced to the pressure exerted upon textbook publishers by ultrafundamentalists in Texas. Texas is the largest school book market at $80 million and publishers cannot afford to make one edition for Texas and another for the rest of the country. Thus, as Texas goes, so goes the nation. This was due, until recently, to the Texas statewide policy of textbook selection. A 10-year-old rule required textbooks to refer to evolution "as only one of several explanations of the origin of humankind," and to carry a disclaimer that "evolution is treated as theory rather than fact." The selection process also allowed objections by creationists to dominate the selection procedure by allowing the State Board of Education to negotiate specific changes with publishers which resulted in the watering down of evolutionary content.

In March 1984 the Texas attorney general ruled that the state's textbook anti-evolution rules were unconstitutional. More recently, the state legislature passed a bill that did away with the elected Board of Education and erected a body appointed by the governor. These positive steps, stimulated by People for the American Way, should eventually result in return of respectable coverage of evolution. However, the high school books available today were developed under the former backward guidelines. The study reviewed herein evaluates 18 nationally distributed biology textbooks by major publishers that were
submitted for approval last year to the Texas State Board of Education.

The authors, Dr. Wayne A. Moyer, a former biology teacher and past executive director of the National Association of Biology Teachers, and Dr. William V. Mayer, professor emeritus of biology at the University of Colorado, are well qualified for the task. They established 10 thoughtful guidelines for textbook selection committees. Their evaluations dwell on two interrelated concepts: the treatment of the nature of science, and the coverage of evolutionary theory.

The introduction to A Consumer's Guide describes the nature of science and explains the Texas selection procedure. There are three main sections in the paperback book: General Biology (=introductory biology), Academic Biology (=college prep), and Advanced Biology. Within each textbook title, general comments describe the book, and specific comments, identified by page number, point out problems.

Six books in the general biology category are evaluated. This category considers students as below average in reading level and ability to learn. Five of the six books are considered unacceptable because of their low-level, watered-down approach. Only one, Prentice-Hall's Biology and Human Progress is rated minimally acceptable.

Nine titles are considered for Academic Biology. Houghton, Mifflin's Biological Sciences: An Ecological Approach earns high marks for its ability to challenge above average students. Evolutionary theory is soft peddled in Macmillan Biology, an otherwise excellent book. For example, "evolution" is not listed in the glossary, and the unit on evolution is called "History of Life." Of Addison-Wesley Biology, a book with many good qualities, the reviewers write, "One cannot escape the suspicion that the publisher has sequestered all evolutionary content into one chapter where it can be conveniently ignored by some teachers in order to allow students to complete a high school biology course without ever being exposed to the major unifying concept of modern biology." Charles E. Merrill's Biology Living Systems is said to contain one of the best sections on human evolution although it presents conclusions as opinions and gives the impression that evidence doesn't matter. This is a common flaw in most of the books in this category and reflects publishers' response to creationist pressure.

Three books are reviewed in the Advanced Biology section, two of which are collegiate texts. The lone high school text, Prentice-Hall's Biological Sciences: Interaction of Experiments and Ideas is praised as one of the few books to raise the scientific literacy of high school graduates.

A very valuable part of the Consumer's Guide to Biology Textbooks is the last chapter which contains rebuttals to creationist testimony on biology textbooks. Eighteen pages are devoted to scientific refutation of the standard creationist arguments. This information can be very useful to the biology teacher.

I highly recommend A Consumer's Guide to those involved in textbook selection, teachers, and libraries and commend the authors and People for the American Way for this useful public service. Those wanting further information should consult the March 1985 issue of the AAAS publication Science Books & Films for evaluation of 35 major high school biology textbooks.

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