resignation prior to the meetings at Central College.

Along this same line of thought, I would like to thank Dr. Bill Doemel of Wabash College who has agreed to edit the Midwest Bioscience. It is an important part of AMCBT and I hope that all members and anyone who would like to contribute articles or papers will provide Bill with the material that he needs to publish a desirable paper.

EDITORS NOTE: At Wabash College, every Freshman is required to take a Freshman Tutorial in the fall or spring semester. These tutorials are designed to insures the first year student's participation in small group discussions that will challenge him intellectually and suggest the kind and quality of experience characteristic of the liberal arts. Instructors select topics of critical importance to them and ones they judge to be pertinent to student concerns. The student need not have had previous experience in the particular field in order to participate -- and his participation is important. Limited to fourteen members, each tutorial encourages students to practice both written and oral self-expression, in some cases using media such as videotape, photography and music. Reading and writing assignments will, of course, vary with individual topics and instructors, but the goals of every tutorial remain the same: to read texts with sensitivity, to think with clarity, and to express one's thoughts with conviction and persuasion -- all in terms of each tutorial's particular subject. Below are descriptions of two of these tutorials that were offered by scientists.

A COURSE IN SCIENTIFIC CREATIONISM AND EVOLUTION

by

David Krohne (Assistant Professor, Biology, Wabash College)

This spring I offered a seminar on Scientific Creationism and Evolution as part of Wabash College's freshman tutorial program. Freshman tutorials are designed to provide freshman with an experience more like that found in upper level courses. Rather than an introductory lecture course, the tutorial focuses on small group discussion and writing.

Obviously, the subject of creationism and evolution is far too large to be covered in a single course. One could concentrate on a host of topics including philosophy of science, legal questions, historical aspects of the debate, public policy, scientific questions, etc. I chose to consider the scientific basis of creationism in comparison with evolution. In doing this, we concentrated on two main texts: Darwinism Defended by Michael Ruse and Scientific Creationism by Henry Morris. Most of the students had not had more than high school biology. The class consisted of both ardent creationists and evolutionists.

Early on in the course we attempted to identify, through reading and discussion, the major features of the scientific method and a set of criteria with which we could identify "good" science. We then focused on the theory of evolution, using Ruse as a text, and considered the evidential basis for it. With this background in basic evolution, we proceeded to a consideration of Morris' objections to evolutionary theory and his argument that creationism can have a sound scientific basis. One of our primary goals was to learn to distinguish between a good and a poor scientific argument.

I believe that the exercise was a success in that all students came away with a better understanding of the theory of evolution, regardless of their position in the debate. Second, many are better able to identify a weak argument. Those with strong fundamental religious or evolutionary bias did not change their views but still came away with an
ability to discuss the problem intelligently.

Nevertheless, my feeling at this point is that I would not do this particular exercise again. The reason is that the book Scientific Creationism is so poorly written and argued that it does not deserve serious consideration in a college course. Let me be clear about what I am not saying. I do not mean to say that scientific creationism cannot be legitimate intellectual exercise— it perhaps can. I am not saying that evolution and religion must oppose each other— perhaps they may be reconciled. I am not saying that religion must be scientific to be valid. I am simply saying that Morris' book, as the best exposition of the scientific creationist view, is so grossly incorrect, unfair and in some cases downright dishonest that it does not deserve dignification with serious academic discussion.

SCIENCE AND PSEUDOSCIENCE
by
Robert Henry (Chairperson, Physics Department, Wabash College)

In this freshman tutorial the students studied the criteria by which scientists determine which phenomena and theories should be classed as science and which as pseudoscience. They discussed and wrote papers about the application of these criteria to such phenomena as dowsing (water-witching), biorhythms, astrology, extra-sensory perception, acupuncture, and the use of animals in predicting earthquakes. The class also looked at historical examples of the rejection of genuine break-throughs, such as continental drift.

The texts used were The Psychology of the Psychic by Marks and Kammann and Theory of Science by Gale.

The objectives of the course were to sharpen up the students' critical faculties with respect to pseudoscience and to provide some interesting topics for their papers. Both objectives seem to have been achieved.

Much help in structuring the course was provided by Dr. Donald E. Smanek, Professor of Physics at Lock Haven College (PA), who has taught courses on pseudoscience for several years.

VIDEOTAPES FOR COMPARATIVE VERTEBRATE ANATOMY: HEART AND ARTERIES OF THE DOGFISH SHARK
by
Frances A. Rogers (Associate Professor of Biology, Drake University)

The videotapes dealing with the circulatory system of the dogfish shark have been developed for use in Comparative Vertebrate Anatomy classes at Drake University. The original impetus for producing these tapes was the desirability of presenting visual instruction involving the use of small specimens to an entire laboratory section at one time. Satellite benefits of equal importance were the opportunity to present theoretical considerations in conjunction with laboratory dissections and to provide valuable "hands on" experience to students who participated in the production of these tapes.

The first videotape which was produced was "Circulation Through the Heart and Gills of the Dogfish Shark." Similarities between the heart of the adult shark and embryos of all vertebrate groups were stressed. Certain structures of the gills, such as cross trunks and