TO THE MEMBERS OF AMCBT

Hopefully your holidays were filled with joy and happiness, and that you are all ready to return (or may already have done so) to the joys of the classroom.

All of you will be getting or should have gotten, a notice of dues renewal, unless you were paid in advance. Please tend to this as soon as you can, and save us the time and expense involved in further statements.

The Fall Annual Meeting was judged to be successful by the some 70 of you who attended. St. Xavier's in Chicago, is a very attractive urban college. The program and the field trips were especially enjoyable.

Getting ready for next year's meeting, the Steering Committee met at Augustana College in Rock Island, IL on December 1st to lay out some preliminary plans for the meeting. The central theme of the meeting is, "Biology -- An Experimental Science". It was considered that this would be an appropriate time to reemphasize the fact (which we in the business all know) that biology, despite what many schools and administrators would like to do about it, is and always has been an experimental science. This program promises to be especially rewarding. If you have any ideas on presentations, or want to volunteer your help, contact the Program Chairman, Harold Wilkinson, Department of Biology, Millikin University, Decatur, IL 62522. I'm sure he will welcome your assistance.

Last fall I received a couple of notes from long standing AMCBT members informing me of changes in their status. One note came from Fr. John Ostdiek, who is now completely out of teaching and is the director of the Alverna Retreat house in Indianapolis, Indiana. He keeps a little of his hand in science, however, in that he has been appointed to the Institutional Review Board at St. Vincent's Hospital reviewing clinical medicine proposals. He sends his best wishes to all AMCBT members.

The other note came from Charles Vaughn of Miami University in Oxford, Ohio. Charles goes back to the founding meeting of AMCBT along with Leland and Willis Johnson. Although he made emeritus professor in 1981, Miami hauled him back as Associate Dean for Research and Special Programs. As Charles points out, "...half time turned out 1/2 time in AM and 1/2 time in PM and assorted weekends." Also as of October 1983, he has been National President of Phi Sigma. As he says, he's too busy "...to be emeritus as in arthritis." Attaway Charles.

I hope that you will all have an excellent semester, and that you will respond to Harold Wilkinson's efforts to produce a quality program for our Annual Meeting. You all are the society, you all make it work...or not work!

Your ExecSec

EFFECTS OF A HIDDEN CURRICULUM ON WOMEN'S SELECTION OF SCIENCE COURSES

by

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What effects can the conditioning of a hidden curriculum have on women's selection of science courses at the secondary level? Hidden curriculum
is a phenomena that has only recently been investigated as an important and moving element in education and society. Apple (1979), Giroux (1981), Keddie (1971) and Vallance (1974) have defined and suggested ways of dealing with hidden curriculum since it was first uncovered in the early 1970's. The definitions of hidden curriculum differ as to function, amount of control and consequences for society. For example Apple (1979) describes the hidden curriculum as the tacit teaching of norms, values and dispositions to individuals simply by an individual living in, and coping with, the institutional expectations. Institutions here could be defined as schools or family units. According to Jackson (1970) as a child moves from home to school, specific assumptions (e.g., authority roles, sex roles) of the home are supplemented and complimented by the schools and vice versa. Regardless of the authors' individual perspective all agree that the hidden curriculum is important because of its capacity to shape and condition the attitudes of individuals. Also, because hidden curriculum is implicit it is particularly resistant to change. For the purposes of this discussion Apple's more general definition will be used since it allows for a conceptual transition between society and schools.

Sex roles and indeed sexual equality are sometimes shaped by the hidden curriculum, often as a result of rewards and sanctions. Males and females face very different sanctions on the expectation of what is a "good" person and in cognitive styles. Many of the behaviors rewarded, are linked to compliance with a specific role model and rewards and/or the sanctions occur with regularity between home and school. An important aspect of hidden curriculum is tied up in the social arrangement between schools and home. Dreeben (1976) suggests that children acquire models of thinking, social norms and principles of conduct from their prolonged involvement in this arrangement. The hidden curriculum is so pervasive that those covert lessons are remembered far longer than most of the overt teaching of society and schools (Bloom, 1972).

Sexual equality is a primary axiom in the educational system of most first world nations. The view that gender distinctions are artificial and unhelpful was an important segment of the Plowden Report (1967) of Great Britain. Despite these kinds of directives the hidden curriculum and occasionally the formal curriculum of primary and secondary schools separate the sexes. By the age of seven separate "boy and girl subjects" have begun to crystalize. Educational stereotypes, such as the one perceiving scientific fields as masculine, is supported by various informal structures within the educational system.

The impact of hidden curriculum effects on women in such areas as science and math have serious personal and societal consequences. Science and math participation at the high school level can be a filtering agent for occupational choices (Iker, 1980). The level of high school math and science courses chosen can limit the student's free choice of undergraduate majors, and subsequently, effectively narrow opportunities in the work world (Sell, 1967).

The dominance of numbers of males over numbers of females in science and math programs has been a serious concern for educators over the last several decades. A variety of reasons have been postulated regarding this marked difference in numbers. Only one reason, male superiority on tests measuring spatial relations indicate any physiological difference between males and females that could explain the males' greater facility in science or math. Recently, however, Linn's (1982) meta-analysis of spatial ability research, reveals no differences between males and females before, during, or after puberty.
In many homes and in most school systems, overt sex-role philosophies of previous generations have become hidden. The current messages that parents and educators communicate to children are subtle. Parents or teachers may not be aware of these subtleties, but children are. In school, women are still being rewarded for behavior that would best fit a housewife model. This is the consequence of a nonconscious ideology. The status of quality of homemaker, secretary or teacher as an occupational choice is not the issue, just as the choice of a man becoming a neurosurgeon would not be questioned, until it could be demonstrated that one-half of all men were becoming neurosurgeons. The fact is that, in spite of innumerable differences in personality and ability, the majority of American women become full time homemakers, secretaries or teachers and not scientists or mathematicians.

I do not believe that women's studies will or can change the course of women in math and science fields. Awareness of specific covert factors affecting women in math and science courses is the first step. Once these factors are isolated it would be possible to modify the reinforcement history of some females. Scholarly studies of hidden curriculum effects on special interests groups such as women is lacking. Progress in this area could be helpful in uncovering and restructuring stereotyping in such areas as math and science. Until some progress is made in uncovering and restructuring the conditioning of the hidden curriculum with respect to women the belief that education is the gateway to golden opportunities is mythical.

**LETTER FROM THE PRESIDENT**

The success of the AMCBT meeting at St. Xavier College in Chicago is yet vivid to me as I assume the office of President and begin working with other members in preparation for our next annual meeting. There are many persons on the Steering Committee and throughout the membership, to thank for their efforts. I will, however, mention a few: Sr. Marion Johnson, local arrangements, John Jungck for putting together an interesting and informative program and Edward Kos, our diligent Executive Secretary. Neil Baird, our past President, has done an excellent job in keeping our special committees and Steering Committee members working smoothly together in order to accomplish their goals.

During the several years of membership in AMCBT I have come to regard the annual meeting as a kind of family reunion. I feel a closeness among members whereby ideas and techniques can be shared, friendships can be formed and a variety of interests are represented. Even during the months between meetings I have a network of friends who are only a phone call or letter away. While there is a diversity of interests among the members, our common bond is the teaching of biological sciences. AMCBT does have unique qualities.

Perhaps one of the main concerns for our organization is bridging the time gap between the annual meetings. How does the membership keep in touch? There can be only one main mechanism; *The Midwest Bioscene*. I want to extend the highest praise and commendation to our editor, William Doemel, for his superb job during the past year. The Steering Committee has plans for developing an editorial board that will solicit ideas and articles for publication. Please make a commitment to submitting an article for *Bioscene* during 1985. Only your contribution can make each issue our key to sustaining the interest and enthusiasm of our members.