

Technology And Newer Media

By James E. Parker, Director, Audiovisual Center



Centuries ago, the writer of the Book of Hebrews asked, "What is man, that thou art mindful of him? Or the son of man, that thou visitest him." —Hebrews 2:6

This question has troubled psychologists in American education for centuries as they have attempted to discover how man learns and the conditions under which he learns. The invasion of technology in education has given added impetus to the search for an answer to the question, "What is man?"

Seeking to explain what takes place in learning situations and to devise means of controlling teaching-learning situations, psychologists have constructed theoretical "models" or "prototypes" of man to serve as useful references in their scientific investigations of learning. Increasingly, leaders in educational technology are seeking to use these models or prototypes as they look for ways in which learning theories may be better applied to instruction in general, and to newer instructional media in particular. That is to say, today, learning theory is of major concern as a basis for more effectively utilizing newer instructional media. What are the implications of the doctrines of man for audiovisual education?

Various 'Models'

First, let us look at the "models." The *homo mechanicus* model views man as a machine, and learning is viewed as the association of stimulus to response. Teaching is like programming for a computer. The educator is concerned here with the machine's input and output. Learning is reproductive rather than productive.

The *homo volens* model asserts that man's inner urges constitute his only reality. Things have meaning for man only in relation to their possibility of satisfying his inner urges. To educate man, the teacher must concentrate on his motives, his likes, his status, his appetites. Man is basically egocentric.

The *homo sapiens* model of man pictures man as a cognitive creature, capable of perceiving, understanding, and of judging on the basis of evidence. To comprehend an act of behavior, one must be concerned with the field in which that behavior takes place because man is field-centered. Education must be concerned with cognitive clarity and meaning, because man wants to learn and to understand. Education must be concerned not only with overt responses, but with the processes which lead to these responses.

The choice of these models has had considerable influence on learning research. Yet, when one observes carefully, it is not difficult to see that each model is but an example of one of a variety of learning situations. Their representativeness of all the varieties of actual learning phenomena is not at all comprehensive. For the most part, they have been derived from animal learning studies. Thorndike studied animal association. Pavlov studied animal reflexes. Kohler studied problem-solving by animals. Unfortunately, somehow the models came to be placed in opposition to each other; either all learning was insight or all learning was conditioned response. This situation has created barriers to an understanding of the true nature of learning.

Man is Complex

What is man? Man is a machine; he is capable of being programmed. Man is a composite of urges; he is capable of being motivated. Man is a cognitive creature; he is capable of solving problems and of making decisions. Man is all of these and much more. Any serious attempt to describe learning must take into account all varieties of learning situations.

Effective utilization of newer instructional media means integration with instruction. Instructing is said to mean arranging the conditions of learning that are external to the learner. All of the events of instruction are instituted for the purpose of establishing the proper external conditions of learning. Instructional media constitute resources for learning, and when they are put to use, they are generally placed in some particular arrangement or mode of instruction for the purpose of getting the greatest instructional usefulness from the media or combinations of media. The aim always is for optimal conditions for learning.

Sometimes man behaves as a machine. Hence, those media that aim at fixating responses or developing mechanical habits through practice might have practical value in a learning situation. The major concern, however, is the kind of practice provided by the media rather than the amount of practice. Some people seem to be closer to the *homo sapiens* model than others. Others tend to be closer to the *homo volens* model. Some people are more egocentric, and some are more field-centered.

A-V Approaches Differ

The effective use of newer media of instruction then requires a recognition of these differences. Different types of audiovisual devices are required to insure optimum effectiveness. It is important, in the use of newer instructional media, to study not only the learning process but also the social climate in which learning takes place. Some instructional materials may be structurally clearer than others, but it may be inadvisable to use them because they may create a social climate that interferes with learning. Quite often some of the most important outcomes of instruction are lost because we neglect to relate our materials of instruction to the life experiences and feelings of the learner.

A lesson intended to teach Arabs the value of a balanced diet is not likely to have effect if the audiovisual device used cites pork as an example. The reference to pork is likely to arouse attitudes that interfere with their grasping the essential point. A lesson intended to teach a group of Negroes how modern scientific methods have been used to prevent tuberculosis among Negroes is not likely to have the desired effect if the motion picture "Let My People Go" is used because this motion picture employs stereotypes that suggest that most Negroes are glib and ignorant.

Audiovisual materials should be meaningful in terms of the structure of the subject matter, because man is a *homo sapiens*; he wants to understand. Audiovisual materials must take into account the social climate in which learning takes place, because man is field-centered. Behavior takes place in context.

Audiovisual materials can be "tailored" to increase motivation. They may be developed with "built-in" practice so that students know what they are practicing and why. Audiovisual materials may be created to provide experiences in productive thinking. Attention must be given to the way the materials are organized and to the way they are to be used by the teacher. Audiovisual materials may be constructed so as to reveal the structure of the subject matter. They should challenge the student's curiosity and his decision-making. The purpose for which audiovisual devices are used should be kept at the forefront. The model of man being used at the moment must be the guiding star, if educational technology is to pay dividends. Man is a machine; he can be programmed. Man is a *homo volens*; he can be motivated. Man is a *homo sapiens*; he wants to understand.

Manning Drafted By Detroit Club

Ted Manning, number one scorer for the North Carolina College Eagles, was chosen seventh draft choice of the Detroit Pistons Basketball Club in New York City in May.

Manning, a native of Baltimore, Md., broke Samuel "Sad Sam" Jones' four-year scoring at NCC of 1,770 points in racking up 2,086 in 96 games in four years ending with the 1965-66 season. Jones' record was set in 1957.

Graduate Programs Earn Accreditation By NCATE

North Carolina College in May received announcement of the accreditation of its graduate program in teacher education by the National Council for Accreditation of Teacher Education.

Rolf W. Larson, director of NCTAE, in a statement of notification to the college cited "full accreditation of programs for preparing elementary and secondary school teachers at the master's degree level, full accreditation of programs for preparing school service personnel (elementary and secondary school principals, supervisors, and guidance counselors) at the master's degree level."

William Jones, chairman of the interim committee administering the affairs of the college, congratulated the Graduate School and its dean, Dr. Helen G. Edmonds; the Council on Teacher Education and its chairman, Dr. F. G. Shipman; and "the entire graduate faculty for the effective cooperation which brings this unique distinction to North Carolina College."

Jones accented the congratulatory statement from NCATE which read: "The administrative staff and faculty of the college are to be commended for improvements made in the criteria for admission to graduate programs, in faculty strength, and in design and content of graduate curricula."

Approval of NCC's graduate programs by the agency means

Chorus Concert Set For July 26

The Summer School Chorus will present its annual concert on Tuesday, July 26, at 8:15 p.m. in B. N. Duke Auditorium.

The 38-member chorus, under the direction of Samuel W. Hill, will perform three interesting numbers.

These include Mozart's motet, "Creator Father"; Holiday Montage, which will commemorate all of the American holidays (with Miss Mary Bohanon, NCC faculty member, as narrator); and a medley of eleven songs from Gilbert and Sullivan's "Mikado."



Dutton Trio To Appear In Concert On July 21

The second summer lyceum offering will feature the Dutton Percussion Trio on Thursday, July 21, at 8:15 p.m. in B. N. Duke Auditorium.

The group whose members can perform on nearly fifty instruments, will present a varied repertoire which will include Bach, Satie, Kabalowsky, jazz, show tunes, and novelty numbers. Their instruments vary—from a concert marimba, a vibe,

and a xylophone to a drum set.

Dutton, chairman of the percussion department at the American Conservatory of Music, Chicago, is a composer and arranger and is a nationally renowned artist on marimba, timpani, and all percussion instruments.

Other members of the trio are Jane Neitzhe, a talented vibist, and Fred Stoll, an exciting young jazz drummer.



Himes To Lecture Abroad Next Term

Dr. Joseph S. Himes, chairman of the Department of Sociology at North Carolina College, has been appointed a Fulbright lecturer in sociology at Madras University, India, for the 1966-67 school year.

To lecture on methodology and sociological theory, he will begin his assignment on August 1, 1966 and will complete it on about May 1, 1967.

Himes, who was a Fulbright lecturer at the University of Helsinki, Finland, in 1961-62, has been on the NCC faculty since 1946. Holder of A.B. and M.A. degrees from Oberlin College and the Ph.D. from the Ohio State University, he has taught also at Shorter College, Little Rock, Ark., and Houston College, Austin, Tex. He is currently president of the Southern Sociological Society.

He will be accompanied to India by his wife, Mrs. Estelle Himes, assistant professor of French at NCC.



JOHN BAKER HONORED—John H. Baker Jr. Day was observed in Raleigh, June 24, on proclamation by the mayor in honor of the star football player of the Pittsburgh Steelers.

Shown, from left to right, are James A. Stevens, Baker, Herman H. Riddick, and P. H. Williams. Stevens and Riddick were Baker's coaches at North Carolina College, and Williams coached the athlete when he played football at Raleigh's Ligon High School. Baker was given citations from the Chamber of Commerce, the Raleigh City Council, and other organizations on the program held in Memorial Auditorium.