



SCIENCE INSTITUTE—The above scenes show persons enrolled in the 10th Summer Institute for Teachers of Science and Mathematics. From left to right on the top row are: James Butts assisting a student preparing to

take the melting point of an organic compound; Vernon Clark demonstrating the use of the hemacytometer, used to determine the total number of blood cells in a cubic millimeter of blood; and the extracting of blood to make

a blood smear. On the bottom row are shown: taking a melting point; Dr. William Fletcher, an NCC graduate, teaching a class in mathematics; and two enrollees taking melting points.

## NSF Institute Emphasizes Modern Concepts

Seventy-four junior and senior high school teachers are participants in the National Science Foundation-supported Institute for Teachers of Science and Mathematics this year. The institute, directed by Dr. W. H. Pattillo Jr., NCC professor of biology, began on June 13 and will end on July 22.

Its purpose is to upgrade the preparation of teachers who in the main do not have majors in certain areas of science which

they teach. Though various NCC science departments have offered science institutes for ten consecutive summers, the particular type of program offered this year is offered for only the third time.

Courses involved feature the modern or newer approaches and materials in science and mathematics. In biology, BSCS (Biological Sciences Curriculum Study) materials are used primarily in the laboratory course. In chemistry, CHEM Study (Chemical Education Materials) materials are employed in the

introductory course. Both courses in mathematics—Introduction to Mathematical Concepts with Emphasis on the Laws of Algebra and Characteristics of Axiomatic Systems with Emphasis on Laws of Algebra—emphasize modern concepts.

Since many school systems throughout the nation have initiated or will soon initiate these types of courses, their presentation in this institute performs a necessary service, said Dr. Pattillo.

With two exceptions, the staff is the same as last year. In addition

to Pattillo, Dr. Mary Townes, associate professor of biology, and Vernon Clark, assistant professor of biology, both of NCC, offer the biology courses. Dr. E. L. Totton, professor of chemistry, and J. R. Butts, assistant professor of chemistry at NCC, offer the chemistry courses. Dr. W. M. Whyburn, Kenan Professor of mathematics at the University of North Carolina, teaches mathematics.

Additions to the staff are Dr. Abdu Bardawill, associate professor of chemistry, and Dr.

William T. Fletcher, mathematics, a graduate of NCC who received the Ph.D. degree from the University of Idaho on June 12, 1966.

In-service participants represent a wide variety of prior training and teaching experience. Employed in 61 different schools in eight states, they are graduates of 23 different colleges and universities, including NCC, from which 21 received degrees. Twelve hold master's degrees. Durham led all other cities by enrolling fifteen persons.

Sponsored By SEF

## Media Institute In Fifth Year

The Southern Education Foundation is sponsoring an institute for New Media of Instruction at North Carolina College for the fifth summer. The institute consists of two courses, Education 580 and Education 582, and a group of extended experiences.

Education 580, the Preparation and Use of New Instructional Media, is taught by James E. Parker, director of

the NCC Audiovisual-Television Center; and Dr. Norman C. Johnson, associate professor of Education 582, the Organization and Administration of New Instructional Media.

The SEF provides scholarships for supervisors of instruction and audiovisual leaders in the Southern region. Participants in the institute come from North Carolina, South

Carolina, Mississippi, Texas, and Virginia. The scholarships cover tuition, room and board, and all fees except a materials fee. In past years, participants have come also from Alabama and Georgia.

The institute attempts to promote the development of professional competencies in the use of teaching machines and programmed learning, overhead projectors, tape record-

ers, television, slides, filmstrips, motion pictures, and other equipment and techniques. It grew out of nationwide concern for the scarcity of experienced persons in public schools to operate audiovisual equipment for which millions of dollars were being spent under provisions of the National Defense Education Act of 1958.

Parker, who is assisted by

Marvin Duncan, instructor of education at NCC, has said the institute seeks to formulate a unifying philosophy of education, and "to give meaning and purpose to all instructional effort." Evaluation of techniques and purposes are listed as dominant in the course's curriculum.

### Australian Serves On NCT-NDEA Staff

Michael Sherman, a native of Australia who is a Ph.D. candidate at Duke University, is serving on the NCT-NDEA staff this summer at NCC.

A 1966 recipient of the M.A. degree from Duke University, Sherman received the B.A. degree in 1961 from Toronto University, Canada. For eight years, he attended high school in Kenya, East Africa.

He has formerly worked in the field of epidemiology and in the area of probation/parole in Santa Fe, New Mexico, and in forestry service in Alberta, Canada.

Sherman has himself been the recipient of an NDEA fellowship for graduate study.



NEW MEDIA SCENES—The above views show participants in the Institute for New Media of Instruction, now in its fifth summer at North Carolina College. On the left, enrollees in the institute are seen using an overhead projector. In the center, three students examine a

roll of recently-processed film in the darkroom; and on the right, two persons in the institute are using a dry mounting press.

The institute, sponsored by the Southern Education Foundation, has as teachers James E. Parker, Dr. Norman C. Johnson, and Marvin Duncan.