Teaching Methods and Devices

As teachers consider the theme of this issue of Educational Leadership it must be abundantly clear that the subject areas currently receiving greatest attention are science, mathematics and language. The most glamorous devices are television, language laboratories and teaching machines. There is much danger that overconcern in these areas and relative neglect of others may produce a lopsided curriculum and hence lopsided people. Concern about this danger is the responsibility of everyone in the school community; but it is the unique function of professional educators, and particularly curriculum workers, to be sure that the community in general understands the possible alternatives and the likely consequences of decisions in these instructional matters.

Teachers and students of science may look for special help of several kinds. Robert Carleton, Executive Secretary of the National Science Teachers Association, has announced a new organization, Future Scientists of America, for high school students throughout the nation. This new extraclass activity group was initiated by science educators, is chartered by the parent body and should strive to cooperate with all present youth programs in science. The FSA Centrifuge is a quarterly newsletter which describes activities of local chapters and recent scientific developments of interest to club members.

The NSTA is conducting a nationwide study of science programs in elementary schools. The search will center on experimental evidence of success in curricular planning: plans, procedures and accomplishments will be highlighted. Suggestions for in-service education will be carefully appraised and the more appropriate ones recommended for more widespread adoption. Careful examination of science programs in the elementary school is a normal addition to the current emphasis on science in junior and senior high schools. The report of this research will be eagerly awaited by school people.

The Science Materials Center of the Library of Science, New York, has published a paperback volume: Laboratories in the Classroom. It contains many tested classroom methods for elementary and secondary teachers who want their students to "learn by doing" in science. The necessary equipment and supplies are carefully specified. The suggestions come from 27 prominent educators and cover a wide range of topics. As long as the first printing lasts, science teachers may secure a copy free by writing Naomi Alt, Science Materials Center, 59 Fourth Avenue, New York 3, New York.

High school biology may soon take on a new look. Some 14,000 students are currently using new experimental ver-
sions of a tenth-grade biology program prepared by 69 high school teachers and research biologists. They did this work at a (1960) Summer Writing Conference of the Biological Sciences Curriculum Study, sponsored by the American Institute of Biological Sciences, at the University of Colorado, Boulder.

CIBA Pharmaceutical Products, Incorporated, at Summit, New Jersey, publishes once a month a large wall newspaper called “MARK.” Through very interesting pictures and clear descriptions, about eight important events in science are depicted monthly in such fashion as to stimulate broader interests in science among students in school. Single copies are available free from CIBA, P. O. Box 1627, New York 17, New York.

The Florida Foundation for Future Scientists, located at the University of Florida, Gainesville, has made available to high school students in the state small grants to further their special projects for science fairs. The money is expected to encourage students by helping defray costs for science project equipment and supplies.

Community resources are where you find them! The Community High School at Napierville, Illinois, offers an Honors Science Seminar with guest speakers from nearby North Central College. They are presenting 22 lectures on nuclear physics.

The Curriculum Services Center of the Wilmington (Delaware) Public Schools provides eight “instructional loan kits” for teachers. Composed mainly of books at various reading levels, film strips and pictures, the kits treat such topics as St. Lawrence Seaway, World We Live In, and The Sea. There are also Senior and Junior Space Kits. These can be mailed out of the Central Office, but individual schools are encouraged to assemble kits of their own, utilizing their own resources and adapting to their own needs.

Theodore Andersson of the University of Texas, directed the first conference of state supervisors of modern foreign languages, a two week session last summer at the George Washington University. It is interesting that two years earlier only four states had such supervisors; last year there were 38, and 32 of them attended the Washington meeting. They organized the National Council of State Supervisors of Foreign Languages and agreed to hold annual meetings. These leaders are bent on de-emphasizing the traditional grammar-translation methods which tend to develop into academic drudgery, in favor of learning experiences that are enjoyable and rewarding to youngsters. They also favor more attention for the less common languages.

The alert teacher travels to keep up with modern youngsters. Joseph Hanlon, of the NEA, reported that in the summer of 1960 some 1,500 teachers traveled into 70 different countries via 40 NEA-sponsored tours. This they did sometimes for college credit but always for guided study of the history and culture of the various nations. The actual firsthand experiences in other lands, the color slides taken, the collected souvenirs, all enable teachers to bring their classes “alive” with flavor and excitement that can hardly be gained from reading books alone. This kind of experience is good for every teacher; but for teachers of foreign languages particularly, it is virtually indispensable.

Under the direction of Charles E. Bish, and with financial support from the Carnegie Corporation of New York, the NEA and NASSP have jointly spon-
sored a program of particular interest to curriculum workers: the Project on the Academically Talented Student. Several reports have appeared as products of this endeavor. These reports have stemmed from various sources, but usually they are the by-products of carefully planned work conferences to which recognized specialists in the areas of concern have been invited. Furthermore, they enjoyed the active support of the parent professional body, such as the National Council of Teachers of Mathematics, the National Association of Science Teachers, the National Council for the Social Studies, and the Modern Language Association of America.

The conferees were also aided by highly qualified consultants in each area. A quotation sets the defense for the entire series: “There is nothing so unequal as the equal treatment of unequals.” This is not to suggest that the average or the slow student is ever to be neglected. A democratic nation cannot afford to make less than its best effort for all students in school, and that includes the talented.

In Schools of Tomorrow—Today, A. D. Morse has compiled brief descriptions of educational experiments of several kinds, including team teaching, television, teacher aides, ungraded classes, schools within a school, and teacher selection and preparation. The report was prepared for the New York State Education Department.

Schools, teachers and locations are clearly identified along with their major purposes and procedures. For the busy

educator and particularly for the curriculum worker, this publication presents a valuable summary of certain experimental programs and a source book of names and places to investigate for further information.

National Library Week will be observed from April 16-22 this year. A school kit of very real help to teachers and librarians is again available at the nominal cost of one dollar. It includes a large poster, a streamer, a four-color mobile, book marks, and many suggestions for programs. The observance is sponsored by the National Book Committee, Incorporated, in cooperation with the American Library Association.

Send orders to: School Kit, National Library Week, P.O. Box 365, Midtown Branch, New York 18, New York.

New Bulletins


The Primary Teachers Club of San Diego County produced this bulletin in an effort to suggest things children could do "on their own" and with very little teacher preparation or supervision. At the same time, each activity must require productive thinking and reaching toward the unknown; each must provide for freedom of expression, use of individual talents and personal satisfaction.

The activities described here are not just busywork. They fall into eight areas, including such topics as bookmaking, making games and self-service centers. Along with each description of an ac-

3 Dr. A. L. Butler, of Indiana University, assisted the column editor in the appraisal of this bulletin.

February 1961
tivity, several examples are given and the related subject areas are identified.

This bulletin contains a wealth of ideas for busy primary teachers. The activities are based on modern concepts of learning, suited to a wide range of individual differences, and conducive to free and creative expressions of many kinds.


Only those field trips or journeys which are directly related to secondary school curriculum appear in this revision of the catalog which originated in 1955. It is an elaborate, thoughtfully arranged and carefully indexed catalog. Rules and policies, names and places, planning arrangements and educational procedures are clearly specified. The producers of this catalog underscore the importance of planning, supervision and evaluation of all trips if they are to have maximum value.

Field trips often enable youngsters to clarify many abstract and hidden factors which operate in their daily lives, even in somewhat familiar elements of their communities. By providing firsthand contacts and vital personal experiences, with proper guidance, trips and journeys can lend meaning and excitement to readings in books and subjects in school. This bulletin will enhance such possibilities for better learning in Los Angeles schools certainly, and possibly by suggestion in many other schools where trips are not yet common parts of the educational program.


Several states have recently studied block-of-time and core type classes in their schools. This report from Illinois is a welcome addition to the growing body of data. The survey described in this bulletin was made possible through the cooperative efforts of four state groups: the Department of Public Instruction, the Junior High School Association, the Junior High School Principals Association, and the Teacher Placement Office of the University of Illinois.

Inquiries were sent to all of the 278 junior high schools in the state. Replies were received from 158 schools, and 97, or 61 per cent, reported having block-of-time classes. As usual, the great majority occurred in grades seven and eight and in the larger schools. The study included specific information on how
programs were initiated, the nature of instruction, reporting pupil progress, guidance practices, types of core, preparation of core teachers, and chief obstacles to development of core programs. Responses were secured from both principals and teachers.

The Illinois report reflects a sense of the importance of core-type classes for the junior high school. Indeed, it suggests that this type of class is likely to increase still further to provide the common learnings needed by junior high youngsters. At the same time, it underscores the need for urgent attention to the preparation of junior high school administrators and teachers in general and core-type teachers in particular.


Very few topics in the education of youngsters today have the power to stimulate the imagination to the extent that the topic of this resource unit does. At the same time it offers many opportunities to study basic laws of science in several fields and to see the interrelationships among them. As might be expected, special emphasis falls to astronomy and radio astronomy.

Three sections of the unit include: (a) The Earth’s Atmosphere, (b) Exploring Space from the Earth, and (c) Exploring Outer Space. Numerous activities are suggested to explore the principal scientific concepts involved in space study. Individual aspects of the total unit lend themselves well to separate study, e.g., “Exploring Space from the Earth.” General goals are clearly stated in the beginning, and a Preteaching Checklist should be of special value to teachers using this material.

The unit closes with detailed lists of equipment and supplies, useful films, and readings. The references were carefully chosen for their scientific accuracy and value, in order to help youngsters recognize the limitations of certain science fiction writings which often permit imagination to disregard established fact or inescapable laws of nature. The entire work is profusely illustrated. It should prove to be of practical value to teachers of science in our emerging space age.

Machines and Learning Process

(Continued from page 283)

4. Can a program of instruction be arranged in the school system which encourages each student to proceed at a rate appropriate for him, kindergarten through twelfth grade? Though this idea is accepted by many at the verbal level, the authors are unaware of any school system that actually accomplishes it well. And there is no point in introducing machine instruction unless it is accepted in practice. Children can be denied the opportunity for using appropriate levels of programmed material, as, for example, many of the more proficient sixth graders are now being denied use of any of the required textbooks or other instructional material used in the seventh grade.

Little doubt exists that relatively inexpensive machines and programs in such fields as spelling and arithmetic throughout the elementary school level will soon be available. If the producers and manufacturers cannot sell them to the schools directly, they will sell them to parents, just as encyclopedias, dictionaries, and non-textbook materials are now sold.