

SCIENCE EDUCATION

The College Aid Bill

President Johnson has recently signed two bills that will increase federal aid to education by a total of \$2.7 billion.

Legislation assisting colleges in the construction of classrooms, libraries, and laboratories was signed on December 16, 1963. The measure authorizes additional legislation that will provide \$835 million in grants, to be matched by the colleges on a 2-1 basis, and \$360 million in low-interest loans over a period of three years. If the program is fully used, funds up to \$3 billion will be available for new construction at 2100 educational institutions. The program is open to church-connected schools, as well as other privately and publicly financed institutions, with the stipulation that no funds be spent on chapels, divinity schools, or revenue-producing arenas or auditoriums. Further restrictions require that classrooms built under the program be designed for instruction in the sciences, mathematics, engineering, and modern foreign languages.

A second bill, signed on December 18, extends the National Defense Education Act for another year, and will provide \$1.5 billion toward expanded aid to vocational schools, increased funds for loans to college students, and continued assistance to schools crowded by military or other federal installations.

AIP Student Sections

During the past five years, the number of Student Sections of the American Institute of Physics has risen from about 50 to a current total of 236. The Sections, located on the campuses of colleges and universities throughout the country, have a combined membership of approximately 5000 students.

Established by the Institute in September 1950, the Student Section program was conceived as a means of supporting the efforts of physics teachers to encourage and stimulate the interest of students in the study of physics.

It was also intended to promote an early awareness of the advantages of individual membership in the national organizations of physicists. Many of those now belonging to Student Sections are junior members of one or another of the AIP Member Societies as well. Members of the Sections receive a steady flow of information from the Institute concerning graduate schools, fellowships, employment opportunities, worthwhile physics films, and the availability of guest speakers.

Although Section meetings are usually organized on a modest scale, program planning occasionally becomes a project in itself, as in the case of a jointly sponsored seminar held last spring in Dayton, Ohio. The meeting was organized by the AIP Student Section at the University of Dayton, in cooperation with groups at Miami University, Xavier University, and the University of Cincinnati. The suggestion that a joint meeting of physics students from neighboring universities be arranged was originally made by the vice president of the Dayton Section, Ronald J. Versic. The section promptly endorsed the plan and made Versic responsible for carrying it out. A rough prospectus of the meeting sent to several nearby schools elicited three enthusiastic replies, and Versic subsequently met with student representatives Louis Anciaux of Miami University, Carmen Catanese of Xavier, and Cliff Born of the University of Cincinnati to map out a detailed program.

On Saturday, May 4, the four co-operating Student Sections held their Intercollegiate Seminar on the campus of the University of Dayton. The more than one hundred registrants came from colleges, universities, high schools, and industrial organizations in the Dayton area. The meeting was opened with a welcoming address by the president of the University of Dayton, and it continued with ten invited lectures covering a wide range of topics in modern physics. Eight of the speakers

were professors from the participating universities; the other two were physicists from the National Cash Register Company and the Wright-Patterson Air Force Base, respectively. In some cases, two lectures were given at the same time, forcing each student to decide which of the sessions he should attend. To aid in making this choice, abstracts and information about the speakers were made available to those attending the meeting.

According to Mr. Versic, who served as chairman of the meeting, the aim of the project was to further student understanding of the various fields of physics and to promote cooperation between AIP Student Sections in the southwest part of Ohio. The success of the venture (which led to early planning for another such meeting) demonstrated, he said, "that it is possible for Student Sections, with a minimum of outside help, to participate in activities directed toward professional identification and development of their own members. Such an activity, I feel, raises the educational objectives and presents a concrete goal for the Student Sections to pursue."

Summer Programs

A program in experimental solid-state physics will be offered from June 22 to July 24 by the Metallurgy and Electrical Engineering Departments of the Massachusetts Institute of Technology, under the direction of Professors Simon C. Moss and Roy Kaplow. Intended primarily for faculty members in the materials sciences who wish to obtain first-hand experimental experience, the course will deal with x-ray diffraction, crystal growth, infrared spectroscopy, magnetic resonance, galvanomagnetic effects, excess carriers in semiconductors, ferroelectricity, thermal properties, superconductivity, and the Mössbauer effect. In addition to laboratory work, the program will include background lectures, references to selected literature, and tours of