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SCIENCE EDUCATION

British curriculum revision

This summer the Nuffield Foundation intends to finish developmental work on a project to produce complete teaching programs in physics, chemistry, and biology for the 11-16 age group. The project was inaugurated late in 1961 when the Nuffield Foundation set aside an initial sum of £250 000 (since increased to £430 000) to develop new science curricula for schools in England. The following year, a start was made on a physics course suitable for children in the 11-16 age group in grammar schools, corresponding to the British O-level stage. Subsequently, classroom trials were made of the draft material and continued during the succeeding year, with suitable revisions made both in curriculum and in various pieces of apparatus. Altogether, some forty-nine schools, representing 164 classes, participated in the 1964-65 program, and arrangements are now being made with the Department of Education and the General Certificate of Education Examining Boards for special Nuffield examinations at the O-level. Among the principles that have guided the courses are that physics should be taught for understanding and that the subject matter should be limited in quantity to a few important ideas which the pupil can make his own. The program seeks to build upon natural curiosity, to have the student learn by doing by providing an abundance of apparatus, and to give a broad picture of what modern science is and the way in which scientists think. A further aim is to present science as a part of general education for the non-specialist and at the same time provide a good foundation for the future scientist and engineer. The work of the American Physical Science Study Committee, though it has both stimulated reform in England and influenced thinking on the Nuffield project, is not expected to be widely used there due to the different re-

quirements and traditions of science teaching in Britain.

The cost of apparatus for the physics course is estimated now to be about £750 per school per year and about £3000 for the entire five years of the course. With the completion of the 11-16 program this year, Nuffield expects the material to be published by the spring of 1966 and made freely available for use by schools from September 1966. Additional programs embarked upon by the Foundation this year include a 16-18 age section which follows the 11-16 program and a junior science section for ages 8-11. The Nuffield Foundation is located at Nuffield Lodge, Regents Park, London, NW 1, England.

UNESCO review

Plans are now being completed for publication later this year of an annual review on "New Trends in Physics" by UNESCO's Division of Science Teaching. The purpose of the review will be to provide information to university faculty members (and especially to those responsible for training teachers in the underdeveloped countries) about new approaches to the teaching of physics and new ideas of content and methodology. Selected articles on physics teaching, reviews of textbooks, data on new teaching aids, and on new groups dealing with curriculum reform will be included in the publication. The articles will appear in English, French, or Spanish, with abstracts in the other two languages. Distribution of the review is to be directed to teachers in universities and teacher-training colleges, as well as to governmental authorities responsible for science teaching. Additional information on the publication can be obtained from Dr. Thérèse Grivet at the Division of Science Teaching, UNESCO House, place de Fontenoy, Paris 7, France.

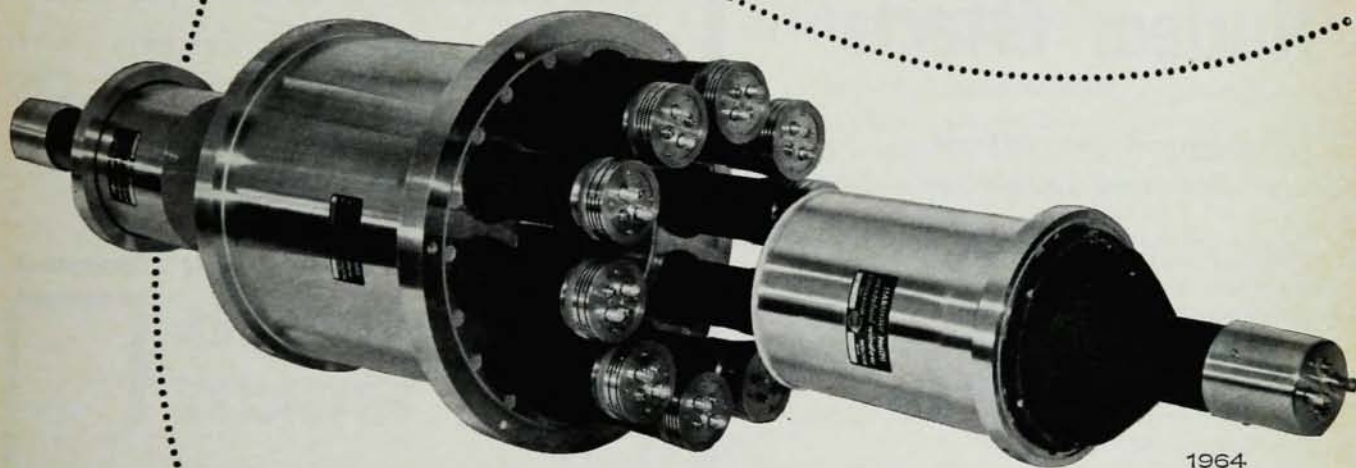
Apparatus report

Last fall, the AAPT's Committee on Apparatus for Educational Institutions conducted a survey in which 123 colleges and universities reported on

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their needs for new physics apparatus and gave opinions of existing equipment. The results of this survey have since been processed by the Center for Educational Apparatus in Physics, headed by F. E. Christensen, and the report is now being sent to the approximately 1700 physics departments in American colleges and universities.

Part I of the survey reports on the level of interest or need for 32 items of lecture-demonstration and laboratory apparatus. Suggestions of other needed apparatus are contained in Part II, and evaluations of existing equipment are provided in Part III. Part IV contains a summary of the results pertaining to the present and prospective use of kits. The publication also includes appendices listing the schools in the survey group and their characteristics. Copies of *Survey of Teaching Apparatus in Physics 1965* can be obtained, while the supply lasts, from Dr. Christensen at the American Institute of Physics.

New building

Brown University's Physics Department reports that it is in the process of moving into the new Barus-Holley Building, which is expected to alleviate extremely crowded conditions in the Department and allow its concentration in one place. The new quarters, which it will share with the Division of Engineering and the interdepartmental Metals Research Laboratory, will provide offices for the entire Department of Physics as well as specialized instructional space and a number of all-purpose classrooms. Dedication of the structure was held on June 4; summer classes were scheduled in the new building later in the month. The main fields of research now in progress at Brown are: (theory) high-energy and solid-state physics, many-body problem, general relativity and gravitation, and physical acoustics; (experimental) high-energy, nuclear, resonance, and surface solid-state physics, defects in solids, optical spectroscopy and low-temperature physics, metals and magnetism at low temperatures, physical acoustics, and properties of conventional liquids and liquid helium.



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