The Advisory Committee on Physics Education

The constitutive meeting

The constitutive meeting of the EPS Advisory Committee on Physics Education was held in Bucharest on 11 September 1975 in the presence of 26 members and delegates from EPS National Societies and other Educational Institutions.

The chairman outlined the background to the formation of the Advisory Committee. In many areas, the problems arising from changes in the educational pattern, such as the introduction of new mathematical courses and of integrated science, have led to some disorientation of physics teachers, especially at the secondary school level. Changes such as these have led to difficulties in the teaching of basic physics. Perhaps even more serious are the consequences of a science teaching at the most elementary school level that neglect the role of physics in understanding natural phenomena and overestimates e.g. that of biology. The chairman reported briefly on the International Conference on Physics Education held in Edinburgh last summer.

A well defined activity programme could of course not yet be formulated in this first meeting. A number of points, however, were made during the general discussion on possible activities of the Advisory Committee. In particular, it was suggested that we attempt to identify problems which the Committee, through its European character, is in an especially strong position to study.

Accordingly, the first task of the committee should be to assemble information on the curricula in different European countries.

At the next meeting (planned for Monday 5 April 1976 in Leipzig), members will be asked to present papers giving a description of the physics teaching in their own countries at secondary school level (to begin with). The hard data, concerning e.g. curriculum, should be complemented by more general information about the school system and the intended goals of the physics teaching programme.

Furthermore the committee should become a channel of information, both inside and outside the European Physical Society, on activities in the field of Physics Education, leading in particular to the possibility of coordination of national efforts in the field.

It was agreed to collaborate with the Advisory Committee on Publications for questions connected with journals on physics education: two delegates accepted to assist professor Deprez's committee. Professor Heaven has been so kind as to act as secretary for this meeting. Part of this report is based on his minutes.

The members

At the moment the members are delegates of a number of EPS — national societies. One (Dr. J. Vlachy) will take care of the necessary contacts with the EPS Advisory Committee Physics and Society, whose activity clearly also involves educational aspects. It is expected that a few more delegates will be designated in the near future. Furthermore other people will be asked to participate in the Committee on the basis of competence in education matters and of interest in specific projects.

At present the members are:

M. Anastassiadis, Hellenic Physical Society
E. Andrew, Ampere Group (substitute)
G. Aubert, French Physical Society
J. Auth, Phys. Soc. German Democratic Republic
G. Born, German Physical Society
D. Brinkman, Swiss Physical Society
M. Chytliová, Union of Czechoslovak Mathematicians, Physicists and Astronomers
A. Ferendeci, Turkish Physical Society
A. Janner, chairman
B. Karczewski, Polish Physical Society
K. Knutsen, Norwegian Physical Society
H. Kramers, The Netherlands' Physical Society
W. Kuhn, German Physical Society (substitute)
E. Mendoza, Israel Physical Society
K. Müller, Ampere Group
A. Rađ, Bulgarian Academy of Sciences
S. Răpceanu, Romanian National Committee for Physics
L. Samuelsson, Swedish Physical Society
J. Vlachy, EPS Advisory Committee Physics and Society

The Europhysics Education News

A Newsletter form of communication will permit the committee to be more effective in its function of information channel. The title of "Europhysics Education News", proposed by the chairman of the Advisory Committee, found the favour of the EPS Executive Committee. Despite this compelling title, the newsletter will keep an informal character suited to a rapid information exchange.

In the initial stages at least, the distribution of this newsletter will be limited to directly interested people and organizations. The first issue contains a survey of a number of organizations with activities on Physics and Education. This report, by no means complete, is based on documents gathered at the International Conference on Physics Education held at Edinburgh and personal contacts the chairman has had. The following hints may give an idea on how rich and widespread on a world scale are the activities in the field of Physics Education.

Organizations interested in Physics Education

The International Council of Scientific Unions (ICSU) is assisted on questions concerning education by a committee on Science Teaching (chairman Dr. A. Baez, Berkeley). Recently a new organization has been affiliated to this committee: it is the International Council of Associations of Science Education.

The International Union of Pure and Applied Physics (IUPAP) also has its own commission on physics education (chairman Pro. A.P. French, MIT). Another international group, more directly involved in questions concerning the secondary school, is the Groupe International de Recherche sur l'Enseignement de la Physique (chairman Prof. P. Thomsen, Copenhagen).

Also Unesco has a specific activity in the field of physics education. In particular two officers can be contacted: Dr. B. Robinson and Dr. N. Joel (Unesco, 7, place de Fontenay, 75700 Paris).

The American Physical Society also formed a committee on education (chairman: Prof. E. Merzbacher, Univ. of North Carolina). In the activity of this committee, particular attention is paid to the serious difficulty of employment of physicists, particularly the graduate ones.

The newly constituted European Science Foundation is mainly centred on science research policy, as already explained in E.N. Shaw's article in Europhysics News, March 1975.

The vivid interest shown by its members at the first meeting on a number of topical subjects like the mathematical education of scientists shows that there are certainly points of joint interest.

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