DISCUSSION: MORNING SESSION, 5th JUNE

THE MATERIALS AND METHODS OF IMPLEMENTATION IN THE DEVELOPMENT OF THE CURRICULUM

Report by K. Smart (Reading)

Opening the discussion on the place of sciences in the modern curriculum, a British member drew attention to the tendency, revealed by Dr. Springer's investigations, away from verbal components and towards the scientific as cardinal components. The value of science was such as to make it desirable for educators to regard it as the core of the curriculum. Another British member introduced a cautionary note, raising two questions: (i) In our enthusiasm for the sciences, are we in danger of introducing too much detailed study, and perhaps too great an emphasis on the traditional "pure" sciences? Perhaps what the average man needs is some knowledge of those aspects of science that are directly and patently relevant to everyday life, e.g. basic physiology. This impression is supported by the current trend in the United Kingdom away from physics. (ii) Are we falling victim once more to the old theory of "transfer of training"? Are we favouring science because we assume that this will inculcate scientific methods of thinking? If so, we should be cautious, as we observe that not all trained scientists are necessarily thoroughly scientific in their way of thinking in fields outside their scientific specialisations.

A Bulgarian member reminded the conference that a recent conference at Varna had considered the importance of science in school curricula and had re-emphasised the fact that education is for children. We are not concerned only with the content of knowledge but also with developing the aptitudes of children: the activity of the children themselves is a major component of the educational process.

Referring to Dr. Parízek's quotation from R. V. Das, a Dutch member thought that the weakness of the notion of "knowledge for its own sake" lay in that it left us without criteria for development or evaluation. Without criteria, how can we effect judgement on priorities? Is there any middle way between the extreme view of Das and its opposite?

Commenting on the problems and questions raised, Dr. Parízek thought it was possible to study the principles of science without necessarily acquiring all the data. In science teaching today, we observe a tendency in favour of principles and away from great detail. Science was not completely neutral from a moral standpoint: its moral content could be brought out in consideration of topics such as, for example, the conservation of the environment (trees, etc.).

In conclusion, the Chairman emphasised that the function of science teaching is to enable people to reach rational decisions. The amount of knowledge in existence grows, but scientists generally are aware of the problems posed by the expansion of knowledge.
Opening the discussion of Dr. Dahllöf’s paper, a British member commented that not all countries possessed the resources and the homogeneity of Sweden; and that the model did not perhaps indicate in sufficient detail the need for consideration of the relationships between general and specialist education, and between the needs of pupils and the needs of society.

A German member wondered how, precisely, one could ascertain the “demands” and “goals” shown in fig. 1 of Dr. Dahllöf’s model. He also wondered whether the time-scale shown in fig. 3 was adequate. In reply Dr. Dahllöf said that fig. 3 may not be accepted as universally applicable, but that it was intended only as a demonstration of the feasibility of this kind of analysis.

A British member expressed his appreciation of the usefulness of Dr. Dahllöf’s model as a basis for educational planning in developing countries, and thought that the programming exercise summarised in fig. 3 might well lead to more detailed programming, in which “critical path” methods as used in industrial planning could be applied.

An American member pointed out the need for information on “consensus”. There should be more research in social sciences and into the application of natural sciences. The social sciences should be invoked to clarify some of the sociological problems in education, for example the role of women in the teaching profession.

A Dutch member thought we should clarify the relationships between research and operational problems in development.

MATERIELS ET METHODES DE MISE A EXECUTION DANS LE DEVELOPPEMENT DU PROGRAMME
DISCUSSION : SESSION DU MATIN, 5 JUIN
par K. SMART, (Reading)

Un membre Britannique insista sur le fait que la science devrait être considérée comme l’épine dorsale du programme d’enseignement; un autre membre, Britannique lui aussi, fit toutefois remarquer que l’on pouvait discernier une tendance à présenter une étude trop détaillée et à donner une importance trop grande aux sciences purement traditionnelles; il conclut par une mise en garde contre la théorie discréditée du transfert de la formation.

Un membre Bulgare, évoquant une conférence récemment tenue à Varna, rappela aux autres membres de l’assistance que l’enseignement ne devrait pas avoir pour seul but de développer les connaissances de l’enfant mais, également, ses aptitudes. Le Dr. Patzík, commenant les problèmes soulevés au cours de cette discussion, fit observer que l’on insistait sur les principes mêmes de la science plutôt que sur ses données. En conclusion, le Président souligna la fonction de l’enseignement de la science, en ce qu’il aide les individus à prendre des décisions rationnelles.

Au début, la discussion sur l’exposé présenté par le Dr. Dahllöf se concentra sur la question du modèle. Un membre Britannique suggéra qu’il serait nécessaire d’étudier de plus près les relations entre l’enseignement général et spécialisé et entre les besoins des élèves et ceux de la société. Un membre Allemand, dont le Dr. Dahllöf partagea l’opinion, fit remarquer que l’échelle de temps représentée en figure 3 n’était que d’une valeur limitée. Enfin, un membre Américain demanda que les sciences sociales soient l’objet d’une étude plus approfondie, particulièrement en ce qu’elles s’appliquent à l’enseignement.