

COMMONWEALTH CO-OPERATION IN THE MANUFACTURE, SUPPLY AND USE OF SCHOOL SCIENCE EQUIPMENT

Paper presented by the Commonwealth Secretariat

This paper seeks to indicate areas in which the Commonwealth Secretariat can assist in promoting Commonwealth Caribbean co-operation in the field of school science equipment, and to identify the Secretariat's role.

The educational programme of the Commonwealth Secretariat can be described under three main heads: the organization of conferences, seminars and workshops; the collection and dissemination of information; and the organization and support of training courses.

Information

One of the main functions of the Commonwealth Secretariat is to act as a clearing house for information about educational developments in the Commonwealth. The collection of information is done in various ways, for example through visits to Commonwealth countries, through correspondence, and through the large number of journals and periodicals that the Division receives.

When necessary, the Secretariat may commission specialists to obtain information in specialized fields. For instance, it was as a result of a commissioned study that we were able to publish The Production of School Science Equipment. The Secretariat also organizes surveys in order to provide information required by Commonwealth countries.

The dissemination of information is effected through publications like the C.E.L.C. NEWSLETTER. The Secretariat also publishes reports of its seminars, workshops and other conferences, as well as results of surveys. There is in addition the Education in the Commonwealth series of publications dealing with special areas of education; such as Correspondence Education and the Education of the Handicapped. Among other publications are titles such as Educating and Training Technicians, Mathematics Teaching in Schools, and The Production of School Science Equipment.

Conferences/Seminars/Workshops

Commonwealth Meetings dealing with Education are handled by the Education Division. The meetings vary from ministerial conferences to specialist conferences and smaller meetings like workshops, seminars and symposia. Mention has already been made elsewhere to previous specialist conferences dealing with other aspects of education. The Secretariat has recently concentrated on the workshop/seminar type of meeting which, in addition to discussing problems in general terms, aim at providing an element of training for participants.

The purpose of this present Seminar/Workshop is to provide an

opportunity for participants to exchange views and information on the problem of providing science teaching equipment in the various Commonwealth Caribbean countries, and to consider solutions to the problems raised with a view to making the knowledge of science available to as many school pupils as possible through the local production of science teaching equipment.

Training

Training is provided and supported by the Commonwealth Secretariat in various ways, some of which are as follows:

(a) Bursaries: The Secretariat encourages Commonwealth countries to send personnel to train at courses which are already in existence. Emphasis in training is mainly on middle-level personnel and awards have been made for a wide variety of courses in technical and professional institutions. For instance, the Secretariat supported with bursaries the training of 25 technicians from Tanzania who went to India to train for the promotion of small-scale industries in rural areas. The Secretariat has also supported training in special courses at the East Caribbean Institute of Agriculture and Forestry in Trinidad and Tobago.

(b) Provision of Consultants: The Secretariat has often provided consultants to assist national training programmes. For example, the Commonwealth Secretariat was involved in the latest review of educational policy and programmes in Sierra Leone, and in 1975 a team of consultants was invited to advise the Government of the Bahamas on the organization and administration of their educational system.

(c) Regional Training: Where regional training courses exist, the Secretariat is prepared to consider requests for support of personnel sent there for training. It is at present in consultation with non-Commonwealth training centres with a view to getting them to accept trainees from Commonwealth countries. The Commonwealth Secretariat is itself trying to establish a programme of regional courses, in accordance with a recommendation of the Sixth Commonwealth Education Conference. It is usually agreed that regional training is worthwhile for two main reasons. First, training will be in the context of problems which are common to a particular region, and second, the cost of training can be reduced by avoiding the necessity of having a number of national training centres for the training of only a limited number of personnel. At one such centre, the University of Nairobi, the Secretariat is about to train personnel from Commonwealth countries in Africa in educational administration and supervision. This will be followed by a Caribbean course on certain aspects of book production to be held in Guyana. These are the first of what we hope will be a number of regional courses if demands for them continue.

(d) Educational Visits: The Secretariat has in the past provided a number of travel grants to enable personnel from developing countries to travel to other developing countries to examine special educational areas of interest. These visits have proved very useful. However, emphasis is now shifting to training attachments.

It is necessary for this Seminar/Workshop to consider specifically Commonwealth co-operation in the field of manufacture, supply and use of science equipment. Suggestions have already emerged. The Commonwealth

Secretariat has already been requested, for instance,

- (a) to circulate information on developments in the field of school science equipment, and compile and publish a directory of audio-visual materials on a regional and pan-Commonwealth basis;
- (b) to encourage the free flow of low-cost science equipment among Commonwealth countries;
- (c) to investigate the design of basic equipment which can be used widely, especially where there is no supply of electricity;
- (d) to encourage regional co-operation through standardization, production and distribution of locally-produced science equipment;
- (e) to assist with programmes of in-service training of science teachers and with the running of regional science workshops.

Other areas of Commonwealth co-operation could also be considered. As has been done in other fields, the Commonwealth Secretariat would be happy to consider requests for:

- (a) support for national training programmes either through the provision of consultants to help plan the programmes or operational personnel to assist with the actual training;
- (b) provision of bursaries for trainees at centres already in existence;
- (c) provision of travel grants for persons engaged in the design, production, distribution and use of low-cost science equipment.

Bi-lateral Co-operation

It is encouraging to note that the widening of the range of Commonwealth co-operation through the Secretariat has not lessened the importance of bi-lateral co-operation. Bi-lateral co-operation has given rise to a great number of exchange visits and a certain amount of technical assistance. The following could be considered as areas suitable for increased bi-lateral assistance:

- (a) travel funds to enable visits of personnel to the donor country or a third country to see education projects;
- (b) awards to enable personnel to train in the donor country or in other countries in selected fields;
- (c) support for trainees at regional training centres;
- (d) the supply of personnel to support national training programmes;
- (e) the exchange of materials for the teaching of science.

Commonwealth Associations

There is room for Commonwealth associations as well as other international organizations to assist with the training of personnel. Commonwealth support

could be requested by any Commonwealth association (including Science Teachers' Associations and Teachers' Unions) willing to assist with training personnel for the manufacture, supply or use of low-cost science equipment.

Science Teachers' Associations can be particularly useful by encouraging teachers to train and by arranging in-service training courses.

Teaching About the Commonwealth

Sadly there is a great deal of ignorance in Commonwealth countries about what the Commonwealth is and what it has to offer to member countries. The Commonwealth Secretariat would like to see more teaching about the Commonwealth in schools. In Britain, the Commonwealth Institute, which is an independent body supported by most Commonwealth countries, has produced, for use in Britain, kits of materials which teach about the Commonwealth. The Secretariat would like to see this approach developed on a wider scale, and it is hoped that some of the materials that will be developed in individual countries will include kits suitable for local use in teaching about the Commonwealth.

The future of the Commonwealth will depend ultimately on the degree to which its members work together. It is for this reason that the Commonwealth Secretariat is anxious to stimulate, in every possible way, the knowledge and understanding necessary for effective co-operation.