# Report of the Seventh Commonwealth Education Conference

**Accra, Ghana: 9–18 March, 1977**

Commonwealth Secretariat

# Seventh Commonwealth Education Conference Report

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# Foreword

"To a large extent the pace of any society's development depends on the availability of an appropriate supply of skilled and educated manpower for harnessing and exploiting its resource endowments".

These words form the opening sentence of the lead paper by Dr. Adebayo Adedeji, presented at the Seventh Commonwealth Education Conference in Accra. Our theme was "The Economics of Education", and the aim was to consider how to get the best value for the money that member states are spending on education. The sums involved are considerable. Few Commonwealth countries spend less than one-seventh of their total public expenditure on education: some are spending as much as one-third. This in itself is a great achievement, underlining as it does the confidence of Governments in education as an instrument of progress. But while the need for massive expenditure on education persists, it is clear that very few Ministries of Education will be able to increase their budgets significantly in the immediate future, and some may even have to reduce them. It is also clear that public expectations of education are not being realized in practice. Again and again we were reminded of the fundamental "mismatch" that exists between the skills provided by the schools and the available jobs on the market, and of the way that such schooling as exists in rural areas is often far removed from the realities of rural development.

These were some of the back-drops to the Accra Conference. They had already served to foster experiment within countries, and the sharing of experiences among them: processes of innovation and consultation which the Commonwealth Secretariat has been privileged to assist in a variety of ways. Between the Sixth and Seventh Commonwealth Education Conferences, the Secretariat held two linked specialist conferences — on learning materials and on educational broadcasting — that concentrated on the means by which modern media could make more education available to more people in a more effective way. It organized regional workshops and seminars on low-cost science equipment, book development, educational supervision, and technical education and industry. The Secretariat also maintained a vigorous publishing programme and, as a new development, began the organization of regional training courses in two important aspects of education. The first of these — for educational administrators in Africa — was drawing to its close in Nairobi while the Seventh Commonwealth Education Conference met in Accra The next, on book development for the Caribbean, will follow shortly in Guyana. These and many other co-operative educational activities have been made possible by the resources provided through the Commonwealth Fund for Technical Co-operation (C.F.T.C.). In addition, the Education and Training Programme of the C.F.T.C. has been enabled to multiply the number of students it supported by over three times in the period between the Sixth and Seventh Commonwealth Education Conferences, and to increase its projects to over 500 a year.

One of the significant results of the Accra Conference was the approval given to an increased emphasis on programmes of education designed to create an understanding and appreciation of the Commonwealth and of the activities being undertaken within its framework. Our interest in these matters was undoubtedly heightened by the cordiality of the deliberations which are so characteristic of Commonwealth Education Conferences, and further reinforced by the fact that the first commemoration of the newly designated Commonwealth Day was held while the Accra Conference was in progress. This happy circumstance enabled us to enjoy an exhibition of Commonwealth children's art mounted in the Kwame Nkrumah Conference Centre to mark the event, and to join in some of the other Ghanaian special activities. I am sure all who were present will long remember the occasion and give encouragement to schools to celebrate successive Commonwealth Days in ways which serve to increase Commonwealth understanding.

While Commonwealth Days will undoubtedly help to foster a sense of belonging, the Conference recognized the need for a much wider appreciation of the Commonwealth, the principles it stands for and its programmes based on them, and recommended that this be brought to the attention of the Heads of Governments who were scheduled to meet in June this year. It is gratifying to be able to report that the Heads of Government at their London Meeting endorsed the need expressed by the Conference for greater efforts to increase information, understanding and appreciation of the activities being undertaken within the Commonwealth framework, stressing at the same time the role of school and adult education programmes designed to reach the general public.

It is my hope that this Report will be carefully studied by all concerned — Governments, educational institutions and organizations, educationists, and the community at large. Each should find somewhere in the report pointers to contributions towards this collective responsibility of educating our peoples for a better and more meaningful living.

SHRIDATH S. RAMPHAL
*Commonwealth Secretary-General*

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# Conference Arrangements

## Background

Following the first Commonwealth Education Conference which was held at Oxford in 1959, further Conferences were held at New Delhi (1962), Ottawa (1964), Lagos (1968), Canberra (1971), and Kingston (1974). During the Kingston Conference, offers to host the seventh in the series were made by Ghana and by Kenya. Later, in view of the fact that other major international conferences were to be held in Nairobi, the Government of Kenya gave its support to the offer from Ghana, and arrangements were accordingly made to hold the Seventh Commonwealth Education Conference in Accra.

Preparations for the Seventh Commonwealth Education Conference began in 1974 when the Commonwealth Education Liaison Committee (C.E.L.C.) appointed a small committee to assist the Commonwealth Secretariat in reviewing the organization of the Sixth Commonwealth Education Conference. This committee's review was considered first by the C.E.L.C. and then by the Working Party which was appointed to make detailed recommendations for the Seventh Conference.

The Working Party met on six occasions between 19 November 1975 and 28 April 1976 under the chairmanship of Dr. S. J. Cookey, Director of the Education Division. In addition to members of the Secretariat's staff, those who attended one or more of the meetings were Mr. H. J. Russell and Mrs. H. Bilson (Australia), Mr. F. Sawyer (Bahamas), Mr. J. E. C. Thornton and Mr. A. S. Fair (Britain), Mr. J. R. Francis (Canada), Mr. D. K. Tettey (Ghana), Mr. R. Austin (Guyana), Professor R. Dogra and Mr. S. G. Vethakkan (India), Mrs. H. Y. Turriff (Jamaica), Mr. D. G. Mwangi (Kenya), Mr. C. N. Umelo (Nigeria), and Mr. A. Black (Trinidad and Tobago). The Commonwealth Secretariat is grateful to the members of the Working Party and to all those other individuals who contributed towards planning the Conference.

The Working Party prepared two reports which were considered by the C.E.L.C. on 16 March and 28 June 1976. The main decisions of the C.E.L.C. were:

(a) The Seventh Conference should be shorter than its predecessors, and senior officials should meet for a few days before the arrival of the Ministers of Education to consider areas of Commonwealth co-operation in education, including the Commonwealth Scholarship and Fellowship Plan.

(b) There would no longer be a steering committee; the enlarged membership of the Commonwealth would make the conventional committee on which each country was represented unmanageable. The work of supervising the progress of the Conference could be undertaken by a conference bureau, though heads of delegations might meet if major policy issues arose.

(c) In view of the widespread concern that existed in many countries about educational financing, the theme of the Conference should be "The Economics of Education".

The C.E.L.C. approved the Provisional Conference Agenda at its meeting on 27 January 1977. The Agenda was adopted by the Meeting of the Leaders of Delegations at the first session on 9 March.

Acting on suggestions made by the C.E.L.C., the Commonwealth Secretariat commissioned the following lead papers on the theme of the Conference:

"*Education, Economic Policy and the National Budget*" by Dr. Adebayo Adedeji — Executive Secretary, United Nations Economic Commission for Africa.

"*The Provision of Education and its Costs*" by Professor Richard Jolly — Director, Institute of Development Studies, University of Sussex.

"*Educational Financing*" by Dr. Malcolm S. Adiseshiah — Vice-Chancellor, University of Madras.

Professor Jolly and Dr. Adiseshiah, who attended the Conference, presented their lead papers and participated in the deliberations on the Conference theme.

Dr. Philip H. Coombs — the noted American economist and educator, and Vice Chairman of the International Council for Educational Development — was invited to deliver the Keynote Address.

In July 1976, the Director of the Education Division (Dr. Cookey) and the Conference Officer (Mr. Sardana) visited Ghana to hold preliminary consultations with government officials about the arrangements for the Conference. Subsequently it was agreed to hold the Conference at the Kwame Nkrumah Conference Centre from 9–18 March 1977, with officials being present for the whole period and Ministers of Education attending from 14 March onwards. Further consultations were held at Marlborough House on 16 and 17 February 1977 with Mr. S. Arthur, Senior Principal Secretary, Ministry of Education, Ghana, and Mr. D. K. Tettey of the Ghana High Commission in London.

## The Officials' Meeting

The Meeting of Officials was chaired by Dr. E. Evans-Anfom (Chairman of the Ghana National Council for Higher Education and Alternate Leader of the Delegation of Ghana) and the Ministerial Conference by Mr. E. Owusu-Fordwouh (Commissioner for Education and Culture, and Head of the Delegation of Ghana). The Conference Secretary was Dr. S. J. Cookey and the Co-Conference Secretary Professor N. O. Anim, Director-General of the Ghana Education Service.

During the meeting which lasted from 9–12 March, five Working Committees were formed as follows:

Committee 1 (Chairman, Sir Zelman Cowen, Australia): Higher Education, and the Commonwealth Scholarship and Fellowship Plan.

Committee 2 (Chairman, Professor Rais Ahmed, India): Science Education, and Technical Education.

Committee 3 (Chairman, Mr. R. P. Martin, Britain): Book Development Programme, Education Media, and Curriculum and Examinations.

Committee 4 (Chairman, Mr. G. W. Oguli, Uganda): Administration and Supervision of Education, Applied Studies in Education, and Non-Formal Education.

Committee 5 (Chairman, Mr. Norman Goble, Canada): Teacher Education, and Teaching about the Commonwealth.

A Working Paper on Commonwealth co-operation in education was presented to the Officials' Meeting by the Commonwealth Secretariat. Besides setting out details of the Education Division's activities, particularly in relation to each of the topics being considered by the Working Committees, it contained proposals for future projects and information about the activities of the Commonwealth Fund for Technical Co-operation in the field of education.

Over a period of six sessions, each of the Committees discussed the appropriate sections of the Working Paper. They modified or approved some of the suggestions contained in it, rejected others, and injected new ideas of their own. Draft reports prepared by the Committee Secretaries were further considered on the last day of the Officials' Meeting, and adopted after some revision for presentation to the Ministerial Conference on Thursday, 17 March.

The consolidated Draft Report, consisting mainly of the five Committee reports, also contained a short section on "Other Activities and Programmes" compiled partly from the Working Paper, partly from the Committee deliberations, and partly from the record of a meeting of chief professional officers on Friday, 11 March. This meeting was a repeat, at their own request, of the successful meeting of these officers held during the Sixth Conference at Kingston. It was chaired by Mr. A. V. Gough. Finally, the Draft Report contained a short statement about aspects of the Commonwealth Fund for Technical Co-operation of particular application to education.

## The Conference Bureau

The Conference Bureau, set up to monitor the day to day progress of the Conference, was chaired by the Chairmen of the Meeting of Officials and of the Ministerial Conference in succession. The other members were the Chairmen of the Working Committees (the Chairmen of the Working Groups for the second week), the Commonwealth Assistant Secretary-General, the Conference Secretary, the Co-Conference Secretary, the Assistant Conference Secretary, the Report Secretary and the Conference Officer.

## The Ministerial Conference

The Ministerial Conference was formally opened on Monday, 14 March. The Conference proceedings on that day were confined to the Opening

Ceremony performed by the Chief of the Defence Staff, on behalf of the Head of State, at which an opening speech was delivered by the Commonwealth Secretary-General. The day was also, as the second Monday in March, that on which Commonwealth Day was to be celebrated jointly for the first time by all Commonwealth countries. A programme of ceremonial and entertainment took up the rest of the day. This began with a flag raising ceremony performed by the Commissioner for Foreign Affairs, and addressed by the Commonwealth Secretary-General. It was followed by a Durbar, very kindly arranged by Nana Osae Ntifo Ababio, the Adontenhene of the Akuapem Traditional Area.

Three days therefore remained for the Conference to consider its theme "The Economics of Education". The first day was devoted to the delivery of the Keynote Address by Dr. Philip Coombs and the presentation of the three lead papers. As Dr. Adebayo Adedeji was unfortunately unable to attend the Conference, his paper was presented by Mr. E. C. Anyaoku, the Commonwealth Assistant Secretary-General. The time remaining in each session was used for preliminary questions and comments.

On the following day (Wednesday, 16 March) it was arranged that the Conference should divide into three working groups, one to discuss the topic of each lead paper. Mr. A. L. Ciroma (Nigeria) was appointed Chairman of Group A, Mr. C. Roebothan (Canada) of Group B, and Mr. Q. Munzur-I-Mowla (Bangladesh) of Group C. On the morning of Thursday, 17 March, the groups concluded their consideration of the Conference theme, each adopting a set of conclusions for consideration in plenary session.

Meanwhile on the Wednesday afternoon, arrangements were made, in accordance with the wishes expressed by Ministers at the Sixth (Kingston) Conference, for a closed meeting of Ministers. Also outside the main framework of the Conference, a working party, broadly representative of the main areas of the Commonwealth, met on the morning of Friday, 18 March, to consider the structure of future Commonwealth Education Conferences.

The final Plenary Session on the afternoon of Friday, 18 March, provided the occasion for the final act of the Conference, the adoption of its draft report on a motion proposed by Zambia and seconded by Tanzania and Uganda, and a summing up of the Conference by Sir Roy Marshall, Chairman of the Commonwealth Education Liaison Committee. In conclusion, Senator Marilyn Gordon, Head of the Delegation of Trinidad and Tobago, expressed the appreciation of the delegates for all the work that had been done to ensure the smooth running and success of the Conference, for the characteristic openness and freedom of the discussions, and for the ceremonial programme arranged for Commonwealth Day.

The Commonwealth Secretariat wishes to express its gratitude to the Government of Ghana for making available the Kwame Nkrumah Conference Centre, at the State House, and all the other services, facilities and hospitality that were provided.

# Summary of Recommendations

## Recommendation to Heads of Government

1. It is recommended that at their meeting, later this year, Commonwealth Heads of Government consider expressing encouragement and support for teaching about the Commonwealth in schools, other educational institutions, and the community as a whole.

## Specialist Conferences

2. It is recommended that in view of the different preferences expressed at the Seventh Commonwealth Education Conference on the subject of a Specialist Conference, the Commonwealth Education Liaison Committee should, after due consultation, make a selection from among the following:

(a) The integration of science and mathematics education with technical and vocational education, and the place of this subject group in the school curriculum.

(b) Curriculum planning and educational assessment.

(c) Non-formal education.

## Recommendations on Special Areas of Educational Activity

### Higher Education and the Commonwealth Scholarship and Fellowship Plan

3. The Commonwealth Secretariat should continue the collection and dissemination of information on improving programmes for the teaching performance of staff in tertiary institutions.

4. It is recommended that:

(a) The Commonwealth Scholarship and Fellowship Programme be continued as a valuable link between member countries, and that the number of awards made under the Plan be increased to an overall figure of 1,500 in any one year.

(b) Consideration be given to the provision by developed countries of Commonwealth Scholarship and Fellowship Programme awards for their nationals in developing countries, and for developed countries to provide third country awards under the Plan.

## Science Education

5. It is recommended that:

(a) The Commonwealth Secretariat should explore fruitful ways by which member countries could co-operate in the supply of science and mathematics teachers.

(b) A third workshop on low-cost science teaching equipment should be held in either the Pacific or Asia.

(c) The Commonwealth Secretariat should explore the possibility of creating a small pool of low-cost science equipment.

(d) The Commonwealth Secretariat should continue to explore ways of overcoming the problems of shortage of equipment.

(e) Appropriate programme funding should be made available by the Secretariat to certain non-governmental, national, regional and international organizations including professional bodies to develop relevant, effective, and innovative programmes in science education in member countries.

(f) The Commonwealth Secretariat should publish a resource book about science materials produced in various countries, and the experiences people have had in using them.

## Technical Education

6. It is recommended that;

(a) One further Commonwealth Regional Seminar/Workshop on Technical Education and Industry be held.

(b) A study be made of the problems encountered in technical examinations.

(c) A meeting be convened to consider the establishment of an association of polytechnics in Commonwealth African countries.

(d) The desirability and feasibility of a regional staff college in Africa for technical education be explored in consultation with all interested parties.

(e) Proposals for a Commonwealth Exchange Scheme for Industrial Training and Experience be worked out in detail and commended to member governments.

## Book Development

7. The Commonwealth Secretariat should:

(a) Keep in touch with innovations and experiments in paper and book technology throughout the world, and communicate whatever information it obtains to member governments.

(b) Continue to provide assistance to the work of existing National Book Development Councils in Commonwealth developing countries, and help in establishing new ones.

(c) Consider providing study visits for personnel connected with book development.

(d) Give high priority under the Commonwealth Book Development Programme to supporting the establishment of courses in book production in regional training centres in Commonwealth developing countries.

(e) Endeavour to give support to national bibliographies.

(f) Provide educational libraries and curriculum development units in Commonwealth developing countries with some of the "books about books" and other items of published material and equipment they need to operate more effectively, and seek to obtain sufficient funds from member governments to enable the scheme to become effective.

(g) Explore the possibility of getting member countries to provide the funds necessary to support those aspects of the Commonwealth Book Development Programme that are not catered for by the Commonwealth Fund for Technical Co-operation or the proposal in Recommendation 7f above.

## Education Media

8. The Commonwealth Secretariat should:

(a) Investigate the problems of producing low-cost teaching materials as a pilot project for the proposed Programme of Applied Studies in Education.

(b) Consider holding workshops to stimulate training in the production of low-cost teaching material.

9. The Conference endorses the recommendations of the Commonwealth Educational Broadcasting Conference and the Commonwealth Conference on Materials for Learning and Teaching, and draws particular attention to those listed in the paragraphs 89 and 90 of the Report of the Meeting of Officials.

## Curriculum and Examinations

10. The Commonwealth Secretariat should:

(a) Offer assistance in the training of curriculum personnel, facilitate the exchange of curriculum materials between member countries, and provide opportunities for curriculum planners to meet and discuss common problems.

(b) Provide assistance in the form of consultants and advisers for members governments wishing to review their examination systems.

## Applied Studies in Education

11. An information paper on recent curriculum reforms attempted in secondary schools in various member countries should be produced for consideration at the next Commonwealth Education Conference, and be distributed at least six months before that Conference.

## Administration and Supervision

12. The Commonwealth Secretariat should continue to organize regional training courses for high-level administrators and trainers in the field of educational administration and supervision.

13. Governments should consider making provision in their normal budgets for training personnel in educational administration, and the Commonwealth Secretariat should consider providing consultants to help to run these courses.

## Non-Formal Education

14. The Commonwealth Secretariat should:

(a) carry out surveys, case studies and pilot projects in the field of non-formal education;

(b) assist in the exchange of information concerning programmes designed to identify solutions to common problems in non-formal education and rural development.

## Teacher Education

15. The Commonwealth Secretariat should:

(a) Commission a study of alternative methods of training teachers, disseminate information on these methods, and be prepared to offer assistance in implementing them.

(b) Organize regional workshops that aim to assist member governments in tackling problems and sharing ideas associated with teacher education, and assist them to strengthen their teachers' support services.

## Education About the Commonwealth

16. The Commonwealth Secretariat should:

(a) Continue to publish information about the Commonwealth, and make it more widely available for educational purposes.

(b) Consider providing a consultant and possibly other resources for appropriate workshops, such as those held by the African Social Studies Programme, in order to prepare educational materials to be used in teaching about the Commonwealth.

(c) Give some support to the preparation of a report on questions set on Commonwealth topics by some of the examining boards in Britain, and circulate the report so that it can serve as a basis for similar studies.

(d) Examine the feasibility of establishing a multilateral Commonwealth teacher exchange scheme.

(e) Collect and disseminate information on educational activities about the Commonwealth that are suitable for use by schools.

17. Ministries of Education should specifically assign the responsibility:

(a) for education about the Commonwealth;

(b) where appropriate and possible, for ensuring that channels of communication are opened for the exchange of information about the Commonwealth for educational purposes.

### Research and Publications

18. The Commonwealth Secretariat should:

(a) Continue its commissioned research programme.

(b) Continue its series of publications on important aspects of education, including a bulletin to publicize educational problems and their solutions.

(c) Raise the print run of these publications and distribute them more widely to interested institutions, organizations, and individuals.

### Universal Primary Education

19. It is recommended that:

(a) The Secretariat, in consultation with the governments concerned, should assemble information on the steps being taken to implement programmes of universal primary education in member countries, and make this information available to other countries.

(b) The Secretariat be asked to consider arranging for a series of meetings on universal primary education, beginning with the countries that are farthest from achieving it.

## Links with Other Organizations

20. The Education Division of the Commonwealth Secretariat should maintain and strengthen its links with international, regional and national organizations that are working in the fields of education and development so that it can continue to avoid duplicating work being undertaken elsewhere.

21. In addition to the occasional visits currently undertaken by the Secretariat staff, individual officers with special responsibilities for particular regions should be enabled to pay regular visits to those regions to obtain first-hand information on developments in education.

## Commonwealth Fund for Technical Co-operation

22. In order to enable the C.F.T.C. to increase its support for education and training activities of benefit to developing countries, including the implementation of many of the recommendations made by this Conference, it is recommended that governments should consider the possibility of increasing the resources of the Fund.

## Priorities

23. Because priorities for Commonwealth co-operation differ from region to region and depend on the level of funding available, the order in which the foregoing recommendations are put into action should be determined by the Commonwealth Education Liaison Committee.

# Report of the Meeting of Officials

## Higher Education

1. The continuing provision of higher education constitutes a heavy financial burden on the national resources of both developed and developing member countries. This burden is particularly heavy in poorer countries, where the severe competition for scarce funds and the increasing emphasis on manpower considerations result in special problems for all post-secondary levels of education. Universities continue to play an important and distinctive role in the economic and cultural development of communities. This is specially the case in developing countries, where the stimulus provided by university research and training in many fields has a powerful direct and multiplier effect. Such universities also perform important service roles in their communities. In these circumstances, it is clear that they should continue to receive the support necessary for them to carry out and develop their work. It is clear also that an increasingly important role in post-secondary education is being carried out by a wide variety of institutions.

2. Universities and other post-secondary institutions should exercise a wide range of influences on the processes of development in all areas and levels of education. In this regard, it is considered that post-secondary institutions have important research roles in such key areas as management, media technology, student guidance and assessment, curriculum renewal, examinations, and teacher education programmes. The practical application of research in these fields is also a means by which these institutions can make significant contributions to the development of education, through the provision of appropriate training courses.

3. It is noted with interest that numerous and varied programmes of training relevant to education have been organized in a number of post-secondary institutions throughout the Commonwealth. Background papers prepared by these institutions have been most helpful to the Secretariat in its capacity as a disseminator of information. The Secretariat should continue to keep in close touch with appropriate institutions for this purpose.

4. In addition to co-operating with individual institutions, the Secretariat maintains regular contacts on educational matters with relevant international organizations including the Association of Commonwealth Universities, the Association of African Universities, the Inter-University Council, l'Agence de Coopération Culturelle et Technique, and Unesco. It is agreed that this co-operation is of considerable value and that it should be continued and strengthened.

5. It is noted that the Commonwealth Secretariat has taken a special interest in the quality of education and training in tertiary institutions and in suggestions that their academic staff should be provided with courses which would make them more effective as teachers. *The Secretariat is currently engaged in a survey of programmes in Commonwealth countries designed to evolve techniques and methods to improve the quality of such teaching. The results of this survey will be published in due course.*

## The Commonwealth Scholarship and Fellowship Plan

6. At the Sixth Commonwealth Education Conference (Jamaica, 1974) consideration was given to a report reviewing the Commonwealth Scholarship and Fellowship Plan (C.S.F.P.) since its inception in 1959. The report accepted that the Plan had been an unparalleled success and that the hopes of its founders had been fully realized.

7. The Seventh Commonwealth Education Conference, having considered the Fifteenth

and Sixteenth Annual Reports on the C.S.F.P., agrees that the Plan continues to represent a form of Commonwealth co-operation which is making a distinctive contribution to Commonwealth education, and recommends that it should be continued as a valuable link between member countries. It is noted that the Plan is strongly supported by both nominating and awarding countries.

8. It is agreed that the major review of the C.S.F.P. completed at Jamaica in 1974 has been most useful, and that the Plan should be kept under continuing review. It is generally felt that the purposes of the C.S.F.P. as formulated at Oxford in 1959 remain valid and that the Plan has made a significant contribution to excellence throughout the Commonwealth. It retains sufficient flexibility to accommodate the needs of countries which require a special emphasis in certain areas of postgraduate education (e.g. science and technology), and the needs of those which have a special requirement for undergraduate rather than for postgraduate training. At the same time, it is noted that the distinctive needs of certain countries for special categories of skilled manpower (for instance, high-level skills such as veterinary science and dentistry, to name but two examples) can also be provided through a variety of technical assistance programmes. Stress is laid on the importance of increasing the resources and improving the mechanisms of these programmes in order that these needs may more effectively be met.

9. It is agreed that there is particular value within the Plan in increasing the number of awards between developing countries. While the more developed countries have provided and will continue to provide significant facilities, particularly at the postgraduate level, there are many cases where the most valuable and appropriate training can be provided within developing countries.

10. In connection with the problems of "brain drain", it is agreed that the main purposes of the Plan are defeated if scholars do not return to their home countries on completion of their courses. This may to some extent be dealt with by special visas; it is, however, a complex problem which merits consideration by the relevant governmental authorities.

11. It is recognized as desirable that nominating countries should be informed of the number of available awards. At the same time, it is appreciated that it is not always possible for donor countries to provide this information. It is recognized also that it is the responsibility of receiving countries to make the final decisions regarding awards.

12. The establishment of Academic Staff Scholarships and Fellowships under the Plan is commended as a most useful measure to help meet the staff development requirements of universities and other institutions of higher learning. Satisfaction is expressed also at the continued growth of the Academic Exchanges Programme, which is funded by the C.F.T.C., and is administered by the Association of Commonwealth Universities in conjunction with the Secretariat.

13. The generous response of some countries to the appeal made at the 1974 Conference for an increase in the awards offered under the Plan is noted with satisfaction. It is considered desirable that *consideration should be given to increasing the number of awards to an overall figure of 1,500.* In order to achieve this growth, new offers from both developed and developing member countries will need to be forthcoming. It is unlikely that by themselves the major donor countries will be able to provide the increased number entirely on their own while, at the same time, paying for the higher value of awards.

14. In this connection, it is noted that the Commmonwealth Fund for Technical Co-operation remains willing to assist governments of developing countries to institute C.S.F.P. awards for nationals of other developing countries or, in the case of developing countries which are already donors, to increase the number or value of the awards which they offer to other developing countries. The Fund will consider providing up to £2,500 or two-thirds of the cost for each C.S.F.P. award, up to an agreed limit, offered by developing countries in subjects of key developmental importance. The hope is expressed that this offer will lead not only to an increase in the total number of awards provided by developing member countries, but also to an increase in the number of such countries which participate in the Plan as donors.

15. It is agreed that awarding countries should ensure that allowances granted to C.S.F.P. award-holders should keep pace with inflation.

16. *In order to promote an increase in the interchange of scholars under the Plan, it is recommended that consideration be given to the provision by developed countries of C.S.F.P. awards for their nationals in developing countries, and for developed countries to provide third country awards under the Plan.* An increased number of awards from Commonwealth developing countries, and an increase in the number of such countries that contribute to the Plan, would be particularly useful in increasing the interchange of Scholars between developing countries.

17. It is noted with satisfaction that the proposal at the 1974 Conference that a compilation should be made of the research potentials of universities in developing member countries has resulted in the publication of a directory entitled *Research Strengths of Universities in the Developing Countries of the Commonwealth.* In view of the value of this publication, it is agreed that the Association of Commonwealth Universities should be asked to prepare a new edition in collaboration with the Secretariat.

18. The administrative arrangements of the Plan, as presented in the new edition of the Administrative Handbook, are accepted, with the following additions and amendments:

(a) Agencies in nominating countries should ensure that all applicants and other relevant bodies receive timely information on publications concerning the education and training resources of the countries in which applicants wish to study.

(b) Where the offer of an award is conditional on the candidate producing satisfactory evidence of medical fitness, such certification should not be required until a provisional offer has been made.

(c) In the application form, the following sentence should be added in brackets after the introduction on page 1:

"(with regard to the referees in Section 21, it should be noted that the nominating agency is responsible for obtaining references and forwarding them to the awarding country together with the completed application form.)"

(d) At the end of the first sentence in Section 21 of the application form, the words "by the nominating agency" should be added.

19. The Association of Commonwealth Universities should continue to obtain annually from Commonwealth Scholarship agencies basic data and information about each country's operation of the Plan. It is agreed that in future reports on the C.S.F.P. should be published triennially, in time for successive Commonwealth Education Conferences.

20. It is reported that the provision in the Administrative Handbook requesting acknowledgement of nominations is not always complied with. Agencies in awarding countries should ensure that such acknowledgements are sent.

# Science Education

21. Science as a school subject has a particular part to play in the education of children in that it can contribute to the development of individuals who think in a rational and non-dogmatic way, are prepared to test evidence, and are open to change. But it can fulfil this potential only if it is taught in a meaningful way. This implies the preparation of relevant curricula, the provision of equipment and materials, the active involvement of pupils in discovery methods relating to the environment in which they live, and the training — or in some cases the re-training — of teachers to fulfil their new roles and responsibilities.

## Recent Developments

22. It is noted that though the Secretariat publication *The Production of School Science Equipment* has been well received in member countries, *Mathematics Teaching in Schools* appears to have been received with mixed feelings because some countries consider the introduction of modern mathematics in schools to be premature. The Secretariat should continue its publishing efforts in the field of science and mathematics education, and endeavour to increase the scale on which these publications are supplied to those Ministries of Education that are known to be in need of them. The Secretariat should also review its system of disseminating information so as to ensure that the information also gets to interested institutions, organizations and individuals.

23. It is noted with approval that the Secretariat is assisting the Commonwealth Association for Science and Mathematics Educators in its projects in the field of socially significant science and mathematics education.

24. It is noted with appreciation that the Commonwealth Secretariat, through the mechanism of the Commonwealth Fund for Technical Co-operation, organized the Caribbean regional seminar/workshop on low-cost science equipment, sponsored study visits of Commonwealth educators, and supported attendance of science educators at various regional and international meetings on the teaching of science and mathematics.

25. Whereas most developing member countries have a shortage of adequately trained science and mathematics teachers, some member countries (such as Canada) are faced with a problem of surplus. *It is recommended, therefore, that the Commonwealth Secretariat should explore fruitful ways by which member countries could co-operate in the supply of science and mathematics teachers.*

26. The recent Caribbean seminar/workshop on low-cost science teaching equipment has been successfully completed, and plans to hold a similar one in Africa are well advanced. *A third workshop in either the Pacific or Asia is recommended.* It is suggested that training personnel for fabricating low-cost science equipment might be arranged in suitable centres already engaged in this work. It is further suggested that in-service training of teachers and teacher educators in the use of such equipment should also be undertaken.

## Proposed Future Activities

27. It is noted that it is nearly 15 years since a Commonwealth Specialist Conference on Science was held, and that the last Commonwealth Specialist Conference on Mathematics Teaching was held as far back as 1968. New developments have taken place in the approaches to, and content of, science and mathematics education during the last decade. These developments have made it expedient to discuss and review curricula and teaching techniques at all levels of science and mathematics education. Hence, a proposal to hold a Specialist Conference in the area of science and mathematics education arises. Such a conference should examine ways of integrating science and mathematics with technology in the curriculum so as to give children the technical and vocational as well as the mathematical and scientific grounding that the modern world so clearly demands. A Specialist Conference with this theme is therefore strongly recommended. If this conference is held, one of its features should be an exhibition of low-cost teaching equipment developed in member countries. It is suggested that the Secretariat should prepare a resource book of designs of low-cost science and mathematics equipment, if possible before the conference.

28. Approval of arrangements currently being made by the Commonwealth Secretariat to provide Commonwealth developing countries with samples of science kits produced by units (such as the Kenya Science Equipment Production Unit) is recommended. *The Commonwealth Secretariat should also explore the possibility of creating a small pool of low-cost science equipment donated by those countries that manufacture it.* Items in the pool could be loaned or given to other Commonwealth developing countries for inspection. This would give them the opportunity to purchase it, adapt it, or produce it themselves. The Commonwealth Secretariat could help in identifying potentially useful equipment, and in facilitating packaging and freight as well as rights of replication.

29. Despite the efforts being made to promote local production of low-cost science teaching equipment, most Commonwealth developing countries will still need to depend on the importation of certain items. Since many developing member countries face foreign exchange difficulties, *the Secretariat should continue to explore ways of overcoming the problems of shortage of equipment.*

30. The Secretariat's view that it should concentrate on short-term training attachments rather than study visits for science educators is endorsed.

31. It is noted that the Commonwealth Secretariat has established useful links with a number of non-governmental national, regional and international organizations, including professional bodies, and is exploring the development of liaison with, and support for, govern-

mental regional organizations. *It is recommended that appropriate programme funding be made available by the Secretariat to assist these organizations to develop relevant, effective and innovative programmes in member countries.*

32. The new trends in science education, in which the environment is used as a resource and science education is related to development, should be strengthened. In this connection *the Commonwealth Secretariat should publish a resource book about science materials produced in various countries and the experiences people have had in using them.*

## Technical Education

33. The world has become an increasingly technological place, and all countries, whether termed developing or developed, have become dependent on the efficient use and maintenance of things scientific and technical. Today, boys and girls cannot fulfil their potential as individuals, citizens or workers unless their education has included a formal introduction to technology and a modicum of scientific and vocational instruction. Young people who are educated in this way can enter employment, either direct from school or by way of further or higher education, and form part of the pool of skilled manpower so essential to national development.

34. It is noted that the Commonwealth Senior Officials' Review Committee of May 1976 laid down priorities for the Secretariat which included curriculum renewal aimed at making education more relevant to national goals, and placed special emphasis on technical and vocational education. It is further noted that the "recommendation to member governments on technical and vocational education" adopted by the UNESCO General Conference in 1974 concentrated on the teaching of practical subjects and the introduction of technology in schools. This means that care needs to be taken to ensure that the Secretariat does not duplicate or unduly overlap UNESCO activities with similar objectives.

35. Against this background, it is essential that assistance should be given to measures that will make education more relevant and meaningful for both the developmental needs of society and the personal development of the individual. All too commonly the yardstick of scholastic success is a progression from school to university. But this progression is not open to most school-children and as a result many of them lack enthusiasm for their work and some drop out of formal education altogether.

36. What is needed is an education designed to foster rational thinking, innovation and discovery for all who are at school. This should be accompanied by a new approach to the production and use of books, equipment and materials, and by new perspectives in the education of those teachers who are inexperienced in making full use of the environment and the facilities it offers.

37. In these circumstances *it is recommended that very favourable consideration be given to selecting for the next Specialist Conference a theme that takes these considerations into account.* One of the aims of the Specialist Conference should be to integrate the technical and vocational content of the curriculum with science and mathematics. Another should be to examine the role that this integrated subject group should play in the general education of every boy and girl.

### Seminar/Workshop on Technical Education and Industry

38. Note is taken of the Seminar/Workshop on Technical Education and Industry held in Hong Kong, for Commonwealth countries in Asia and the Pacific, in September/October 1976. It touched upon several problem areas of technical education and made recommendations involving Commonwealth co-operation within and between the regions, as well as recommendations to governments and other competent authorities for improving their training arrangements, particularly at the technician level. The purposes of the seminar were therefore to improve (a) communication between technician educators and industry, (b) the quality and quantity of training for technicians, and (c) co-operation among member countries of the Commonwealth.

39. It is recognized that this seminar will probably lead to some useful advances; on the other hand, the relationship between technical

education and industry has now been very widely discussed, academically, and the problem is to a considerable extent a national one for each country to work out in terms of its own industrial situation. The guidance that will be supplied by the Hong Kong seminar report, together with the report of one further regional seminar, should be sufficient for the region that has not been covered, particularly if an observer from that region has attended one of the previous seminars. *It is therefore recommended that one further Commonwealth Regional Seminar/Workshop on Technical Education and Industry be held.* Industry should be strongly represented at this seminar, which might consider, *inter alia*, how more encouragement could be given to each industry to train skilled personnel up to and even beyond its own requirements.

## Technical Teacher Training

40. Known shortages of technical teachers ought to be made good in all possible ways. Suggestions to which further consideration should be given include:

(a) Holding regional seminars/workshops which have a training component and would also assist in analysing needs and priorities.

(b) Providing a substantial number of awards for technical teacher training under the Commonwealth Fund for Technical Co-operation's Education and Training Programme.

(c) Carrying out surveys of needs for technical teacher training facilities, conducted region by region. This would involve visits by an expert from a Commonwealth country to some countries about which insufficient material is available to the Secretariat. The work would include evaluation of training institutions and of their potential as hosts to teachers from other Commonwealth countries.

(d) Preparing a directory of facilities for technical teacher training either as part of or as a supplement to a wider directory of education and training resources.

(e) Undertaking explorations by the Secretariat along with the competent authorities into the possibility of developing special courses for the training of trainers and key staff in technical education planning and management at a college or centre in one or more of the regions of the Commonwealth, on the lines of the regional training course held in Kenya for educational administrators and supervisors. Such courses might later justify a regional staff college on the analogy of the Colombo Plan Staff College for Technician Education if the need is better met this way than through existing institutions.

## Further Surveys of Facilities for the Practical Training of Technicians in Industry

41. It is noted that a survey of technician training in the Asian region by Mr. R. Dasgupta has been published by the Secretariat, and that an earlier survey of facilities in some African countries by Dr. E. A. Akinleye could be supplemented and updated if necessary. Regional surveys in a wider area of education and training have been considered by the South Pacific Commission and the Caribbean Community Secretariat, and suggestions have been made that surveys of facilities for practical training in industry could be made in association with the wider surveys. Some doubt is felt about the scale on which information gained through such surveys would be likely to be utilized for the purpose of placing trainees from other countries in a country's national industry, and it is recommended that priority should be given to these surveys only if an obvious opportunity arises to carry them out at little expense.

## Technical Examinations

42. There is widespread questioning of established systems of technical examinations, some of them heavily used but external both to the teaching institution and to the country concerned. Sometimes these systems have been rejected without a substitute system being first established, and some governments are in need of help over the solution to this problem at a national or regional level. *It is therefore recommended that a study be made of the problems encountered in technical examinations.*

## An Association of Polytechnics in Africa

43. Many polytechnics, and their principals or directors personally, are far from clear about the curricula, organization and administration needed to attain their objectives successfully, and feel somewhat isolated, especially where they are unique in their countries. Several have suggested some form of association, and it is considered that a viable and useful association can best be achieved in Africa in the first place. An important role might be played by Nigeria, and the relevant authorities in that country are thought likely to welcome Nigerian participation.

44. An Association is proposed for this region in the first place because the ground appears to be ready for it, but without prejudice to the formation of associations in other regions or on a pan-Commonwealth basis. It is noted that during the 1960s and 1970s at least a dozen polytechnics and a number of comparable institutions operating under other titles have been established or developed out of smaller technical institutions in Commonwealth African countries, mainly to provide post-secondary courses for technicians and other middle-level personnel. Most of these institutions confine themselves to traditional diploma courses in mechanical and electrical engineering and building. However, new and more specialized needs are constantly emerging which cannot be met economically without co-operation between countries and between institutions; and there are many problems inherent in the education and training of technicians, who in many countries are a "new breed".

45. Such an Association would help to remove any sense of isolation of individual institutions, particularly in small countries, by enabling them to compare notes and sometimes co-operate actively over their programmes, to effect exchanges of staff and students, and to work together on many other aspects of their educational provision, their organizational and administrative development, and their corporate life. At the same time, it is recognized that the stage has not been reached where the constitution of such an Association could go ahead without further consultation. Moreover, the Conference has been informed of the interest of l'Agence de Coopération Culturelle et Technique and of the Economic Commission for Africa both in this project and in the staff college project, and the possibility should therefore be considered of inviting francophone and other non-Commonwealth institutions to consider involvement in one way or another; the link that already exists between the Commonwealth Secretariat and those agencies can be utilized to this end. There should also be consultation with relevant teachers associations which have a legitimate interest.

46. The Conference warmly welcomes the proposal that an Association of Polytechnics in Commonwealth Africa be established, and recommends:

(a) That as a preliminary to any decision to adopt a constitution and proceed with the practical work of setting up an Association of Polytechnics in Commonwealth Africa, the Commonwealth Secretariat in consultation with the governments concerned convene a meeting in Kenya or Nigeria of the directors or principals of the polytechnics and comparable institutions which might suitably become founder members.

(b) That the Commonwealth Secretariat proceed with consultations with the appropriate authorities about the inclusion of institutions in non-Commonwealth countries.

## Regional Staff College for Technician Education

47. This project also is not intended to be exclusive to Africa. It is proposed for Africa in the first place partly because of the prospects of its practicability and acceptability, and partly because a staff college already exists in South East Asia providing facilities for the Commonwealth countries, among others, of that region. (This college, established under the auspices of the Colombo Plan, is considered to have already proved its value in promoting staff development and training, in research, in providing a forum for discussion, and in the provision of an advisory and resource service to member governments.)

48. The main function of a similar staff college in Africa would be to train trainers of teachers, and to provide short courses in related subjects such as manpower planning, the comparative study of technical education systems, technical curriculum design, and institutional planning

and management. The staff college would also provide a consultancy service for governments, and would serve as a resource centre for technician education in Commonwealth Africa. A separate institution, which would require capital provision unlikely to be available, might not be needed: an extension to an existing teacher training institution might suffice, provided the institution was already doing reasonably high-level and diversified work. In that case, only a very small permanent staff would be needed, additional tutors being engaged *ad hoc* for particular courses, and both the recurrent and capital costs would be kept to a minimum. Care however must be taken to avoid unnecessary duplication and to give specific consideration to whether the needs can best be met in this way rather than through existing institutions. These institutions will need to be consulted, as will governments, before further action is taken; and the possible involvement of the E.C.A. in this project, as in the Association of Polytechnics, will need to be considered jointly. *It is therefore recommended that the desirability and feasibility of a regional staff college in Africa for technician education be explored in consultation with all interested parties.*

## Commonwealth Exchange Scheme for Industrial Training and Experience

49. In the course of deliberations in the area of technical education it has become clear that one major source of weakness is a failure to complement polytechnic and college courses with appropriate practical training in industry. (This is true at the level of professional technologists as well as that of technicians.) When training in technologies or industries newly introduced or about to be introduced into a country is in question, the need for training in the industry of another and probably more developed country will arise. Existing international schemes for providing practical training and work experience in engineering and other areas involve movements mainly between developed countries or from developing to developed countries. Increased industrialization in some of the developing countries of the Commonwealth is considered to provide new scope for more genuinely multi-lateral traffic.

50. At a seminar held under Canadian and British auspices at the University of Regina, Saskatchewan, in July 1976 (at which the Commonwealth Secretary-General gave the opening address and representatives from Commonwealth developing countries also participated) it was agreed that there was a need for a much wider range of international opportunities to be opened to students — particularly of engineering at both technician and professional levels — to complement their courses of formal education (whether undertaken in a host country or their own). Commonwealth co-operation in industrial training was seen as an important component of Commonwealth industrial co-operation generally, and an important medium for the transfer of technology.

51. The scheme would be multi-lateral, but would consist, like the Commonwealth Scholarship and Fellowship Plan, of a network of bilateral schemes, with each country willing and able to do so offering awards and places for practical training or experience and receiving candidates nominated by other Commonwealth countries in the same way that Commonwealth Scholars are nominated and received. The whole cost of the awards would not necessarily fall upon every receiving country, since it is within the terms of reference of the C.F.T.C. to include such awards in its existing Education and Training Programme; contributions from donor governments, trusts, and industry could be canvassed. The proposed scheme would fulfil both the conclusions of the Regina Seminar and those put forward in the background paper submitted by the Commonwealth Science Council, "Industrial Training Programme", giving details of the types of project-oriented training and industrial fellowships that might be instituted. The Secretariat would expect to have a role of encouragement, co-ordination, and pump-priming.

52. It is recommended that:

(*a*) *Governments give their full support to a Commonwealth Exchange Scheme for Industrial Training and Experience.*

(*b*) *The Secretariat should in the first place set up a working group to explore the feasibility and the modus operandi of this programme, on a basis analogous to that of the Commonwealth Scholarship and Fellowship Plan.*

# The Commonwealth Book Development Programme

53. The major objectives of the Commonwealth Book Development Programme are threefold: namely, to strengthen national self-reliance in the production and provision of books; to provide training courses for book industry personnel; and to assist in improving the two-way flow of books.

## Strengthening National Self Reliance

### *Textbooks and Curriculum Renewal*

54. The preparation of new school curricula has stimulated the preparation and production of new textbooks and other educational materials. Some of these materials are published by state and parastatal organizations, others by multinational companies and private concerns. In a number of Commonwealth developing countries, the emergence of indigenous educational publishing has been among the major educational achievements of recent years. Nevertheless, some problems still exist.

55. One of the problems is the spiralling cost of providing pupils with the materials they need; a cost which, in a developmental programme, has to take into account both the replacement or reprinting of existing titles and the provision of new ones covering a wide range of subjects. In order to prepare accurate forecasts of expenditure on these items, it is necessary for governments to formulate a clear national policy on the role that books and other educational materials should play in meeting children's needs. These needs should be related not only to immediate educational aims but to the creation of an adult public which continues to use and value books, and for this reason the policy should not be confined to children but be extended to take into account the whole community.

56. Many developing countries are heavily dependent on imports of paper and other raw materials to keep their publishing industries functioning. In view of the growing world paper shortage — which is expected to reach crisis proportions in the next few years — governments should note, as a matter of urgency, the need to investigate the extent to which locally-produced raw materials can be used in the manufacture of paper. Otherwise those countries that rely on imports may find that the price of paper on the world market is too high to enable them to maintain existing import levels, with the result that their plans for producing books and other printed materials cannot be fulfilled.

57. It is important not only to make more use of locally produced raw materials but to prevent waste. In many instances, economies can be effected in the production of books. For example, advance knowledge of a country's textbooks requirements can serve as the basis for purchasing the most appropriate printing machinery. Again, restricting textbooks to a few standard page sizes and to convenient lengths can simplify production techniques and prevent wastage of printing paper. Possibly, also, the waste paper normally disposed of by schools could be collected on an organized basis and re-cycled for further use. *The Commonwealth Secretariat should keep in touch with innovations and experiments in paper and book technology throughout the world, and communicate whatever information it obtains to Commonwealth governments.*

58. The production of books should not be considered in isolation from their distribution. In countries where book distribution is a problem, *the Commonwealth Secretariat should consider arranging study visits to successful book distribution organizations that exist in Commonwealth developing countries.*

### *National Book Development Councils*

59. Among the functions that National Book Development Councils can undertake if they are adequately funded and professionally staffed are the encouragement of indigenous authorship, the provision of specialist information (e.g. on authors' agreements, copyright, etc.), the promotion of the reading habit, the co-ordination of the various arms of the book industry, the organization of writing workshops and training courses, the improvement of book distribution channels, the organization of literary competitions and book fairs, and the efficient matching of external aid to local needs. Where they exist they can serve as the main point of contact with the Commonwealth Book Development Programme.

60. In view of the valuable part that these Councils can play in national cultural and educational development, it is noted with some regret that their establishment in Commonwealth countries is proceeding slowly. Except in cases where assistance to the book industry is provided by other organizations (e.g. Arts Councils) governments are urged to renew their efforts to establish National Book Development Councils where they do not already exist.

61. *It is recommended that the Commonwealth Secretariat should continue to provide assistance to the work of existing National Book Development Councils in Commonwealth developing countries and to help in establishing new ones.* One useful form of assistance would be to arrange for their personnel to visit other Book Development Councils in Commonwealth developing countries.

### *Reducing the Dependence on Imported Publications*

62. In order to create employment, conserve foreign currency, and keep down the price of books, some developing countries have become increasingly interested in reprinting rather than purchasing books originating in other countries. In these circumstances, the question of international rights arises, and the Commonwealth Secretariat's publication *Copyright in the Developing Countries* — first published in 1974 and revised in 1976 — has made a useful contribution in explaining in non-legal language the main features of the Berne and Universal Copyright Conventions. The booklet has been translated into Sinhala and Tamil by the National Book Development Council of Sri Lanka, and translation requests from other sources have been received and granted. It is noted that in response to a recommendation of the Sixth Commonwealth Education Conference, publications produced by the Education Division of the Commonwealth Secretariat contain a statement that governments of Commonwealth developing countries wishing to reproduce the material in whole or in part in any language may do so.

63. It is suggested that those Commonwealth countries that are not yet members of the international copyright community should consider joining it in order to safeguard the interests of their writers, artists, musicians and other citizens who make their living in a creative way.

### *Libraries and Media Resources for Schools*

64. The Conference endorses the view expressed by the Commonwealth African Book Development Seminar, held at Ibadan, Nigeria in 1975, that the role of libraries should be to support interest-centred rather than fact-oriented learning. In all societies, but particularly in those with a rich culture of folklore, festivals and oral traditions, these libraries should endeavour to be "media-resource centres". Wherever possible they should contain books selected to be of particular relevance to the school or community they serve, a wide variety of non-book materials, and the equipment required to make these materials effective. Other functions these centres can perform are the production of inexpensive home-made materials and the organization of teaching programmes to make the best use of the resources.

65. Because the cost of establishing these centres lies beyond the reach of all but a few individual schools, governments may wish to consider establishing them on a national or local scale, along with model centres located, perhaps, at teacher training institutions. It is noted that the Commonwealth Secretariat is proposing to prepare the draft of a handbook for newly appointed teacher-librarians setting out the basic procedures for organizing a school library and media collection centre, and making suggestions for carrying out teaching programmes within an organized library. The draft will, in due course, be made available to governments so that they can arrange, if they wish, to modify the text to meet particular circumstances.

66. It is noted that an international computer-based system for the rapid retrieval of information (Educational Resources Information Centre — ERIC) has been developed. The possibility that an increasing number of Commonwealth countries could participate in, and benefit from, this system is a matter which the Commonwealth Secretariat may wish to consider.

### *Local Language Publishing*

67. In order to educate children in their mother tongue and strengthen national cultures, increasing numbers of books are being published in national and local languages, and

many more are required. It is noted that the Commonwealth African Book Development seminar recommended governments: (a) to consider employing officers to look after the interest of each national language, and (b) to give every possible encouragement to writers, editors, publishers and other personnel to produce books in these languages. Of necessity, much of the work will have to be undertaken on a national basis, but bilateral assistance in such fields as orthography, typography, readability, book design and printing techniques would be a valuable form of aid from those countries with experience in publishing in more than one language. Governments may also wish to note that certain international funding organizations, such as the World Bank, are taking an increased interest in locally-produced textbooks.

## Providing Training Courses

68. It is noted that the three regional book development seminars organized by the Commonwealth Secretariat (New Delhi, 1973; Port-of-Spain, 1974; and Ibadan, 1975) all stressed the need for initial and in-service training at a number of different levels for a wide range of personnel. It is also noted that in responding to these expressions of need, the Commonwealth Secretariat organized a planning meeting in London (December, 1975) at which draft outline syllabuses of a foundation course and seven linked modules were prepared on special areas of book production.

69. *The planning meeting's recommendation that the Commonwealth Secretariat's book development programme should give high priority to supporting the establishment of courses in book production at regional training centres in Commonwealth developing countries is endorsed.*

70. It is noted that the first of these courses is due to be held in Guyana for the Caribbean from July–September 1977, and it is recommended that further such courses, designed to meet regional needs, be held at other centres. It is further recommended that governments should consider selecting participants for these courses who, on their return home, will not only be more effective in their work but will be able to contribute — if only in a small way — to running book production courses on a national or local scale.

## Improving the Two-way Flow of Books

71. Despite the growth that has taken place in their book industries, developing countries are importing far more books than they export. However, various measures are being taken to achieve a better balance. One of these is the provision, primarily on a national basis, of an information system which gives basic data about every title that is published. Most important of all is the publication by every country of a national bibliography because this, in some cases, may be the only authoritative source to which bookshops, libraries, and other potential purchasers can turn for information on what publications are available. It is noted that in order to help national bibliographies to be made available to a wide audience, the Commonwealth Secretariat has published an annotated directory entitled *Commonwealth National Bibliographies*. It is also noted that the working party that assisted the Secretariat in preparing this publication reported that although it was desirable that each country should prepare its own national bibliography, in a number of Commonwealth developing countries bibliographic information about local publications is being collected and published by developed countries. As a result, the development of professional skills in the developing countries concerned is being retarded.

72. It is recommended that:

(a) Governments should take action, where necessary, to give increased support to the preparation and publication of national (and in some cases, regional) bibliographies.

(b) Bilateral financial assistance should be sought, if necessary, to support the publication of the first issue of a new national (or regional) bibliography.

(c) The Commonwealth Secretariat should endeavour to make arrangements to advertise Commonwealth national bibliographies in journals which specialize in publicizing bibliographic information with a view to increasing the sales of these bibliographies to libraries and other institutions throughout the world.

(d) The Commonwealth Secretariat, through the mechanism of the C.F.T.C. should consider:

(i) providing consultants to help to establish national bibliographies where they do

not already exist, and

(ii) providing financial support to assist Commonwealth developing countries to send a delegate to important international bibliographic conferences.

73. It is noted that the Commonwealth Secretariat consulted with UNESCO and other international organizations in the preparation of *Commonwealth National Bibliographies* and *Copyright in the Developing Countries* so as to prevent any duplication of activity.

74. The publication by the Commonwealth Secretariat of *Commonwealth Specialist Periodicals* — an updated and enlarged version of an earlier publication (*the Directory of Commonwealth Periodicals*) — is also noted. Originally, this directory was intended to accompany the Commonwealth Gift-Voucher Scheme, first approved in principle by the Heads of Government Meeting in 1971 and subsequently recommended later that year by the Fifth Commonwealth Education Conference. Attempts to put the scheme into practice were unsuccessful owing to lack of financial support, and the proposal was reconsidered by the Sixth Commonwealth Education Conference in 1974. It emerged as a considerably less expensive three-year pilot project to provide professional journals to universities and other institutions of higher education in five Commonwealth developing countries. Even so, it was felt that £100,000 would be needed to finance the pilot project successfully. Shortly after the Conference ended, the Secretariat prepared detailed proposals for administering the pilot project and submitted them to the Commonwealth Education Liaison Committee for consideration. Financial support was still not forthcoming despite the fact that the sum of money sought was further reduced to £40,000 or £50,000 and that Britain was willing to provide at least 30% of the funds.

75. Owing to a shift of emphasis away from university education, it is believed that if the scheme is to succeed at all, it should be applied to the whole of the educational system from basic education upwards. It is therefore recommended that:

(a) The scheme should be redesigned so as to enable the Commonwealth Secretariat to provide educational libraries and curriculum development units in Commonwealth developing countries with some of the "books about books" and other items of publishing material and equipment they need to operate more effectively.

(b) Britain should be invited to transfer its original offer of financial support to this new project.

(c) All other member states should be asked to contribute so that sufficient funds are raised to enable Britain's offer to become effective.

76. It is noted that the Commonwealth Book Development Programme has so far had no funds of its own, and that not all the projects recommended here fall within the terms of the Commonwealth Fund for Technical Co-operation. *Accordingly, the Commonwealth Secretariat should explore the possibility of getting member countries to provide the funds necessary to support those aspects of the Book Development Programme that are not catered for by the C.F.T.C. or by the proposal in the previous paragraph.* In addition, the major donor countries are urged to continue to support bilateral aid programmes for book development, and the Commonwealth as a whole — through the Commonwealth Secretariat — should endeavour to direct the attention of funding agencies outside the Commonwealth to the need for their assistance in expanding book development in Commonwealth developing countries.

77. Choosing priorities for book development is not a simple task because its various components should not be allowed to get out of step with one another. Even so, attention is drawn to the need for preventing the impending paper shortage from threatening the output of books and other printed materials in Commonwealth developing countries. As for the Commonwealth Book Development Programme, emphasis should be placed on various forms of training (in particular the provision of regional seminars designed to meet national needs), on study visits, and on the proposed replacement for the gift-voucher scheme.

## Education Media

78. Educational technology has been increasingly used in Commonwealth countries; some of

it taking the form of sophisticated colour television, language laboratories, teaching machines, and computer terminals. Formerly, this technology was evaluated first and foremost in terms of its contribution to strengthening the professional skills of teachers. Nowadays, in the light of experience and economic constraints, the use of expensive equipment is being more carefully scrutinized in relation to the availability of less costly alternatives. In addition, most school systems are combining various forms of educational media to attain objectives. Studies of cost effectiveness of media need to take account of these interrelationships so as to determine the most effective combination.

## High Technology

79. The Commonwealth Educational Broadcasting Conference held in Sydney, Australia, in 1975 brought together for the first time Commonwealth broadcasters and educators to study the contribution that broadcasting could make towards educational development.

80. The experience of Commonwealth countries in educational broadcasting is now substantial, some having been involved in it for over 50 years. Even developing countries have now had considerable experience, with several having succeeded in integrating radio and television fully into the teaching programmes of their schools. Educational television programmes can no longer be regarded as an urban luxury.

81. Common problems experienced in educational broadcasting have included technical faults, usually occurring in the reception equipment, difficulty in sustaining an output of consistently good quality programmes, and weakness in evaluating the effectiveness of programmes. The Indian experiment with satellite broadcasting tackled each of these problems methodically. It set up maintenance units to service all the equipment used. In addition, it trained producers in the techniques of television production and acquainted them with detailed research findings on the composition, interests and receptiveness of their village audiences, and the limitations that such unsophisticated audiences presented for the conventions of various types of filming technique. To take another example, Malawi conducted research into the effectiveness of its school broadcasting, and discovered a great disparity between its acceptance at primary and secondary levels. In consequence it has adopted a tape service for secondary schools which has proved more satisfactory.

82. The potential of educational broadcasting as a medium of distance teaching is being realized increasingly. Many programmes to upgrade teachers have taken place in Africa. Likewise for health, rural development and family life, radio and television programmes have been remarkably successful.

83. Closed circuit television is now used in a variety of teaching contexts including microteaching. But the high cost of purchasing, maintaining and repairing equipment (such as monitors, video recorders and tape) has deterred many users and prevented the potential of closed circuit television from being realized.

84. The prime need in educational broadcasting is to have trained personnel — teachers trained as broadcasters, broadcasters trained to educate, and technicians trained to service and repair equipment. Additionally there needs to be training for teachers in how to make the best use of educational broadcasting. Such training should feature in all teacher training courses.

## Correspondence Education

85. Correspondence education is now an accepted medium of instruction. It has been used to teach at all levels of education and over a wide range of subjects including technical education, science and agriculture. In certain circumstances it offers education at less cost than conventional means and therefore has its attractions for developing countries. In Malawi, for example, correspondence education has become an accepted alternative to conventional secondary schooling, and a number of local centres have been built through community action. In these centres young people can follow correspondence courses under the guidance of a teacher. The salaries of these teachers are paid by the government.

86. The particular advantage of correspondence education does not lie so much in its lower cost but in its ability to deal simultaneously with large numbers of students. This

has made it of considerable value for crash programmes such as upgrading teachers or for providing in-service training for particular groups of teachers such as heads or subject specialists. It has also proved popular among teachers as a self help method of furthering their education, and it holds out attractive possibilities for the training of teacher educators. The weakness of correspondence education lies in its need to have an effective infrastructure of postal services, and specialist tutors who are familiar with the medium. In addition it needs an element of face-to-face teaching to be successful.

## Low Cost Teaching Materials

87. Many teachers shy away from costly and sophisticated equipment, choosing instead low-cost equipment which is readily available and over which they have greater control. This is a commendable practice and should be encouraged, but it requires appropriate training. Essentially, such training must be practical, and is best conducted in the form of workshops. *The Commonwealth Secretariat should consider holding workshops to stimulate this kind of training.*

## The Specialist Conferences

88. Note is taken of the two linked specialist conferences held since the Sixth Commonwealth Conference. These were the Commonwealth Conference on Materials for Learning and Teaching held at Wellington from 22 September to 3 October 1975, and the Commonwealth Educational Broadcasting Conference held at Sydney from 7 to 16 October 1975.

89. The recommendations of the Commonwealth Educational Broadcasting Conference were endorsed with the request that special attention be given to the following:

(a) Governments, education authorities, and agencies responsible for educational broadcasting should finance appropriate research to evaluate existing and pilot projects in educational broadcasting.

(b) The Commonwealth Secretariat (in association with other agencies and international organizations where appropriate) should consider:

(i) Collecting and disseminating informal opinions on the effectiveness of the contribution of educational broadcasts.

(ii) Co-ordinating an evaluative study of educational broadcasting in the Commonwealth, and disseminating the resulting information to member countries.

(iii) Initiating an enquiry into the problems associated with copyright and contracts in educational broadcasting with a view to enhancing flexibility for the users while protecting the interests of producers and distributors.

(iv) Organizing regional courses for the training of middle-level personnel in educational broadcasting.

90. The recommendations of the Commonwealth Conference on Materials for Learning and Teaching were endorsed with the request that special attention should be given to the following:

(a) Educational authorities should ensure that:

(i) When budgets for the purchase of new equipment are being prepared, or contracts are being awarded, long-term considerations of supply and support should be borne in mind as well as short-term financial benefits. Qualities of durability and simplicity are often preferable to ideal standards of refinement and sophistication.

(ii) Consideration is given to setting up audio-visual advisory groups to investigate and make recommendations for the technical standards, purchase, storage and utilization of equipment and materials.

(iii) Mobile maintenance units are provided where other arrangements for servicing and repairing equipment are unsatisfactory.

(iv) Information about appropriate practices and materials associated with educational technology is widely disseminated.

(b) Governments are urged to:

(i) Establish tape copying and exchange services as a necessary support to educational broadcasting.

(ii) Make special provision of teaching materials for the teaching and learning needs of handicapped children.

(c) The Commonwealth Secretariat (in association with other agencies and international organizations where appropriate) should consider:

(i) Disseminating as widely as possible among member countries, information on developments in educational equipment, educational materials, and related teaching and learning procedures.

(ii) Establishing a clearing house which would assist Commonwealth countries to obtain reproduction rights for educational materials among member countries.

(iii) Reaching agreement on a common system of cataloguing non-book materials.

(iv) Investigating the design of equipment, including unsophisticated equipment, which meets the educational needs of member countries, and disseminating the results of the investigation.

(v) Assisting member countries in evaluating educational equipment and materials, in a manner that takes into account their costs and their benefits.

(vi) Assisting the interchange of educators between Commonwealth countries for short periods so as to enable them to gain insights into teaching practices and the preparation and provision of educational materials.

(vii) Collecting and disseminating information on the experience gained by Commonwealth countries in various forms of individualized and group learning procedures.

(viii) Setting up regional centres for initiating educational research and development and for improving communications between the Secretariat and member countries.

(ix) Encouraging and providing assistance for national and regional programmes relating to educational materials.

(x) Consulting with appropriate organizations about the qualities required of educational equipment and materials to be used and stored in regions of climatic difficulty.

(xi) Encouraging research into ways in which schools can make use of materials that are normally discarded.

# Curriculum and Examinations

## Curriculum

91. Educationists and education authorities have long recognized that education must respond to the needs of society; and education conferences and commissions have over the years recommended that those responsible for education in each country should make education relevant to national policies and needs through curriculum renewal. Yet the situation has remained practically unchanged in many countries.

92. The best examples of curriculum renewal reveal that successful implementation is the result of new curricula fulfilling clearly formulated and well publicized national educational objectives. It is recognized too that curriculum reform should be accompanied by appropriate services for the production and supply of teaching materials and the in-service training of teachers affected by the new curriculum. It is therefore recommended that curriculum planning units should ensure that moves towards the launching of a new curriculum are not made until provision has been made for the equipping and training of teachers.

93. Some common strategies of curriculum development are:

(a) Minor changes to improve the relevance of a curriculum.

(b) More fundamental changes that require the restructuring of subjects and possible integration.

(c) Continuous small curriculum developments to avoid sudden and dramatic changes of content and teaching methods that necessitate the retraining of teachers.

(d) Curricula for non-formal education.

94. Jamaica is one example of a country that has recognized the centrality of the curriculum by establishing a department with responsibility for all related matters such as planning, evaluation, media research, counselling and guidance.

95. It is recommended that where such departments exist, they should have high status within the machinery of educational administration and be staffed appropriately with senior and specialist personnel. *It is also recommended that the Commonwealth Secretariat should offer assistance in the training of curriculum personnel, facilitate the exchange of curriculum materials between member countries, and provide opportunities for curriculum planners to meet to discuss common problems.*

### Examinations

96. Examinations have traditionally been an integral part of the curriculum and an inseparable part of the process of education, yet there has been a continuing debate as to what their proper role should be — whether that of attainment or that of providing a basis for selection for further education and employment.

97. There is a strongly-held view that examinations should not be the sole basis of selection, but should share with individual assessment any accounting towards selection. In Singapore, at the primary level, agreement with this view is evident from the fact that examinations count for 60% while school reports count for 40%. In Tanzania the proportion is equal at 50% for each.

98. A serious effect on developing countries resulting from efforts to make university qualifications internationally acceptable has been the brain drain. While such comparability may be useful and desirable, individual interests should take a subservient position to the needs of national development and should not deny to a country the benefits of its most gifted people.

99. If more of the people who have vested interests in examinations had influence on the content and methods of examinations, the results might be very different from those that result from the present system which is largely controlled by the universities.

100. Regional examination councils are useful when countries are still expanding their educational systems and are unable to support their own examining bodies. But such councils should be transitional and be dispensed with as soon as countries are capable of organizing their own examinations. For this reason *the Commonwealth Secretariat should provide assistance in the form of consultants and advisers for countries anxious to review their examination systems.*

101. The best way of co-ordinating the work of curriculum planners and examining authorities effectively is to put total responsibility for both in the hands of one body. Since curriculum lies at the heart of education, the major share of responsibility might be given to the curriculum planners. So important is the need for such co-operation that it is recommended that the Commonwealth Secretariat should consider arranging a specialist conference to examine curriculum planning and educational assessment.

## Proposed Commonwealth Programme of Applied Studies in Education

102. The Report of the Study Group which met in London in May 1976 has been considered at some length, and particular attention has been paid to the programme's objectives, approaches, problem areas, mode of operation, financing, direction and co-ordinating arrangements.

103. The principle underlying the objective and approaches of the proposed programme is accepted. In order to maximize the benefit of investment in education, it is valuable to draw upon the expertise of other disciplines to help solve certain urgent educational problems.

Moreover, because the field of education is broadly based and aims at satisfying a multiplicity of consumers, a concerted effort ought to be brought to bear to find solutions to educational problems. This will help to attract the active support of all concerned.

104. It is accepted that individual countries should be left to identify their own problem areas and seek assistance if required. However, some problems (e.g. premature school leavers and the provision of low-cost teaching materials) are shared by a number of countries. An examination of suggested problem areas has shown that some of them are so complex and involved that they may not lend themselves to easy solution within the programme's constraints of time and financial resources. Thus, investigation into such subjects as premature school leavers or the diversification of secondary education — though of major concern — may not be easily accomplished with modest means: nor would the investigation be likely to bring forth tangible results. On the other hand it is strongly felt that for a subject like low-cost teaching materials, investigation should be capable of producing practical and useful results. *It is therefore recommended that the problems of producing low-cost teaching materials be taken up for investigation as a pilot project between this Conference and the next. The results should be reported to the Eighth Conference as a basis to consider the future of the programme.*

105. The Commonwealth Secretariat should consider carrying out this investigation by assembling a small team of specialists to report on the result of findings which should be widely disseminated to member countries. It is hoped that the Commonwealth Secretariat will be able to provide the funds from within its formal budgetary provision. The Secretariat should also be responsible for the supervision of the project.

106. As an adjunct to the programme, *it is considered desirable to publish a bulletin for the purpose of publicizing educational problems and their solutions so that member countries can learn from one another's experience.*

107. *Specifically, an information paper on recent curriculum reforms attempted in secondary schools in various member countries should be produced for consideration at the next Commonwealth Education Conference, and be distributed at least six months before that Conference.*

## Administration and Supervision of Education

108. Considerable efforts have been made by the Commonwealth Secretariat to promote the training of personnel in the field of educational administration and supervision. Activities have included a series of three regional seminar/workshops held at Freetown in 1973, Georgetown in 1974, and Kuala Lumpur in 1975. These were followed by a planning meeting in Nairobi in November 1975 to draw up suitable training courses. The first regional training course was started in January 1977 at the University of Nairobi and will be completed by the end of March. In collaboration with the Commonwealth Council for Educational Administration, the Secretariat has published a *Directory of Qualifications and Courses in Educational Administration.*

109. The Nairobi course, attended by fairly senior officials, is aimed at training trainers in educational administration. It is expected that when they return home the participants will organize training courses in their own countries.

110. An interim report has indicated that participants are keen on the course and are making good progress. However, there is some indication that the course may be attempting to cover too many topics, and in future concentration on a few specialized areas of administration, and on the needs of special groups involved in the administrative process, may be preferable. Since administrative styles and practices vary greatly, a practical approach may not be enough, and some theory may be necessary to enable administrators to adapt courses to national needs. It may also be necessary to carry out further examination of the nature of the administrative process in those countries for which a course is intended.

111. It is agreed that a great need exists for the training of personnel in the field of educational administration and supervision. In organizing

future courses, consideration should be given to the following:

(a) The need for in-depth training in areas of special concern combined with some training in related areas.

(b) The selection of a homogeneous group in terms of duties and level of responsibility.

(c) Emphasis on short and practical in-service training courses.

(d) The theoretical basis of topics studied.

(e) The need for further research into the administrative processes of the countries concerned.

(f) Appreciation of relationships between administrators and their authorities, school committees, teachers, parents, and other special interest groups.

112. For the purpose of certification of participants in these regional training courses, only certificates of attendance should be issued. These should indicate the period of training and the topics studied.

113. Regional training courses might be of two kinds: (a) those designed for the training of top-level administrators; and (b) those for the trainers of middle-level administrative personnel such as inspectors or principals.

114. On the question of training costs, distinction must be made between regional and national training courses. *The Commonwealth Secretariat should continue to organize regional training courses and be responsible for the expenses of a minimum number of participants from each participating country.* Participating countries should pay for any additional participants they send. In those cases which the Commonwealth Secretariat is unable to fund in full, governments should be asked to contribute towards the cost of travelling or the subsistence allowance. The principle of sharing costs with participating governments is recommended because it is felt that this may improve the feedback information and thus help with the evaluation of the courses. Moreover, people tend to value what they pay for. The cost should not be so high as to deter participation by poorer countries.

115. As regards national courses, these should be largely the responsibility of governments, which might consider making provision in their normal budgets for the purpose. If assistance is required to obtain the services of consultants, an approach may be made to the Commonwealth Fund for Technical Co-operation which will be willing to assist if funds are available.

116. In summary, it is recommended that:

(a) The Commonwealth Secretariat should continue to organize regional training courses for high-level administrators and trainers in the field of educational administration and supervision.

(b) Participating governments should (i) be responsible for the expenses of additional participants over and above the number to be supported by the Commonwealth Secretariat; or, (ii) make a contribution towards the cost of travelling or the subsistence allowance.

(c) Certificates of attendance be issued for regional training courses, and these should state the period of training and the topics studied in some detail.

(d) Governments should consider making provision in their normal budgets for training personnel in educational administration and supervision; and the Commonwealth Secretariat should consider providing assistance through making available consultants to help run these courses.

## Non-formal Education

117. Although the meaning of the term non-formal education varies from country to country, there is a clear need to find alternatives to formal education, particularly in the current climate of world inflation and economic recession. Governments often experience considerable difficulties in meeting the demands for more and better education. Questions have therefore been raised in many quarters about the form and effectiveness of education systems.

118. Interesting experiences have been noted in a number of countries.

(a) In Canada, for instance, some children find it difficult to respond to a highly insti-

tutionalized system of learning, and emphasis has therefore been given to such non-formal programmes as correspondence education, educational broadcasting, part-time schooling and short courses to meet specific interests and needs within the country. Other programmes exist by which persons can attend school part-time and participate in informal learning in occupational fields.

(b) Australia has a national council to assist curriculum development, the work being undertaken by the Federal Government in partnership with the six states. The present programme is aimed particularly at the lower secondary school. Among the problems encountered are those relating to premature leavers and the increasing unemployment of school leavers. Some pilot schemes are being conducted in an attempt to discover causes and remedies. It is expected that technical colleges will play a major role in this area.

(c) In Nigeria, non-formal educational activities are organized mainly by the state or local governments. In the Third National Plan, adult education has, since 1975, become the concern of the Federal Government: it has as its aim the provision of appropriate education and training for all Nigerians.

(d) In Britain, the adult literacy campaign receives strong voluntary support. Television and radio are utilized and supplemented through the provision of correspondence teaching materials. The work of the Open University is a good example in this regard. Considerable efforts are being made also to minimize the problem of unemployed school leavers by finding short-term jobs for them (if possible with related education), and to experiment with general education and training or assessment courses.

(e) In Guyana, non-formal education concentrates on the provision of functional literacy programmes. Though it is funded by the Government, it is largely administered by non-governmental institutions.

(f) In Malawi, adult education and training programmes are administered by a number of government ministries and agencies. Training programmes include courses in health work, rural development, agriculture, library services, auto-repairs and craft work. To increase co-ordination in the planning and implementation of programmes, the creation of a National Advisory Council is under active consideration.

(g) In Swaziland, the government has set up an interministerial committee, headed by the head of the Civil Service, to co-ordinate various non-formal education schemes run by various ministries. At the local level, rural education centres are being set up to co-ordinate such programmes.

(h) Kenya's non-formal education system is well developed and is directed by various ministries and voluntary organizations. The village polytechnics arrange relevant training courses aimed at assisting young citizens to be self-reliant. The University of Nairobi has an extramural studies department which deals with adult education programmes. It also disseminates information on multi-purpose development centres, the national youth service, and the work of government ministries and agencies involved in adult education.

(i) The Gambia government has decided recently to explore the possibility of establishing a programme of non-formal education. A UNESCO expert has been appointed to advise the government, and a report is awaited.

(j) In Bangladesh, the responsibility of organizing and co-ordinating non-formal education programmes is vested in the Ministry of Education, and is administered in close co-operation with a number of other ministries and relevant bodies.

(k) Lesotho sees non-formal education as a means of relieving the pressure on limited education and training facilities. The Lesotho Distance Teaching Centre was established recently as part of a new polytechnic, and is intended to act as a co-ordinating agency for non-formal education. Additional resources include a library centre and mobile library services. There is also a special scheme to assist in the education and training of nomadic communities.

(l) In Ghana, on the suggestion of a UNESCO Literacy Mission, a 36-member National Working Party on Literacy has been set up to review the Literacy Programme and integrate it effectively with the Community

Development Programme. It has identified the problems and made recommendations to the government for action. Following on this, an Experimental Functional Literacy Programme has been launched to cover 6,000 persons in the experimental year. A serious problem encountered is the lack of writers for the type of literature required, and as a result a corps of writers has had to be recruited and trained for the purpose.

119. In general, the problems encountered by member countries in the provision of non-formal education are as follows:

(a) The retention of literacy amongst primary school leavers or premature school leavers.

(b) The fact that vocationalizing secondary education can be much more expensive than the provision of ordinary secondary education.

(c) Unemployment arising from the production of school leavers with no saleable skills.

(d) The difficulty of reorientating the attitudes of students, teachers, parents and other groups in the community towards the needs of a changing society.

(e) Developing more effective ways and means of providing education for nomadic communities.

(f) Strengthening the motivation for learning.

(g) Training teachers for various types of adult education.

(h) The need for designing and producing relevant teaching materials for non-formal education.

(i) Creating an effective agency for co-ordinating non-formal education and training activities.

120. *Support is given to the Secretariat's proposals in connection with the organization of surveys, case studies and pilot projects in the field of non-formal education, and it is recommended that when carrying out these proposals due consideration should be given to the above-mentioned problems.*

# Teacher Education

121. The recommendations of the past six Commonwealth Education Conferences, together with those of the Specialist Conference on Teacher Education in a Changing Society held at Nairobi in 1973, have all recognized the key role of teacher training in improving education. These conferences have highlighted a number of issues that require action. They include the training of teacher educators, teacher education, the status of teaching as a career, and teacher support services. For the Seventh Commonwealth Education Conference, the additional matter of national policies on education and training has been raised for consideration.

## National Policies on Education and Training

122. Many Commonwealth countries are still in the process of formulating their national educational policies, and as a result teacher training has yet to be closely geared to the needs of the school. In addition, the various stages in teacher education — initial training, induction and in-service training — are still not well co-ordinated. In-service training is frequently organized on an *ad hoc* basis or allowed to become the first victim of financial cuts in training. The problem is very real and requires deliberate action in the form of policy decisions about educational objectives and ways in which these objectives can best be achieved.

123. Initial training, induction and in-service training of teachers should be recognized as aspects of one on-going process of teacher education; and teacher education should be considered as inseparable from the process of curriculum change and development. Co-ordination of all education and training resources is also vital if the piece-meal approach to teacher education is to be overcome.

124. For these reasons it is recommended that governments should be encouraged to incorporate all aspects of the training of teachers within coherent policies of teacher education and to allocate adequate resources to give these policies reasonable hope of success.

## The Training of Teacher Educators

125. In a number of Commonwealth countries teacher educators are in short supply. It is apparent from the manner in which teacher educators tend to be recruited and trained that the kind of person preferred is the one who has proved effective as a teacher rather than the one who has merely amassed academic qualifications. This preference does not imply that the training of teacher educators should not be based on sound academic and professional training, for these are important, but that the skills that the teacher educator must impart to his students are those that are learned in the practice of teaching.

## Teacher Education

126. Conventional means of training teachers in monotechnic institutions tend to be relatively expensive and to attract teachers from a rather narrow section of the community. For this reason, countries might consider alternative ways in which teachers can be trained and means by which entry to the teaching profession may be broadened. While it is recognized that standards should be maintained, consideration should be given to offering teacher training to people with the qualities that make good teachers and not just to those with academic qualifications. Teachers with potential, whether they are untrained or under-trained, should be given opportunities to become more competent. In providing these opportunities, attention should be paid to different modes of training and to the content of courses.

127. Many Third World countries recognize the need to give priority to pre-vocational subjects in schools so that primary school leavers can be self-employed or semi-employed. Such education might require that teaching depart from the over-emphasis on traditional methods of training in basic number and language skills, and incorporate the development of vocational skills, such as crafts and farming which, apart from their intrinsic value, can be used to reinforce basic number and language skills.

128. New training programmes for various levels of teachers are being developed in many countries. For instance, in Nigeria the National Teachers Institute has evolved a programme for mass training and in-service training through the use of mass-media resources and the best available resource persons from the community. Ghana has introduced a three year post-secondary teacher training course to train teachers in the sciences, liberal arts subjects and pre-vocational subjects such as commercial and business education, home science, crafts (weaving, pottery, tailoring, dress making) and agriculture. Britain places considerable emphasis on helping teachers to take responsibility for their own in-service training. In the Eastern Caribbean, there is an associate scheme whereby teachers are given an opportunity to develop a closer relationship between principles and practice in the school.

129. *In the light of the increasing variety of training being offered, the Commonwealth Secretariat should commission a study of alternative methods of training teachers. It should disseminate information on these methods and be prepared to offer assistance in implementing them.*

130. In-service training is of key importance to the maintenance of standards in the schools. Teachers should not be expected to implement new methods of teaching or tackle new curricula without in-service training. It is vital, therefore, that programmes of in-service training should be planned within the context of teacher education as a whole.

131. A wide variety of resources should be incorporated in training programmes. For example, greater use can be made of the community, business houses, and other public and private organizations. Teacher organizations can play an increasing role in teacher development, and educational institutions (such as universities, institutes of education, polytechnics, teachers' colleges and teachers' centres) and Ministry of Education inspectors and advisers, can contribute more effectively to training by ensuring that efforts are co-ordinated. Only by harnessing all available resources can in-service training be made more cost effective. *The Commonwealth Secretariat should organize regional workshops that aim to assist countries in tackling problems and sharing ideas associated with teacher education.*

### Teachers and Teacher Support Services

132. In some countries the wastage rate in the teaching profession in unacceptably high. Often low morale lies at the root of the problem, and this can be attributed to poor career structures, difficulty in job switching within teaching, salary rates that compare unfavourably with other forms of employment, poor support for teachers on the job, and a sense of insecurity. Morale could be greatly improved if teachers were more fully involved in professional matters and if action were taken to rectify these problems.

133. One of the main causes of the insecurity felt by many teachers is the lack of support they receive. Often this begins as soon as they take up their first appointment, when their head-teacher gives them their timetable, books and equipment and leaves them to get on with the job. But the sense of insecurity is aggravated by the fact that few countries appoint anyone to supervise in any meaningful fashion the teacher's first year in school. College tutors are unable to follow up their students when they leave college; inspectors often have too many schools to supervise to give adequate time to individual teachers.

134. There is therefore a need to provide teachers with strong support services. These can be considered as consisting of advisory, training and technical services, and may include professional associations, units or groups for the evaluation of teaching materials, advisers, training institutions, distance teaching organizations, school inspectors, teachers' centres, in-school administrators, repair and maintenance units, media production units, multi-media library services, and resource centres. Such support services urgently need to be strengthened, and *the Commonwealth Secretariat should endeavour to organize regional in-service training workshops aimed at assisting countries to strengthen their teachers' support services.*

## Education about the Commonwealth

135. Education about the Commonwealth has been a topic of discussion at previous Commonwealth Education Conferences, and the subject of a number of recommendations. Thus, Group D at the Fifth Commonwealth Education Conference recommended that, "All member countries should be encouraged to make provision for education about the Commonwealth, the line of approach being the responsibility of the individual countries." And, at the Sixth Commonwealth Education Conference, governments were urged to "encourage and support teaching about the Commonwealth in schools, in other educational institutions, and in the community as a whole."

136. At their meeting in Singapore in 1971, Commonwealth Heads of Government prepared a declaration of Commonwealth principles. A growing number of activities, based on these principles, is being carried out to the mutual benefit of member states and the international community as a whole. Programmes of education are needed to create an understanding and appreciation of the Commonwealth association and of the activities being undertaken within its framework. With this in mind, *it is recommended that at their next meeting, later this year, Commonwealth Heads of Government consider expressing encouragement and support for teaching about the Commonwealth in schools, other educational institutions, and the community as a whole.*

137. In order to give practical effect to this recommendation, Ministries of Education in countries where curricula are centrally determined are urged to ensure that appropriate consideration be given to the study of the Commonwealth and its member countries, and, where curricula are not centrally determined, to draw the attention of those responsible to the need for such studies.

138. The provision of educational materials is essential if teaching about the Commonwealth is to be successful. The materials most likely to portray a country's geography, history, and national goals accurately are those that have been prepared by nationals of that country and are used in the country's school system. Many of these materials are unknown elsewhere and it is recommended that arrangements are made to exchange specimen copies. It is also recommended that *the Commonwealth Secretariat should continue to publish information about the Commonwealth and make it more widely available for educational purposes.*

139. Some of the materials obtained in these ways may be of considerable assistance to curriculum developers, editors and writers in preparing materials of their own about Commonwealth countries or revising those that are already in use. However, the task of preparing new materials in some subjects (especially social studies) is extremely difficult, and the availability of source material may not in itself be sufficient to ensure the required degree of accuracy and emphasis. In some cases, therefore, once provisional approval has been given to the draft of a work about a member state, and publication is assured, it is recommended that the author, editor or educator most closely involved should be enabled to visit the country concerned, seek on-the-spot advice about the draft, and obtain whatever additional information is required. It is intended that this recommendation should refer both to book and non-book materials.

140. Much the same observations apply to educational broadcasting, and it is noted that the Information Division of the Commonwealth Seretariat has recently begun to prepare and distribute radio tapes on topics of Commonwealth interest. Individual member states can also play a valuable role in creating and supplying material. We therefore endorse the recommendation of the Commonwealth Educational Broadcasting Conference held at Sydney in 1975 requesting governments, education authorities, and educational broadcasting agencies to endeavour to produce programme material on their own country profile for use by other member states in promoting a greater appreciation of the Commonwealth.

141. Some Commonwealth developing countries (e.g. those involved in the African Social Studies Programme) have some experience in running workshops for the production of educational materials for schools. *It is recommended that the Commonwealth Secretariat should consider providing a consultant and possibly some other resources for appropriate workshops, such as those held by the African Social Studies Programme, in order to prepare educational materials to be used in teaching about the Commonwealth.*

142. Examinations exert a considerable influence on what is taught in school. Where new syllabuses are being prepared or old ones are being revised for national, regional, or even, in cases, international examinations, the opportunity exists for including or modifying topics dealing with the Commonwealth in history, geography, social studies, civics, and other appropriate subjects. Education authorities, teachers' associations and schools may wish to consider what influence they can exert and what support they can offer to examining bodies in these tasks.

143. The frequency and quality of the questions that appear on examination papers can have more bearing on what is taught in schools than the topics listed on the syllabus. It is therefore recommended that national and regional examining bodies be urged to ensure that meaningful questions about the Commonwealth are included in appropriate examinations. It is also recommended that *the Commonwealth Secretariat should give some support to the preparation of a report on the questions set on Commonwealth topics by some of the examining boards in Britain, and that the report is circulated so that it can serve as a basis for similar studies.*

144. Learning about the Commonwealth cannot become a normal part of school education unless teachers are interested in the Commonwealth and knowledgeable about it. The task of including Commonwealth studies in teacher education programmes is one that each country must undertake on its own. However, member states are urged to take advantage of the presence of members of staff of the Commonwealth Secretariat in their countries when Commonwealth conferences, seminars and workshops are being held, by inviting these members of staff to participate as resource persons in carefully planned teachers' seminars arranged to take place a day or two before or after the main conference is held.

145. One certain way of building up a cadre of teachers who are interested in and knowledgeable about the Commonwealth would be to organize a Commonwealth-wide teacher exchange programme in which arrangements are made for those taking part not only to be attached to a school but to visit other institutions and serve as resource personnel. A well-developed bi-lateral scheme already exists to serve as model. It is operated by the League for the Exchange of Commonwealth Teachers — a voluntary body that has been in existence for many years. Currently it arranges 240 teacher

exchanges between Britain and seven other Commonwealth countries (Australia, Barbados, Canada, Jamaica, Kenya, Malaysia, and New Zealand). *It is recommended that the Commonwealth Secretariat should examine the feasibility of establishing a multi-lateral Commonwealth teacher exchange scheme.*

146. The value of existing visitation programmes for educators attending Commonwealth Conferences is also recognized, and the Commonwealth Secretariat is urged to continue them.

147. Ministries of Education are urged to make appropriate use of the services of resource persons (e.g. educators who have participated in visitation programmes, officials belonging to Commonwealth non-governmental organizations, nationals of other Commonwealth countries, and teachers who have worked in other Commonwealth countries) in their education programmes.

148. Novels and other literary works written by Commonwealth authors can provide readers with a unique and entertaining insight into the character and way of life of Commonwealth peoples. Special efforts should therefore be made to enable these works to reach the general public and special groups of readers such as teachers in training and young people.

149. Book exhibitions have been found to be a valuable way of bringing Commonwealth works to the attention of potential readers. Some have been general in nature; others have concentrated on particular countries, regions, or age-groups. For example, the 1976 Commonwealth Book Fair was devoted to "Stories for Children". *It is recommended that the Commonwealth Secretariat should spread information about Commonwealth literature throughout the Commonwealth.*

150. The newly designated Commonwealth Day, to be celebrated on the second Monday in March from 1977 onwards, will provide schools with a special opportunity for focusing attention on these and other formal and informal activities. In the period leading up to Commonwealth Day, activities could lay emphasis on the Commonwealth association and the brotherhood of man through art, music, drama, writing and poetry. On the day itself, schools could hold a special ceremony and organize an exhibition to feature pupils' work on some aspect of Commonwealth studies. Ministers of Education may wish to send a special message to schools to mark the event.

151. It is recommended that Ministries of Education should give every encouragement to schools to make imaginative use of Commonwealth Day and the period leading up to it. *It is further recommended that the Commonwealth Secretariat, in association with the Commonwealth Institute, and other organizations, should collect and disseminate information on educational activities about the Commonwealth that are suitable for use by schools.* It is hoped that the Commonwealth Foundation will also be able to provide support for projects undertaken in connection with education about the Commonwealth.

152. It is noted that the Conference on the Commonwealth and Non-Governmental Organizations (the "Dalhousie Conference") held in October 1976 drew attention to the fact that "the immense task of creating a wide popular awareness of the value of Commonwealth activity is in great need of strengthening", and recommended that member governments be invited to establish resource and information centres in however modest a form at first.

153. Ministries of Education can themselves make a valuable contribution, either by strengthening offices where they exist for education about the Commonwealth or by designating an officer who, as part of his duties, would be responsible for the matter. Besides possibly participating in relevant areas of curriculum renewal and organizing seminars for teachers, the officer would serve as the chief point of contact with the Education Division of the Commonwealth Secretariat and assist in making arrangements for the receipt and despatch of Commonwealth information intended for educational use. It is therefore strongly recommended that Ministries of Education specifically assign the responsibility for education about the Commonwealth and, where appropriate and possible, for ensuring that channels of communication are opened for the exchange of information about the Commonwealth for educational purposes. Ministries of Education are requested to inform the Commonwealth Secretariat of whatever arrangement they make so that this information can be passed on to other countries.

# Other Activities and Programmes

### Information

154. One function of the Commonwealth Secretariat is to serve as a clearing-house of information for member states. As far as Education is concerned, the value of this service has been stressed at previous Commonwealth Education Conferences, and it is repeated here.

155. One way in which the Education Division collects information is by means of the country papers submitted for Commonwealth meetings. It is noted with satisfaction that 29 such papers have been supplied to this Conference — a greater number than ever before. It is also noted that the Division receives a number of reports from people who are on study visits organized by the Secretariat.

156. In addition to preparing special papers for such occasions, Ministries of Education are urged to ensure that a copy of each important publication they produce is sent to the Education Division where it will be retained as a reference document in the Division's recently re-organized library.

157. Information is also collected by members of the Division's staff when they are visiting Commonwealth countries. However, it is noted that such visits are virtually confined to occasions on which staff members are attending conferences, seminars and workshops. *It is recommended that officers with special responsibilities for particular regions should be enabled to pay more frequent visits to those regions to obtain first-hand information on developments in education.*

158. It is noted with satisfaction that some countries have, within their Ministries of Education, officers who, as part of their duties, are responsible for Commonwealth Secretariat affairs. Other Ministries of Education are urged to consider the possibility of doing likewise in order to improve the two-way flow of information.

### Liaison with Other Organizations and Institutions

159. It is noted that the Education Division has maintained liaison with a large number of organizations — international, regional, and national, working in the fields of education and development. *These contacts should be maintained and strengthened so that the Secretariat can avoid duplicating work being undertaken elsewhere.*

### Research and Publications

160. It is noted that the Secretariat has utilized a modest budgetary provision to commission research on topics where a need has been expressly communicated by member countries or identified by members of staff in the course of their liaison visits. *It is recommended that this form of activity should be maintained. It is further recommended that the Division should continue to produce publications on important aspects of education, and that it should raise the print run of these publications and distribute them more widely.*

# Commonwealth Fund for Technical Co-operation

161. It is noted with appreciation that financial support from the Commonwealth Fund for Technical Co-operation has made possible a number of valuable activities concerned with educational development. These have included:

(a) The provision of advisory and operational experts to developing countries.

(b) The provision of awards for study and training programmes undertaken in developing countries.

(c) The funding of the Academic Exchanges Programme.

(d) Support for training courses, workshops and seminars arranged by the Education Division of the Secretariat, and other bodies.

(e) Support for the preparation and publication of directories.

162. It is agreed that the support for educational projects that is provided by the Commonwealth Fund for Technical Co-operation, in original and cost-effective ways, is

an important addition to the assistance available to governments from bilateral sources and from other multi-lateral organizations.

163. It is noted that the Fund's resources are composed of voluntary contributions by Commonwealth Governments, and that the degree of support for educational activities is, therefore, dependent on the resources that Governments make available to the Fund. *In order to enable the C.F.T.C. to increase its support for education and training activities of benefit to developing countries, including the implementation of many of the recommendations made by this Conference, it is recommended that governments should consider the possibility of increasing the resources of the Fund.*

# Report of the Meeting of Chief Professional Officers

1. At the Sixth Commonwealth Education Conference, Chief Professional Officers greatly appreciated the opportunity of meeting together to exchange views from a professional standpoint, and expressed the wish that similar meetings would be arranged in the future. At this meeting in Accra, two issues arising out of the previous meeting in Kingston have been discussed, together with a number of topics of current interest.

## Collection and Dissemination of Information

2. One function of the Commonwealth Secretariat is to serve as a clearing-house for information for member countries. The frequent requests the Secretariat receives for information on educational programmes and materials confirm that the Secretariat could play a very useful role in this regard if it received regularly from member countries important materials like annual reports on education, reports of commissions on education, journals, and other publications.

3. The meeting has considered ways by which the Commonwealth Secretariat can best collect the necessary information from member countries. It is noted that some of the information available to the Secretariat at the moment has been collected during visits by members of staff to member countries. These visits have been few and far between, with the staff having to take what advantage they can of their attendance at Commonwealth meetings held outside Britain to visit a few countries. The meeting is of the opinion that such visits are important and should be encouraged. *It therefore recommends that in addition to the occasional visits presently undertaken by the Secretariat staff, individual officers with special responsibilities for particular regions be enabled to pay regular visits to those regions to obtain first-hand information on developments in education.* To ensure that information collected by a visiting Secretariat officer is retained in the Secretariat beyond his term of office, the meeting endorses the present system whereby reports of visits and other materials emanating from various countries are stored in "country boxes" in the Division's library. The Secretariat also receives reports on study visits undertaken by various individuals who are sponsored by the Commonwealth Secretariat.

4. Another way by which information is collected is through "country papers" submitted for Commonwealth meetings. Such papers are usually based on the theme of the meeting. Thus the country papers submitted in connection with the current conference are related to the theme of "the Economics of Education". It is recommended that the practice of preparing country papers for Commonwealth Education Conferences should continue, and that countries should be guided as to the kind of information required.

5. Related to the collection of information is the problem of ensuring that information from the Secretariat reaches the ministries, institutions and individuals who can best benefit from it. The present system whereby the Secretariat communicates with member countries through their respective High Commissions in London does not appear to be effective. It is suggested that in matters not relating to policy, the Secretariat could communicate directly with the relevant ministry or institution, and send information copies to the High Commission. In addition, attention is drawn to the need for the Secretariat's mailing list to be reviewed so as to ensure that individuals and organizations as well as ministries receive information materials.

6. It is our view that the number of copies per publication sent to ministries, particularly in federated states, should be increased. While the Education Division will do its best to increase the multiple copies it now sends to various countries, it is suggested that member countries

should assist the Secretariat to cut down its printing and mailing costs by:

(a) furnishing the Secretariat with information on its present requirements;

(b) continuing the present practice whereby the Secretariat mails additional copies of publications on request; and

(c) taking advantage of the Secretariat's invitation to countries which wish to do so to reproduce its publications locally, in English or in a local language.

7. It is noted that in order to improve communication between the Secretariat and member countries, a few countries have appointed, within their Ministries of Education, officers with responsibility for Commonwealth Secretariat affairs. The meeting expresses its support for this arrangement and hopes that more countries will do something similar.

8. The Secretariat should take action, from time to time, to ensure satisfactory feedback from Commonwealth countries on the effectiveness of its dissemination of information. As for the dissemination of information within countries, this is best left to the countries themselves as they are in the best position to devise appropriate measures to overcome any bottlenecks that arise.

## The Provision of Experts and Training Opportunities

9. In response to requests, the Commonwealth Fund for Technical Co-operation (C.F.T.C.) provides advisory and operational experts for key positions in member countries. There are at present about 200 to 300 experts on the C.F.T.C. list but the requests for experts in education has not been large. Other activities of the C.F.T.C. include awards for training attachments and study visits, and awards tenable at universities and professional, technical and vocational institutions. The meeting wishes to express its satisfaction with the C.F.T.C.'s emphasis on third country training and hopes it will continue.

## Universal Primary Education

10. It is noted that in Nigeria (which submitted this topic for discussion) a number of problems have arisen since universal primary education was launched in September 1976, and that some of them were unexpected. Among the problems have been delays in providing accurate information on children's age, practical difficulties in the recruitment and training of teachers, the logistics of providing learning materials for several million pupils, and the anticipated problem of finding employment for so many school leavers.

11. Nigeria is to be commended for the bold step it has taken in offering every child the opportunity to receive schooling. However, other countries planning to embark on a project of such magnitude should note the need to make realistic projections based on sufficient data. Experience shows that educational planners normally need at least five years to collect the relevant data before major country-wide projects can be successfully attempted. These countries should also seek answers to a number of fundamental issues; for example, what type of primary education should be offered? and should universal primary education be followed by free secondary schooling. It is suggested that though infrastructural differences need to be taken into account, educationists and policy makers in Nigeria might benefit from the conclusions arrived at by the Commission on universal primary education set up by the recent Conference of African Ministers of Education in Lagos. It is further suggested that the Commonwealth Secretariat might collect data on Canadian and other experiences on the subject with a view to helping countries that might need such information.

## Training Facilities for Refugee Students from Southern Africa

12. The meeting notes that as part of the Special Commonwealth Programme, the Secretariat — through the Commonwealth Fund for Technical Co-operation — administers the Commonwealth Rhodesia Scholarship Trust Fund. Under this Trust Fund, scholarships have been provided for 229 students from Zimbabwe in 15 Commonwealth developing countries. In addition, 100 Zimbabwean students living within Rhodesia are being assisted to pursue 'A' level and first degree courses by correspondence.

13. It is felt desirable that there should be a considerable expansion of Commonwealth assistance to Zimbabwe, including the provision of in-service training for persons designated for key positions in the public service, in the period leading up to the emergence of a legitimate Zimbabwe Government. It is encouraging to note that a number of governments have indicated willingness to offer more places in their institutes of learning to such students, and to provide, in due course, high-level in-service attachments. Stress is laid on the importance of increasing the financial resources and the number of training places available under the Programme, so that more assistance can be provided for the large number of well-qualified Zimbabwean applicants who currently lack opportunities to continue their studies.

14. There is a similar need for countries to offer financial support, and study and training opportunities, to Namibian refugee students under the Commonwealth Programme for Namibians. Since its establishment in 1975, the Programme has enabled 71 Namibians to pursue courses in five Commonwealth developing countries. It is noted, however, that the modest resources available to the Programme have been fully utilized for those students' support.

15. It is noted with appreciation that the United Kingdom Government has recently increased the number of its bilateral awards to assist Namibians to pursue courses in technical education in the United Kingdom.

16. The meeting commends the Secretariat for the role it is playing in assisting students and trainees from Zimbabwe and Namibia, and asks the Secretariat to continue to keep governments informed of needs as they arise.

## Specialist Conferences

17. Commonwealth Specialist Conferences in various educational fields have been held since 1961. They have been useful in that they study key educational issues in depth and make recommendations for action. Out of a number of proposed topics, the meeting recommends that the following themes be considered for future Specialist Conferences: (a) technical and science education with emphasis on technical education; and (b) non-formal education.

## Future Meetings

18. The Secretariat appreciates the support given to this meeting and notes that Chief Professional Officers would like such meetings to be arranged at future Commonwealth Education Conferences.

# The Economics of Education

## Background to the Discussions

1. Dr. Philip Coombs, Vice-Chairman of the International Council for Educational Development, set the keynote for the Conference by taking "a fresh look at the world educational crisis" and leading delegates into the Conference theme, "The Economics of Education". In some circulated discussion notes he asked his audience to think about events since the mid-sixties and prospects over the next ten years. In his view the traditional linear expansion of educational provision had been quite successful in purely quantitative terms; but the upward curve of enrolments had started to flatten and, in any case, quality was being eroded and unit costs were continuing to rise.

2. Most existing educational systems had been inherited and had been designed for a select elite, not the masses. An educational revolution was needed, comparable with industrial revolutions. Even if only quantitative factors were considered, demographic pressures and the consequently expanding enrolments of developing countries made radical changes inevitable. Other pressures included inflation, oil prices, general world recession, and a continued upward movement in the real unit costs of education.

3. The bright side of the picture was a willingness to consider changes that would have been heresy ten years ago. Sometimes the changes envisaged were not very fundamental, but the creative thinking about alternative approaches was a good omen for an acceleration in the process of change and adaptation. Certainly the educational crisis was still very live and real, and needed all the thought and action it could muster.

4. Dr. Coombs was conscious of a consensus that priority must be given to the rural poor. That being the case, elitist education would not do; it brought no comfort to the masses who never got to school, or who dropped out of school before even learning to read. Part of his answer was a drastic reorientation and recasting of existing schools; and an even larger part was non-formal education — mostly the training of children in functional skills that, apart from literacy and numeracy, were probably as well taught out of school as in school. Dr. Coombs ended by asking the Conference to consider which ministries should be responsible for programmes of rural non-formal education, emphasizing that it was the business of other ministries besides Education and Labour.

5. The first of the lead papers was written by Dr. Adebayo Adedeji, Executive Secretary, UN Economic Commission for Africa, and presented on his behalf by the Commonwealth Assistant Secretary-General, Mr. Anyaoku. Its subject was "Education, Economic Policy, and the National Budget".

6. The paper directed attention to the critical needs in national development for skilled and educated manpower and the integral part which the planning and development of education must play in development generally. This part, however, was difficult to quantify. Fast rates of economic growth often went with fast rates of educational growth, but it was not apparent which caused the other; countries that allocated a small proportion of their budgets to education were usually those which lagged in the economic race.

7. Critical shortages of skilled persons often went hand in hand with a surplus of unskilled labour. Sometimes this was aggravated by a "brain drain". The education system had to provide society with the manpower for productive activity; therefore it had to forecast manpower requirements for this purpose. Only then could changes and adjustments be made in the system, which might include its redirection towards job-oriented education and training. Guidance to school children and students, or career counselling, could help steer them in

useful directions. What was fundamentally important was to rectify imbalances by establishing a much stronger relationship between education and manpower planning.

8. Like Dr. Coombs, Dr. Adedeji saw many different ministries being involved in the necessary arrangements; they should get together both at central government and at field level, and co-operate with the private sector as well. This required a co-ordinating body, which many countries still lacked. reinforced by an advisory board consisting of representatives of employers, unions and other industrial organs, and educational institutions.

9. Educational development had to be related to priorities for social and economic development, but educational development was also influenced by demand — based often on political considerations and on a greater awareness of the benefits to be derived from education. This meant that there had to be an increasing allocation to education in national budgets; if this was investment, it did not stand up to any rate-of-return analysis. A closer relationship with the economy might be achieved by sharing some training responsibilities with major employers, whose systematic involvement in the training process would ensure that the products were job-related. Education was simply not amenable to the strict test of investment criteria. And it was an affront to human dignity if a man were regarded simply as an investment speculation.

10. Among the remedial contributions that Dr. Adedeji suggested were concentration on the local training of teachers, and the use of locally made equipment and other components; that is to say, a general substitution of local for foreign inputs. Another was more emphasis on vocational and technical training and less on formal academic courses. The developing world should be careful about imitating the educational systems of the more developed countries. No matter how important were the economic functions of education, he strongly believed that the needs of individuals for their own development and self-fulfilment ought to come first.

11. The second lead paper was written and presented by Professor Richard Jolly, Director of the Institute of Development Studies, University of Sussex. Professor Jolly's starting point was the inadequacy of past development patterns and the need to replace them with projects, programmes, and policies from which the less well-off could directly benefit. Like Dr. Adedeji, he attached importance to the job-market linkages between school and work, which ought to be an important feature of the inter-relationship between the educational system and the rest of the economy.

12. Professor Jolly asked two basic questions: What were the options for meeting the basic need of education for all, given the realities of economic and financial constraints? And what were the critical constraints in the light of rapidly rising costs of education throughout the Commonwealth, especially in the poorer countries?

13. In some regions, especially the Caribbean, universal primary education had virtually been achieved, but the range of secondary enrolment ratios was still very wide. Public expenditure on education had risen extremely rapidly in virtually all countries. Nevertheless, the number of unemployed school leavers was growing and education was inappropriate for broad-based (specifically rural) development and for creating equality. Professor Jolly presented tables setting out details of enrolment growths at all levels. He was critical of traditional methods of determining fitness for jobs and promotion, and said that the differentials between pay for the highly qualified jobs and for those requiring only primary education were out of proportion. Salary structures drew skilled people away from the countryside, raised the cost of employing them, and made it impossible to expand the school system; particularly as teachers formed one of the major groups of beneficiaries. Education was being corrupted by preoccupation with higher incomes and better jobs, while its contribution to the needs of the majority and to rural development was approaching zero.

14. The main causes of high recurrent costs were teachers' salaries, low pupil-teacher ratios, the non-salary costs of education, and the capital costs per place. Together these explained why the proportions of national income spent on education in different countries differed much less than the percentage of school-age children attending school. It meant that the poorer countries had to spend a far higher share of their resources for each person in education than the richer countries. Professor

Jolly pointed out that teachers as a group, together with other groups with similar qualifications paid similarly, were the cause of any given share of developing country's resources buying much fewer teaching hours than it would in a developed country where they were paid something nearer to the norm.

15. Raising the ratio of pupils to teachers might not be all bad, particularly if it enabled a country to attain universal primary education. Ratios of 50 or more to one did not necessarily mean classes of that size: there were all sorts of options to prevent that — shifts, alternative day's classes, and so on — and there was nothing to prove that student performance would suffer all that much.

16. Another option Professor Jolly put forward was that of relying on outside resources rather than national ones. But this was not a complete alternative to changes in salaries and institutional structures within countries; and, in any case, many donors were not prepared to meet local costs. Still, in the context of Commonwealth co-operation, the dimension of international movement of teachers to the developing countries, and of students from the developing countries, was not to be overlooked. Expatriate teachers with very high salaries made the rationalization of salary structures more difficult; and the doubtful relevance of imported curricula, books and technologies stood in the way of educational reform. So did support from abroad that developed centres of extravagance rather than centres of excellence.

17. Professor Jolly emphasized that it was not simply a question of achieving U.P.E. by juggling with salary scales and pupil-teacher ratios; but finance tended to dominate discussion, and he thought the goals he had outlined were in the grasp of all Commonwealth countries if only they chose to achieve them.

18. The third lead paper, "Educational Financing", was written and presented by Dr. Malcolm Adiseshiah, Vice-Chancellor of the University of Madras. He illustrated, with tables, various aspects of the public financing of educational expenditure, and pointed out that the education budget was over 20 per cent of average total national budgets of developing countries, in individual cases as much as one third. One feature of educational financing in developing countries was that the share of private expenditure, whether from individuals, endowments, institutions or fees, was small and declining. Voluntary bodies had lost some of their significance for education since independence.

19. Dr. Adiseshiah then turned to the question posed from a slightly different point of view by Dr. Adedeji: whether expenditure on education was investment, and whether any measurement of the rates of return on it meant anything at all. He made the point that the investment and consumption effect of educational expenditure on the same person could not be analysed in terms of one or the other; a simple proposition was that education increased future earnings through increasing an individual's productivity. Because of this and other imponderables, there was a return to the "social benefits" argument for large public expenditure on education — a return in fact to Adam Smith 200 years ago, whose grounds he quoted for preferring an instructed, intelligent, decent, orderly and critical public.

20. Dr. Adiseshiah listed a wide range of social benefits and commented on some of them. He regarded improved income distribution and social mobility as the most important. Next in importance were changes in attitudes and values that education brings about in people, as Adam Smith pointed out. Next was the improved public leadership for which education was necessary. However, investment in the fulfilment of political ambition raised questions, as did other social benefits. He felt, with the other lead paper writers, on safer ground in calling for a better mix of manpower skills, and for vocational and technical education programmes to improve productivity.

21. Although the prospects of boosting private finance were not bright, income from fees continued to make an important contribution, and his paper included an analysis of fees in India where, overall, they contributed 17 per cent to total educational expenditure. Dr. Adiseshiah concluded that, given an equitable scholarship policy, fees at secondary and post-secondary levels should be levied in developing Commonwealth countries.

22. A section of Dr. Adiseshiah's paper was taken up with a discussion of the general taxes (central and local), earmarked taxes, cesses, loans, tax relief, contributions in kind, and foreign aid and international assistance, that together made up the overall budgetary pro-

vision for education. With regard to the size and nature of the contribution that could reasonably be sustained from foreign aid and international assistance, his general position was that aid for irrigation schemes, textile factories and so on, released local resources, part of which could be used for financing education; and he regretted therefore that foreign aid had for long stagnated at 0.34 per cent of the combined national incomes of the O.E.C.D. countries as against their pledged 1 per cent. He saw a stronger case for educational aid than was commonly recognized, in that education was a public sector industry depending for most of its financing on government. He did not accept the argument that the lack of absorptive capacity was a reason for not aiding education; aid to education, by increasing the trained manpower needed for development, increased the country's need for foreign aid, but it was also a guarantee that it could be used effectively.

23. Dr. Adiseshiah ended by giving criteria for educational aid: the extent to which a country was making its maximum effort from its own resources, the extent to which the educational system was being planned and tied in with the country's national plan, and the extent of the reform of the educational system that was under way. The second of these criteria he thought particularly urgent and necessary if the creation of white elephants was to be avoided. Technical assistance and third country training had a great appeal to him, especially as these programmes tended to demand a little more from the more affluent Commonwealth countries.

24. In the discussions that followed the keynote address and the three lead papers, particular interest was shown in the desirable extent and possible techniques of manpower planning. The point was made that in any country there were people like secondary school leavers and university graduates to whom manpower planning could be applied, and others to whom it did not apply at all. Manpower planning and training, perhaps as distinct from education of a non-vocational nature, were seen to go hand in hand.

25. Dr. Coombs considered that it was not a question of manpower planning or no manpower planning. There could be no precision about forecasting, but it could reveal gross national maladjustments in the system — for example 90% of doctors living in cities and 90% of people in rural areas — and could point the way to measures like the training of near-professional and para-medical staff to adjust the imbalance. Where an employment sector was maladjusted (e.g. too many engineers and too few technicians) there could be adjustment to narrow the differential between the salaries of the two, and make technicians' salaries more realistic in terms of the knowledge and skills required, and of the market.

26. Universal primary education was the subject of other points and questions. A suggestion for Commonwealth educational co-operation was made, to the effect that countries who had attained universal primary education some years ago might be able to help those that were planning it by identifying problems that they could expect to arise after (as well as before) universal primary educaton had been achieved.

27. The point was made that there were few schools in most rural areas. The schools in the market towns mostly took bright, highly motivated pupils on the path to academic education and employment in the cities. The different goals and curricula that Dr. Coombs and the lead paper writers called for would mean that rural schools would provide leadership for the rural areas from among their own people.

28. In these sessions, as in some others, small island territories pointed out that smallness brought different problems. A mini-conference of small islands might be the best forum in which these could be discussed. The New Zealand spokesman said that his Government might consider hosting a conference of this nature for the Pacific, and suggested that it might attract assistance from the Commonwealth Secretariat.

29. Because of the breadth of the ground it had to cover in considering "The Economics of Education", the Conference was then divided into three groups, one to consider each aspect of the subject covered by a lead paper. Group A, which considered "Education, Economic Policy and the National Budget" was chaired by Alhaji A.L. Ciroma (Nigeria), Group B, which considered "The Provision of Education and its Costs" by Mr. C. Roebothan (Canada), and Group C, which considered "Educational Financing" by Mr. Q. Munzur-I-Mowla (Bangladesh). The report of Group A is to be found in paragraphs 30–43, of Group B in

paragraphs 44–65 and of Group C in paragraphs 66–82.

# Education and Economic Policy

## Establishing Educational Policies for Development

30. To a large extent the pace of any society's development depends on the availability of an appropriate supply of skilled and educated manpower for harnessing and exploiting its resource endowments. This implies that a country's development does not only depend on endowments of natural resources and availability of capital resources, but more importantly on skilled and educated manpower with the proper attitudes and enthusiasm as the most essential precondition. Accordingly, the planning and development of education constitutes an integral part of the whole policy of social and economic development. No amount of capital investment uncomplemented by the human factor can sustain or enhance the development of any society.

31. Most developing countries are faced with the paradox of the shortage of persons with critically needed skills and a surplus of unskilled labour. Any strategy of human resource development must, therefore, aim at the production of these critically needed skills and also the creation of productive employment for unutilized or underutilized manpower. The needed skills occur at various levels including high- and middle-level manpower.

32. Rural areas are a particular example of need in most developing countries, and education has a necessary role in providing the essential skills for these areas. The attainment of basic literacy and numeracy should be made the goal of every country and form the foundation on which other forms of training can be developed. Apart from literacy and numeracy there should be opportunity for learning independently of the formal school system. This suggests that, in addition to conventional education, a thrust should be made towards non-formal remedies and on concentrating on the acquisition of skills that offer opportunity for self-employment as well as the more usual employment skills.

33. Rural development offers a unique opportunity for Commonwealth co-operation, and the Commonwealth Scholarship and Fellowship Plan — which at present performs a valuable service in facilitating the training of personnel from developing countries in institutions of higher education — might consider extending further this assistance to manpower needs at other levels.

34. However, since rural development is not the concern of the Education Ministries alone, there is a need to set up an inter-ministerial body consisting of senior officials from all the departments and ministries concerned, charged with this responsibility. Indeed, this was the method adopted with great success in India in preparation for the Satellite Instructional Television Experiment (SITE) which aimed at encouraging rural development in 2,400 villages selected because of their backwardness. The various ministries and All India Radio co-operated closely in providing these villages with educational and cultural programmes to improve health, hygiene, family life and farming. The co-operation was initiated and monitored at a high level and this no doubt accounted for the remarkably close co-operation that was achieved among the field workers.

35. Given the financial constraints in many countries, it is inevitable that selectivity will be applied in determining those who proceed in the formal education system beyond whatever level is available to all. This emphasizes the need for providing alternatives such as non-formal education to cater for those who are unable to proceed further in the formal system.

36. In developing countries, salary differentials present a hindrance to the introduction of alternatives in education. If non-formal education is to be acceptable, then a serious attempt should be made to reduce the disparity of levels of income between clerical and manual jobs. This can be achieved only as a result of clear government policy.

37. The private sector also has an important role to play, particularly in the field of on-the-job and in-service training. In large companies this is commonly performed by training officers employed by the firm; in other cases employees are given day release or undertake sandwich courses. Apprenticeships are another form of private training. But even those private organizations that make no provision for formal train-

ing of their workers do, in fact, perform a useful job of informal training that enhances the usefulness of employees. Thus Nigeria has an Industrial Training Fund for the training of workers to which government and private industry both contribute; Ghana has a National Vocational Institute and Public Service Secretariat that organize training for both the government and private sectors; and Australia and Britain also have a substantial participation by private organizations in education. However it is apparent that because of the profit motive, multinational and foreign companies do not always contribute to training as much as they might.

38. It is this need for widespread involvement and actual participation which makes it imperative to have some central co-ordinating machinery for the direction, monitoring, and review of manpower development priorities and strategies so as to ensure that proposed development is consistent with the current and future requirements of the economy. Such a central co-ordinating body ought to function at the highest possible governmental level and be reinforced by an advisory body composed of representatives from government, the major educational and training institutions, employers in the private sector, and labour unions where they exist. This composition is necessary in order to ensure a coherent perspective of the requirements and utilization aspects of human resource development.

39. Views differ as to whether education should be properly considered as an investment in human capital or as consumption. Perhaps the question should not be whether education is an investment or a consumption input, but rather, given the requirements and resource constraints on the development process of the developing world, whether it should be properly treated for planning purposes, as an investment or consumption expenditure. A major difficulty is that it is almost impossible to separate the consumption from the investment component of expenditures on education, so that the rate of return on any incremental expenditure on education cannot be computed. Since the rate of return is essential for consideration of alternative investment opportunities, and since it cannot be accurately computed for expenditures on education, such expenditure should not be regarded as investment. It must be noted, however, that there have been considerable improvements in techniques of isolating the consumption and investment components for the application of rate of return analysis.

40. Another difficulty is that values, attitudes and cultural training cannot be quantified, and therefore cannot be calculated. Primary education with its emphasis on the teaching of basic skills is an inappropriate subject for this kind of analysis, especially since it is unthinkable to consider curtailing it on economic grounds. However, it is generally agreed that primary schools, while paying particular attention to literacy and numeracy, should combine training in life skills so that the school leaver can more readily establish himself by self reliance and not be dependent on employment in types of work that are strictly limited.

41. Since one of the major functions of the education system is to provide society with the manpower capabilities for productive activity, it follows that the system must be well geared to reflect the current and future manpower requirements of the economy. Considering the long gestation period in producing skilled manpower, particularly at the higher scientific-based categories, the education system must be given sufficient lead time in this task if an adequate and appropriate supply is to be made available at the right time. Herein lies the relationship between educational planning and manpower planning. As such, manpower planning is essentially an exercise to ascertain the current and future skill requirement necessary for the attainment of national development goals and aspirations. This information must be available to the education system well in advance so that the necessary changes and adjustments in the system can be undertaken in response to such requirements. These changes and adjustments may include, among others, redirection of the system towards job-oriented education and training, more emphasis on career counselling and guidance, and measures for more efficient utilization of skilled personnel. Manpower planning is based on information that is subject to variability. This has produced manpower forecasts that are inaccurate and brought the practice into disrepute in many circles. If it is to be of any real value it must have short- and long-term plans and be presented as a flexible guide. The problem is exacerbated by the practice of tying educational planning too closely to national economic planning; the many variables acting on the latter quickly playing havoc with the former.

### Policies Involving External Factors

42. In developing countries there is sometimes a relationship between human resource development and the balance of payment problem. Most developing countries, faced with the urgency of educational development pay little, if any, attention to this relationship. Admittedly in most cases the foreign exchange component of expenditure for education is relatively small, but the alternatives for reducing this component must be given some priority in the strategy of educational development. Such alternative strategies include the training of local skilled personnel, localization of as much tertiary-level education as possible, and the manufacturing of school equipment and supplies locally. These are all import substitution inputs which have not been sufficiently incorporated into the strategy of educational development.

43. The "brain drain" is a phenomenon which takes place in both advanced and developing countries; but it poses a very serious problem to the developing world. It involves an international transfer of resources in any official balance of payments statistics. Unfortunately, this is a phenomenon which most developing countries are not able to arrest completely since it is induced by both pecuniary and non-pecuniary incentives. For example, the skills mostly involved in this transfer are those which are in great demand in the international market where developing countries are unable to compete either in pecuniary or non-pecuniary terms. In some cases the non-pecuniary incentives, such as working and research facilities, are the major consideration. Educational planning must therefore make allowance for this form of attrition. On the other hand some countries with large numbers of skilled unemployed, such as India and Sri Lanka, deliberately encourage a form of brain drain by encouraging their nationals to take up employment in other countries. A few underdeveloped countries allow a form of brain drain to act as relief to their population problems.

## The Provision of Education and its Costs

44. Over the last two decades, the pace of development has accelerated significantly. Dramatic changes have taken place, reflecting the determination of governments to transform their economies. Over all, however, development patterns have proved seriously inadequate; the benefits of development have largely accrued to the better off groups and regions within countries and to the better off countries in the world. The result is that in many countries the poor today are more numerous and often in more serious poverty than ever before.

45. Measures are needed, nationally and internationally, to support strategies to eradicate poverty and meet the basic needs for the whole population of each country. Amongst such basic needs is education: sufficient education to enable each person to develop his or her talents and abilities and to acquire the knowledge, skills and confidence to play a full and effective part in such development; and a total system of education — formal and informal and of the quantity, quality and relevance at all levels — to provide for broad-based development and to sustain a strategy focused on basic needs for the whole community.

46. Within the total system of education, primary education is of paramount importance. Indeed, universal primary education is generally accepted not only as a basic need but also as a basic human right. Some countries have already achieved it; others are approaching it; some countries are not yet within striking distance of it and are seeking assistance to accelerate their progress towards it; still others are unable to give priority to universal primary education because of the overriding need to develop those sectors of the education system that produce high-level manpower.

47. Professor Coombs has suggested six essential needs that are the minimum requirements of anyone living in the rural area of a developing country. These may be summarized as follows: (a) positive attitudes towards self, family and development; (b) functional literacy and numeracy; (c) scientific understanding of the environment; (d) functional skills for raising a family. (e) appropriate skills for earning a living; and (f) the skills necessary for civic participation. Few of these skills can be imparted in the primary school. Recognition of this fact may lead some countries to aim at providing *basic* education for all, rather than primary education, using non-formal as well as formal approaches to achieve this aim. Foundations can be laid in the primary school,

however, on which other learning experiences can subsequently be built. The school is only one of the places in which skills and attitudes are acquired. Most learning, in fact, takes place in non-formal situations. It is, therefore, important not to erect barriers between the formal and non-formal areas of education. Schools should be opened to the community and be part of its life. Interaction between the school and the community multiplies learning opportunities. Such interaction may be facilitated, and local participation in the life of the school enhanced, if the focus of educational development is shifted to the local level.

48. Non-formal education is not a poor relation of formal education, or an inferior substitute for institutional learning. Generations of political leaders, civil servants, teachers, parents and pupils have encouraged the view that education means schooling. Success in school examinations has been rewarded by well-paid employment in white-collar positions. Exhortation is unlikely to change deep-rooted attitudes which, in many countries, realistically reflect salary structures that give much higher rewards to white-collar workers than to artisans and farmers. Perhaps it is only when industralization is well advanced, as in Malaysia and Singapore for example, where technicians and skilled manual workers receive a proper reward, that there will be changes of attitude on the part of teachers, parents and pupils.

49. The major constraint against expanding primary education is financial. It is important, therefore, to examine carefully methods of reducing unit-costs within the education system, in order to effect savings that can be applied to the expansion of the system. It is also necessary to consider alternative methods of funding education.

50. Circumstances vary so much from one country to another that it is not possible to recommend measures for adoption in all countries. It is believed, however, that it may be helpful to list a variety of measures, some of which may be suitable for adoption in some countries as they progress towards the target of universal primary education:

### *Schools as Production Units*

51. Some schools, particularly in the secondary and technical sectors, may be able to develop production units which will generate some income that will contribute to educational costs; Zambia, Uganda and Bangladesh have some experience in this field. The value of this concept lies as much in the inculcation of right attitudes towards manual work and in the encouragement of self-reliance as in the financial returns which are unlikely to be very significant.

### *Reduction of Unit-Costs at Secondary and Tertiary Levels*

52. Although it is recognized that a reallocation of resources may be needed within the secondary and tertiary sectors in favour of expanding technical and vocational education, unit-costs in post-primary education as a whole are very high. These sectors absorb 50% of the education budget in many countries. There may well be scope for pruning costs in both secondary and tertiary education, (e.g. by reducing building costs, student-staff ratios, and revising the length of the education cycle) and for reallocating the savings to primary education.

### *Self-help*

53. "Self-help" has been very successful in some countries, notably in the Harambee school movement in Kenya, in providing school buildings and paying teachers' salaries. Experiments in Jamaica dealing with productive rural units may also be of interest to other Commonwealth countries. In all cases it is important to create the right climate of opinion; otherwise appeals to communities to contribute their labour or money are unlikely to be successful.

### *Private Schools*

54. In some countries, notably Hong Kong, private schools are well patronized and relieve the financial burden on the government. It is difficult, however, to regulate standards in private schools.

### *The Shift System*

55. This system has been tried with varying degrees of success in Singapore, Malaysia, Zambia, Nigeria, Ghana and a number of other countries as a means of saving either on teachers' salaries or on capital costs. Zambia,

for instance, has a system of one teacher per double shift in the lower primary school, and a teacher per shift in the upper primary classes. However, experiments with a shift system in Trinidad and Tobago proved to be unacceptable.

### *Sources of Financing*

56. Sources that are used to finance education include central and local government taxes, earmarked taxes, cesses, loans, tax relief, contributions in kind, and bilateral and multilateral aid. Provided the conditions attached to it are acceptable to the recipient country, foreign aid is welcome and should be increased far beyond its present levels. The likelihood, however, of substantial funds being provided, on a regular basis, from overseas sources is slim, and self-reliance is therefore seen as the best policy.

### *Day/Boarding Schools*

57. Running costs of day schools are considerably less than those of boarding schools, and many countries are ceasing to make provision for boarding as their education system expands. Though the savings in cost may be substantial, the lack of boarding facilities, especially in rural areas, can lead to hardship for pupils who live at a distance from school and have inadequate facilities for study at their homes. In some countries (e.g. Ghana) boarding schools have served as a unifying element in nation-building.

### *Length of School Cycle*

58. There appears to be no reliable research data on the relationship between the length of the school cycle and pupil attainment. Some countries have reduced the length both of the primary and secondary school courses without apparent deterioration in levels of achievement.

### *Revision of Teachers' Salaries*

59. As Professor Jolly has pointed out, teachers' salaries are a crucial element in determining unit-costs because they absorb 70% to 95% of the education budget. If it were feasible to reduce them, the savings would be considerable. In practical terms, however, it would be totally unacceptable to reduce teachers' salaries and leave unaffected the salaries of other members of the public service, or those in the private sector. Some governments may feel that the level of remuneration of educated workers, including teachers, is too high in relation to average per capita income in the country, and will endeavour to narrow the gap by means of a prices and incomes policy that will, *inter alia,* effectively reduce the salaries of high income groups (e.g. by raising salary levels for higher income groups at a rate lower than the increase in the cost of living, while giving full compensation for those at the minimum wage level).

### *Raising the Pupil-Teacher Ratio*

60. Pupil-teacher ratios vary considerably from one country to another. According to Professor Jolly, twelve more Commonwealth countries could achieve universal primary education by adopting the pupil-teacher ratio currently in use in Jamaica, i.e. 57:1. Educational research has not established, so far, a firm relationship between class size and student performance. Experience, however, makes it abundantly clear that large classes place a heavy burden on the teacher, encourage passivity and rote learning, reduce the opportunity to give individual attention to pupils, discourage children from challenging, questioning and doubting, and generally reduce the quality of education.

### *Decentralization of Education*

61. Hopes of realizing economies of scale by centralizing education administration and institutions have frequently been frustrated by the high cost of administrative superstructures and large capital outlays. The experience of some countries indicates that savings may be effected by pursuing a decentralized pattern of education administration, and by emphasizing the development of modest but efficient facilities at the local level.

### *Tuition Fees*

62. While some governments are opposed to charging tuition fees for any form of education, especially for primary education, which should be compulsory and universal, others may con-

sider that fees should be charged at the secondary and tertiary levels for those in a position to pay them.

### The Role of the Secretariat

63. Governments may require advice on the development of their education systems, including the implementation of programmes for universal primary education. It is noted that the Commonwealth Secretariat is prepared to consider requests for assistance in this field.

64. One of the functions of the Commonwealth Secretariat is to serve as a clearing-house for information on educational programmes and developments in member countries. *It is recommended that the Secretariat, in consultation with the governments concerned, should assemble information on the steps being taken to implement programmes of universal primary education in member countries and make this information available to other countries.*

65. It is considered that considerable benefit could be obtained if representatives of countries at similar stages of educational development were brought together in order to exchange ideas and to discuss problems of mutual interest. *The Secretariat is asked to consider arranging for a series of meetings on universal primary education, beginning with the countries that are farthest from achieving it.*

## Educational Financing

66. The lack of an adequate data base with regard to the expenditure on, and the effectiveness of, non-formal education imposes severe constraints on those who attempt empirical studies in this area. While acknowledging this problem, we suggest that relevant research and experimentation should be expanded in an effort to identify ways in which to bring about the education reforms which are needed in many member countries. While universities' involvement in research and experimentation has been useful, there is evidence to suggest that it has suffered from a number of serious limitations, including lack of funding and over-concentration on the provision of "certification". Such involvement should perhaps be orientated more closely to non-formal education.

67. Education should be seen as an essential component of those national development plans which are aimed in particular at the improvement of the social cultural and economic environments of rural communities. Moreover, relevant programmes designed to improve significantly the conditions of the people in rural areas are essential if there is to be any chance of achieving rapid development in such communities. In this regard, stress should be laid on the desirability of providing adequate education and training facilities within rural communities, on whose initiative and active participation depend the success of rural development programmes. In implementing such programmes, the enthusiasm generated for projects initiated by communities is generally greater than the interest expressed in projects organized by governments.

68. *The exchange of ideas between member countries is most useful in facilitating the identification of solutions to common problems in non-formal education and rural development, and arrangements for such exchanges should be continued and expanded. It is recommended that the Commonwealth Secretariat should assist in this matter.*

### *Private Financing*

69. There are considerable political difficulties inherent in most schemes to increase fees and other parental contributions towards the cost of education. In this connection, there are cost-saving benefits in day schooling as compared with boarding; such savings constituting forms of private financial contributions for education which communities are prepared to accept. On the other hand, some countries consider boarding schools as important tools for nation building in that they bring together young people from different communities. Where, for example, such schools are associated with farms, agricultural projects can sometimes make valuable contributions towards education costs. Importance is attached also to other programmes of work experience within schools.

### *Public Financing*

70. This takes the form of taxes, cesses, loans, tax relief arrangements, contributions in kind, and foreign and international assistance.

Annual audits can be useful in helping to ensure the most effective utilization of these resources.

### *General Taxes*

71. Most of the funds for education come from general taxes; the percentage of such revenue provided for education being dependent on Treasury allocations. It is clear that additional revenue will not be forthcoming from general taxes unless significant progress is made in achieving economic developmental goals. In these circumstances, the main hope of increasing such revenue currently lies in eliminating opportunities for tax evasion and avoidance.

72. With regard to taxes levied by local government authorities, there is often a strong political disincentive to raise additional revenue from such sources, due to local government officials' direct links with their communities and their consequent desire to limit tax increases.

### *Earmarked Taxes and Cesses*

73. Experience indicates that the quality of training provided directly by large-scale industrial and agricultural enterprises could be improved. This is because those enterprises frequently view training narrowly in terms of their particular needs rather than in terms of the broader requirements of communities. Levies on such enterprises can constitute useful means of providing finance for some education and training programmes in which industrial and agricultural enterprises may have important parts to play.

74. Cesses can be useful in providing the financial resources necessary for specific small-scale and discrete services to local communities (e.g. local libraries). The collection and administration of such funds also increases the level of local control in planning and administration.

### *Loans*

75. It seems likely that the reason why loans are infrequently used for financing education is that financial returns on education expenditure are neither separate nor quantifiable. However, in view of the urgent and widespread need for funds, all possible sources of loans should be explored to help meet both capital and recurrent costs.

### *Tax Relief and Contributions in Kind*

76. There is a need in many countries for coherent national policies on income tax, gift tax relief, and other financial contributions made to education. Though the implementation of such policies would result in additional financial provisions for education, care should be taken to ensure that tax reliefs are not abused.

77. Some countries have achieved useful results through programmes designed to encourage local communities to provide contributions in kind. The establishment of similar projects in other countries depends upon the political will to develop co-operative arrangements between the education system and the communities which they are designed to serve.

78. While not strictly speaking being a contribution in kind, apprenticeship systems are making significant contributions to development, and methods should therefore be explored of expanding these systems.

### *Foreign Aid and International Assistance*

79. One of the current problems facing aid-granting organizations is the small absorptive capacity of some countries for aid. Education and training assistance is necessary to increase this capacity in order to maximize the developmental impact of aid programmes.

80. The United Kingdom Government, through its Ministry of Overseas Development, has decided to transfer gradually its assistance for education and training from the formal to the non-formal sector, as far as it is practicable to do so. In such circumstances, any award schemes previously applying only to formal education could be broadened to include the non-formal sector, particularly in relation to rural development. Developing countries may wish to inform aid donors of relevant and meaningful non-formal education programmes for which they require financial support.

81. In connection with third country training, developed member countries experience problems in providing large-scale funds for such programmes due to balance of payments problems.

82. The interchange of personnel and the sharing of education and training resources between developing countries are commended

as most useful in all areas of education, including the non-formal sector. In respect of the funding of experts and the provision of scholarship support between such countries, the Commonwealth Fund for Technical Co-operation remains willing to assist in these matters. However, the Fund's ability to respond to requests is governed by the financial resources which are made available to it on a voluntary basis by all member countries.

# Summing Up

## *Sir Roy Marshall*

### *Chairman of the Commonwealth Education Liaison Committee*

To the task of reflecting upon the work of the Seventh Commonwealth Education Conference, I bring a ripe inexperience, for although I have been engaged in education all my life, this is the first Commonwealth Education Conference I have attended. For this reason I feel somewhat like the seventh husband of the much married Barbara Hutton who on their wedding night is alleged to have said: "Darling, I know what to do; but I am not sure that I can make it interesting". However that may be, in preparing for the responsibilities you have been good enough to ask me to assume on this occasion, I have looked at the proceedings of the previous conferences and, having reflected upon the themes with which they were concerned, I am struck by the way in which each conference has built upon those that went before it and by the really remarkable record of solid achievement and practical co-operation in education to which those conferences have given rise. I hope therefore that you will permit me to preface my remarks with a brief conspectus of our previous conferences.

The Oxford Conference in 1959 is best remembered for the major initiative it took in establishing the Commonwealth Scholarship and Fellowship Plan, the report of which has demonstrated to this Conference — as it has to all its predecessors — how fundamental the Plan continues to be in promoting co-operation and mutual understanding among the governments and peoples of the Commonwealth. Indeed, there can be no better measure of the importance of the Plan than the recommendation adopted by this Conference that every effort should be made to increase the number of scholarships from 1,000 to 1,500 to be held in any one year and to maintain their value in keeping with rising costs.

Another important result of the Oxford Conference was the decision to treat the training and supply of teachers and the development of technical education as standing items for subsequent discussions. But perhaps the most dynamic result was the creation of a structure to continue and develop the work of co-operation between conferences. In the course of time that structure has grown into the Education Division of the Commonwealth Secretariat; but there still remains a link with the past through the continued existence of the Commonwealth Education Liaison Committee, which is composed of representatives of all the Commonwealth High Commissions in London and of the United Kingdom Government. Among other things, it assists the Education Division in carrying out the recommendations of the previous Conference and in drawing up the agenda and making arrangements for the next.

It is as Chairman of the Commonwealth Education Liaison Committee that I have the privilege of addressing you, and it is in that capacity, as

well as in my own right — that I wish to pay tribute to my predecessor, Professor Lionel Elvin, who made many eloquent and elegant contributions to previous conferences and to the whole ambit of Commonwealth educational development. I am sure that I speak for everyone when I say that few men could have done as much for that cause and none with greater dedication and style.

I shall return to the work of the Division in due course; but for the moment I should like to continue my conspectus of previous Conferences. The New Delhi Conference in 1962 added co-operative action in the provision of textbooks and developed proposals for social education and education in rural communities.

The Ottawa Conference in 1964 looked at the questions of quantity and quality in education in the context of educational self-sufficiency and paid special attention to manpower in education, the development of agricultural education and the eradication of adult illiteracy.

The Lagos Conference of 1968 not only authorized the expansion of the Education Division but dealt with an agenda large enough to make one believe that the expansion had already taken place. The agenda covered the needs of higher education; technical and vocational development; curriculum development; education for social and economic development; book production and library expansion; education and family planning; the role of the mass media; and the contribution of women to national development.

The Canberra Conference in 1971 perceived the importance of the Commonwealth Fund for Technical Co-operation in accelerating the pace of educational co-operation; established the Commonwealth Youth Programme; reviewed programmes for the training and supply of educational personnel; reconsidered the problems of curriculum and educational media; and provided new guidelines for out-of-school education and training.

The Jamaica Conference of 1974 dealt with a wide-ranging theme; *The Management of Education — Innovation, Implementation, Consolidation.* In summing up its work, Professor Elvin perceived two changes from previous conferences both of which seem to me to have been underlined at this Conference and to be of on-going and fundamental importance.

Professor Elvin's first point of contrast arose out of the feeling which he experienced for the first time in Jamaica that: "We have all been taking part equally. The First and Third World polarity is getting modulated; at least in the sense that the frequency of interventions of participants bears no relation, as far as I can see, to the size or wealth of the countries they represent. That is as it should be. We are all really working together now. I notice the growth of interchange of experience, to say nothing of persons, between countries of the so-called Third World. I also note that the myth that First World countries have no educational problems has disappeared."

No one can be left in doubt after this Conference that Elvin is right as far as equality of participation is concerned. But there are still differences between the member countries of the Commonwealth — differences of size, of progress on the road to educational advancement, of wealth of resources, and of the make-up of population in terms of differing

percentages of relevant age groups. One of these differences led to a proposal by the Minister from the Seychelles for a meeting of small states to consider their problems and search for solutions. This is a most interesting development, for it cuts across the regional classification that is usually used and focuses attention instead on the problems of particular member states, wherever located, with similar problems at any given time. I sensed that the Seychelles proposal was favoured and I hope that action will be taken in respect of it.

I think that this could be the beginning of a very important line of development. During the proceedings of the Conference there emerged a clear desire on the part of countries which had not yet achieved the goal of universal primary education to have the opportunity to confer among themselves to see what lessons they could offer to — and learn from — each other. And although this was not mentioned at the Conference, I foresee that there could be a case for member countries with similar demographic trends conferring among themselves with a view to finding common answers to their questions. For it is a fact that some countries are moving into a situation of falling birth rates in which the demand for education will fall during the next six or seven years. On the other hand there are countries where an unusually high proportion of their population is under 16 and there is no sign of any easing of pressure on the educational system. I hope that the Secretariat will carry forward these ideas through workshops composed of the appropriate personnel from the participant countries.

My gloss on Elvin's first point of contrast has distracted me from his second which he expressed in these words: "This is the first occasion I remember on which we have said quite explicitly that educational decisions — I do not mean pedagogical ones but decisions of educational policy — must be made in the setting of a country's political and social aims. It is good to get that right." And I have no doubt that in this Conference we have continued to get it right. Indeed, anyone who sat in on the group discussions during this week will have no difficulty in recalling the numerous occasions on which various suggestions have been said by delegates of particular countries to be unrealistic, or impracticable, or politically not possible, or more fundamentally educationally unacceptable, in the context of the aims and needs of those countries.

But I am running ahead of myself, for the Conference began last week with a three-day meeting of officials in the absence of their ministers. In this respect it differed from all previous Conferences where ministers were present throughout. It differed also in that it lasted for ten days only, of which seven were working days, whereas the duration of previous conferences was a fortnight.

I am sure that all of us who have studied the *Working Paper on Commonwealth Co-operation in Education* prepared by the Commonwealth Secretariat will wish to congratulate Dr. Cookey and his colleagues on a monumental piece of work. This paper clearly showed the scope of the Secretariat's contribution to Commonwealth co-operation in education and more than fulfilled the most optimistic expectations of those who succeeded in establishing the structure for such co-operation at the Oxford Conference in 1959. The range of the Secretariat's activities and the scope of the services provided by the officers of the Education Division make it a special pleasure for me on your behalf to pay a warm

tribute to Dr. Cookey and his colleagues for the quality of their work. I should also like to take this opportunity to say to Dr. Cookey how much we appreciate what he has been able to do during his term of office as Director of the Education Division and to extend to him every good wish for the future.

It would be a work of supererogation on my part and a cause of at least a modicum of tedium to you if I went through the contents of the Secretariat's Working Paper *seriatim* and in detail, or of the Report of the Meeting of Officials arising from it, especially as they have already been the subject of close scrutiny in plenary sessions. At the same time, I am sure you will allow me to make just a few observations.

The first is an expression of satisfaction that the country papers have been so greatly appreciated. We have received a record number on this occasion and we are naturally very pleased that they provide the information for which we asked within a framework suggested by the Education Division, yet leaving every country free to emphasize any aspect of its own system in accordance with its own wishes. It is extremely gratifying that Dr. Adiseshiah suggested that they should form the nucleus of a Commonwealth Education Documentation Bureau. We shall be looking into the possibilities of that.

My second observation is one of regret that we have been unable to report at this Conference the holding of a Commonwealth Universities Seminar on the lines of the one in Jamaica which discussed the link between universities and national development. The economics of conferences led the C.E.L.C. to advise that there should be no pre-conference seminar — whether of university personnel or of any other category of delegates. We are comforted, however, by the knowledge that members of Commonwealth universities meet together in seminars and conferences organized by the Inter-University Council for Higher Education Overseas, the Association of Commonwealth Universities, and similar bodies. We recognize that these meetings do not have the same broad spectrum of representation from other educational interests as is provided at Commonwealth Education Conferences; but we hope that this will be offset to some extent by the presence of university men and women in national delegations at this Conference. Though they have been few in number, I am sure you will agree that they have made significant contributions to this Conference.

My third observation concerns the programme of development which this Conference has agreed to support. Such encouragement will be an enormous stimulus to the Education Division in carrying forward the book development programme, the further study of non-formal education, the collection and distribution of information, and the proposals for science and technical education. The Division also looks forward with enthusiasm to developing the proposals for the establishment of an Association of Polytechnics in Commonwealth Africa, regional staff college facilities for staff engaged in technician education, and a Commonwealth exchange and placement scheme for industrial training and experience. These are among the imaginative programmes whose development future conferences will appraise with interest. But perhaps the most overdue development is the action programme for education about the Commonwealth. This subject has been on the agenda of most Commonwealth Education Conferences, and it is gratifying that it has now been given the go-ahead by this Conference.

Let me now leave the Meeting of Officials and turn to the second part of the Conference. This was conceived as a sounding board for ideas and an opportunity to widen horizons, glimpse new perspectives and acquire new insights. It was not, and it did not turn out to be, a workshop on specific problems of specific countries.

The theme of the week was "The Economics of Education". We had the benefit of the advance distribution of lead papers on three aspects of the theme: *Education, Economic Policy and the National Budget* by Dr. Adedeji; *The Provision of Education and its Costs* by Professor Richard Jolly; and *Educational Financing* by Dr. Adiseshiah.

Each of the authors had been invited to present his paper in person, but unfortunately Dr. Adedeji was unable to be with us. In his absence Mr. Anyaoku, our Assistant Commonwealth Secretary-General, spoke incisively to his paper; and both Professor Jolly and Dr. Adiseshiah spoke enthusiastically to theirs.

But before we reached that stage we had the signal pleasure of listening to a stirring opening address by the Commonwealth Secretary-General, a powerful message of welcome read on behalf of the President of Ghana, and a wide-ranging keynote address by Dr. Coombs on "A Fresh Look at the World Educational Crisis".

The keynote address and the three lead papers have been the subject of exhaustive study by groups of delegates formed for the purpose, and the reports prepared by each of the groups have been the subject of consideration by Conference in plenary session.

You are, of course, aware that I am not an economist, and I am therefore happily relieved of the obligation to put before you any expert appraisal of the contributions of the learned speakers or any original thinking about the theme of the Conference. All I can do is to try to bring to bear upon the question the views of a layman who is concerned with educational administration and who has read only a fraction of the burgeoning literature dealing with the matter. And in this connection I doubt whether you will find anywhere a better analysis of these broad strands of the Conference theme than that so ably demonstrated by our authors in their several ways. And you will seldom have heard better presentations.

Permit me, however, to make just a few observations. In introducing his paper, Professor Jolly quoted an aphorism of Churchill's, that "from every five economists, you get six opinions — at least two from Keynes". This set me thinking, after having read all four papers and heard the authors of three of them, that something might have gone wrong, for there appeared an unusually broad similarity of approach and wide measure of consensus among them.

I am not qualified to perform the role of Keynes, but Professor Jolly's remark compelled me at least to try to put a few glosses on some of the issues. Let me begin with the emphasis to be put upon rural development. I am sure it is right to pay attention, and very considerable attention, to the rural situation; but I think it is essential to remember that there are equally pressing problems of urban development. These problems do not disappear if you divert attention to the solution of another problem. A successful rural development programme will in time contribute to the solution of urban problems in a variety of ways; but you

must give it time, and during that time you must tackle the urban problem also.

Next I must question the assumption underlying the suggestion that unit costs can be reduced for the system as a whole by diverting resources from the higher sectors of education to the primary sector. Let me confess that I have an interest in this matter; but I think it is a great mistake to assume that there are spare resources in the higher sector and that these are readily transferable to the primary. On balance I think you will find on close analysis that few resources are transferable, and if you were to make the transfer just like that you would create economic consequences that might be wholly undesirable. It does not seem to me that putting university teachers out of work or depriving bright young graduates of the opportunity to get university appointments is an answer to the problems of primary education.

Finally I think it is worth bearing in mind that there is a social as well as an economic aspect to the difficult choices that you will have to make. In this regard I was much struck by the comment a delegate made about the shift system. He said that its introduction created immense social problems where children were attached to a shift that was out of school at the very time that their parents were at work. His advice was: "If you have to introduce the shift system, get rid of it as quickly as possible".

I began with a reference to inexperience. Let me end with another. An apprentice jockey was riding a horse which the trainer fancied to win. He gave the apprentice elaborate instructions on how to ride the race. "Break fast from the start", he said, "secure a good position on the rails, and when you come to the top turn entering the straight, go for any opening you see, come through it and keep going to the winning post". Things went well as far as the top turn, but when the opening appeared the apprentice failed to come through. On his return to the unsaddling enclosure, the trainer berated him in no uncertain fashion. After a time, the apprentice, unable to contain himself any longer, delivered himself of a devastating question: "Mister," he asked, "have you ever tried to go through an opening that's moving faster than you?"

Our aim must be to get ahead of the educational problems that beset us and not miss the chance to go through any openings that will help us to do so. But I am sure that there will still be problems we have not overtaken by the time of the Eighth Commonwealth Education Conference. In our search for solutions, this week's proceedings will provide a checkpoint for the self examination of our educational systems for which Dr. Coombs asked, a foundation for the conduct of an annual audit of expenditure of the kind Dr. Adiseshiah advised, and a stimulus for gearing your own educational systems to instil into your people the self-confidence that is required to support the pressure for a new international economic order.

It has been a privilege and a pleasure for me to participate in this Conference, and I wish to express my appreciation to you for the confidence you have shown in the C.E.L.C. by assigning some difficult tasks to its judgement, and to add my own thanks to those expressions of appreciation with which this Conference is about to conclude.

# Keynote Address

## A Fresh Look at the World Educational Crisis

*Philip H. Coombs*

This conference on the economics of education falls in the tenth anniversary year of another memorable educational happening, the Williamsburg International Conference on the World Crisis in Education. This seems a particularly appropriate time and place, therefore, to take a fresh look at the World Educational Crisis — to ask what has happened to it over the past ten years, where it may be heading over the next ten years, and what measures are needed to alleviate it.

### The Crisis Ten Years Ago

It will help our perspective to review briefly how the World Educational Crisis looked in 1967. It resulted from a combination of powerful forces, some external and some internal to educational systems. The initiating force, starting right after World War II, had been the explosive increase in world-wide educational demand inspired by sweeping political, economic, and demographic changes and by a "revolution of rising expectations".

National leaders everywhere responded to this explosive demand with a strategy of linear expansion whose simple aim was to expand their existing educational system in its old image as rapidly as possible so as to increase the number and proportion of each age group enrolled at each level of the system. This strategy culminated in the quantitative targets adopted by the historic UNESCO regional conferences at Karachi, Addis Ababa and Santiago-de-Chile at the start of the 1960s. Measured by its own simple criterion of success, the strategy of linear expansion appeared to be succeeding brilliantly by 1967. In the 15 years from 1950 to 1965 world-wide enrolments had roughly doubled — a truly remarkable accomplishment.

But the picture was by no means as rosy as the mounting enrolment figures suggested. Educational systems everywhere were besieged by shortages of qualified teachers, classrooms and textbooks that could not be quickly overcome simply by spending more money. As they spread their limited resources thinner over more and more pupils, educators and the general public complained increasingly about the erosion of educational "quality". At the same time evidence accumulated of shocking internal inefficiencies hidden by the optimistic enrolment figures. In the rural areas of many developing countries (where the great majority of children lived) primary school drop-out rates reached 75 per cent, and since many children — particularly girls — never even entered school this often meant that no more than ten per cent of the whole age group

actually completed the primary cycle. And many of these had "repeated" grades, thus taking seven to nine years to complete a six year cycle. This combination of high drop-out and high repeater rates meant that the actual cost of putting one pupil all the way through primary school was several times greater than the "nominal" cost (based on dividing the total school budget by the number enrolled).

It was also clear by 1967 that educational systems everywhere were caught in a serious financial squeeze — between rising unit costs and tightening budgetary ceilings — that promised to get steadily worse. To finance the great expansion, national educational budgets had grown dramatically between 1950 and 1965, generally two to four times as fast as the G.N.P. and overall public revenues. In other words, education had been winning a steadily increasing percentage share of available national resources — a trend that obviously could not continue indefinitely without seriously crippling other important public services. The handwriting was already on the wall by 1967; the rise of educational budgets was already slowing down or even flattening out in a number of countries. The outlook was that in all countries sooner or later education's share of the national budget would stabilize, bringing annual increases into line with the growth rate of the economy and overall public revenues.

This might not have been so bad if educational systems were improving their efficiency and holding down or even reducing their unit costs, but the evidence suggested that quite the opposite was happening. After accounting for inflation, the real costs per pupil at every level were rising, mainly because teacher salaries were rising and no serious steps were being taken to increase the productivity of teachers or of capital resources used by education.

Two other clouds were on the horizon that threatened to grow into a storm. One was the increasing uneasiness about the old curriculum and the relevance of what was being taught to the real needs of students and their life prospects. The other was a growing imbalance between the rapidly expanding "output" of educational systems and the capacity of employment markets to provide appropriate jobs for the newcomers. The politically lethal problem of the "educated unemployed" had already shown up in such countries as India, the Philippines and Egypt and was just around the corner in many others — including Western industrialized countries.

In addition to all these worrying pedagogical and economic issues, the more profound issue of equality and social justice was shaping up. The theory had been, in keeping with the new democratic spirit of the times, that universal primary schooling and widened opportunities for secondary and higher education would erode existing social and economic inequalities and give every youngster, regardless of family background, an equal opportunity in life. But evidence was mounting, particularly in developing countries that were still far from the goal of universal primary schooling, that their urban-oriented and elitist-oriented educational systems were inadvertently serving as a powerful engine of discrimination. The children of educated parents, especially in urban areas, who brought a good vocabulary and a higher measure of motivation to school, were far more likely to climb successfully up the academic ladder than the children of the poor and uneducated who comprised the great majority in rural areas. There was also serious discrimination against girls in many areas, not as a matter of educational

policy but because of deep-rooted cultural patterns. It did not require a crystal ball in 1967 to see that these festering inequalities and injustices would eventually lead to serious trouble for educational systems.

All the factors mentioned above had contributed importantly to the World Educational Crisis as it stood in the late 1960s. But the most fundamental cause of all was the inflexibility and inertia of educational systems themselves — their overpowering tendency to cling to the familiar, and to perpetuate the inherited curriculum, teaching methods and all the other paraphernalia of the traditional system in the face of great changes in the composition, needs and life prospects of their expanding clientele. The crisis, in a nutshell, was a crisis of growing maladjustment between tradition-bound educational systems and the rapidly changing world around them.

This being the case, the crisis was bound to worsen in the absence of strenuous counter-measures, starting with a new and more creative strategy aimed not simply at *expanding* the existing educational system but at *changing* it to fit the new circumstances. What was needed, in effect, was a far-reaching "educational revolution" that would catch up and keep pace with the vast social and political changes going on and with the simultaneous scientific and technological revolutions taking place in agriculture, industry, communication, transportation, health and other fields, and with the explosion of knowledge itself.

To be fair, it should be said that the hard-pressed educational administrators and teachers can hardly be faulted (though they often are) for not having pushed such an educational revolution. They had their hands more than full just trying to hold the old system together under very trying conditions. Moreover, educational systems had historically never been equipped or inclined to re-examine themselves critically and to apply to their own affairs the methods of modern research and development they had taught so well to others; thus, conventional educational practices were based largely on folklore and tradition, not on scientific enquiry. Finally it should be noted that the general public, and parents particularly, were often more resistant to educational innovations than the administrators and teachers themselves.

## The Crisis Today

Turning from the past to the present, what can be said about the state of the World Educational Crisis today?

It must be said straightaway that there are no clear-cut answers to this question for there has been no recent systematic effort to assemble, analyse and interpret the relevant information such as was done in preparation for the Williamsburg Conference. Nevertheless, in the hope of stimulating discussion, I shall venture a few personal and impressionistic observations and hypotheses based on recent visits to a number of countries and discussions with a variety of educational leaders and analysts as well as casual reading of numerous reports that cross my desk. Needless to say, I will have to deal in crude generalizations that will not precisely fit the widely varying circumstances of many individual countries.

With these caveats in mind, let me present the first whopping generalization. Many far-reaching educational, economic, and social changes and new developments have occurred over the past ten years that have in some cases moderated and in others further aggravated the various crisis factors outlined earlier. On the whole, these pluses and minuses appear to have balanced out more favorably for educational systems in the industrialized countries than in the developing world and widened the differences between their respective situations. Here are some of the specific changes that lead me to this conclusion.

### *Shortages and Pressures for Expansion*

In most of the industrialized world, the pressures to expand educational systems and enrolments have slackened dramatically in recent years and the former shortages of classrooms and qualified teachers have now turned into surpluses (especially at the primary level). There are two main reasons. First, the post-war bumper crop of babies has now passed through all levels of the educational system, and as young adults they are disinclined to produce a bumper crop of their own. The birth rate has fallen sharply, close to the point of Zero Population Growth in many instances. Second, with universal primary education having long existed in these countries, and with the greatly increased participation rates in secondary and post-secondary education having now been achieved, there is an inevitable and natural slackening of demand.

In most developing countries, though to a lesser extent, shortages of qualified teachers and facilities have abated considerably. However, the pressures for further educational expansion are still very strong and are likely to remain so for some years to come. The continuing high birth rate, coupled with declining child mortality, requires the schools in most developing countries to increase their intake by two to three per cent each year before they can even begin to increase their participation ratio. This rapid demographic growth, plus the further demographic fact that the school age population in these countries is a much higher proportion of the total population than in the developed countries, makes it extremely difficult to boost educational participation rates, especially in the lowest income countries.

Despite these difficulties, however, a sizeable number of developing countries according to UNESCO statistical reports have somehow managed to increase their participation rates over the past ten years (though generally at a slower pace than earlier). Even more surprising in light of the earlier heavy emphasis on achieving universal primary schooling, the rate of expansion has been considerably greater in secondary and higher education (where the costs-per-student are far greater) than in primary education. I strongly suspect that this curious phenomenon is linked to the widening social-economic gap between urban and rural areas and to the proliferation of rural poverty in many developing countries.

### *Efficiency and Productivity*

The facts here are sparse and murky, but judging from the fragmentary evidence available there is no reason to believe that there has been any substantial and widespread improvement in the internal efficiency of

educational systems over the past ten years, in either the developing or developed world. The same old indicators of low efficiency can still be found in abundance: rising unit costs unmatched by corresponding improvements in learning results; perpetuation of curriculum irrelevancies; underutilization of costly facilities and equipment; heavy absorption of valuable teacher time on non-professional chores that could be done by others; incredibly high drop-out and repeater rates (especially in the rural areas of many developing countries); and underexpenditure on learning materials with adverse effects on teacher productivity.

This is not to suggest that there have been no efforts to improve efficiency. One finds a substantial number of such efforts in both developing and developed countries, usually tied to significant innovations. But at this stage such innovations are generally isolated and small scale. The secret of spreading well proven innovations on a large scale still remains to be discovered.

### *The Financial Squeeze*

Here again the facts are scarce and tricky to interpret. There seems little doubt, however, that the continuing pressure of rising costs against stiffening budgetary constraints remains a major problem for virtually all educational systems.

The levelling off of educational demand in industrialized countries has somewhat alleviated the pressure for large annual budgetary increases, but it has certainly not eliminated it or significantly reduced the difficulties faced by educational administrators in the annual "Battle of the Budget". The public and legislative resistance to higher educational expenditures seems to have stiffened considerably over the past ten years. At the same time the pressures of inflation and the demands of greatly strengthened teachers' unions are giving sleepless nights to educational managers.

Most developing countries, of course, other than those with large oil revenues, are far worse off financially. They not only face the pressures of inflation and of strong public demand for further expansion, but in many cases their educational budgets have now reached 25 to 30 per cent of total public revenues, making further increases very doubtful. According to published UNESCO statistics a good many developing countries have somehow managed to expand their educational budgets and education's share of the total public budget over the past ten years. The latest UNESCO statistics available, however, stop at 1974. There is some independent evidence that suggests a substantial slowing down since then — due in part to the world-wide recession and the adverse impact of increased oil costs on national budgets, but also raising the possibility that education ministries in many developing countries are now bumping against immovable budget ceilings.

### *Education and Employment*

The small cloud on the horizon ten years ago has by now enlarged considerably. The imbalance between educational output and job openings has worsened considerably in both the developing and developed

world and has become a prime concern of educational and political leaders. The problem is already sizeable, but the fear is that it will continue to grow, not only exacerbating the educational crisis but fueling a serious economic, social, and political crisis. The unexpected eruption of student protests all across Europe and North America in the spring of 1968 have subsided for the moment, but few would wager that it couldn't happen again.

Unemployment of the relatively highly educated, though it gets the lion's share of attention because of its political volatility, is actually only the tip of a much larger iceberg. In developing countries it is the less educated and uneducated out-of-school youth who bear the main brunt of high unemployment, and their numbers have swelled considerably in the past ten years despite increased educational enrolments. Chronic and sizeable unemployment, of course, is not a problem that can be solved by the schools alone, or even primarily by education, even though the schools and universities are often incorrectly made the whipping boy. This problem can only be solved by straightening out the dislocations within and between economic systems, and this is likely to require also some rather extensive political and social changes. But societies do have a right to expect their educational systems to provide relevant educational offerings and experiences that will facilitate national development in the broadest sense and prepare young people to participate productively in the affairs of the society and its economy. There is little doubt that educational systems still have a sizeable distance to go in living up to this reasonable expectation.

### *Educational Innovations and Adaptation*

The brightest and most promising aspect of the current picture, in my view, is the broader and more realistic perceptions of education that have gained currency in the last ten years and the new spirit of self-criticism and innovation that has permeated the world educational community.

The conception of education as *learning* and not simply as schooling, and the view of learning as a life-long process that not only can but must take place through many different channels and in a great variety of environments — some highly institutionalized but most of them much less formal — have gained wide acceptance in recent years and have set educators and others to thinking in fresh directions. This is a very hopeful fact.

To be sure, there is a tendency in the educatonal circles for jugular ideas to degenerate into hollow slogans and eventually give way to the next new fashion to come along without ever getting far beyond the talk stage. This could become the fate of the present popular rhetoric about life-long learning, non-formal education, distance learning, and similar stimulating concepts. But there is encouraging evidence that these current ideas — actually very old ones in a new context — are beginning to be translated into action and will have a more enduring impact. Compared to most educational fashions of the past they are much more fundamental and much more radical, in the true sense of that term. Moreover, the educational crisis itself has helped to create the pressure and the necessity to break out of the old moulds and strike out in new directions.

If there were a world index of significant educational innovations, I feel sure it would show that the volume of such innovations in the last ten

years has been considerably greater than in any comparable previous period. One can only hope that these years will be looked back on by future educational historians as a critical period of incubation in which important new ideas were hatched, tested out, and acquired a momentum that accelerated greatly in the years that followed. Meantime, we'll just have to wait and see.

Whether the World Educational Crisis is still with us today and whether it is better or worse than in 1967 becomes largely a matter of how one defines the crisis and weighs the various favourable and unfavourable changes referred to above. For my own part, I believe that the crisis is still a very live and large reality and that we would be ill-advised to take it lightly just because we have learned to live with it. I say this not so much because of what has or has not transpired over the past ten years but because of the enormity of the challenges that lie ahead in the next ten years — challenges that most societies and education systems are presently ill-prepared to cope with.

## The Outlook

In looking into the future, I propose to narrow my focus to the developing countries and in particular to their rural areas. In so doing I do not mean to suggest that their urban areas are not also filled with important challenges that must be dealt with, or that the industrialized nations will suddenly run out of educational problems of crisis proportions.

My reason for choosing this focus is because there is today, at long last, a wide and growing consensus that the dominant challenge facing the majority of developing nations in the immediate future, and for a long time to come, is to develop their vast rural areas and to bring the long neglected, poverty-stricken mass of their rural people into the mainstream of the national development process, as both contributors and beneficiaries. To accomplish this, the developing countries will clearly require much more material help than they have had in the past from the more developed nations — not as a matter of welfare but because the whole world has a major stake in meeting this mammoth challenge.

Rural development in its full sense involves much more than expanding the output of commercial agriculture to supply urban customers and the export trade (which has been the main orientation of rural development projects up to now). It means helping the poorest of the rural poor, who have been largely by-passed by earlier rural programmes, to produce enough nutritious food to meet the needs of their own families. It means improving their basic health conditions and encouraging them to pursue their own englightened policy of responsible parenthood. It means opening up new employment opportunities, raising the low productivity of rural workers, and diversifying rural economies to make these things possible. Not least of all it means achieving a more equitable distribution of the benefits of development, and building more equitable rural societies. This is a long-term task that will require a large and persistent effort, above all by the rural people themselves but with strong encouragement and essential help from others.

Education — broadly defined as *learning* — clearly has a crucial and ubiquitous role to play in this transformation, in close conjunction with other essential inputs. Rural people of every age, status and occupation

will have to acquire new insights, knowledge and skills of many kinds, along with new attitudes and new hope, in order to lift themselves above the level of absolute poverty and sheer day-to-day survival.

If we are honest with ourselves, we must admit that the existing urban-oriented elitist-oriented schools inherited from the past are not the answer to these rural learning needs. It is true that they have helped many bright and ambitious young people (mostly boys) to get to the city and better themselves. But what about the great majority who are left behind to live out their lives in rural settings? What have the schools done to equip them for a brighter future? In many rural areas that my ICED colleagues and I have visited in the past half dozen years, a high proportion of those who stay behind — particularly those from the poorest families — never even get to school, or else drop out before even learning to read. Some of the most frustrated ones are those who, though they finish primary school, cannot go further up the academic ladder. As an eminent educator in Bangladesh observed recently, "These schools have nothing to do with improving rural life. Parents view them as a railroad station to which they take their children to be transported to the city."

Even if the present schools could be transformed into serving rural children and youth much more effectively — and I agree with those who believe they can — the sheer problem of numbers is staggering. According to UNESCO projections, the total of *out-of-school* children and youths from six to 17 years of age in developing countries (largely in rural areas) will increase from 264 million in 1975 to 405 million by 1985. This estimate is based on the relatively optimistic assumption that national school enrolments will continue to increase at the rate of the past ten years.

If there is to be real rural development in the future, today's great out-of-school majority of rural children and youth are going to have to create it. How can they best be prepared for this responsibility?

There are obviously no quick and easy answers. Part of the answer certainly lies in a drastic reorientation and recasting of the existing schools, involving not only a new curriculum but a breaking loose from traditional age-grade ties, enabling young people to pursue their learning interests on a part-time basis at their own convenience, and using as teachers anyone in the village who has something relevant and useful to teach.

An even larger part of the answer lies in the great and flexible potentialities of non-formal education. By this I do not simply mean substitute ways to teach what is taught in schools, such as literacy and numeracy, but a great variety of essential things that are not taught in schools and probably should not be attempted.

By non-formal education I mean, very simply, any organized learning activity outside the structure of the formal educational system that is consciously aimed at meeting specific learning needs of particular subgroups in the community — be they children, youth, or adults. Non-formal education, thus defined, includes a vast assortment of activities, such as agricultural extension, skill training, health and family planning programmes, youth clubs and women's organizations with educational objectives, functional literacy programmes, and so forth.

Non-formal education can be a substitute for formal schooling when there is not enough to go around, but primarily it is complementary and supplementary to formal schooling. It follows up on formal education and tackles learning tasks for which schools are not well adapted. It serves audiences that are beyond school age. Its greatest virtue is its flexibility and potential for serving virtually any kind of learning need, at any time of day or night. And it *can* be low cost, especially if it takes advantage of locally available resources and does not try to emulate the expensive methods of formal education.

There are many more non-formal educational activities already going on in developing countries — and in industrialized countries — than is realized, especially by professional educators who think of education exclusively in terms of schools. Ironically, other ministries (such as agriculture, health, manpower and social welfare) are much more involved in these learning activities than education ministries. But such activities now need more attention. They need to be broadened and strengthened and to be better integrated with other development efforts. For non-formal education is not a "system" unto itself. Rather it is — or should be — an integral component of all different types of rural development programmes, a kind of lubricant that makes them work effectively.

The point I would stress is that both formal and non-formal education, if they are to be effective and productive, must be tailored to meet the real needs of rural people in their particular circumstances — not the presumed needs as perceived by distant experts. These needs vary from place to place and over time, and they differ among subgroups within the same community.

The cardinal rule, therefore, in planning rural educational provisions is to start with the learning needs themselves, not with a preconceived institutional solution (especially one imported from some industrialized country). Once the needs are clear, then the problem is to design a locally viable and low-cost way to meet them, after considering various possible alternatives.

My colleagues and I at the ICED, in connection with a study for UNICEF, attempted to illustrate some basic categories of "minimum essential learning needs" of children and youths growing up in poor rural areas, as a basis for considering alternative ways to meet them. Briefly, we came up with the following six categories (which are spelled out more fully in a little book called *New Paths to Learning — for Rural Children and Youth*):

1. Positive attitudes toward co-operation with one's family and fellowmen, toward work and national development, and toward self-improvement through learning.

2. Functional literacy and numeracy, sufficient to read a newspaper or farm or health bulletin and to make locally useful measurements and calculations.

3. A scientific outlook and an elementary understanding of the processes of nature in the particular area.

4. Functional knowledge and skills for rearing a family and operating a household.

5. Functional knowledge and skills for earning a living.
6. Functional knowledge and skills for civic participation.

These are only illustrative; they are not a formula carved in stone to fit every situation. But they suggest how educational planners, working close to the local scene, might go about examining the real learning needs as the first step toward devising appropriate ways to meet them. They also suggest a way to check the relevance and adequacy of what is now being taught, whether within the schools or outside.

An interesting point about the above list of needs is that the rural school as it generally exists today is primarily addressed to only one out of the six; namely, literacy and numeracy (though it may contribute marginally to some of the others). This is not said to criticize the schools but simply to emphasize that the schools cannot be expected to do everything and shouldn't try.

Let me emphasize that non-formal education is not a panacea. *There are no educational panaceas for rural areas.* The solutions will not be simple or easy. They will require ingenuity, persistence, patience and a lot of hard work over a long time. They will also require overcoming stubborn bureaucratic complexities and rivalries and abandoning the comfortable but fallacious notion that all education for a nation can be planned in a central ministry in the capital.

But all this is what makes it challenging. If an able and spirited young man or woman were to ask my advice on an exciting frontier to work on for the next 30 to 40 years, I would urge them to try rural education. And unless a great many such young people do in fact move onto the frontiers of rural development, with great energy and dedication, tomorrow's educational crisis may be considerably more severe and ominous than yesterday's or today's.

# Lead Papers

## 1. Education, Economic Policy and the National Budget: *Adebayo Adedeji*

### Education and Development

To a large extent the pace of any society's development depends on the availability of an appropriate supply of skilled and educated manpower for harnessing and exploiting its resource endowments. This implies that a country's development does not only depend on endowments of natural resources and availability of capital resources, but, more importantly, on skilled and educated manpower with the proper attitudes and enthusiasm as the most essential precondition. Accordingly, the planning and development of education constitutes an integral part of the whole policy of social and economic development. No amount of capital investment uncomplemented by the human factor can sustain or enhance the development of any society.

The significant role of education in the development equation is therefore well recognized and accepted. What is currently being explored is ways and means to quantify or determine the magnitude of its contribution in interaction with other factors in the equation.

Over the last two decades or so we have witnessed the integration of education into the central fabric of national development policy and planning. This integration is a manifestation of the acceptance of education as one of the mainsprings in the development process. For example, correlation analysis has shown that increased expenditure on education has been accompanied by substantial economic growth; that countries experiencing the fastest rate of economic growth are usually those which have allocated the largest absolute and relative shares of their national budgets to education; and, on the contrary, those countries which are falling behind in the economic race are mostly those which are allocating the smallest proportion of their budgets to education. However, one must be cautious in interpreting such findings. For example, it can be plausibly argued that what is taken as the "cause" may well be the "effect", in that countries which are allocating larger proportions of their budgets to education are doing so, or are able to do so, because of greater economic prosperity. On the other hand, countries which are allocating smaller proportions of their budgets to education are those which are behind in the economic race. Reinforcing this alternative interpretation is the fact that research and empirical evidence have shown that social and welfare services, in the early stages of development, are way down on the national budget priority list.

Most developing countries are faced with the paradox of the shortage of persons with critically needed skills and a surplus of unskilled labour. Any strategy of human resource development must, therefore, aim at the

production of these critically needed skills and also the creation of productive employment for unutilized or underutilized manpower.

A very salient phenomenon which contributes to this shortage is what has been called the "brain drain". Although this is a phenomenon which takes place in both advanced and developing countries, it is one which poses a very serious problem to the development world. It involves an international transfer of resources in the form of human capital. This transfer is completely unrecorded in any official balance of payments statistics. Unfortunately, this is a phenomenon which most developing countries are not able to arrest completely since it is induced by both pecuniary and non-pecuniary incentives. For example, the skills mostly involved in this transfer are those which are in great demand in the international market where the developing countries are unable to compete either in pecuniary or non-pecuniary terms. In some cases the non-pecuniary incentives, such as working and research facilities, are the major considerations. Educational planning must therefore make allowance for this form of attrition.

It is increasingly recognized that the acceleration of development could be hindered by a deficiency in the knowledge and skills embodied in human beings. Many studies of economic growth have indicated that this factor, designated "human capital", accounts for a substantial proportion of the output of any production process and accordingly the national economy. For example, one such study in the United States attributes 23% of the growth in real national income to this factor which implies that it is the single most significant contributor to national development.

It is obvious, however, that education is not the only component which enhances the productive capacity of human capital. There are other factors, such as health, housing and so on, which also contribute to the productive capacity of human beings. While the various aspects of investment in human capital have been a major source of growth in advanced countries, the developing world has lagged far behind in extending this capacity of its peoples to meet the challenges of accelerated development. This lagged capacity is a severe constraint on the development potential of these countries.

Since one of the major functions of the education system is to provide the society with the manpower capabilities for productive activity, it follows that the system must be well geared to reflect the current and future manpower requirements of the economy. Considering the long gestation period in producing skilled manpower, particularly at the higher scientific based categories, the education system must be given sufficient lead time in this task if the adequate and appropriate supply is to be made available at the right time. Herein lies the relationship between educational planning and manpower planning. As such, manpower planning is essentially an exercise to ascertain the current and future skill requirements necessary for the attainment of national development goals and aspirations. As implied before, this information must be available to the education system well in advance so that the necessary changes and adjustments in the system can be undertaken in response to such requirements. These changes and adjustments may include, among others, redirection of the system towards job-oriented education and training, more emphasis on career counselling and guidance, and measures for more efficient utilization of skilled personnel.

The need for greater association between manpower planning and career counselling is due to the fact that a rational choice of career requires concrete information on such factors as job availability, pecuniary and non-pecuniary benefits, and promotion and career development possibilities.

It must be noted, however, that education should not be exclusively conceived in terms of purely economic considerations. There are the social and political imperatives which must be given due consideration. Even so, educational development planning is undertaken by every country in one way or another, and the justification is quite obvious. For example, if a country is in a situation of full employment, then continuing development — or even maintaining the development standard — requires a continuing supplement of manpower in all categories for wastage and attrition. On the other hand, if a country is in a situation of unemployment or under-employment, this implies one or a combination of the following: a need for labour development and job-creating programmes, a need for job-oriented education and training programmes, and a need for population and labour force adjustments. These are some of the problems of imbalance which the relationship between education and manpower planning is intended to rectify.

The demographic factor is undoubtedly the most important parameter in incorporating the social and political aspects in manpower and educational planning and development. For example, knowledge of the demographic trend is indispensable for planning the various levels of the education system and also for employment planning.

Experience has clearly demonstrated the futility of approaching the development problem without a rational balance of physical and human capital. As a result of such failures, the term "absorptive capacity" has become quite popular in any discussion or negotiation concerning development assistance. In simple terms it means that if a particular piece of equipment is requested or ordered, there must be someone available to operate it; otherwise it cannot be a productive factor. It is therefore obvious that the efficient use of physical capital is dependent upon human capital. If there is a deficiency in appropriately trained manpower, the rate at which additional physical capital can be productively utilized will be limited since technical, professional and administrative personnel are needed to make effective use of material capital.

Most developing countries are still in the initial stages of experience in the oganization and co-ordination of an appropriate machinery for human resource development. It is not unusual to find that in most of these countries the Ministry of Education or the Ministry of Labour are the only ones involved in any way with human resource development matters. However, it is obvious that at the government level, many other departments ought to be vitally concerned with human resource planning and development (e.g. the Government Establishment Office or the Civil Service organization which deals with personnel matters, and the Ministries of Health, Agriculture and Public Works which employ a large proportion of skilled personnel). In addition, the private sector has an important role to play, particularly in the field of on-the-job and in-service training. It is this need for widespread involvement and actual participation which makes it imperative to have a central co-ordinating machinery for the direction, monitoring and review of manpower devel-

opment priorities and strategies so as to ensure that such development is consistent with the current and future requirements of the economy. Such a central co-ordinating body ought to function at the highest possible governmental level and be reinforced by an advisory body composed of representatives from government, the major educational and training institutions, employers, and labour unions where they exist.

## Education and Economic Policy

Recognition of the role of education in the development process has led to its incorporation as an integral part in national economic policy and planning. This recognition and acceptance is based on scientific research and on empirical evidence which indicates a positive relationship between the rate of economic development and the performance of the education sector. Accordingly, educational development — particularly at the national level in most developing countries — is now closely tied to the manpower requirements of development as ascertained from manpower studies.

Without an adequate and appropriate supply of educated and skilled manpower, no country is in a position to fully exploit the development potential of its natural resources and other endowments. Consequently, its development process will inevitably be retarded. It follows, therefore, that developing countries must take urgent and positive steps in the direction of human resource development which is the critical complement to the other resource factors in the development equation.

Given the resource limitations of developing countries, it will be appreciated that targets for educational development, and the consequent allocation of resources, cannot be decided in abstract, but must be related to the priorities of social and economic development. The education sector must, therefore, compete with the other sectors, and satisfy — although not as rigidly as the other purely economic sectors — the basic efficiency criteria in terms of resource allocation.

The demand for education on average has outstripped every other demand in the process of development. There are basically three reasons which may be cited for this rising educational demand: the first is associated with the skill requirements for development as ascertained from manpower studies; the second is usually in response to social and political demands or pressures; and the third is what may be termed the demonstration effect in that past expansion of educational opportunities leads to greater individual awareness of the benefits to be derived from education.

As a result of this trend of educational expansion in practically every country for which information is available, the proportion of national income devoted to expenditure on education rises as national income per capita rises. This occurs at every stage of development. The major component of such increased expenditure is associated with the provision and expansion of tertiary-level education which is so much more expensive than the primary and secondary levels. This increasing allocation of national budgets to education is perhaps the main reason for the attraction of rate of return analysis to the education sector in order to ensure that such resource allocation is efficiently undertaken.

The available statistics indicate that most developing countries devote about one-fifth of their budgets to education, or, in general, to human resource development. The financing of such programmes is, therefore, an important aspect of national development planning. It should not be assumed, however, that the budget allocation to education is the sole yardstick for measuring a country's involvement in human resource planning. The strategy and the process of skill development must necessarily involve all sectors of the economy.

The potentialities of fully utilizing government agencies, private employers, expatriate firms and technical experts as trainers and developers of manpower are seldom fully exploited. A key element, therefore, in the strategy of human resource development is to shift as much as possible the responsibilities for training to the major employing institutions and to provide the necessary technical guidance to enable them to develop relevant in-service training programmes. It follows that education and training which are directly job-related in nature, should enlist the full participation of the private sector in providing on-the-job and in-service training programmes. Such training has proved to be very efficient in terms of cost, productive relevance and time. For example, a large firm can utilize the services of its experienced staff on a rational basis as instructors, without incurring the difficulty and cost of recruiting teaching staff internationally which the formal system usually faces. At the same time, the instructional impact of a working technician in a work situation cannot be paralleled by a teacher in the formal set up. Another merit of such vestibule training relates to the demand side. By greater and more systematic involvement in the training process, the employing institutions are in a position to influence and shape the training content to the current and future needs of industry and the economy in general. This will undoubtedly facilitate the absorption and productive utilization of such trained manpower in the labour market.

Whereas physical capital, technology, financial and other resources can be acquired from abroad, for various economic, social and political reasons a country must endeavour to be self-sufficient in the provision of human capital. It is clear, therefore, that when plans are made for the expansion and growth of specific sectors, the manpower component for the implementation of such plans must be an integral part if such targets are to be realized.

The fact that education is not amenable to the strict test of investment criteria for budget allocation has not affected its development. This is due mainly to the social and political imperatives so that most national development plans provide, as a matter of procedure, for increasing proportional expenditures on education. This, however, could be a purpose-defeating exercise if not carefully monitored since there ought to be a period of stabilization so as to ensure consolidation and maximum internal efficiency of facilities provided.

A word at this point concerning the relationship between human resource development and the balance of payment problem — particularly of developing countries — might be in order. Most developing countries, faced with the urgency of educational development, pay little, if any, attention to this relationship. Although in most cases the foreign exchange component of expenditure for education is relatively small, the alternatives for reducing this component must be given some priority in

the strategy of educational development. Such alternative strategies include the training of teachers locally, the localization of as much university and other tertiary-level education as possible, and the local manufacture of school equipment and supplies. These are all import substitution inputs which have not been sufficiently incorporated into the strategy of educational development.

It is argued in some quarters that it is only at a fairly advanced stage of development that pressures for substantial qualititative improvements in human capital are felt. To support this view, reference is made to the early industrialization in Western Europe which appears to have been accomplished without requiring as prerequisites marked improvements in skills and knowledge. Similarly, it is pointed out that the contribution of education to American economic growth has been pronounced only in recent decades. However, unlike these earlier historical situations, the recent and current pattern of development makes it necessary to have a relatively high level of skill and much more knowledge to take advantage of the more complex equipment and techniques from the advanced countries.

Since education expenditure must compete for resources that have alternative uses in more directly productive investment, it is essential to determine what proportion of national income should be devoted to education and to establish priorities for the various forms of education and training. In terms of the economic function of education, the priority requirements for accelerating development may require greater emphasis on vocational and technical training rather than on the formal academic courses.

In the context of most developing countries, education — or, in general, human resource development — must place considerable emphasis on the requirements of the agricultural sector which is the backbone of most of these economies. The economic transformation and modernization of this sector requires the infusion of new skills and knowledge. Associated with the purely economic advantages of agricultural modernization is the potential for such modernization to retain and attract an adequate and appropriate labour force to sustain and enhance the contribution of this sector to national development, and, at the same time, to stem the rural/urban exodus. Accordingly, the developing world ought to exercise some restraint and caution in imitating the educational systems of the more advanced countries. Particularly in the early stages of development, more emphasis should be given to methods of informal and functional education. These efforts are less time consuming, less costly, and more directly related to the productive requirements of their economic structure.

So far it might appear that the discussion has been biased in favour of the economic function of education. To some extent this is quite justified. Given the resource constraint of developing countries, priority ought to be given to measures directly related to the immediate task of development. Nevertheless, education ought to be seen as rendering two basic services: it must attempt first to meet the needs of individuals for their own development and self-fulfilment, and then the needs of society for its general social and economic development. These two aspects of education are, in fact, intrinsically merged, for even if one were to postulate that the sole purpose of education should be individual satisfaction, one

could not logically exclude as incompatible the investment motive for finding remunerative employment which is one of the major prerequisites for achieving such self-fulfilment.

In most developing countries the greater part of the educational facilities is provided by the State. Education, therefore, claims a substantial proportion of the national budget, and it would be useful if some scientific criteria could be applied to justify the level of resources to be allocated to the education sector. Any such criteria must, however, take into consideration both the economic and cultural aspects of education. Unfortunately, due to the virtual impossibility of quantifying, computing and isolating the various cost factors (including opportunity costs for rate of return calculations) investment theory has not yet been able to make its full contribution in the field of human resource development.

## Education as Investment or Consumption

The debate continues as to whether education should be properly considered as an investment in human capital or as consumption. Perhaps the question should not be whether education is an investment or a consumption input, but rather, given the requirements and resource constraints on the development process of the developing world, whether it should be properly treated for planning purposes as an investment or consumption expenditure.

Investment is simply a means of enhancing the productive capacity of a capital resource to yield an increased stream of income over time. It follows, therefore, that the growth of income which defines economic development must be the result of investment in various forms of capital resources. The advocates of the investment approach argue that if the positive relationship between education and economic growth is accepted it follows that education is an investment which is undertaken in human beings and which enhances their productive capabilities to the extent of their mental endowments and physical conditions. Therefore in keeping with the definition of economic growth, investment in both physical and human capital resources ought to be given at least equal emphasis. However, the very thought of categorizing man as a capital asset, raises deep-seated moral and philosophical issues dating back to slavery, when the slave was an accountable asset of his master. Therefore, to treat man as a capital or property asset whose value can be augmented by investment is held by some to be a debasement of human dignity. In spite of these and other arguments, most planners and economists take the bull by the horns and incorporate education in the formal core of economics as an investment decision both at the society and individual levels.

Another opposition to the application of the "investment in capital" concept to man concerns the virtual impossibility of separating the consumption from the investment component of expenditures on education, so that the rate of return on any incremental expenditure on education is not computable. The argument continues that since the rate of return is essential for consideration of alternative investment opportunities, and since it cannot be rightly computed for expenditures on education, such expenditures should not be regarded as investment. It must be noted, however, that this opposition has witnessed considerable improvements in the techniques of isolating the consumption and investment components for the application of rate of return analysis.

In line with investment theory, rate of return calculations have become a prominent feature in the literature on the economics of education. In some of the more recent approaches, attempts are made to isolate and quantify those components of education which affect human capabilities to do productive work, and thus classify them as investment components. The consumption school has quite rightly responded that if this definition is taken to its logical conclusion, it would include expenditures on food, clothing, housing, entertainment and even some luxury expenditures since it could be plausibly argued that each and all of these enhance human capabilities to do productive work.

On the specific issue of the rate of return, the advocates of the consumption approach argue that expenditure on education is essentially different from expenditure on physical capital, in that the former is undertaken for reasons other than the expectation of future monetary returns, and it is not normally based on scientific comparison of alternative investment opportunities. However true this might be at the society level, it must be conceded that there are individuals who do make decisions to invest in and pursue a particular type of education with an eye on future pecuniary returns.

Another weakness in the rate of return approach is the attribution of earnings differentials exclusively to additional education. It is well known that such differentials are the result of a permutation of factors among which are the dualism of developing economies (which means that earnings are related to the sector in which the person is employed), innate abilities, ascribed and acquired status, and class of the individual and family. It is, therefore, not unusual to find wide variations in the earnings of individuals who are at the identical level of education. Any linear relationship therefore between education and earnings is void of empirical foundation. Such relationships are more likely to provide measures of the relative earnings influence of respective categories of employees rather than an education-earnings association. Even if the non-educational factors are waived, the validity of any correlation of this kind would have to be based on the assumption of a perfect market situation in which earnings are everywhere equal to the value of the marginal product of labour. In such a situation any earnings differential will be equal to the change in the value of the marginal product of labour. If it is assumed in addition that the change in the value of the marginal product is a pure result of the additional education, then and only then can it be postulated that the earnings differential is the result of the additional education. Given that the whole premise revolves around an assumption of market imperfection, and given that such a situation is utopian, it becomes extremely tenuous to postulate any valid linear relationship between earnings differential and additional earnings.

It should be noted that even with physical capital there is no precise mechanical relationship between the amount of resources invested and the *value* of the product which results from it. This value, or return, normally depends on how and where such investment is made and the extent to which the resultant product serves the production requirement of the economy, and also the prevailing demand for the product. This problem therefore of trying to establish a causal quantitative relationship between the expenditure on resources and the value productivity is multiplied when one moves from physical to human capital.

Frankly, I do not think that there is a sufficiently high rate of return to justify the continuing controversy as to whether expenditure on education is an investment or a consumption outlay. Taken as either, education has established its rightful claim to a substantial allocation of resources. For example, if it is taken purely as an investment expenditure, then the fact that the stock of human capital as calculated by Professor Schultz for the U.S.A. increased more than twice as fast as that of physical capital means that its rate of return is higher than that of physical capital. On the other hand, if education is taken a consumption expenditure, the fact that educational expenditure increased much faster than that of real consumer goods for the same period means that the income elasticity of demand for education is higher than that for real consumer goods.

Although there are a few noteworthy examples of progress in scientifically incorporating certain aspects of education in the core of investment theory, there still remain too many arbitrary elements. This is inevitable. It must be accepted, however, that the attention which investment in human capital continues to receive should prove salutary in cautioning against any over-emphasis on physical capital to the neglect of less tangible factors.

* * *

## Introduction to Lead Paper 1: *E. C. Anyaoku*

It is a hazardous exercise to introduce someone else's paper; and I fear that it is even more hazardous to do so when it seems clear from the paper that the author, had he been here, would certainly have been glad to expand the views put forward by him. I therefore propose to do no more than attempt to draw attention to some of the main points and questions arising from the paper.

In the manner that one would expect from an author who is both a distinguished economist and actively engaged in the business of development, Dr. Adedeji has presented a paper that is both scholarly and practical. He has taken an economist's macro-view of the relationship between education and development on the one hand, and education and economic policy on the other. He has also given us the benefit of his contribution to the debate on whether expenditure on education should be conceived as investment or as consumption.

His paper poses a number of important questions which will, I am sure, provoke fruitful discussions. In the first section of the paper, Dr. Adedeji expresses the familiar argument that the main purpose of education is to provide a country with the educated and skilled manpower that is essential for social and economic development. He stresses the importance of "the human capital" in the output of any production process, and as such for the national economy. He recognizes that there are social and political imperatives which have to be considered when planning educational development. The burden of his argument, however, is that education planning must reflect the current and future manpower requirements of the country. The relationship, therefore, between education planning and manpower planning must be close. He describes manpower planning as "essentially an exercise to ascertain the current

and future skill requirements necessary for the attainment of national development goals and aspirations". Education planners must be given sufficient lead time to produce the appropriate types of manpower at the right time, having due regard to economic and social needs and to demographic trends. In order to achieve this objective, Dr. Adedeji urges that a central co-ordinating machinery should be set up in each country to direct, monitor and review manpower development priorities and strategies in order to ensure that such development is consistent with the current and future requirements of the economy. The co-ordinating machinery will embrace an advisory body composed of representatives of (a) those departments of government which are particularly concerned with human resource planning, (b) major education and training institutions, (c) employers from the private sector, and (d) labour unions. He makes the point that the advisory body should function at the highest level of government.

Dr. Adedeji draws attention to the pheomenon of "brain drain", which is a potent factor contributing to the shortage of skilled manpower in many developing countries. He sees "brain drain" in terms of "an international transfer of resources in the form of human capital". He doubts whether "brain drain" can be completely arrested, and advocates that the inevitable loss of skilled resources in this way should be taken into account by the manpower planners.

In the section of his paper entitled "Education and Economic Policy", Dr. Adedeji continues to emphasize the economic function of education. If a high proportion of a country's budget is devoted to education — and most developing countries allocate about 20 per cent of their budget to education — then there has to be justification, in economic terms, for such a high rate of expenditure. The education sector must compete with other sectors in the allocation of resources. He concedes, however, that normal tests of investment criteria cannot be applied to education as rigidly as they can to most other economic sectors. The rate of return on a country's investment in education cannot be accurately quantified or subjected to strict scientific criteria.

Nevertheless, Dr. Adedeji clearly wishes to see an identifiable return, in economic terms, from investment in education. He puts forward four suggestions for obtaining greater efficiency in the education system:

(a) Greater use should be made of government agencies, industry and other employing organizations in training personnel. Every effort should be made to enlist the full participation of the private sector in providing on-the-job and in-service training programmes, thus relieving the burden on Ministries of Education.

(b) Education planners should be fully conscious of the need to conserve foreign exchange. Instead of importing teachers, greater use must be made of national manpower resources. In other words, the emphasis should be on the training of local teachers. For the same reasons, universities and other tertiary education institutions should be localized as far as possible. School equipment should be manufactured locally rather than imported from overseas. These are all significant forms of import substitution.

(c) Greater emphasis should be placed on technical and vocational training than on formal academic courses. These forms of training

contribute directly to development. Economic factors require that special consideration should be given by the education planners to the transformation and modernization of the agricultural sector.

(d) Developing countries must be cautious about imitating the education systems of more advanced countries and should place greater emphasis on non-formal and functional education, which is less time consuming than formal education courses, less costly, and more directly related to the productive requirements of developing countries.

In his concluding section, Dr. Adedeji boldly tackles the question of whether expenditure on education should be regarded principally as investment or principally as consumption. With scrupulous fairness, he analyses the arguments on both sides of this controversy. Some of us who are not economists may find ourselves getting a little out of our depth. Fortunately, this does not really matter, since Dr. Adedeji doubts whether any useful purpose can be served in continuing the debate on whether expenditure on education is mainly an investment or a consumption outlay. "Taken as either", he says, "education has established its rightful claim to a substantial allocation of resources". We must hope that our various Ministers of Finance will accept Dr. Adedeji's assurance on this point.

I am sure we are all grateful to Dr. Adedeji for presenting such an authoritative, scholarly and stimulating paper. It raises issues of fundamental importance. Without in any way wishing to limit your deliberations, I have singled out certain questions around which discussion might profitably centre. These are:

(1) What are the implications of regarding the primary objective of education as human resource development?

(2) Is the "manpower approach" to education adequate in a free society? What weight is to be given to social and political influences?

(3) What machinery is necessary to ensure that education planning is effectively geared to manpower planning?

(4) What steps could, or should, be taken to limit "brain drain"?

(5) Granted that education must compete with other sectors in the allocation of resources, what criteria can usefully be applied when resources are allocated?

(6) What part of the education burden can be transferred to industry and other employing organizations?

(7) What is the scope of import substitution in education?

(8) Should greater emphasis be given to technical and vocational education at the expense of more academic forms of education? If so, what are the implications for teacher education and curriculum renewal?

# 2. The Provision of Education and its Costs: *Richard Jolly*

"By its very nature, the Commonwealth must be pre-eminently concerned with the issues of poverty and must be militant in its preoccupation with development": *Shridath Ramphal, Commonwealth Secretary-General.*

"To Plan is to Choose": *Julius Nyerere, President of Tanzania.*

These forthright statements on development priorities and the need for clear choices provide the framework within which the provision of education and its costs will be considered. This framework is one which starts with the recognition that past development patterns over the last two decades have proved seriously inadequate. There have been growth and dramatic changes in many ways but the benefits of development have largely accrued to the better off — to the better off groups and regions within countries and to the better off countries within the world. The result is that in many countries the poor today are more numerous and often in more serious poverty than ever before.

If this situation is to be significantly improved by the end of the century, major changes in development strategy are required. Numerous studies have shown that there is an urgent and inescapable need for the widespread adoption of projects, programmes and policies from which the less well off can directly benefit. There is a parallel need for changes within world economic institutions and organizations to enable less well off countries to obtain the resources and technologies which such a change of strategy will require. In short, measures are needed, nationally and internationally, to support strategies to eradicate poverty and to meet the basic needs for all the population of each country, not merely the half or two-thirds which is financially better off.

This is not the place to elaborate a full list of basic needs or the details of how to achieve them. But amongst such basic needs is education — sufficient education to enable each person to develop his or her talents and abilities and to acquire the knowledge, skills and confidence to play a full and effective part in such development; and a total system of education — formal and informal and of the quantity, quality and relevance at all levels — to provide for broad-based development and to sustain a strategy focused on basic needs for the whole community.

One should not underestimate the full significance of what it means to approach the topic — the provision of education and its costs — within a framework of national strategies towards meeting basic needs. In part, it certainly means asking how education can be provided to *all* as one of the key elements in the package of basic needs. But it means much more than this. It means asking how the expansion of education can take place in ways which are also part of a general strategy to contribute to meeting the full range of "basic needs" in other respects. Again in part this is to make sure that education helps to develop the skills and commitments which a country will need if the goods and services are to be produced and distributed in ways which meet the basic needs of all. But it also means that the whole set of inter-relationships between the education system

and the rest of the economy should strengthen the institutions and capacity of society to meet basic needs. This applies particularly to education's role in the job-market linkages between school and work — that is in the structure of salaries for educated persons, in the use of educational certificates as a means of selection for jobs; the whole way the content and organization of schooling interacts with social and economic structures. To give serious priority to basic needs is to ask how education and the school system in all these respects ought to be changed.

This framework defines the crucial questions for considering the provision of education and its costs, not as an abstract academic exercise but in relation to these specific issues of broader "basic needs" strategy. The first of these questions is: What options exist for meeting the basic educational needs of all persons within our countries within the foreseeable future and within the realities of economic and financial cost constraints? This, however, cannot adequately be assessed without considering two related questions: What are the critical cost constraints — and what explains the large and rapidly rising costs of education throughout the Commonwealth, especially in the poorer Commonwealth countries which still have relatively low enrolment ratios?

These of course, are not the only issues involved — but certainly they are important ones. In the course of attempting to answer them, I hope to have indicated at least an approach to the analysis of other more general issues of educational costs. This analysis will distinguish sharply between financial costs, which already are usually pushing against budgetary constraints, and what may be called the real manpower costs, which are usually in most respects far inside the limits of available resources.

## Educational Realities — the Starting Point

Tables 1, 2 and 3 present the basic data on enrolment ratios and the growth of enrolments and public expenditure on education over the last two decades. These data are familiar — probably only too familiar in terms of painful experience for those in Ministries of Education daily wrestling with ways to match the political ambitions for an expanding system with the financial constraints of the government budget. At the same time, one may miss some of the major tendencies, common to most developing countries, just because the basic data are so well known. These tendencies are:

(a) Educational enrolments have risen rapidly in all countries — but almost always more rapidly at higher levels than at secondary and very much faster at secondary than at primary level.

(b) Educational enrolment ratios, however, have risen more slowly and still spread over a wide range. Primary enrolment ratios in the African Commonwealth countries have risen from half to over three-fifths of the age group but are still substantially below those in Asia. In the Caribbean and most other Commonwealth areas, universal primary education has virtually been achieved. Secondary school enrolment ratios have risen rapidly in all parts of the Commonwealth, most rapidly in Africa, least in the developed Commonwealth, but the range of enrolment ratios is still very wide at secondary level. At university level, not surprisingly, the differences in enrolment ratios are widest of all.

(c) Public expenditure on education has risen extremely rapidly in virtually all countries; two, three, sometimes four times faster than total enrolments and in almost all cases considerably faster than either government revenue or the Gross National Product.

**Table 1**

Primary, Secondary and Tertiary Enrolment Ratios of Commonwealth Countries by Main Regions (total enrolments at each level as a percentage of eligible school age population)

| | No. of countries covered | Primary Level | | | Secondary Level | | | Tertiary Level | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1960 | 1970 | latest | 1960 | 1970 | latest | 1960 | 1970 | latest |
| Africa | 13 | 48 | 56 | 63 | 4 | 10 | 12 | 0.2 | 0.7 | 0.6 |
| Asia | 7 | 81 | 90 | 89 | 22 | 40 | 43 | 1.3 | 3.2 | 3.4 |
| Caribbean | 4 | 113 | 104 | 103 | 25 | 40 | 45 | 0.7 | 2.7 | 3.6 |
| Other | 2 | 108 | 106 | 105 | 17 | 38 | 48 | NA | 3.4 | 4.1 |
| Developed Commonwealth | 4 | 112 | 109 | 106 | 61 | 76 | 76 | 15.0 | 25.5 | 26.4 |

(Source: UNESCO Data, given in Appendix Table A.2)

| | |
|---|---|
| Africa | As Table 2 but excluding Seychelles |
| Asia | As Table 2 but excluding Bangladesh |
| Caribbean | Barbados, Guyana, Jamaica, Trinidad & Tobago |
| Other | Fiji, Malta |
| Developed | Australia, Canada, New Zealand, United Kingdom |

**Table 2**

Average Public Expenditure on Education of Commonwealth Countries by Main Regions (regional averages are unweighted averages of country or region)

| | No. of countries covered | Percentage of G.N.P. | | | Percentage of all Public Expenditure | | |
|---|---|---|---|---|---|---|---|
| | | 1960 | 1970 | 1970+ | 1960 | 1970 | 1970+ |
| Africa | 14 | 3.2 | 3.8 | 4.1 | 14.7 | 15.5 | 13.2 |
| Asia | 5 | 3.0 | 3.7 | 3.8 | NA | 13.7 | 14.3 |
| Caribbean | 6 | 2.8 | 5.0 | 5.9 | 14.5 | 19.2 | 18.5 |
| Other | 6 | NA | 4.8 | 6.1 | NA | 16.2 | 16.7 |
| Developed Commonwealth | 4 | 3.4 | 5.8 | 6.0 | NA | 13.2 | 25.9 |
| Total | 35 | 3.2 | 4.1 | 4.7 | 14.7 | 15.0 | 15.6 |

(Source: Appendix Table A.1)

Regions defined as in Table 3 except that Asia excludes Bangladesh

**Table 3**

Average Growth Rates of Educational Enrolments by Level and Public Expenditure on Education in Main Commonwealth Regions
(regional averages are the unweighted averages of country growth rates in the region)

| Region | No. of countries | Primary Level | | | Secondary Level | | | Tertiary Level | | | Public Expenditure | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1950—60 | 1960–70 | 1970+ | 1950–60 | 1960–70 | 1970+ | 1950–60 | 1960–70 | 1970+ | 1950–60 | 1960–70 | 1970+ |
| Africa | 14 | 6.3 | 5.9 | 5.6 | 16.3 | 13.3 | 10.4 | 16.9 | 26.8 | 13.2 | 16.1 | 14.1 | 16.6 |
| Asia | 8 | 7.3 | 3.5 | 1.4 | 13.1 | 12.3 | 9.5 | 13.6 | 9.8 | 10.5 | 18.3 | 10.2 | 4.4 |
| Caribbean | 6 | 3.0 | 2.4 | 1.7 | 13.4 | 9.3 | 8.8 | 11.7 | 19.5 | 42.0 | 11.4 | 17.0 | 8.6 |
| Other | 6[a] | 4.6 | 1.5 | 3.3 | 14.0 | 11.9 | 6.5 | NA | 5.2 | 13.6 | 12.8 | 14.6 | 11.2 |
| Developed Commonwealth | 4 | 3.4 | 1.8 | 2.4 | 6.8 | 4.4 | 14.9 | 5.1 | 10.8 | 4.5 | 13.0 | 13.0 | 14.6 |
| Total | 38 | 5.3 | 3.7 | 2.9 | 13.8 | 11.3 | 9.8 | 11.5 | 17.3 | 13.6 | 15.0 | 13.7 | 12.8 |

(Source: Appendix Table A.3)

| | |
|---|---|
| Africa: | Botswana, Gambia, Ghana, Kenya, Lesotho, Malawi, Mauritius, Nigeria, Seychelles, Sierra Leone, Swaziland, Tanzania, Uganda, Zambia |
| Asia: | Bangladesh, Cyprus, India, Malaysia, Sabah, Sarawak, Western Malaysia, Singapore, Sri Lanka |
| Caribbean: | Bahamas, Barbados, Grenada, Guyana, Jamaica, Trinidad and Tobago |
| Other: | Fiji, Malta, Nauru, Papua New Guinea, Tonga, Western Somoa |
| Developed countries: | Australia, Canada, New Zealand, United Kingdom |

*Note:* Data are not always available for all periods for all countries in each region. In such cases, the regional average refers to the average of those data which are available as indicated in Table A.3.

The share of total government expenditure going on education has also increased significantly, and has, in increasing numbers of countries, reached proportions which are said to mark the limits of what is politically acceptable.

More significant, these financial constraints on further educational expansion co-exist with the following paradoxical features of the educational scene.

(a) Considerable and sometimes growing unemployment of school leavers. In Asia these are graduate and secondary school leavers; in Africa, so far, mainly secondary and primary school leavers. This phenomenon is so well known that it needs little elaboration — except to note that the causes are often more complex than often assumed and that visible unemployment of the educated is usually only the tip of an iceberg of frustration and under-utilization of skills and education which involves those without educational qualifications as well as those who have some.

(b) Increasing evidence of education's inappropriateness for broad-based development, particularly for the mass of the rural population. The content and approach of primary education is still too often far removed from the realities of rural development. Higher levels of education are almost entirely concentrated on the needs of the urban modern sector and civil service, even in those areas like agriculture or engineering or medicine, where expertise in relevant rural small-scale technology is desperately needed if basic needs are to be satisfied.

(c) A particular weakness, usually emphasized even less than others is the inadequacies of education for enabling women to play a fuller and more effective role in both household and economic activities. In rural areas, the over-employment of women is often a critical constraint on raising living standards for the whole family — yet rural education has done little to develop the skills or attitudes to deal with it.

(d) In spite of higher unit costs and educated unemployment, it is enrolments at higher and secondary levels which have continued to expand considerably faster than enrolments at primary level. Moreover, in a number of countries — and perhaps *generally* in Africa — the rate of expansion at secondary and higher levels has exceeded the planned rate over much of the period since 1960, while the actual expansion of primary enrolments has fallen short of the planned ratio.

(e) Finally, education which is often justified as an instrument for achieving greater equality of opportunity and even income, has emerged as a major social mechanism for re-inforcing inequality of opportunity and income.

Educational certificates are used in both the public sector and the larger firms of the private sector to select people to fill the best jobs, sometimes to determine promotion and frequently to fix the salaries of those who get the jobs.

The differentials paid at graduate and secondary level are not small, as Table 4 illustrates. Combined with sharply narrowing educational pyramids in which barely ten in a hundred of those who start primary enter secondary school and barely three of them go to higher education, the inequality of the interlocking process is considerable: for those who make it

**Table 4**

Salary ratios of persons with graduate and primary-level qualifications to per capita income in the public sector in selected Commonwealth countries 1963–1976

| | Period | Graduate level salary to per capita income | Primary level salary to per capita income |
|---|---|---|---|
| *Africa* | | | |
| Botswana | 64–70 | 31.9 | 3.2 |
| | 70–74 | 17.0 | 2.0 |
| | 74–76 | 16.7 | 2.8 |
| Ghana | 67–74 | 9.5 | 1.2 |
| | 74–75 | 11.1 | 2.3 |
| Kenya | 67–70 | 25.8 | 3.7 |
| | 70–74 | 23.7 | 3.5 |
| Malawi | 70–71 | 33.3 | 2.8 |
| | 75–76 | 16.7 | 1.4 |
| Mauritius | 66–67 | 8.7 | 1.3 |
| | 70–71 | 10.0 | 1.7 |
| | 75–76 | 6.1 | 0.8 |
| Nigeria | 63–64 | 32.4 | 5.6 |
| | 68–69 | 20.3 | 4.0 |
| | 72–73 | 15.8 | 3.6 |
| Sierra Leone | 63–64 | 17.2 | 1.4 |
| | 69–70 | 23.6 | 2.0 |
| | 74–75 | 17.7 | 1.7 |
| Swaziland | 67 | 21.2 | 2.3 |
| | 69–70 | 17.1 | 2.4 |
| | 71–72 | 12.3 | 2.1 |
| Tanzania | 64–65 | 37.2 | 4.2 |
| | 70–71 | 25.8 | 3.6 |
| Uganda | 67–73 | 21.5 | 3.2 |
| Zambia | 70–74 | 14.1 | 2.7 |
| | 74– | 13.3 | 2.6 |
| *Asia and Pacific* | | | |
| India | 73 | 12.3 | 3.2 |
| Sri Lanka | 74 | 7.3 | 1.9 |
| Fiji | 73 | 6.6 | 2.2 |
| *Caribbean* | | | |
| Barbados | 63–64 | 7.0 | 1.5 |
| | 68–69 | 6.4 | 1.6 |
| | 73—74 | 5.2 | 1.6 |
| Trinidad & Tobago | 71 | 6.6 | 1.6 |

Source: Recurrent Estimates and Salary Commissions of the countries concerned

to the top and into a graduate job, earnings of often 15 to 50 times per capita income, plus regularity of incomes, job security, annual increments and often virtually assured promotion prospects. By comparison, earnings for those who only get as far as a job requiring primary education are usually 3 to 5 times per capita income — tiny in relation to the

earnings of those in jobs requiring graduate qualifications but even then considerably in excess of the earnings in cash or kind of the typical farmer.

These paradoxes are related in that one of the main causes for so many school leavers being unemployed is the existence of a structure of salaries and incentives which draws most of the skilled manpower away from the countryside to the towns and from occupations of priority for meeting basic needs towards educationally overloaded occupations and sectors where under-employment at junior and middle levels often co-exists with over-worked civil servants at the top! This inappropriate salary structure, by raising the costs of employing skilled persons, is also a main reason why it is impossible to expand the school system, health facilities and other services and activities needed for meeting basic needs. This wage and salary structure is also the prime cause of the unit costs of secondary and higher education being so much higher than the unit costs of primary. Essentially it is a wage and salary structure out of line with the resources of the whole country.

Given such differentials, perhaps the contradictions seem less paradoxical and more an expression of sharp and complex contradictions between individual (and class) interests and social needs. Education is the ladder of success, which allocates the rewards and legitimizes the whole system. But, in doing so, enormous rewards have been created. Students, parents, the general public, the politicians, even the educational administrators have been drawn into a process which ever expands the number of places at secondary and higher levels — even with the risk of unemployment. All this has in effect been increasingly at the expense of resources for primary education. Yet the process can only continue for a limited time. Eventually, it will become too expensive. But the whole content and focus of education will have been corrupted by preoccupation with its use for access to higher incomes and better jobs. Education's contribution to meeting the basic needs of the majority of the population and to rural development may have been virtually destroyed.

## The Crucial Elements in Educational Costs

A first step to unravelling what needs to be done is to decompose public (or private) expenditure on education into the crucial elements which determine unit costs. In fact, this is done far too rarely; instead, costs per student at different levels or in different types of education are calculated, quoted and used to determine policy in ways which are often highly misleading with respect to the true economic costs and resources involved. Like many other statistics, until one looks behind them, unit costs of education hide more than they reveal.

The critical determinants of educational costs* are in most countries the following:

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*Fuller explanations of the points that follow can be found in *Costs and Confusions in African Education*, Richard Jolly (ed), *Education in Africa; research and action*. East African Publishing House, (Nairobi) 1969.

### *Recurrent Costs*

The level and structure of teachers' salaries — which in turn reflect (a) qualifications and grading of teachers at each level of education, (b) the relationship between teachers' salaries and that of others in the educated professional groups, and (c) the level of salaries of the educational professional group as a whole.

The average pupil-teacher ratios at each level of education — which in turn reflects (a) class size and (b) staffing and school organization.

The non-salary costs of education — which at primary and secondary levels are almost always a minor part of total recurrent costs in all countries, frequently less than 20 per cent. At tertiary level, these may become more important — and occasionally a cause of unnecessary waste.

### *Capital Costs*

The capital costs per place — which usually reflect (a) the standards and general quality chosen for school and university accommodation as much as (b) actual space provision and (c) general building costs. Critical also is (d) the efficiency of school organization — notably whether shift use is common or exceptional, whether school and university facilities are left vacant during vacations and whether subject options and timetabling make intensive use of specialist facilities like laboratories and assembly halls instead of requiring extra provision.

These four factors explain why the proportions of national income spent on education in different countries differ so much less than the percentage of school-age children attending school. Among Commonwealth countries public expenditure on education as a percentage of national income averages 4.8 per cent, ranging (as Table A.1 shows) from 2.6 to 8.1 per cent with three-quarters of the countries falling between 3.0 and 6.4 per cent. Yet enrolment ratios in the same group of countries range as widely as 34 to 112 per cent of the relevant age group at primary level, 3 to 83 per cent at secondary level, 0.2 to 37.3 per cent at tertiary level. These country differences in enrolment ratios (shown in Table A.1) are far from simply matched with the narrower differences in public expenditure on education. Why?

The answer to the question is tremendously significant for illuminating the cost constraints in education. In brief, unit costs of education at each level differ much less than per capita income between countries. *Thus the poorer countries have to spend a much higher share of their resources for each person in education than the richer countries.** On top of this, the poorer countries have experienced higher rates of population growth than the richer countries, usually 2 to 3 per cent per annum against about

*This relationship does not appear clearly in data for which student unit cost figures encapsulate different proportional emphases on primary, secondary and tertiary education. The fact that the proportional emphasis placed upon each level of the system differs strongly between countries is itself a major reason for different unit costs, and different percentages of the budget and G.N.P. going to education. Since university education is not as important in the poorest countries, this improves their costs picture relative to the rich groups.

half per cent per annum. This in turn results in the school-age population being a substantially higher proportion of the total or working population than in the more developed countries. The economic impact is made more severe by the tendency in many areas to build secondary and higher education facilities at standards which often put considerable strain on the government budget.

It is the first two factors — namely the average level of teachers' salaries and the pupil-teacher ratios — which explain the relatively high level of unit costs. As a multiple of per capita income, teacher salaries in Africa and the Caribbean are much higher than in Asia and in virtually all developing countries are higher than in the developed countries. This is not to say that teachers alone are well paid. Often they are worse paid than many others with jobs requiring similar educational qualifications. But as a group, teachers and others with qualifications are often paid very highly in relation to the resources and average incomes of the country — with the result that any given share of the nation's resources buys much fewer teaching hours than it would in countries where salaries of the educated are only two or three times per capita income.

Two further difficulties follow from this situation. First, the cost of raising the quality of the teaching force by employing more educated teachers or upgrading existing teachers becomes proportionately more expensive than in richer countries. Second, the cost of expanding secondary and higher educational levels, which by definition requires more highly qualified and trained teachers, also absorbs disproportionately large fractions of public expenditure on education.

Both these factors have operated over the last two decades or longer and account for the very rapid rise in educational costs in spite of much slower increases in enrolments. Since 1950, total public expenditure on education has risen on average some 21 to 23 times in most regions of the Commonwealth, and considerably faster in Africa, where on average it has risen 36 times. The increase of enrolments explains a good part of this rise in education costs, but in total less than half. The remainder is mainly increases in teachers' salaries, the cumulative result of inflation, upgrading, proportionately faster expansion at secondary and higher levels requiring more qualified staff, and to some extent — particularly in the earlier period — increases in teachers' salary scales in relation to the cost of living.

In passing one may note two factors which have had little influence on changes in costs — though in principle they might have been important. The first is the pupil-teacher ratio, which has changed little since 1960. In spite of a slight tendency to have risen at primary levels and slightly more at secondary and probably higher levels, the potential for major savings in costs by changes in the pupil-teacher ratio has not been exploited. In contrast, and most unfortunately for education quality, expenditure on non-salary items seems too often to have been too low, resulting in ill-equipped classrooms and students and teachers without even sufficient basic books for many subjects. This is particularly tragic because compared with salaries, the impact on total costs of more and better equipment at primary (and often secondary levels) is almost negligible — yet its effect on educational performance is likely to be considerable.

## The Choices Ahead — Difficult Options but Real Opportunities

We are so accustomed to treating the financial constraints of education and so much of its cost determining structure as given that we often fail to sense the magnitude of what we sacrifice through not exploring options with sufficient imagination. In order to make this clear, one can calculate the extent to which it would be possible to move rapidly to universal primary education without any increase in total educational expenditure. This goal is of course only one of the quantitative measures which could be used. It is chosen, partly because it is in line with the basic needs strategy and partly because it illuminates more general issues, but in an area which in many countries is already accepted as one of high political priority. Many politicians might think again at the difficulties of adopting certain cost saving measures if they realized the full extent to which they might make possible a rapid move to universal primary education.

According to the figures for the latest year available, twelve Commonwealth countries out of the 30 for which enrolment data are given in the latest UNESCO Statistical Yearbook had achieved universal primary education — judged by the admittedly approximate measure of a primary enrolment ratio of 100 or more. The other 18 countries were distributed as shown below:

| Primary enrolment ratio for latest year available | Number of countries |
|---|---|
| 80–99 | 7 |
| 60–79 | 4 |
| 40–59 | 5 |
| 30–39 | 2 |
| | 18 |

Although these 18 countries have not yet achieved universal primary education, the failure cannot be blamed on the lack of real resources. Education is essentially a labour intensive activity. The human resources required for expansion, persons with the skills and abilities to be teachers, are not lacking. Many such persons, as noted already, are under-employed if not unemployed and seeking work. The problem is not to find them — but to mobilize them, to enable them to use their skills and abilities productively.

The conventional way to mobilize them as teachers (or into any other activity) is simply to pay them a salary. But this runs against the financial cost constraints in the sense that more countries lack the finance to pay the additional salary bill and, in turn, the foreign exchange and sometimes local productive capacity needed to supply the goods on which the additional salaries would be spent.

Can nothing be done? In principle, there are two ways around these constraints. One can "wait for growth" — for additional production to become available which will provide the foreign exchange and local resources needed for additional teachers' salaries and their additional consumption. Quite apart from the delays, however, this strategy may never succeed. Salaries and consumption levels have frequently shown a tendency to rise along with overall growth of national income, thus absorbing the gains in paying teachers more rather than in providing for more teachers.

The other objection to this approach is more fundamental. Many of the disastrous problems and inadequacies of the present situation arise precisely because of the failure over the last two decades to achieve redistribution with growth. Structures of production, employment, salaries and government services have been inherited or built up which prevent the general achievement of basic needs for many of the same reasons why basic education for all seems unattainable. Unlocking the structures which will make it possible to mobilize additional teachers for education is thus part of the wider process of meeting basic needs in general. Similarly, to postpone action on mobilizing under-employed manpower for teaching is probably to postpone action on mobilizing under-employed people and resources for meeting other basic needs as well.

What is the alternative to "waiting for growth"? Essentially it is to provide for educational expansion (and to tackle other educational problems) within the resources already available, especially within available human resources. This means working out how educational goals can be achieved by adapting institutions and incomes structure to achieve them rather than adapting the goals to fit unchanged organization and limited resources.

Given the determinants of educational costs identified earlier, there are three major ways in which this can be done: (a) a revision in the effective salary structure of teachers and other employees with comparable education; (b) changes in pupil-teacher ratios and the other structural factors determining the major part of educational costs; and (c) much greater provision of financial support and resources from abroad.

A revision in the effective salary structure of teachers and other educated persons would make it possible to employ more teachers within a given budget. But it would also make possible a general narrowing of excessive differentials and incentives, one of the critical requirements for the eradication of educated unemployment and the establishment of an incentive structure related to the priorities of rural development and basic needs.

A wholesale restructuring over time of wages and incomes implies a major and sustained incomes and wages policy applying to all educated persons and not just teachers. One must frankly admit that in spite of the obvious difficulties in many countries, this seems to be an inescapable need if educated unemployment is to be eliminated and basic needs met.

At the same time, important though less satisfactory alternatives are available, both as positive measures in themselves and hopefully as steps towards more fundamental reforms. Such measures include: the adoption of national service wage scales for teachers and others in the first two or three years after training, the use of volunteer teachers or pupil-monitors, and a revision of the automatic link between teachers' qualifications and individual salary grading. Some reduction of excessive salary differentials in general has often been achieved as a by-product of inflation, by providing only partial compensation for cost of living increases among the higher income groups but full compensation for those at the minimum wage level. All these approaches are or have been in operation — though often their broader significance as steps towards more general changes in salary and incentive structures has not been emphasized.

One quite different approach is for government to provide its financial support for education to the local community — and to leave it to the community to supplement in cash or kind the teacher's remuneration, in the form of free housing, free food or assistance with work on the teacher's farm etc. Such an approach, in principle, offers a major way to bridge the gap between limited government financial resources and the additional consumption which employing more teachers would generate. It does this by building on the productive resources of the rural areas and not just by finance from central government (though it implies the need to diminish urban bias elsewhere in the community).

Each of these measures can be used singly or in concert, to make possible changes in education expansion and improvements in the short run and, at the same time, to move towards broader changes in salary structure. The extent of the salary changes required will naturally vary with the particular circumstances of each country. If at all possible, the measures should be applied to all salaried workers with educational qualifications, not just to teachers.

The second approach, whether with or without some change in salary structure, would be by changes in the factors internal to the educational system which largely determine its financial costs. These are the pupil-teacher ratio at primary level and those factors at secondary and higher levels which determine unit costs (which in principle could be both salary and non-salary factors). For most of the 18 countries which have yet to achieve universal primary education, this target is within reach with changes in these two factors and no major changes in educational expenditure. For instance, as shown in Table 5:

(a) Of the seven countries with primary enrolment ratios between 80 and 99, four could reach an enrolment ratio of 100 by raising their average pupil-teacher ratio to 40 and the other three by raising it to 43, 46 and 54. Alternatively, if unit costs in secondary and higher education were reduced by 20 per cent and the savings transferred to primary education, the 100% enrolment ratio could be achieved with a reduction in the present primary pupil-teacher ratio in two of these three countries.

(b) Of the four countries with current primary enrolment ratios between 60 and 79, an expansion in coverage to 100% enrolment ratios is also within reach with cost saving changes. Such enrolment ratios are achievable with pupil-teacher ratios of no more than 42, providing 20 per cent of expenditure could be shifted from secondary and higher education to primary. Without this, pupil-teacher ratios would have to rise to just over 50.

(c) For the seven countries with the latest primary enrolment ratios recorded between 30 and 59, the changes required to reach 100% enrolment ratios are naturally more extreme. Even with a 20% shift in expenditure to primary, pupil-teacher ratios would have to increase to around 60 in four cases. In the cases of Tanzania and Malawi, where the average pupil-teacher ratios are already recorded around 50, a pupil-teacher ratio of about double this would be reached if a 100% enrolment ratio were to be achieved with no increase in total expenditure: in these cases, an alternative approach is obviously necessary.

**Table 5**

Changes required to achieve 100% primary enrolment ratios within developing countries of the Commonwealth

| | Latest year data | | Primary pupil-teacher ratios required to achieve 100% primary enrolment ratio | |
|---|---|---|---|---|
| | enrolment ratio | pupil-teacher ratio | with no shift in expenditure | with 20% expenditure shift from secondary and higher levels |
| *Current primary enrolment ratios of 100 or more* | | | | |
| Lesotho | 102 | 45 | — | — |
| Singapore | 105 | 31 | | |
| Sri Lanka | 102 | — | | |
| Barbados | 101 | 26 | | |
| Fiji | 102 | 32 | | |
| Jamaica | 106 | 57 | | |
| Trinidad & Tobago | 110 | 35 | | |
| *Current primary enrolment ratios between 80 and 99* | | | | |
| Mauritius | 81 | 29 | 36 | 33 |
| Swaziland | 90 | 39 | 43 | 34 |
| Zambia | 89 | 48 | 54 | 46 |
| Cyprus | 78 | 28 | 36 | 29 |
| Malaysia—Sabah | 97 | 27 | 28 | 25 |
| Sarawak | 81 | 37 | 46 | 42 |
| W. Malaysia | 92 | 31 | 34 | 29 |
| Guyana | 93 | 32 | 34 | 30 |
| | 88 | 34 | 39 | 34 |
| *Current primary enrolment ratios between 60 and 79* | | | | |
| Botswana | 71 | 34 | 48 | 40 |
| Kenya | 74 | 32 | 43 | 37 |
| India | 68 | 35 | 51 | 33 |
| | 71 | 34 | 47 | 37 |
| *Current primary enrolment ratios less than 60* | | | | |
| Gambia | 35 | 28 | 80 | 58 |
| Ghana | 55 | 29 | 53 | 42 |
| Malawi | 51 | 52 | 102 | 83 |
| Nigeria | 41 | 34 | 83 | 64 |
| Sierra Leone | 34 | 32 | 94 | 58 |
| Tanzania | 43 | 48 | 112 | 96 |
| Uganda | 48 | 33 | 69 | 57 |
| | 44 | 37 | 85 | 65 |

It is not suggested that changes of this sort would be lightly undertaken, let alone easy to implement. There is also a danger in drawing such firm conclusions from macro data. Particularly in countries with wide variations in population density, double sessions in primary schools may be impossible unless boarding facilities are provided. In countries with large land area relative to population, building more schools and providing more teachers may be the only option for a significant proportion of the

out-of-school population. Nevertheless, before they are dismissed as totally impracticable, the following points should be carefully considered.

Pupil-teacher ratios of 50 or even 60 do *not* necessarily mean classes of this size. By means of double-session teaching, alternate classes attending on alternate days, pupil-teacher ratios of 50 or even 60 can be combined with classes of around 30, certainly less than 40. Such methods have all been employed at different times in both developed and developing countries. No doubt they are not ideal — but they may be preferable, educationally and politically, to either very large class sizes or to a whole educational system which leaves large numbers of a nation's children without school places. It should also be noted that:

(a) Pupil-teacher ratios are on average higher in those developing countries which have attained primary enrolment ratios of 100 or more than in countries which have not.

(b) Pupil-teacher ratios of the magnitude of 45 and 50, even 60, both with and without double session teaching are found in a number of countries today.

(c) Educational research has established no firm relationship, positive or negative, between class size and student performance.

The third main option is to rely on outside resources rather than national ones — and so is hardly an example of the self-reliant approach. Nor is it in the present world a serious alternative to changes in salary or institutional structures within countries. International resources of the scale required are simply not in sight — and there is in addition the reluctance of many donors to meet local costs in the way which would be required. It will be recalled that the 1961 Addis Ababa Plan for educational expansion in Africa was based in part on a massive inflow of resourses which, in the event, proved to be totally unjustified.

Nevertheless, in a Commonwealth meeting the international dimensions of support for education need to be mentioned. Logically, the international redistribution of resources required is no less justified than the redistribution within countries which the earlier options implied. Moreover, in certain respects — notably in the flows of educational aid and students in one direction and the not unimportant brain drain flows in the other — international educational exchanges already take place. For certain of the poorer countries and in certain areas of specialist skills and technology a continuation and even some expansion of this will be necessary.

If this is to take place in ways which help rather than hinder the earlier policy changes, however, certain changes are required in the way it takes place:

(a) The supply of expatriate teachers at salary levels and living standards far above local levels only exacerbates the reform of salary structures earlier outlined. The supply of trained teachers on volunteer terms or of teachers from other Third World countries might help to avoid many of these problems.

(b) The old question of the relevance of curricula, textbooks, technologies and approaches imported from abroad takes on a new importance in the light of basic needs and the priority for rural development.

(c) Support from abroad which sustains or helps to develop centres of excellence rather than centres of extravagance is obviously vital. One needs to emphasize quality in terms that matter and to avoid excessive expenditure in areas which raise unit costs with little effect on educational quality.

All these options imply some changes in the distribution of income. A few may imply some changes in the quality of education, to the benefit of those at present outside the system but at possibly some cost to those at present within it.

## To Plan is to Choose

Cost or financial arithmetic can illustrate some of the issues: it can even help to dispel some of the illusions as to the nature of the real constraints involved. The purpose of this paper is not to suggest that achieving universal primary education or other educational changes is simply a matter of altering teachers' salaries, juggling with the pupil-teacher ratio or reducing unit costs in secondary and higher education. The educational, organizational, political and social issues are infinitely more complex than this. The financial issues are *not*. Yet it is the financial issues which usually are the ones which dominate the discussion as to why it is thought impossible to meet basic needs for education for all the population within the foreseeable future. In terms of finance, the goal is within the grasp of every Commonwealth country, if only we choose to achieve it.

## Table A.1

## PUBLIC EXPENDITURE ON EDUCATION

| | | *Total (000's of Local Currency)* | | | | *Percentage of Gross National Product* | | | | *Percentage of all Public Expenditure* | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Local Currency | 1950 | 1960 | 1970 | Latest* | 1950 | 1960 | 1970 | Latest* | 1950 | 1960 | 1970 | Latest* |
| AFRICA | | | | | | | | | | | | | |
| Botswana | Rand | 162 | 635 | 3,025 | 3,547[1] | NA | NA | 3.6 | 3.5[1] | NA | 12.9 | 12.3 | 9.4[1] |
| Gambia | Dalasi | NA | 1,010 | 2,558 | 3,528[2] | NA | NA | 3.0 | 3.3[2] | NA | NA | NA | NA |
| Ghana | Cedi | 4,896 | 32,740 | 95,430 | 115,534[1] | NA | 3.4 | 4.2 | 4.6[1] | NA | 14.4 | NA | NA |
| Kenya | Shilling | 41,600 | 208,000 | 452,260 | 789,200[2] | NA | 4.6 | 4.0 | 5.5[2] | NA | 20.4 | 14.4 | 18.6[2] |
| Lesotho | Rand | 330 | 858 | 2,286 | 2,388[1] | NA | NA | NA | 4.4[1] | NA | NA | 13.3 | 17.01[1] |
| Malawi | Kwacha | 209 (pound) | 3,286 | 10,804 | 10,973[2] | 1.5 | 3.6 | 4.0 | 3.0[2] | NA | 14.8 | 13.1 | NA |
| Mauritius | Rupee | 5,149 | 23,249 | 38,818 | 47,354[2] | NA | 3.7 | 3.7 | 3.4[2] | NA | 13.9 | 11.5 | 9.0[2] |
| Nigeria | Naira | NA | 46,542 | 192,732 | NA | NA | 2.1 | 3.5 | 3.9[3] | NA | NA | 33.7 | NA |
| Seychelles | Rupee | 467 | 1,133 | 4,289 | 4,900[1] | NA | NA | NA | NA | NA | NA | 11.5 | 8.9[1] |
| Sierra Leone | Leone | 792 | 4,274 | 10,349 | 10,845[1] | 0.8 | NA | 2.9 | 3.0[1] | NA | NA | NA | NA |
| Swaziland | S.A. Rand | 162 | 592 | 3,737 | 4,502[1] | NA | NA | 4.7 | 4.5[1] | NA | 10.0 | 18.7 | NA |
| Tanzania | E.A. Shilling | 28,640 | 30,080[a] | 330,039 | 368,642[1] | NA | NA | 3.6 | 3.8[1] | NA | NA | 15.4 | 15.0[1] |
| Uganda | Shilling | 17,840 | 104,160 | 361,646 | NA | NA | 3.4 | 4.3 | NA | NA | 18.7 | 17.8 | NA |
| Zambia | Kwacha | 1,008 | 6,832 | 47,973 | 76,416[2] | NA | 1.8 | 4.3 | 6.3[2] | NA | 12.5 | 9.3 | 14.6[2] |
| ASIA | | | | | | | | | | | | | |
| Cyprus[T] | Pound | 915 | 2,640[a] | 7,060 | 8,473[2] | 2.3 | 2.3[a] | 3.1 | 2.9[1] | NA | NA | 17.3 | 15.3[2] |
| India | Rupee | 777,600 | 3,416,230 | 10,213,000[1] | 10,939,000[2] | 0.8 | 2.3 | 2.7 | 2.6[2] | NA | NA | NA | 23.2[2] |
| Malaysia | Malaysian Dollar | | | | | | | | | | | | |
| Sabah | | 1,282[e] | 9,599 | 27,096 | 30,028[1] | NA | NA | NA | NA | NA | NA | NA | NA |
| Sarawak | | 1,133[e] | 15,698[a] | 32,976 | 33,471[1] | NA | NA | NA | NA | NA | NA | NA | NA |
| W. Malaysia | | 34,178 | 179,000 | 534,054 | 645,848[1] | NA | 3.2 | 5.5 | 6.4[1] | NA | 18.0 | 12.2 | 10.8[1] |
| Singapore | Dollar | 11,217 | 74,557[a] | 184,492 | 210,297[2] | NA | NA | 3.1 | 2.7[2] | NA | NA | 11.7 | 9.4[2] |
| Sri Lanka | Rupee | 111,000 | 285,974[a] | 544,382 | 642,523[2] | 2.7 | 4.3[a] | 4.2 | 4.6[2] | NA | NA | 13.4 | 12.6[2] |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OTHERS | | | | | | | | | | | | | |
| Australia | Dollar | 108,840 | 413,256 | 1,167,000[b] | 1,993,000[2] | 0.8 | 1.4 | 3.9[b] | 4.9[2] | NA | NA | 12.0[b] | 15.2[2] |
| Bahamas | Dollar | 131 | 2,139[a] | 22,520 | 22,867[1] | NA | NA | NA | NA | NA | NA | 23.2 | 20.3[2] |
| | | (pound) | | | | | | | | | | | |
| Barbados | W.I. Dollar | 1,396[e] | 3,998 | 20,969 | 28,301[2] | 2.6[e] | 2.9 | 7.2 | 7.9[2] | NA | NA | 21.2 | 21.2[3] |
| Canada | Dollar | 454,000 | 1,590,595 | 7,244,700 | 7,900,029[1] | 3.2 | 4.6[a] | 8.6 | 8.1[3] | NA | 14.3 | NA | 21.2[3] |
| Fiji | Dollar | 316 | 2,398 | 7,661 | 9,233[1] | NA | NA | 4.0 | 5.5[3] | NA | NA | NA | 20.3[3] |
| | | (pound) | | | | | | | | | | | |
| Grenada | E.C. Dollar | 421[e] | 1,156 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 19.5[2] |
| Guyana | W.I. Dollar | 3,366 | 8,021 | 23,209 | 22,367[1] | NA | 3.0 | 4.4 | 4.0[1] | NA | 12.1 | 14.0 | 12.4[1] |
| Jamaica | Dollar | 3,156 | 11,310 | 39,151[b] | 68,342[2] | 2.0 | 2.5 | 4.5[b] | 5.7[2] | NA | 16.4 | 18.5[b] | 19.3[2] |
| Malta | Pound | NA | 1,983 | 6,436 | 5,864[2] | NA | 3.9 | 6.4 | 5.3[2] | NA | NA | 13.0 | 13.9[2] |
| Nauru | Aust. Dollar | 20 | 146 | 706 | NA | NA | NA | 2.8 | NA | NA | NA | 14.1 | NA |
| New Zealand | N.Z. Dollar | 29,382 | 84,926 | 267,616 | 376,800[2] | 2.1 | 3.2 | 4.9 | 5.2[3] | NA | 9.2 | 14.3 | 17.1[3] |
| Papua New Guinea | Aust. Dollar | NA | 5,228 | 30,833[b] | 42,847[1] | NA | NA | 6.1[b] | 7.6[1] | NA | NA | 17.1[b] | 20.4[1] |
| Tonga | Dollar | NA | 252[a] | 675[1] | 718[1] | NA | NA | NA | NA | NA | 17.9[a] | 14.9 | NA |
| Trinidad & Tobago | Dollar | 5,568[e] | 23,344 | 62,143 | NA | 1.8[e] | 2.8 | 3.7 | NA | NA | 14.9 | NA | NA |
| United Kingdom | Pound | | 1,168,463[a] | 2,950,354 | 3,420,292[1] | | 4.3[a] | 5.9 | 5.9[1] | | | 13.2 | 13.7[1] |
| Western Samoa | Dollar | 324[e] | 442 | 1,527 | 1,295[2] | NA | NA | NA | NA | NA | NA | 21.8 | 12.3[2] |

*Latest year: 1 = 1971, 2 = 1972, 3 = 1973; a = 1961, b = 1969, c = 1968, d = 1959, e = 1951; T = expenditure by office of Greek Education only.
Sources: "Statistical Yearbook", 1969 and 1974. "Education Statistics — Latest Year Available", January, 1976, UNESCO.

## Table A.2 ENROLMENT RATIOS (GROSS)

| COUNTRY | PRIMARY | | | SECONDARY | | | TERTIARY | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1960 | 1970 | Latest* | 1960 | 1970 | Latest* | 1960 | 1970 | Latest* |
| AFRICA | | | | | | | | | |
| Botswana | 36 | 66 | 71[3] | 1 | 8 | 12[3] | NA | NA | 0.31[2] |
| Gambia | 15 | 32 | 35[3] | 4 | 9 | 11[3] | NA | NA | NA |
| Ghana | 59 | 58 | 55[3] | 2 | 9 | 9[0] | 0.24 | 0.72 | 0.74[1] |
| Kenya | 47 | 64 | 74[3] | 2 | 9 | 11[3] | NA | 0.97 | 1.03[2] |
| Lesotho | 83 | 95 | 102[3] | 3 | 7 | 12[3] | 0.22 | 0.45 | 0.40[1] |
| Malawi | 61 | 36 | 51[3] | 1 | 2 | 3[2] | NA | 0.25 | 0.26[2] |
| Mauritius | 86 | 79 | 81[3] | 25 | 35 | 41[2] | 0.15 | 2.53 | 1.47[2] |
| Nigeria | 37 | 34 | 41[3] | 3 | 4 | 5[2] | 0.07 | 0.30 | 0.37[1] |
| Seychelles | — | — | – | — | — | — | — | — | — |
| Sierra Leone | 23 | 34 | 34[3] | 3 | 9 | 9[1] | 0.16 | 0.50 | 0.53[1] |
| Swaziland | 56 | 84 | 90[3] | 5 | 17 | 25[3] | NA | 0.37 | 0.55[1] |
| Tanzania | 24 | 36 | 43[3] | 2 | 3 | 3[3] | NA | 0.17 | 0.22[2] |
| Uganda | 51 | 46 | 48[2] | 4 | 4 | 4[2] | 0.21 | 0.57 | 0.58[1] |
| Zambia | 47 | 70 | 89[2] | 1 | 12 | 13[2] | NA | 0.44 | 0.44[0] |
| ASIA | | | | | | | | | |
| Bangladesh | | | | | | | | | |
| Cyprus[T] | 100 | 82 | 78[2] | 48 | 57 | 66[3] | NA | NA | NA |
| India | 38 | 68 | 68[0] | 9 | NA | 15[f] | 1.70 | 4.35 | 4.35[0] |
| Malaysia | | | | | | | | | |
| Sabah | 62 | 102 | 97[2] | 8 | 29 | 36[2] | NA | NA | NA |
| Sarawak | 72 | 83 | 81[3] | 10 | 22 | 24[3] | NA | 0.49 | 0.48[2] |
| W. Malaysia | 91 | 89 | 92[2] | 19 | 34 | 37[3] | 1.47 | 2.03 | 2.52[3] |
| Singapore | 111 | 105 | 105[2] | 32 | 47 | 71[2] | NA | 8.25 | 8.28[2] |
| Sri Lanka | 95 | 101 | 102[1] | 27 | 50 | 52[1] | 0.58 | 1.09 | 1.20[1] |
| PACIFIC | | | | | | | | | |
| Australia | 110 | 106 | 105[2] | 61 | 83 | 83[0] | 13.11 | 16.70 | 18.44[2] |
| Fiji | 84 | 98 | 101[1] | 15 | 23 | 25[1] | NA | 0.90 | 1.62[1] |
| Nauru | — | — | — | — | — | — | — | — | — |
| New Zealand | 106 | 102 | 104[2] | 60 | 69 | 68[2] | 23.59 | 35.96 | 37.3[1] |
| Papua New Guinea | — | — | — | — | — | — | — | — | — |
| Tonga | — | — | — | — | — | — | — | — | — |
| Western Samoa | — | — | — | — | — | — | — | — | — |
| CARIBBEAN | | | | | | | | | |
| Bahamas | — | — | — | — | — | — | — | — | — |
| Barbados | 91 | 105 | 101[1] | 39 | 49 | 51[1] | 0.67 | 3.57 | 5.01[1] |
| Grenada | — | — | — | — | — | — | — | — | — |
| Guyana | 129 | 99 | 93[2] | 29 | 48 | 57[1] | NA | 1.74 | 1.97[2] |
| Jamaica | 118 | 101 | 106[2] | 10 | 24 | 32[2] | 0.73 | 3.00 | 4.79[2] |
| Trinidad & Tobago | 112 | 110 | 110[0] | 22 | 40 | 40[0] | 0.79 | 2.56 | 2.56[0] |
| OTHERS | | | | | | | | | |
| Canada | 118 | 118 | 102[1] | 56 | 77 | 77[0] | 16.03 | 35.49 | 34.7[1] |
| Malta | 131 | 114 | 109[2] | 19 | 52 | 70[2] | 2.30 | 5.93 | 6.53[2] |
| United Kingdom | 94 | 111 | 112[2] | 67 | 75 | 76[2] | 9.00 | 14.00 | 15.00[2] |

(Sources: Statistical Yearbook, 1966 & 1974, UNESCO. Education Statistics — Latest year available, January, 1976, UNESCO)

*Latest 0 = 1970; 1 = 1971; 2 = 1972; 3 = 1973; 4 = 1974; a = 1961; b = 1969; c = 1968; d = 1959; e = 1951; f = 1965; T = from 1965 data excludes Turkish education.

**Table A.3**

## INCREASE IN ENROLMENTS AND EXPENDITURES ON EDUCATION (AVERAGE PERCENTAGE PER ANNUM)

| | Primary Enrolments | | | Secondary Enrolments | | | Tertiary Enrolments | | | Public Expenditure on Education (to the nearest ½ per cent) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AFRICA | | | | | | | | | | | | |
| Years | 50–60 | 60–70 | 70–74 | 50–60 | 60–70 | 70–74 | | | 70–73 | 50–60 | 60–70 | 70–71 |
| Botswana | 8.1 | 8.6 | 5.7 | 15.6 | 22.5 | 23.9 | NA | NA | 36.5 | 14.5 | 17.0 | 17.0 |
| Years | 51–60 | 60–70 | 70–73 | 51–60 | 60–70 | 70–73 | | | | | 60–70 | 70–72 |
| Gambia | 7.4 | 9.3 | 6.5 | 12.4 | 11.8 | 5.4 | NA | NA | NA | NA | 9.5 | 17.5 |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 71–73 | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–71 |
| Ghana | 6.7 | 10.6 | 0.8 | 39.7 | 15.4 | 4.9 p | 30.3 | 16.5 | 11.0 | 21.0 | 11.5 | 21.0 |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–73 | 56–60 | 65–70 | 70–73 | 50–60 | 60–70 | 70–71 |
| Kenya | 7.9 | 6.2 | 8.4 | 1.9 | 17.6 | 11.2 | 12.8 | 25.0 | 1.5 | 17.5 | 8.0 | 32 |
| Years | 50–60 | 60–70 | 70–72 | 50–60 | 60–70 | 70–72 | 50–60 | 60–70 | 70–71 | 50–60 | 60–70 | 70–71 |
| Lesotho | 4.4 | 3.0 | −1.9 | 9.7 | 9.2 | 16.8 | 22.5 | 9.0 | −8.5 | 10.0 | 10.5 | 4.0 |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–73 | | 65–70 | 70–73 | | 60–70 | 70–72 |
| Malawi | 2.6 | 2.4 | 14.0 | 26.6 | 13.9 | 10.3 | NA | 60.5 | 3.5 | NA | 12.5 | 1.0 |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–69 | 69–72 | 50–60 | 60–70 | 70–72 | 50–60 | 60–70 | 70–72 |
| Mauritius | 6.4 | 3.0 | 1.0 | 18.9 | 6.9 | 7.4 | 9.5 | 38.5 | −2.0 | 16.5 | 5.0 | 10.5 |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–73 | 50–60 | 60–68 | 68–73 | | 60–70 | |
| Nigeria | 11.6 | 1.9 | 9.9 | 20.2 | 7.9 | 13.2 | 23.5 | 14.0 | 1.0 | NA | 15.5 | NA |
| Years | 50–60 | 60–70 | 70–74 | 50–60 | 60–70 | 70–74 | | 60–70 | 70–72 | 50–60 | 60–70 | 70–71 |
| Seychelles | 2.8 | 4.6 | 2.9 | 10.3 | 10.6 | 12.6 | NA | 11.5 | 14.5 | 9.5 | 13.0 | 14.0 |
| Years | 50–60 | 60–70 | 70–71 | 50–60 | 60–70 | 70–71 | 50–60 | 60–68 | 68–73 | 50–60 | 60–70 | 70–71 |
| Sierra Leone | 9.6 | 6.8 | 6.4 | 10.4 | 16.6 | 7.2 | 5.0 | 16.0 | 12.0 | 18.5 | 9.5 | 4.5 |
| Years | 50–60 | 60–70 | 70–74 | 50–60 | 60–70 | 70–73 | | | 70–71 | 50–60 | 60–70 | 70–71 |
| Swaziland | 9.1 | 7.2 | 5.7 | 16.8 | 17.2 | 15.8 g | NA | NA | 54.5 | 14.0 | 20.0 | 20.5 |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–73 | | 65–70 | 70–72 | 50–61 | 61–70 | 70–71 |
| Tanzania | 8.7 | 6.5 | 9.6 | 4.9 | 7.2 | 5.2 | NA | 30.0 | 15.0 | 15.0 | 11.0 | 11.5 |
| Years | 50–60 | 60–70 | 70–72 | 50–60 | 60–70 | 70–72 | 50–60 | 65–70 | 70–71 | 50–60 | 60–70 | |
| Uganda | 9.0 | 3.1 u | 4.5 | 17.4 | 2.4 u | 3.8 | 14.5 | 23.5 | 5.5 | 19.5 | 13.5 | NA |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–72 | | 66–70 | 70–73 | 50–60 | 60–70 | 70–72 |
| Zambia | 5.9 | 9.2 | 5.2 | 22.7 | 26.5 | 7.3 | NA | 51.0 | 33.5 | 21.0 | 21.5 | 26.0 |

**Table A.3**—continued

## INCREASE IN ENROLMENTS AND EXPENDITURES ON EDUCATION (AVERAGE PERCENTAGE PER ANNUM)

| | Primary Enrolments | | | Secondary Enrolments | | | Tertiary Enrolments | | | Public Expenditure on Education (to the nearest ½ per cent) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ASIA | | | | | | | | | | | | |
| Years | | 65–69 | 69–73 | | 65–69 | | | | | | | |
| Bangladesh | NA | 7.1 | 9.0 | NA | 7.6 | NA | NA | NA | NA | NA | NA | NA |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 65–70 | 70–73 | 50–60 | 60–70 | 70–73 | 50–61 | 61–70 | 70–72 |
| Cyprus[T] | 2.7 | −1.6 | −2.8 | 9.1 | 5.6 | 6.2 | 8.0 | 5.5 | 6.5 | 10.0 | 11.5 | 9.5 |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–67 | 67–73 | 50–60 | 60–70 | | 50–60 | 60–71 | 71–72 |
| India | 6.2 | 5.7 | 0.8 | 7.8 | 10.3 | 17.6 g | 10.5 | 12.0 | NA | 16.0 | 10.5 | 7.0 |
| Malaysia | | | | | | | | | | | | |
| Years | 50–60 | 60–70 | 70–72 | 51–60 | 60–70 | 70–72 | | | | 51–60 | 60–70 | 70–71 |
| Sabah | 9.4 | 9.3 | 1.5 | 22.2 | 22.2 | 14.9 | NA | NA | NA | 26.0 | 11.0 | 11.0 |
| Years | 55–60 | 60–70 | 70–74 | 55–60 | 60–70 | 70–74 | | 65–70 | 70–73 | 51–61 | 61–70 | 70–71 |
| Sarawak | 12.2 | 4.3 | 4.1 | 8.1 | 14.4 | 9.5 | NA | 24.0 | 6.0 | 30.0 | 8.5 | 1.5 |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–72 | 50–60 | 60–70 | 70–71 |
| W. Malaysia | 6.5 | 2.5 | 2.6 | 19.0 | 12.2 | 8.1 | 27.0 | 8.0 | 17.0 | 18.0 | 12.0 | 21.0 |
| Years | 51–60 | 60–70 | 70–73 | 51–60 | 60–70 | 70–73 | 51–60 | 60–70 | 70–73 | 50–61 | 61–70 | 70–72 |
| Singapore | 9.2 | 2.5 | −1.7 | 20.2 | 9.8 | 6.2 | 18.0 | 3.0 | 7.0 | 19.0 | 10.5 | 7.0 |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–73 | 50–6 | 60–70 | 70–73 | 50–61 | 61–70 | 70–72 |
| Sri Lanka | 5.1 s | −1.8 | −2.7 | 5.1 p | 16.1 L | 4.1 | 4.5 | 6.0 | 16.0 | 9.0 | 7.5 | 8.5 |
| PACIFIC | | | | | | | | | | | | |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–72 | 50–60 | 60–69 | 69–72 |
| Australia | 4.5 | 1.5 | 0.1 | 7.5 | 5.7 | −2.8 | 8.5 | 8.5 | 7.5 | 14.5 | 12.5 | 19.5 |
| Years | 50–60 | 60–70 | 70–74 | 50–60 | 60–70 | 70–74 | | 60–70 | 70–73 | | 60–70 | 70–71 |
| Fiji | 4.2 | 4.8 | 2.7 | 13.0 | 13.2 | 12.9 | NA | 0.5 | 45.0 | NA | 12.5 | 20.5 |
| Years | 50–60 | 60–71 | 71–73 | 55–60 | 60–69 | 69–73 | | | | 50–60 | 60–70 | |
| Nauru | 7.5 | 2.8 | 9.1 | 9.8 | 11.7 | 4.5 g | NA | NA | NA | 22.0 | 17.0 | NA |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–71 | 50–60 | 60–70 | 70–72 |
| New Zealand | 3.8 | 1.8 | 1.0 | 7.3 | 4.6 | 2.3 | 3.5 | 9.0 | 7.0 | 11.0 | 12.0 | 18.5 |
| Years | | 65–70 | 70–74 | | 65–70 | 70–74 | | | 72–73 | | 60–69 | 69–71 |
| Papua & New Guinea | NA | −1.5 | 2.3 | NA | 17.1 | 11.2 | NA | NA | 4.5 | NA | 22.0 | 18.0 |
| Years | 50–60 | 60–70 | 70–73 | 51–60 | 60–70 | 70–73 | | | | | 61–71 | 71–72 |
| Tonga | 3.8 | 1.5 | −2.2 | 10.1 | 11.3 | 1.3 | NA | NA | NA | NA | 10.5 | 6.5 |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 61–70 | 70–73 | 50–60 | 60–70 | 70–71 | 51–60 | 60–70 | 70–72 |
| Western Samoa | 2.7 | 1.3 | 1.1 | 20.5 | 9.4 | 2.5 | −3.5 | −1.5 | 13.0 | 3.5 | 13.0 | 7.5 |

| CARIBBEAN | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Years | 50–60 | 60–70 | 70–71 | 50–60 | 60–70 | 70–71 | | | | | 61–70 | 70–71 |
| Bahamas | 1.8 | 4.0 | 10.4 | 27.4 | 12.6 | 5.0 | NA | NA | NA | NA | 30.0 | 1.5 |
| Years | 51–60 | 60–70 | 70–72 | 51–60 | 60–70 | 70–71 | 51–60 | 60–70 | 70–71 | 51–60 | 60–70 | 70–72 |
| Barbados | 3.0 | 1.5 | −3.0 | 3.0 | 3.3 | 3.3 | −1.0 | 19.0 | 44.0 | 8.5 | 18.0 | 16.0 |
| Years | 50–60 | 60–70 | 70–71 | 50–60 | 60–70 | 70–71 | | | | 51–60 | | |
| Grenada | 2.3 | 2.7 | −1.8 | 4.9 | 9.2 | 24.2 | NA | NA | NA | 12.0 | NA | NA |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–71 |
| Guyana | 5.3 | 0.1 | 0.4 | 22.5 | 10.7 | 3.7 | 14.0 | 23.0 | 27.5 | 9.0 | 11.5 | −3.5 |
| Years | 50–60 | 60–70 | 70–72 | 50–60 | 60–70 | 70–72 | 50–60 | | 72–73 | 50–60 | 60–69 | 69–72 |
| Jamaica | 1.6 | 4.0 | 3.9 | 13.7 | 12.0 g | 7.7 g | 14.0 | NA | 6.5 | 10.0 | 15.0 | 20.5 |
| Years | 50–60 | 60–70 | | 50–60 | 60–70 | | | 60–70 | 70–71 | 51–60 | 60–70 | |
| Trinidad & Tobago | 3.9 | 2.3 | NA | 9.1 | 7.9 | NA | NA | 16.5 | 9.0 | 17.5 | 10.5 | NA |
| OTHERS | | | | | | | | | | | | |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–71 | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–71 |
| Canada | 4.5 | 1.9 | −11.9 | 7.6 | 6.4 g | 57.2 g | 6.0 | 11.5 | 2.5 | 13.5 | 16.5 | 9.0 |
| Years | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–73 | 50–60 | 60–70 | 70–73 | | 60–70 | 70–72 |
| Malta | 4.8 | −3.1 | −6.6 d | 16.7 | 8.9 | 6.8 | 3.0 | 13.5 | −8.0 | NA | 12.5 | 4.5 |
| Years | 50–60 | 60–70 | 70–72 | 50–60 | 60–70 | 70–72 | 50–60 | 60–70 | 70–71 | | 61–70 | 70–71 |
| United Kingdom | 0.6 | 1.9 | 1.2 | 5.0 | 0.9 | 3.0 | 2.5 | 14.0 | 0.8 | NA | 11.0 | 11.5 |

T = not including Turkish schools
G = general secondary education only
S = includes general secondary and vocational and pre-primary
P = includes primary and pre-primary
d = beginning 1970 the duration of primary education was reduced from 9 to 6 years
u = following the reorganization of the school system in 1966, junior secondary classes are now included in education at the first level
P = Public education only
L = Between 1965 and 1970 the duration of general secondary education was increased from 4 to 7 years
NA = not available

Sources: "Statistical Yearbook", 1966, 1972, and 1974 UNESCO.
"Education Statistics — Latest Year Available" January 1976 UNESCO.

# 3. Educational Financing: *Malcolm S. Adiseshiah*

## Magnitudes and Rationale

The financing of education involves expenditures of large sums of money, expenditures which have been increasing at a rapid rate in the present century. Some details of public financing of education are shown in Table 1 from which it may be seen that world public expenditure in 1972 was $223 billion (being 5.7% of world G.N.P.) and that it increased during the period 1965–72 at an annual average rate of 11.6%. The rate of increase of educational expenditure over this period was highest in Asia and the Arab States, with the developing countries as a whole spending 3.6% to 5.7% of their G.N.P. on education.

The education budget averages 20% of the total national budget of developing countries, with some countries at much higher levels, such as Nigeria at 33.7%, Ivory Coast at 32.2%, Costa Rica at 33.1%, and the Netherlands Antilles at 36.8%. Details of the educational expenditures of the Ministries of Education of 18 Commonwealth countries are given in Table 2.

Another feature of educational financing in developing countries is that the share of private expenditure on education — whether it be contributions from private individuals, endowments or institutions, or fees paid by students — is both small and on the decline. In Singapore for instance it was 26% in 1951 and 3% in 1955, in Malaysia 42% in 1946 and 19% in 1955, in India 20.4% in 1950 and 15.3% in 1965 and 10% in 1970.(1)

One question that thus arises is the reason for the public financing of education which is gradually becoming total financing in the developing countries. This question has occupied the attention of economists rather seriously over the past two decades. At the start of this twenty-year period, the justification for the large and growing public expenditures on education was attempted in terms of the high returns on the investment in human capital which they were held to represent. More recently this rates of return approach has been running into trouble. There are basic unanswered questions which have been posed. Educational expenditures are not only a form of human investment which increases further earning capacity, they also enable the person concerned to satisfy present needs. This investment and consumption effect of educational expenditure on the same person makes impossible the separate analysis of the effects of such expenditures as investment and consumption. There is an even more serious question being posed about the rates of returns approach. As against the view, to which I subscribe, that education increases future earnings through increasing one's productivity is the view that education is merely a market signal or filter which classifies persons, that it is at best a predictor of productivity not an assurer of productivity.

These basic questions are posed with regard to education and educational expenditures in such industrialized countries as the United Kingdom, Canada, Australia, New Zealand, the United States or France, countries with a relatively assured educational and economic data base. When attention is turned to the developing Commonwealth countries like

**Table 1**

**Public Financing of Education**

| Continents, Major Areas and groups of countries | Public Expenditure on Education in Millions of Dollars | | | Annual Average Increase Of Public Expenditure on Education | Annual Average Increase Of Gross National Product | Public Expenditure on Education as % of GNP | | | Public Expenditure on Education per Inhabitant | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1965 | 1970 | 172 | 1965–1972 | 1965–1972 | 1965 | 1970 | 1972 | 1965 | 1970 | 1972 |
| World Total* | 103,601 | 171,696 | 222,955 | 11.6% | 9.7% | 5.0 | 5.5 | 5.7 | 40.4 | 60.5 | 75.6 |
| Africa | 1,679 | 3,005 | 3,750 | 12.2% | 8.8% | 3.5 | 4.4 | 4.3 | 5.5 | 8.7 | 10.3 |
| America | 43,060 | 77,218 | 90,754 | 11.2% | 8.4% | 5.2 | 6.4 | 6.2 | 93.6 | 151.2 | 170.3 |
| Asia* | 7,496 | 12,819 | 18,890 | 14.1% | 13.3% | 3.8 | 3.5 | 4.0 | 6.8 | 10.2 | 14.3 |
| Europe | 34,719 | 54,632 | 77,905 | 12.2% | 10.5% | 4.7 | 5.0 | 5.3 | 78.1 | 118.2 | 166.1 |
| Oceania | 1,057 | 1,987 | 2,990 | 16.0% | 8.6% | 3.6 | 4.5 | 5.8 | 60.3 | 102.6 | 148.0 |
| U.S.S.R. | 15,590 | 22,035 | 28,665 | 9.1% | 8.4% | 7.3 | 6.8 | 7.6 | 67.6 | 90.8 | 115.6 |
| Developed Countries | 95,561 | 158,942 | 206,922 | 11.7% | 11.7% | 5.3 | 5.8 | 5.9 | 93.4 | 147.6 | 188.7 |
| Developing Countries* | 8,040 | 12,754 | 16,033 | 10.4% | 8.8% | 3.3 | 3.5 | 3.7 | 5.2 | 7.2 | 8.6 |
| Africa (excluding Arab States) | 1,078 | 1,866 | 2,166 | 10.5% | 8.5% | 3.2 | 3.9 | 3.6 | 4.7 | 7.2 | 7.9 |
| Northern America | 39,742 | 71,538 | 83,810 | 11.3% | 8.2% | 5.4 | 6.7 | 6.6 | 185.4 | 314.4 | 363.1 |
| Latin America | 3,318 | 5,680 | 6,944 | 11.1% | 9.9% | 3.4 | 3.8 | 3.6 | 13.5 | 20.1 | 23.0 |
| Asia (excluding Arab States) | 7,120 | 12,233 | 17,952 | 14.1% | 13.4% | 3.8 | 3.5 | 3.9 | 6.6 | 10.0 | 14.1 |
| Arab States | 977 | 1,725 | 2,522 | 14.5% | 10.0% | 4.3 | 5.0 | 5.7 | 9.2 | 14.0 | 19.4 |

*Not including People's Republic of China, Democratic People's Republic of Korea, and Democratic Republic of Viet-Nam.
(Source: Statistical Year Book, 1974, UNESCO, Paris.)

**Table 2**

**Public Expenditure on Education at Current Market Prices**

| Country or Area and Currency Unit | Year | Total (Thousands) | As % of Gross National Product | As % of Total Public Expenditure |
|---|---|---|---|---|
| Australia (Dollar) | 1971 | 1,668,000 | 4.6 | 14.0 |
| Canada (Dollar) | 1971 | 7,900,029 | 8.5 | — |
| United Kingdom | | | | |
| England and Wales (Pound) | 1970 | 2,521,917 | — | — |
| Northern Ireland (Pound) | 1971 | 92,990 | — | 22.1 |
| Scotland (Pound) | 1971 | 394,000 | — | — |
| India (Rupee) | 1968 | 8,803,000 | 2.9 | 19.7 |
| Sri Lanka (Rupee) | 1970 | 544,382 | 4.2 | 13.4 |
| Nepal (Rupee) | 1971 | 77,600 | 0.8(d) | 8.4 |
| Ghana (New Cedi) | 1971 | 115,534 | 4.6(d) | 33.7 |
| Nigeria (Naira) | 1970 | 192,732 | 3.5 | 33.7 |
| Sierra Leone (Leone) | 1969 | 10,263 | 2.8 | 17.9 |
| Mauritius (Rupee) | 1971 | 42,403 | 3.7 | 11.0 |
| Jamaica (Pound) | 1969 | 39,151 | 4.5 | 18.5 |
| Trinidad (Dollar) | 1970 | 62,143 | 3.7(b) | — |
| Malaysia | | | | |
| Sabah (M. Dollar) (a) | 1971 | 30,028 | — | — |
| Sarawak (M. Dollar) (c) | 1971 | 33,471 | — | — |
| West Malaysia (M. Dollar) | 1971 | 645,848 | 6.4 | 10.8 |
| New Zealand (Dollar) | 1971 | 337,000 | 5.4 | 15.4 |
| Kenya (Shilling) | 1971 | 571,160 | 4.4(d) | 15.8 |
| Uganda (Shilling) | 1970 | 361,646 | 4.3 | 17.8 |
| Papua New Guinea (Aus. Dollar) | 1971 | 42,847 | 7.6 | 20.4 |
| Singapore (Dollar) | 1970 | 184,492 | 3.1 | 11.7 |

(a) Expenditure of the Ministry of Education only
(b) As percentage of Gross Domestic Product at factor cost
(c) Central or Federal Government only
(d) As percentage of Gross Domestic Product at market prices

(Source: Statistical Year Book, 1974 (pp. 845) UNESCO, PARIS)

India, Nigeria, Ghana, Jamaica or Sri Lanka with their poor data base and their inbuilt margins of error, any attempt to explain educational expenditures in terms of rates of return becomes even more difficult. In the educational finance analysis attempted for these countries, average costs rather than marginal costs, and average returns rather than marginal returns are used in the empirical studies. Time series projections are made with cross-section data and the problem of allowing for productivity series is almost impossible.

Hence there is a return to what are called the social benefits of education as the prime justification for the large public subsidizing of education. I say return, because that is what Adam Smith left us with 200 years ago. He, who was against state intervention in personal and social life except in certain well-defined spheres, established education as one area where the state should intervene with finance, not because it develops skills but because of what he called the moral and civic improvement that it brings about in the people. In his graphic language he set forth the moral thus:

"The state . . . derives no inconsiderable advantage from their [the people's] instruction. The more they are instructed, the less liable they are to the delusions of enthusiasm and superstition, which, among ignorant nations, frequently occasion the most dreadful disorders. An instructed and intelligent people, besides, are always more decent and orderly than an ignorant and stupid one . . . They are more disposed to examine, and more capable of seeing through, the interested complaints of faction and sedition, and they are, upon that account, less apt to be misled into any wanton or unnecessary opposition to the measures of government."(2)

The question then may be posed as to whether we are on relatively firm ground in using the concept of the social benefits of education as the reason for the large public expenditure on education. These social benefits can be considered under seven broad heads: (a) improved income distribution and increased social mobility; (b) changes in attitudes and values; (c) credible political leadership; (d) lower unemployment; (e) improved mix of manpower skills; (f) enhancement of the productivity of physical capital; and (g) increased quantity and improved quality of research. Some comments on each of these benefits may be attempted.

The first is the benefit of improved income distribution and increased social mobility as a result of the spread of education made possible by large expenditures of public funds on education. The general trend of education as a necessary condition for promoting equality, for widening the number of people drawn into its net, for encompassing social groups which have been kept out of education — may be conceded. Whether this leads to improved income distribution, however, depends on assuring that public educational expenditures lower tuition fees and so attract students from low income groups who as a result of their education will earn higher incomes than their uneducated or less educated parents. In this argument, there are two further assumptions. First lower tuition fees or no fees will attract students from low income groups. This depends on the opportunity cost that such students face in attending school or university. Experience in developing countries seems to indicate that the opportunity cost is high and no lowering of tuition fees can make up for the income forgone. This is at this stage a hunch: there is need for empirical studies to bring out the facts. The other assumption is that education leads to higher earnings and that higher education will result in still higher incomes. The general conclusion is that the redistribution effect or social mobility effect of public expenditure on education remains to be proved and cannot at this stage be counted as a benefit to justify the magnitude of such expenditures.

A second social benefit is the change in attitudes and values that education brings about in people, as Adam Smith pointed out and used as the reason for justifying the public financing of education. Education develops the desire to improve oneself, to be open-minded, to experiment and change, to reason and judge for oneself, and to be a better member of the local community and an intelligent citizen. These results of education are undeniable, but two problems must be faced. First, some of these attitudinal changes, like the desire to better oneself or the capacity for reasoning and analysis, are not really social benefits. They are individual gains which may have social cost. One example is when a primary school completer refuses any non-white collar job adding to the

country's unemployment. This is a social disbenefit stemming from education. Another is when a graduate accepts any clerical post which makes for stagnation of the economy. The second problem is more serious. Granted that there is a large residue of this kind of social benefit in the form of attitudinal and value changes induced by education, the fact that in the developing Commonwealth countries the majority of adults are kept out of education and only a minority have access to higher levels of education means that the large public financing of education is not productive of social benefits to the majority of their peoples.

The third social benefit refers to improved public leadership that education makes available. It is true that educated persons in our countries exercise political leadership roles and that education is a necessary condition for discharging such roles. But looking around our countries, we should ask whether the quality of political ambition and/or the financial capacity to invest in the political process are not the sufficient condition as much as education is the necessary condition for political leadership.

The other social benefits of education raise similar questions. In the developing Commonwealth countries, while education makes possible a better mix of manpower skills, provides a base for developing a research and development system needed by the economy, and through vocational and technical education programmes improves the productivity of land and other physical assets, there is need for empirical studies to substantiate these guesses and recognition of the growing and wasteful marginalization of so much of science and technology in the countries. Also the co-existence of an expanding educational system and growing educated unemployment makes it difficult to establish a simple correlation between education and employment.

## Private Financing

The prospects of private financing of education (in the developing Commonwealth countries) as noted earlier, are not very bright. This source of educational finance divides itself into (a) contributions by voluntary bodies; (b) income from fees; and (c) parental expenditure on textbooks, stationery and co-curricular activities. Some analysis of each source is needed.

Though contributions from voluntary bodies towards educational expenditures formed a major source of educational finance in Commonwealth countries before their independence, they have now ceased to be of significance, forming somewhere between 1 to 5% of total educational revenue nowadays.(3) Endowments have lost around 50% of their real value as a result of inflation, at first creeping, and more recently galloping, in the last two decades. Also the sources of domestic private philanthropy have been gradually drying up, with the extension of public regulation, control and ownership of all forms of assets. Thus voluntary contributions cannot be counted upon as a source of educational finance in developing countries.

Income from fees still continues to be a rather important means of financing education particularly at the secondary and post-secondary levels. Table 3 illustrates the place of fees collection in one Commonwealth country, India.

**Table 3**

**Fees in Education (1960–61)**

| Stage-object | Total amount collected through fees (Rs.000's) | Percentage of students paying fees | Average annual fee collected per student (Rs.) | Percentage of fees to total expenditure on the stage | Percentage of fees collected at the stage to total of fees collected at all stages |
|---|---|---|---|---|---|
| Pre-Schools | 2,184 | 77.5 | 23.3 | 37.2 | 0.4 |
| Lower Primary Schools | 17,169 | 3.9 | 16.4 | 2.3 | 2.9 |
| Higher Primary Schools | 31,677 | 16.4 | 18.2 | 7.4 | 5.4 |
| Secondary Schools | 270,394 | 64.8 | 55.6 | 39.2 | 45.8 |
| Schools for Teacher Training | 1,856 | 20.0 | 84.2 | 5.3 | 0.3 |
| Schools for Vocational Education (excluding Teacher Training) | 13,604 | 72.0 | 65.0 | 17.2 | 2.3 |
| Schools for Special Education | 1,378 | 10.0 | 8.1 | 4.3 | 0.2 |
| University Teaching Departments | 52,934 | 90.1 | — | 37.4 | 9.0 |
| Research Institutions | 375 | 86.3 | 147.1 | 1.4 | 0.1 |
| Colleges for Teacher Training | 2,761 | 34.7 | 156.9 | 12.8 | 0.5 |
| Colleges for Arts & Science | 101,384 | 84.9 | 172.7 | 48.5 | 17.2 |
| Colleges for Professional Education (excluding Teacher Training) | 30,346 | 87.9 | 240.5 | 22.2 | 5.1 |
| Colleges for Special Education | 1,447 | 52.4 | 109.0 | 15.9 | 0.2 |
| All Institutions | 527,510 | 18.7 | — | 20.7 | 89.4 |
| Boards of Education | 23,342 | — | — | 96.7 | 3.9 |
| Indirect Expenditure | 39,406 | — | — | 1.7 | 6.7 |
| Grand Total | 590,258 | — | — | 17.1 | 100.0 |

(Source: Report of the Education Commission, New Delhi, 1964-66)

It will be seen that fees contribute over 17% to total educational expenditures. In monetary terms the absolute amounts more than doubled between 1950–51 and 1960–61 (from Rs.233 million to Rs.540 million) and they are estimated to have doubled again (to Rs.1 billion) by 1965–66. Further over one third of the expenditures are financed from fees at the pre-primary, secondary and higher education levels. It is interesting to note that the budgeting of fees started in this country not as an educational financing device, but as an expression of the principle that "people do not value anything that is given free, that the payment of a fee is an indication of the seriousness of purpose on the part of a student or his guardian".(4) The next rather quick transition was the use of fees as a means of financing the educational system. On this there are sharply differing views. Most developing countries regard fees as "the most regressive form of taxation", falling more heavily on the poorer classes who are the majority of society and acting as an anti-egalitarian force. Any attempt to collect fees from students from the well-to-do sections alone runs up against the problem of administrative feasibility.(5) On the other hand, it is pointed out that fees are a means of recouping costs of

education, since the latter's benefits will be rapidly felt by families to whom education is given, and "the poverty of the present quickly followed by education induced affluence". For the developing countries in particular, the individual returns on education are likely to be high and short term, and even if the benefits accrue to succeeding generations, the extended family system acts as a corrective to inter-generational inequities, as the family is a continuing unit.(6) There is thus a mix of economy and equity arguments on the question of fees as a source of educational finance. A general conclusion is that, provided scholarships are provided for students from the poor and vulnerable sector of society, fees at the secondary and post-secondary levels of education should be levied in the developing Commonwealth countries, at least till such time as these educational levels cease reflecting the class bias that they do. In the country to which Table 3 refers, 80% of students in higher education are from the top 20% of its society.(7) There is really no case for not levying fees at these levels to cover 50–60% of recurrent costs.

The third component of the private financing of education is the parental expenditure on books, stationery, school uniforms, transportation etc. It is difficult to quantify this part of private financing but what evidence there is shows that this is a sizeable, if widely varying, part of the total financial picture. A study of these costs in India is summarized in Table 4.

**Table 4**

**Private Costs of Education Per Student (Annual) 1965–66**
(In Rupees)

| | *Lowest* | | | *Highest* | | |
|---|---|---|---|---|---|---|
| *Class* | *Textbooks* | *Stationery* | *Total* | *Textbooks* | *Stationery* | *Total* |
| I | 0.50 | 0.60 | 1.10 | 17.80 | 12.80 | 30.60 |
| II | 0.54 | 0.60 | 1.14 | 16.60 | 12.80 | 29.40 |
| III | 0.69 | 2.11 | 2.80 | 28.51 | 8.33 | 36.84 |
| IV | 2.10 | 3.26 | 5.36 | 38.85 | 14.50 | 53.35 |
| V | 3.91 | 2.40 | 6.31 | 36.10 | 14.50 | 50.60 |
| VI | 5.85 | 4.63 | 10.48 | 43.24 | 60.00 | 103.24 |
| VII | 7.29 | 4.88 | 12.17 | 47.09 | 75.00 | 112.09 |
| VIII | 9.30 | 6.95 | 16.25 | 169.68 | 21.40 | 191.08 |
| IX | 11.15 | 7.51 | 18.66 | 192.55 | 70.00 | 262.55 |
| X | 4.50 | 14.00 | 18.50 | 216.35 | 70.00 | 286.35 |
| XI | 13.75 | 11.25 | 25.00 | 189.65 | 70.00 | 259.65 |

(Source: Report of the Education Commission, New Delhi — 1964–66)

In another Commonwealth country(8), a study of transport and school uniform costs per student is summarized in Table 5 (in shillings).

**Table 5**

| *Category* | *School* | | | | | | |
|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G |
| Transport | 17.88 | 9.3 | 36.14 | 14.62 | 59.00 | 50.19 | 68.14 |
| School Uniform | 55.54 | 61.16 | 6.83 | 92.80 | 69.00 | 65.85 | 8.73 |

(Source: Working Paper for Secondary Schools Cost Survey, Uganda.)

The impression conveyed by this admittedly partial and spotty evidence is that these costs form a substantial part of total educational costs, that they provide an inducement to escape them for the vast majority of families in the developing countries who are the poverty sector (as seen in the low range at one end), and that they might be a causal factor for the declining quality of education at the secondary and post-secondary levels. To counter these trends some public subsidizing of textbooks, paper, and school uniforms is indicated.

## The Financing of Public Educational Expenditure

At this point, I return to our starting point, that the major part of educational expenditure is borne by the State. The residual question is the means of financing this large and growing educational expenditure in each of our countries.

The sources of financing may be classified as follows: (a) allocation from general taxes (central government — local government); (b) earmarked taxes; (c) cesses; (d) loans; (e) tax relief; (f) contributions in kind; and (g) foreign aid and international assistance.

## General Taxes

The allocation to education from the revenue derived from general taxes is in all countries the major means of financing education. Here a distinction must be made between countries with a federal structure like Canada, India, Australia and Nigeria and those with a unitary political structure like most other African and Commonwealth countries. For both groups, a further distinction must be made between central government tax revenues allocated to education and local government tax revenues set apart for education. Taking the federal structures, education — particularly at levels below post-secondary education in most of such countries — is the responsibility of the constituent states of the federal structure. The problem faced in this situation is that the constituent states have inelastic sources of revenue (such as land tax, sales tax, transportation tax etc.) against expanding sources of development expenditure which education, health, social welfare, rural and community development, housing and agriculture represent; while the federal structure has elastic sources of income (such as income tax, wealth tax, corporation tax, customs and excise etc.). The result is that education has to be subsidized by the federal centre *vis-à-vis* the states, to the point where the development of education in the states has come to depend on the nature and quantum of the subsidy received from the federal centre. These in turn are determined by a host of criteria, in which the real demands of educational development have a relatively minor decisive role. One reform that is needed in federal structures is for a long-term (if not constitutional) provision for the sharing of these elastic sources of public revenue, particularly income tax, corporation tax and the central excise, between the federal centre and the constituent states, which reflects the functions of the two political sectors. Such long-term provisions are necessary because educational outlays are like capital formation. But this sharing cannot be a straight uniform division, because allowance has to be made for the extent of the cultivable land and the school-going age groups which vary between the constituent states, and the educational and socio-

economic backwardness of some of them. I would suggest that 50% of the elastic sources of revenue should be allocated to the states for the first group of considerations and a further 20% pooled for distribution to the educationally and socio-economically undeveloped states.

There is also the financing of education through tax revenues by the local government authority, the city corporations, the town municipalities and the village governments. Parallel to the view that educational planning and execution — particularly at the primary school and adult literacy level — should be as close to the operating level as possible, the financing of these two forms of education (i.e. primary and adult literacy) should be the responsibility of local government authorities. In most countries this principle is accepted, and the local authorities are made responsible for operating the primary school and adult literacy programmes. But in fact their financial resources are meagre and there is a general lack of incentive for raising additional revenues. In federal structures, the taxable capacity of the people is almost completely pre-empted by the federal and state authorities and what is left to the local authorities are very small sources of tax revenues, usually additional cesses on taxes levied by the constituent state governments. In unitary structures, local governments have a little more leeway in regard to sources of tax revenue, though even here they are usually inelastic sources such as house-taxes, professional taxes, tolls etc. The other feature, that of the local governments' disincentive to raise revenues up to the hilt of what is possible to them, arises from two factors. First, being the most direct form of democracy, the elected personnel vie with each other in pledges to keep local taxation down. Second, the state government's (in the case of federal structures) and the central authority's (in unitary political systems) subsidizing of the local governments' budgets — which is inescapable given the meagre tax resources available to the latter — is in effect a call not to make an effort to maximize the incidence of its taxation powers.

Some of the general problems in regard to local financing of education just referred to are highlighted and made specific in an investigation I conducted in one state in a federal structure. As may be seen from Table 6, the financing of primary schools for which local governments in that state were responsible has declined over the last decade, both in absolute and relative terms.

**Table 6**

| Unit | 1965–66 | 1968–69 | 1973–74 | 1974–75 |
|---|---|---|---|---|
| 1. Percentage of local government's contribution to total primary education expenditure | 20.29 | 15.75 | 9.78 | 9.75 |
| 2. Percentage of education allocation in that budget of the local governments | 13.58 | 12.10 | 7.88 | 7.57 |

(Source: Table compiled by the Directorate of Rural Development, Tamil Nadu, India, 1975.)

The disincentive factor can be seen in the manner in which the subsidizing of educational expenditures of local governments operates. Each local government received a flat per capita subsidy of a given amount from the state government. The balance of its educational expenditure was shared between the local government and the state authority in accordance with the degree of development of the area covered by the local governments, which for this purpose were classified into six groups, the most developed being in group I and the least developed in group VI. The resulting financial sharing is shown in Table 7.

**Table 7**

| Group | State Government share | Local Government share |
|---|---|---|
| I | 60 | 40 |
| II | 70 | 30 |
| III | 80 | 20 |
| IV | 85 | 15 |
| V | 90 | 10 |
| VI | 95 | 5 |

(Source: Directorate of Rural Development, Tamil Nadu, India, 1975)

This table shows that local governments' financing of the first-level education is extremely tenuous. Even for the most advanced areas, the local governments contribute a minority of total expenses and the system of subsidies is in effect a major disincentive. In this situation, I have recommended (and the state government has accepted) that (a) the flat rate subsidy be abolished; (b) the local governments be allowed to levy an educational surcharge on the people, with the proceeds being maintained and operated in a separate account; (c) a per capita ceiling for each student place be established for the entire state to prevent rampant feather bedding; and (d) the state government share be reduced by around 50% for categories I to IV. The moral here is that there are local taxable resources, and fiscal machinery needs to be devised (in a democratic structure) to induce the local governments to raise the normal taxable resources.

There are four further comments that need to be made before leaving this first source of educational financing, (i.e. revenues allocated to education from general taxes). First before the question of the inadequacy of the financial resources from this source for education is raised, there should be a technical, management and financial audit of how the existing resources are being deployed in the educational enterprise. This is particularly important with regard to the education sector as compared to the other sectors such as agriculture, manufactures or even health, because in all countries about 90% of educational expenditures are just a continuing commitment from the past ten, 20 or 30 years of expenditures on teachers' salaries, educational administration, repairs of buildings and equipment. If such an examination is carried out, it will be seen that somewhere around 20% of total educational expenditure in the country is "wasted" in various forms of feather bedding in teacher placement,

wasteful administrative procedures and personnel, uneconomical buildings, and unused and unusable equipment. As a result of the investigation made with regard to the educational expenditures in the state that I have referred to earlier, my general conclusion on this issue of financial waste was expressed in the following terms:

> "The economical use (of the allocated educational funds) includes a more rational and restrained policy of teacher recruitment based on an effective application of recommended teacher/pupil norms, which in turn calls for a realistic method and form of reporting average monthly school attendance. There are also certain infructuous expenditures currently incurred as in regard to financial incentives for study in one's mother tongue, the State carrying the financial burden for the first stage of post-secondary education and for teacher and physical education training, the expenditures on the central kitchens run in their present form, duplicating and overlapping uneconomical higher elementary and unviable high schools, and the State subsidizing the wide gap in the fees charged as between the Government and private aided colleges, to which I wish to call your attention. This group of economies is estimated to yield an annual saving of around 20% of the Annual Education Budget.
>
> The more efficient use of the existing resources recommended which also will meet future growth expansion needs, include launching eight programmes, covering the continuous in-service training of teachers, improvement of the school environment, non-formal education for school dropouts and non-attenders (which is also the way to meet future expansions), introduction of work experience in schools, functional literacy to eradicate illiteracy, vocationalization of the higher secondary course, setting up a full fledged State Council of Education Training and Research and taking over the scholarship programme for the poor till now financed by the Union Government and operating a small talent and merit scholarship programme. This group of essential qualitative reforms is estimated to cost around 10% of the Annual Education Budget, which is about half the level of economies recommended.
>
> Thus, there is no increase in the State's educational expenditure that is envisaged. The essential qualitative inputs that we have recommended are to be financed from within the existing level of appropriations.
>
> All this involves two essential pre-conditions. The performance budget for education must become much more of a control instrument than it is at present. And it must be established after a detailed review and scrutiny of every so called non-Plan as well as Plan scheme."

The second problem is that the revenue raised by the existing taxes at the federal, state and local levels can be considerably increased by improved methods of tax collection, plugging tax loopholes, and taking punitive action against tax evasion which is almost a national pastime in all countries. Here again the experience of some Commonwealth countries which have taken action to improve tax collection shows that the result is an increase of 10–12% in the revenue returns. A third comment relates to the effect of taxation and that part of its proceeds allocated to education on the growth of the economy. Here a distinction must be

made between the industrialized countries, where the overall tax system with its major reliance on direct taxes is progressive, and the developing Commonwealth countries, where indirect taxation is the major revenue-producing instrument and is in its incidence regressive. The effects on economic growth of the two types of incidence of taxes involve the possibility that for developing countries the regressive tax instrument acts as a brake on growth. In a sense the tax proceeds allocated to education represent allocations withheld from agriculture and industrial development and to that extent call for deployment of educational expenditures in a manner that contributes to growth in the short as well as the long run. In fact a case can be made for either a rather heavy short-term diversion of tax revenues to education or a short-term increase in the general tax effort despite its possible depressing effect on growth, if educational expenditures are planned and deployed as to produce early returns and so speed growth. A fourth and final comment relates to the effect of the tax effort on distribution — particularly in Commonwealth developing countries with their widespread inequitable distribution profiles. As noted earlier their heavy reliance on indirect taxation means that the sources of financing are worsening the unequal distribution of assets, wealth and living levels. In addition the hidden private costs (including the opportunity costs) of education tend to fall disproportionately on the poor majority of the country.

## Earmarked Taxes and Cesses

Another means of financing some parts of education is through taxes earmarked for specific educational expenditures. Technical, technological, management and engineering education, and workers' education expenses, should be met by taxes levied on manufacturing industry and trade, with their revenues earmarked for meeting these forms of education. Similarly part of the expenditure on agricultural education, particularly at the university level and farmers' functional literacy, should be met by earmarked taxes on large and medium sized farms and co-operatives associated with them. There are several alternative bases for the levy of these earmarked taxes. The taxes could be based on the wage bill or the number of workers employed in the firm or farm. This, however, raises problems of encouraging inappropriate capital-intensive techniques in both manufactures and agriculture, and of placing a heavier burden on labour-intensive units. The taxes could be levied on value added, which however does not form the tax base in most Commonwealth countries and gives rise to computational difficulties of its own. There is then left total sales or profits in the case of manufacturing and commerical units, and net income in the case of large or medium farms and co-operatives. Given the problems raised by taxing turnover in relation to inter-firm relations and inventories, profits or net income seems the most appropriate basis for such earmarked taxes. It may be noted that the case for earmarked taxes is only in relation to those forms of education and training which render or are planned to render identifiable service to manufactures, commerce and agriculture: it cannot and should not be used for financing primary, secondary, or general university and literacy programmes.

Cesses are in effect a form of earmarked levies except that they are smaller in scope and the revenues derived are used for even more specific services. Usually a cess is levied as a fraction of some other tax: in urban

areas a cess for financing libraries is usually attached to the urban land or the profession tax; in rural areas the local authority's educational financial resources are often raised by a cess expressed as a percentage of the land tax. For municipalities, corporations and village governments, the cess can be an appropriate source of revenue which, though not elastic and expandable, is suited to the specific nature of recurrent educational costs.

## Loans

Loans for financing education are a supplement to the major taxation instrument. Loans have not generally been used for financing education mainly because educational returns are, as earlier pointed out, not separable and quantifiable, and the returns are long-term ones, except in regard to professional education and training including functional literacy programmes, whereas the amortization of loans is usually within a 5–7 year period. To start with, capital expenditure — what is called non-recurring expenditure — for such forms of professional education and training can be financed by loans. Similarly educational building costs can be financed by loans.

Loans can have an inflationary impact. They can create balance of payments problems, and, in the case of loans used for financing education, there is the further question of choosing between education versus other competing sectors in the use of loan finances. Except in regard to the last issue, the other problems are general ones, not specifically related to educational financing, and must be resolved within a general economic policy framework.

Education loan finance as a resource must be tied in with the tax revenues allocated to education, for while the former provides for building and equipment, these constructions must be timed to coincide with the expenses incurred for teachers' salaries, student scholarships and other ongoing educational amenities that are a part of the educational system. Ideally the bond issues should be launched by the local government authorities, as they are disbursing agents for the capital constructions which the loan finance is to subsidize. But given the problem of the need for a uniform, co-ordinated approach in the undeveloped capital markets of most developing countries, the problem of meeting interest and amortization payments for the loan which the local government does not have the resources to meet, and the need to time non-recurring and recurring expenditures whose major source is the central and/or the state government, educational bond issues have to be centralized either in the matter of actual issue or in their co-ordinated regulation. On this basis, educational bond issues are a source which countries need to tap more widely than is the current practice in educational financing.

Thus far in the discussion, the raising of educational loans has been restricted to the financing of the capital costs of the educational system. The International Development Association credits of the World Bank have, however, introduced a new element in the use of loan finance to meet the capital as well as the recurrent costs of the educational system. Apart from the fact that the division between the two costs is a useful but essentially an accounting device, and should not be taken as a firm basis for financing, the IDA credit, which is repayable after a long period of

30–50 years with a ten-year grace period and no interest charge, enables integrated planning and long-term co-ordinated financing of educational reform programmes.

### Tax Relief and Contributions in Kind

In the area of the private financing of education, there is need in most of our countries for a coherent national policy on income tax, wealth tax and gift tax relief and concessions for financial contributions made to education. This can be a not inconsiderable source of financing, as the manufacturing sector begins to expand in a country and as legislation is adopted with regard to land ownership and control, urban land size, and ownership of industrial assets, with a view to reducing glaring distributional inequalities in most of our societies. In one Commonwealth country, private contributions made to research are granted 150% tax relief. This suggests that the taxing authority can regulate the flow of private funds into those sectors of education, training and research that constitute its priorities for the present through legislating that contributions made to what it has from time to time established as the priority education sector will be afforded the tax relief. In view of the many ingenious ways in which these concessions are liable to be misused, safeguards should be built into the rules as to the beneficiary agency being separate from the donor and being a real educational agency. One area where tax relief can start is in regard to firms who run workers' education or apprenticeship training programmes. Another area for such relief is the financing of research in the universities.

At another level, there is the untapped contribution (in labour, local building materials and teaching personnel) that the local community can make to the educational enterprise, as highlighted by the successful efforts made in Tanzania. The Tanzanian experience indicates that what is lacking in mobilizing this resource is the political will and technical machinery. Given the political will to make the people responsible for their educational facilities (as part of a radical decentralization of political and socio-economic structures and decision making), what is further needed to call forth massive public contributions are small funds to lubricate the machine, purchase iron or steel rafters and — in some cases where local material is unavailable — to indent for roofing materials. The contribution of the local community is not only in labour and local material. In so far as the reformed educational structures enshrine work experience as an educational activity, the best teacher of arts and crafts could be the local village artisan, the best agricultural or fisheries teacher could be the local progressive farmer or seasonal inland fisherman, the music master could be the village musician. There are thus large possibilities for incorporating in the educational system contributions in kind from local communities. I have a suspicion that what is holding up this means of financing education in our countries is the lack of a political will — such as obtains in China, Cuba and the communist countries and in Tanzania.

### Foreign Aid and International Assistance

In all developing countries, internal sources of financing of the educational system are inadequate to meet the demands imposed by the natural growth of the education system, the increase in emoluments and

intakes resulting from the youthful nature of the population, and the reform of the education system. In a sense any foreign assistance to a country — whether it be for building irrigation dams or setting up a fertiliser or textile factory or for any other purpose — releases local resources, a part of which may be used for financing education. Hence the first note that I wish to strike is one of regret at the long stagnation of foreign aid at 0.34% of the combined national income of the OECD countries (for 1975 it is estimated to have gone up to 0.36%) as against their pledged 1%.(9)

Second the brain drain represents foreign aid in reverse in that developing countries are aiding affluent ones. The extent of the resource transfers involved have been computed by UNCTAD and UNITAR Secretariats and the U.S. Congress Studies. The problem is basically due to the fact that the quantum of their scientific manpower is ahead of the local economy's absorptive capacity. For some countries, this situation may require a planned short-term programme of migration of its scientists and engineers. Given the brute facts of the brain drain situation and the absence of any simple speedy remedy to counter them, the contribution being made by the developing countries' educational systems must be taken into account in taking decisions on the sources of the educational finance.

Third there is a stronger case for educational aid than is commonly recognized. Whether we regard education in a country as investment or a consumption item (or as noted earlier a bit of both) it is — in terms of scale — one of the largest industries, with a high income elasticity of demand. Aid is needed to meet its capital costs as well as its recurrent costs, without regard to such further divisions as those relating to foreign exchange or import components of its total educational expenditures. Education is one industry which is heavily a public sector industry, depending, as noted earlier , to the extent of 80 to 90% of its financing on the government, which in turn faces an all round fiscal inadequacy in relation to the growing and competing claims of its various sectors.

Fourth, the time is past when the so called criteria of the absorptive capacity of the country or the lack of teachers and other real resources can be brought up against the need for aiding education. Apart from the vagueness and subjective nature of the concept of the capacity of a country to absorb foreign assistance, it should be remembered that aid to education in a country — by increasing the trained manpower needed for expanding and diversifying its agricultural production, its irrigation system, its flood control programme and its manufacturing and capital goods production sector, and by being the change agent in social structures, tastes and consumer demand — is itself a means of increasing the country's need for foreign aid and a guarantee that it will be used effectively. In other words educational aid is one means of increasing the country's capacity to use external aid in other sectors. The period of teacher shortage — even in recently independent African countries — is now past, and some countries face unemployment of their trained teachers. Educational unemployment, up to a point, is a signpost of a growing and expanding economy, because education, given its longer gestation period, has to be ahead of the rate of growth of the economy. The moral of the discussion thus far is that a good rule of thumb is that 15–20% of a country's foreign aid should be educational aid.

More viable criteria for allocating this amount of educational aid between countries would be (a) the extent to which the country is making the maximum effort from its own resources to finance its education system, (b) the extent to which the education system is being planned and is tied in with the country's national plan and (c) the extent of the reform and restructuration of the educational system underway.

The first criterion — the extent to which the country is making the maximum effort to finance its education system — is not simply indicated by the percentage of G.N.P. devoted to education: for one thing G.N.P. estimates are in some countries a rather crude approximation, and in all countries can be considerably improved; but more serious, the amount of national resources devoted by a country to education depends on its level of development, on the age structure of its population, and the prices and wages prevalent in the country. Taking all these into account, it is possible to arrive at a rough estimate of the national educational effort.

The second criterion is more urgent and necessary. Educational assistance must be within the framework of a national educational plan if the creation of white elephants by power groups within the country or by the external aiding agency is to be avoided. Equally disastrous would be the lop-sided development of certain forms or levels of education which has happened when aid to education is not within the educational plan. The internal coherence of the educational system should be reflected in the educational plan. And the integration of the educational plan with the national plan will result in many a hard decision, but is the only means of ensuring educational economy and educational and national relevance. Such integration sets the priorities of the educational system.

The first two criteria are a prolegomena to aid relations between countries. I would recommend as the major area for educational aid between the Commonwealth countries, educational reform and restructuration that is now underway in each country. The borrowed educational model which served as a good starting point is now being critically re-examined and gradually replaced by an education and training system relevant to the country's political, socio-economic and cultural characteristics, as well as the demands of each of the disciplines. This calls for new structures, new learning content, changed methods of learning and evaluation, a complete re-writing and creation of learning materials, continuous and demanding research and its accompanying costly equipment needs. This is a new area to which I call the attention of the Conference. In the exchange of scholars and teachers, the training through fellowships of teachers and experts and the provision of equipment, the Commonwealth programme of assistance should concentrate on aid to the educational reform programme of each country. And within this major area of concentration, a new form of assistance that I would recommend to the affluent Commonwealth countries is to finance the exchanges in this area between developing Commonwealth countries. For instance, India's emerging non-formal educational structures can be assisted by experts from Jamaica, Trinidad and Tanzania; Sri Lanka's vocational training experts can help Ghana in its vocationalization programmes, and so on. This third country aid programme would involve an affluent Commonwealth country also financing the capital costs — buildings, books, equipment and pilot experiments involved in the reform programme — costs which may be incurred in any of the developing Commonwealth countries.

A further aid needed is a Commonwealth documentation centre which can collect, analyse and diffuse both basic educational financial statistics with a far greater degree of specificity than is now available from UNESCO, and the educational reform programmes underway in the countries. The Centre will make available not plans and ideas (of which we probably have more than what can be practised), but the actual profiles of educational finance and educational reform in the Commonwealth countries.

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# Opening and Closing Addresses

## 1. Address by H. E. Mr. Shridath S. Ramphal, *Commonwealth Secretary-General*

Your Excellencies:

We find ourselves here confronted by a singularly happy set of coincidences. We are to start on Commonwealth Day the Ministerial working sessions of our Seventh Commonwealth Education Conference, thus celebrating the past existence of our association at the same time as we rededicate ourselves to the service of the young people who will shape its future. And we do these things in Ghana, whose choice on attaining independence of free association in the Commonwealth opened the way for our present membership of twelve African nations, and Mauritius and Seychelles too. Twenty years have gone to prove the rightness of Ghana's choice, under the leadership of the great man after whom this fine Conference Hall is so aptly named.

Those of us who have come from far away — and 31 nations are represented here — may perhaps be permitted to share with our hosts their pride in the record of those twenty years of independence. In the Commonwealth we share our problems — and we all have plenty of them. We may also, I think, share our celebrations — as I personally did last week with so many sons and daughters and friends of Ghana at the Commonwealth Institute in London in honour of that twentieth anniversary.

It is significant that the nation whose political awareness and drive led so much of Africa to freedom and dignity and inspired so much of the Third World celebrates also this week another anniversary: the golden jubilee of the foundation of Achimota School. Achimota formed Ghana's educational elite in the years before independence — and indeed since. The school is living proof of how deeply a particular educational experience can mark a nation's character. Let us think of that when in our deliberations this week we remember how radically important is the business we are about — the business of moulding the educational patterns of the future. On a more personal note, a note of acknowledgement, I should perhaps add that the Commonwealth Secretariat owes a special debt to Achimota School, since it is the *Alma Mater* of the Director of our Education Division, the Secretary of this Conference, our good friend Sam Cookey.

We are gathered in Accra to discuss issues affecting the future of every single nation of the world. There is hardly any country that is not now in the throes of the crisis in education. The crisis concerns both the

resources — without which provision of education would be greatly hampered — and the adequacy or relevance of whatever education is provided to meet the needs and problems of the society concerned. For some countries, there is crying need for skilled labour to aid their development efforts; for some the need is two-fold and covers both scarcity of resources and lack of trained manpower; for others, the crisis expresses itself in the unemployment of the educated. It is therefore my hope that this Conference will wish to address itself to these and other problems, all of them not unrelated to the planning and execution of educational policies.

As members of the Commonwealth we have particular reasons for wishing to talk to each other, and for profiting by our conversations. It is not just the facility of a shared language that makes it easy for us to work together: indeed the trend in the Commonwealth is increasingly to recognize and to exploit the fact of our cultural and linguistic diversity. Much more important, when it comes to international co-operation, is the sharing of administrative traditions and structures among Commonwealth countries. It is this administrative likeness that makes it so easy for us to pull in the same harness, and in the same direction.

This statement, however, might fairly be described as a Commonwealth cliché. We have naturally tended to emphasize our similarities, and in so far as it helps to sustain our dialogue it is a right emphasis. But it would not be right if by underlining the things that bind us together, we were to adopt a rhetoric that in fact makes our work less valuable. Behind the similarities of our administrative structures, behind the shared assumptions that make it possible for us to work together — and to be frank with each other — lie profound differences in the societies in which we live and work. They are not differences of merit or of value between human beings — we have grown out of that sort of stupidity now — but they are differences arising from the objective circumstances within our many countries. Let us not fall into the error of pretending to ignore those differences: let us face up to the diversity of the Commonwealth, and exploit it for our common good and the promotion of mutual and true understanding.

Let us look briefly at some of those realities that must affect the work of the Commonwealth in education as in all the spheres in which we operate. What is unique about our association on the international scene is that it brings together in fellowship and equality rich and poor nations alike. That is the value of our association. But the vast majority of our peoples live in the poor world, the Third World. Forty-four per cent of the citizens of Commonwealth countries live in the world's poorest countries — those with an income per head of under $200 a year. Indeed, if you exclude the countries of the Socialist blocs, the Commonwealth contains over 80 per cent of the world's poorest people. It also contains a large number of countries that, while not classed among the poorest, live nevertheless on the brink of poverty, in imminent danger of being dragged back by the fortunes of the world — fortunes external to those countries' control — into absolute poverty. Ghana itself, although by no means among the ranks of the poorest countries of this continent, knows well how sharply can blow the winds of international economic fortune, and how delicately she must nurture the promise of prosperity for the future.

We in the Commonwealth are engaged in — were committed to by our Heads of Government in Kingston, Jamaica two years ago — the pursuit of a new international economic order in which the structures of world economic existence can be transformed. International justice in economic arrangements is an essential prerequisite if the vast gulf between rich and poor nations is to be bridged. It is essential: but it is not sufficient. Nations must win their own destiny by their own efforts. They must strive for national self-sufficiency in the essentials, and for full national viability in external trade. That is the only possible basis both for prosperity and for mutual respect and peace between the nations. We must all make the best of what we have got — however little we have got.

So where is the prime richness and resource for the future of the developing nations? First and above all, it is in their peoples — and one of the distinguishing marks of a developing nation anywhere in the world is not just that most of its people are poor, but that most of its people are youthful. Education is the key to full participation by its individual citizens in the life of the nation and by the nation in international life.

That is why I warmly welcome the fact that the title of your conference here is "The Economics of Education". I know well that the first question implicit in that title is how to make more resources available for education, and how best to use the resources that exist. But there is, I suggest, another aspect that educators need to keep their eyes on if they are to make their fullest possible contribution to debate, and that concerns the contribution that education can make to the national economy. Our discussion of the conference theme and the other related topics of the agenda must be seen in the broader context of how education can, as well as using resources, contribute to creating new resources; to rehabilitating and transforming the rural sector of many countries; to promoting industrialization; to improving the quality of health services; and to providing the environment in which the man in the street and the man in the village can equip himself for productive involvement in a community from which poverty, disease and stagnation have been banished.

This is not to say that education is about these things alone; that it has not a nobler destiny for the improvement of man's mind. Of course it has — that is exactly the point. It is education that produces the leaders of the future in every field of human endeavour, that helps mould the environment in which tomorrow's authors, musicians and artists may develop their talents. But those are not things that can be achieved by focusing the thrust of education on a pre-selected elite: they are blessings that will flow from a general uplifting of the intellectual horizons of the community; they must go along in step with the raising of the educational — and therefore economic — standards of society as a whole.

And that, we may all agree, is easier said than done. There is a vast area of innovation and experimentation open before us, which is entirely in line with the new emphasis that is being given to our work in the Secretariat. Last year Commonwealth governments through their senior officials, meeting in Canberra to ensure the continuity of our work in a year which did not include a meeting of our Heads of Government, formally approved my proposals to focus the work of the Secretariat more fully on new territory of exploration rather than remaining confined to the sometimes traditional framework within which international co-

operation takes place. On the economic side of our work we have already begun that activity by setting up two groups of experts from all over the Commonwealth to explore new ideas for international co-operation for the common good. That, of course, has always been one of the functions of our Education Division in its own field, and I am sure it is a process that we shall now be carrying further.

Our work must be innovative: and it must be practically oriented. We in the Commonwealth may worry about — but we do not need to concern ourselves directly with — the higher ranges of science and its application. If the application of science, and its dissemination through the schools and the universities and the post-school sector in member countries, could lead to the invention of a better ox-cart, that would add immeasurably to the happiness of millions. That is the region of science and technology — relevant science and technology — to which we should be applying ourselves, not the pursuit of Nobel Prizes. I am delighted that the structure of our conference here this week is directed to just such practical ends, and that the work of our educators is being focused on scientific and technical matters just as the Secretariat is due to embark on its new science programme. I should add that much of the emphasis of the Secretariat's science programme is ruled by the same priorities that have, on the initiative of Commonwealth Ministers, led us to set up a new division within the Secretariat concerned with Food Production and Rural Development.

I am confident that the foundation for the work of Ministers has been well laid by officials over the past week — the flow of inspiration, I am assured, has not been at all held up by any delays there may have been in the flow of water. Certainly the great majority of recommendations that the committees are asking Ministers to endorse are down-to-earth measures designed to bring direct benefit to those young people who are at school, college or university, to those who are out-of-school, and to the people who teach or train them. The practical training element has been predominant. Seminars in book development have concentrated on the production of books, as will the regional training course in Guyana which is about to arise from those seminars. A first training course in educational administration and supervision is nearing completion in Nairobi. A workshop on science education in the Bahamas has put across techniques for producing low-cost science equipment at home instead of buying it from abroad. In Hong Kong a workshop for the Asian and the Pacific regions discussed practical ways of developing the relationships between technical education and industry. One of these relationships must be through the provision of practical training in industry to complement college and university courses and this is the purpose of one of the major schemes in the technical education area, a Commonwealth scheme that is being recommended for exchange and placement for industrial training and experience. I had the good fortune to be personally involved in one of the events that gave birth to this proposal, a seminar at Regina University. The Commonwealth Scholarship and Fellowship Plan has proved a great success in practical terms, and Governments are being invited to increase the total number of scholarships to 1,500.

I look forward also to Ministers' decisions on proposals as significant as that for the establishment of a staff college for technical educators and, for the African region, the establishment of an association of polytechnics. In many ways — although I do not by any means wish to

deny the significance of the work of the universities — the task of the other institutions for post-school education is absolutely vital as a means of developing the skilled manpower that all developing countries so desperately need.

It may be of particular interest to our members here in West Africa to hear that we at the Secretariat have already held talks with the Agence de Coopération Culturelle et Technique, the body that links together many French-speaking nations especially in Africa, to see if we can help to bridge the gap between those African nations in which French and those in which English are the language of government. I am, may I say, especially glad that the Agence is among the international bodies represented here, along with Unesco, the Association of Commonwealth Universities and the Commonwealth Foundation, whose delegates are most cordially welcome.

And, finally, I would like to commend to your attention the work that is already being done, day by day, within the Commonwealth in support of education. There are of course several programmes of bilateral assistance of whose usefulness there can be no doubt. One of the valuable off-stage activities at conferences of this kind is the establishment — or more often re-establishment — of the personal contacts between parties to bilateral programmes that are essential for their efficient and humane conduct; and in this regard I would like to pay tribute to the enlightenment of those in the developed Commonwealth countries who administer such programmes.

And I am proud to say that in the Secretariat we are now able to play a not insignificant part in the promotion of economic development through education, by the activities of the Commonwealth Fund for Technical Co-operation. Experts in many fields of education have been provided to a number of countries, both as advisers and in operational capacities. Since the last Commonwealth Education Conference, in Kingston in 1974, our Education and Training Programme has increased the numbers of students whom it supports by over three times. The programme now funds over 500 projects a year. The real test of the worth of our technical assistance programmes is the number of applications for support that they attract. In that sense the Education and Training Programme is a huge success. So much so that we are now under pressure to ensure that our resources are sufficient to meet all the demands upon them.

The answer is, of course, to increase the funds available. But the Commonwealth Fund for Technical Co-operation depends entirely on voluntary contributions from all member Governments: so all I can say to Ministers is that, if you want more of the kind of help that we can provide, the answer is partly in your own hands — or that of your Ministries of Finance whom you are so skilled at nudging into progressive postures. I am aware, as are all delegates from national Governments, that these are hard times, that resources are scarce, and that the needs are almost infinite. Sharing that knowledge, and seeking ways of facing up to it, is of course, one useful purpose of an international meeting to discuss the Economics of Education. I do not suppose — I don't think anyone here supposes — that from our deliberations will emerge all the answers that we all seek. But the search, and the Conference, are open. May they prosper and be fruitful.

# 2. Address by H.E. General Ignatius Kutu Acheampong, *Head of State and Chairman of the Supreme Military Council*

**Read on his behalf by Lt. General F. W. K. Akuffo, *Chief of the Defence Staff***

Distinguished Guests, Your Excellencies, Delegates, Ladies and Gentlemen:

The Head of State and Chairman of the SMC had hoped to be with you today, but has been prevented at the last minute by other pressing official engagements from doing so. He has therefore asked me to bring you his message and good wishes.

It gives me great pleasure to welcome all of you to this very important Seventh Commonwealth Education Conference, which is taking place, for the second time since the series began, on the continent of Africa. For us in Ghana, the holding of this Conference here this year — the 20th year of our attainment of independence — is of very special significance. We have in the first twenty years of independence trained one generation of Ghanaian students through our educational system. This is therefore a convenient time for stock-taking to find out what we have been able to achieve in the first two decades of independence in this vital area.

Independence gave us the opportunity, as a nation and people, to shape our destinies in three vital areas — political, economic and social. From the very beginning, however, it was recognized that education was fundamental to any changes that we could effect in each of the three vital areas I have mentioned. Consequently, education has consistently been accorded a very high priority in the programmes and policies of each successive post-independence government. Yet, this fact notwithstanding, it is also true that current dissatisfaction with the performance of the educational system is at an unprecedented high level. This is, of course, not to discount the fact that the more we get educated the more we find what is wrong with our education. This is a healthy sign. The situation in Ghana is not very different from that in nearly all the Third World countries represented in our comity of nations.

The problems of education in most developing countries, and certainly those of member states of the Commonwealth with identical historical traditions, are fairly similar. The broad outlines of these problems are there for all to see. In almost all Third World countries education has failed to produce those far-reaching changes of attitudes and values that are sweeping those societies. Education has continued to be elitist and has only served to maintain a *status quo*. As a result of these defects, the educational system has failed to produce the trained capacity that can handle pressing national problems expertly. Specifically, education has failed to train skilled technicians in the numbers and levels urgently needed for a rapidly developing society like ours. And for such little output, education in all Third World countries has become an unbearable charge on the national budget.

In the face of this crisis in formal education, it is appropriate that the theme of the Conference should be "The Economics of Education". It is not my intention to burden you in this address with elaborate statistics

pertaining to the spiralling cost of education. In the lead papers which will be presented during the Conference and in your discussions you will have ample opportunity to look at the detailed statistical evidence. I wish, however, to draw attention to some of the salient features of the problem of educational financing which I believe must engage your attention. Nearly all Third World countries now devote more than one quarter — in some cases as much as one third — of the annual recurrent budget to education. The educational budget itself, when examined closely, shows serious imbalances in the allocation between various levels of the system. The least endowed is primary education; while the universities and other institutions of higher learning claim a disproportionate share of the expenditure within the recurrent budget. The most remarkable fact is that such a very small proportion — usually about 10–15% — is devoted to equipment and other teaching aids and materials.

I am sure that in almost all developing countries the governments have the political will to bear this mounting burden of educational expenditure. What I am not certain about is the political will to decide at which level of the system increased investment will yield the greatest dividend. This question, distinguished delegates, is linked with the question of what should be the structure and content of basic formal education. At the beginning of the 1960s most African countries accepted the attainment of universal primary education as a desirable goal. Fifteen years later, the plain fact is that most of these countries have not attained that goal. But perhaps what is most disturbing is the fact that the large army of school leavers we have turned out of our schools have not made the desired impact on our levels of development. How can they, when most of the basic education they have received has pre-conditioned them for nothing but unemployment? We in Ghana are attempting to address ourselves more realistically to this problem. We have to, because the phenomenon of the unemployed school leaver is becoming too alarming to be left unattended for long.

Education does not operate in a vacuum. It draws from the cultural heritage of the society in which it functions and it is also shaped by outside influences. In short, every society gets the education it deserves. Where the formal educational system is characterized by a broad base, a constricted middle section and a tiny apex — which is the common pattern in most Third World countries — it can only be a reflection of the elitism of the society in which it operates. Unless there is a fundamental restructuring of the society, it is difficult to see how the educational system can undergo significant revolutionary change.

Attempts made so far have been peripheral to the central issue. We have paid lip-service to the equalization of educational opportunity, while in actual fact deep inequalities exist both in the accessibility of the broad areas of education and in the distribution of facilities. I believe that an educational system which is relevant to the needs of the people must have a strong policy of self-reliance as its major component. This means that we have reached a point where we must focus our attention and invest our resources in the education of the large masses in order to improve their potential productivity in the economy. This is not to de-emphasize higher education. Surely, with the increasing complexity of the modern world, the specialist skill of the university graduate will continue to be required, but obviously he is not the only cog in the wheel. The present system whereby a tiny minority is highly skilled, leaving the majority in virtual

ignorance, is obviously untenable. Logically, therefore, if we must follow a policy of life-long education, we must continue to devise and support new systems for enhancing and developing adult education both within and outside the formal education structure.

Distinguished delegates, ladies and gentlemen, the tasks facing this Conference are formidable. While we do not expect you to come out with magical solutions to some of the problems I have raised, we expect positive guidelines to emerge from your deliberations which will help to give new meaning and orientation to education. The world is moving towards a future whose outlines are barely perceptible at present. Caught between the phenomena of rising population and dwindling resources, mankind will have to face new pressures and tensions. A high level of skill, both in technology and in the management of society, will be required to deal with the challenges of the future. The formal educational system must therefore undergo a revolutionary change if it is to meet these challenges adequately. We have, through our present educational philosophies, developed a system of social ethics that looks up to leadership for sheer naked power and authority. Let us now, through a new educational ethics, redefine leadership as an opportunity to render greater service to the people. Only then can we develop the total commitment necessary to pursue any realistic goals in our social and economic development.

In conclusion, let me welcome you all to Ghana. I hope you will find time from your deliberations to go out and learn about our country and its people. Here in Ghana you are among members of your own family, and I know you will feel at home. I wish you all a pleasant stay and fruitful deliberations. Thank you and God bless you.

# 3. Remarks by Mr. E. C. Anyaoku, *Commonwealth Assistant Secretary General,* at the Closing Ceremony

The adoption of the Conference Report sets the seal on what, I believe, has been a very successful Conference. We have enjoyed ten days of frank and fruitful discussion which has been characterized by those qualities that one always associates with Commonwealth meetings — a willingness to understand each others' difficulties, friendliness and relaxed informality.

The Conference has provided delegates with the opportunity to discuss, with their colleagues from other parts of the Commonwealth, issues that are of concern to us all. The discussion has been both intellectually stimulating and practically oriented.

The fruits of the Conference are many and varied. Old friendships have been renewed and new ones made. The value of many conferences, including this one, lies as much in what happens in the corridors, at receptions and in the hotels, as in the more formal deliberations of the conference chamber. In more tangible terms we have the fruits of the Conference in the form of the Conference Report which has now been adopted. It contains an unusually large number of recommendations, many of them requiring action by the Secretariat for their implementation. In the Secretariat's view, these recommendations are an exciting challenge and break new ground in Commonwealth co-operation in education.

Mr. Chairman, you have charged the Secretariat with the responsibility for pursuing these recommendations with vigour. On behalf of the Secretary-General and my colleagues, I wish to assure you, sir, and the Conference that the Secretariat accepts this charge. Within the limits of the resources that governments make available to the Secretariat, we shall do our utmost to ensure that the recommendations of this Seventh Commonwealth Education Conference are implemented to the best of our ability.

Our success in discharging these new responsibilities will depend, as in all other aspects of Secretariat work, on the support we receive from the Commonwealth governments. Support will clearly be required in financial terms and you, Mr. Chairman, have already drawn attention to this fact.Support will equally be necessary from ministries of education in member countries. The final recommendation of the Conference places a heavy load on the Commonwealth Education Liaison Committee. The Committee has been given responsibility by the Conference for assigning priorities to the many recommendations that the Conference has made. I hardly need to emphasize that this is a most important task. I wish to be frank, Mr. Chairman, in saying that we have not always received, in the past, the support we require from governments through the C.E.L.C. Some governments have not always been represented at an appropriate level on this important Committee. Some representatives have been handicapped in their participation in the deliberations of the Committee by the failure of home governments to provide them with information or with adequate briefing. I am sure that delegates will appreciate the importance of ensuring that their representatives on the C.E.L.C. are kept in close touch with their home ministries.

In the same way as the Conference has charged the Secretariat with responsibility for carrying out the recommendations of the Conference, I would make so bold as to appeal to Commonwealth governments to support the Secretariat in its efforts to discharge its responsibilities.

We shall soon be leaving Accra which has been the venue of the second Commonwealth Education Conference to be held on the continent of Africa. Our thoughts will shortly turn to the planning of the Eighth Commonwealth Education Conference to be held on the continent of delegates will wish to know that preliminary consultations have already taken place on the possible venue for the next Conference. Arising from these consultations, the hope is being expressed that the next conference will be in Asia, which has not hosted a Commonwealth Education Conference since the 1962 meeting in New Delhi. Governments will, of course, be kept fully informed, through the C.E.L.C. on the progress of the consultations.

Those who have visited the basement of the Conference Centre in the course of the past twelve days will know that it has been a hive of activity all day, every day, and indeed for much of each night. It was, I think, Napoleon Bonaparte who said that an army marches on its stomach. It would be equally true to say that a conference's deliberations depend in large measure on the quality of its secretariat support. On behalf of the Commonwealth Secretariat, I should like to thank all our Ghanaian colleagues for their long hours of hard and effective work, and to thank the Ghana Government for providing us with such a dedicated and hard-working team, with whom we have all been delighted to work as friends and colleagues during the last two weeks.

Finally, Mr. Chairman, I should like to extend to the Government of Ghana the very sincere gratitude of the Commonwealth Secretariat not only for the support I have just mentioned but for all the other arrangements made in connection with the servicing of the Conference.

# Appendix 1: Conference Agenda

## Theme

The theme of the Conference recommended by the Commonwealth Education Liaison Committee (C.E.L.C.) for adoption by the Conference is *The Economics of Education.*

## Conference Objectives

(a) To review present schemes of Commonwealth co-operation in education and to recommend ways by which these could be made more effective.

(b) To consider the problem of financing education in the current economic climate and to identify means by which further Commonwealth co-operation might benefit member countries.

(c) To consider any other proposals for the advancement of these aims and make recommendations concerning them.

## Agenda

As recommended by the Sixth Commonwealth Education Conference, in preparing for this Conference the C.E.L.C. considered possible developments in the structuring and administration of the Conference which would assist governments to derive the maximum benefit from it. For this purpose a Committee was nominated to examine the organizational features of the Sixth Commonwealth Education Conference with a view to making recommendations on the structure of future Commonwealth Education Conferences. The Committee's proposals were endorsed by the C.E.L.C. and a Working Party was nominated, charged with the responsibility of advising on and reviewing progress of the initial preparations for this Conference. The Provisional Agenda was drawn up by the Working Party, approved by the C.E.L.C. and recommended to be put up to the Conference for adoption.

It was agreed that a three-day meeting of officials should precede the Ministerial Conference for the purpose of reviewing Commonwealth co-operation in the field of education, and of considering proposals for future action. Topics identified are Higher Education; Commonwealth Scholarship and Fellowship Plan; Technical Education; Science Education; Book Development Programme; Educational Media; Curriculum and Examinations; Administration and Supervision of Education; Applied Studies in Education; Non-Formal Education; Teacher Education; and Education about the Commonwealth. The reports of the Committees as well as their recommendations will be submitted for the consideration of Ministers during the second week of the Conference.

The Provisional Agenda for the Conference provides for the examination of the theme of the Conference under three main topics — (1) Education, Economic Policy and the National Budget; (2) The Provision of Education and its Costs; (3) Educational Financing. Each topic will be the subject of a Lead Paper, to be introduced by its author. In the Annotated Agenda these topics have been broken down into a number of sub-heads from which selections may be made for detailed consideration.

# Annotated Agenda

## The Economics of Education

### *1. Education, Economic Policy and the National Budget*

(a) *Education as Investment:* a fact or a myth; imperfections of rates of return; if investment, what respective roles for the public and private sectors; what machinery exists for the planning and co-ordination between education and economic policies?

(b) *Education for Personal and National Development:* developing the potentiality of individuals; education for social and cultural values; relating education to development needs; relationship between educational planning and manpower requirements; relationship between education and other ministries involved with manpower requirements.

(c) *Budgetary Considerations:* education's position in the country's budget and priorities at national and local levels; considerations in reaching a rational percentage of the budget — recurrent, capital and developmental costs; what constitutes reasonable growth in the education budget (e.g. influencing factors such as a young population, demands of industry, job opportunities etc., growth in relation to GNP, consolidation versus growth).

### *2. The Provision of Education and its Costs*

(a) *Assessment of Needs and Priorities:* how reliable and efficient are tools for this purpose; how could priorities be decided (e.g. partnership of political leadership and professional expertise; participation at different levels in decision-making); matching resources to priorities.

(b) *Alternatives for Growth/Diversification/Change:* alternative approaches to formal education; basic education; community education; distance teaching via radio/television, correspondence etc.; recurrent education (education by instalments).

(c) *Quality and Cost-effectiveness:* value of cost-benefit analysis at different levels of education (e.g. running a school, training of teachers, etc.); considerations in allocation of resources to different levels of education; practical measures needed to promote efficiency and eliminate waste.

### *3. Educational Financing*

(a) *Sources and Problems:* review of present sources — national and local; considerations of supplementary and potential new sources for

educational financing; widening community participation in educational financing.

(b) *Domestic Support and International Assistance:* encouraging domestic efforts (e.g. education bonds, schemes of student loans, self-help in education, schools as production units etc.); tapping regional and international sources of educational financing (e.g. governmental, non-governmental and private foundations); improving terms and mechanisms; examining further opportunities for Commonwealth bilateral and multilateral schemes of co-operation to promote educational financing.

# Appendix 2: Conference Documents

## General

| | |
|---|---|
| 7CEC/GEN/1 | Provisional Agenda |
| 7CEC/GEN/2 | Organization and List of Documents |
| 7CEC/GEN/3 | Timetable |

## Working Papers

| | |
|---|---|
| 7CEC/WORKING PAPER | Commonwealth Co-operation in Education |
| 7CEC/FCEC/WP | Background paper for Working Party on the structure of future Commonwealth Education Conferences |

## Lead Papers

| | |
|---|---|
| 7CEC/LEAD 1 | Education, Economic Policy and the National Budget — Dr. Adebayo Adejeji |
| 7CEC/LEAD 2 | The Provision of Education and its Costs — Professor Richard Jolly |
| 7CEC/LEAD 3 | Educational Financing — Dr. Malcolm S. Adiseshiah |
| 7CEC/KEYNOTE | Keynote Address by Dr. P. H. Coombs |

## Reports

Report of the Meeting of Officials
Report of the Meeting of Chief Professional Officers

## Background Paper

| | |
|---|---|
| 7CEC/BP/2/1 | Industrial Training Programme |

## Country Papers

| | |
|---|---|
| 7CEC/CP/1 | Australia |
| 7CEC/CP/2 | The Bahamas |
| 7CEC/CP/3 | Bangladesh |
| 7CEC/CP/4 | Barbados |
| 7CEC/CP/5 | Botswana |
| 7CEC/CP/6 | Britain |

| | |
|---|---|
| 7CEC/CP/7 | Canada |
| 7CEC/CP/8 | Cyprus |
| 7CEC/CP/10 | The Gambia |
| 7CEC/CP/11 | Ghana |
| 7CEC/CP/13 | Guyana |
| 7CEC/CP/14 | India |
| 7CEC/CP/16 | Kenya |
| 7CEC/CP/17 | Lesotho |
| 7CEC/CP/18 | Malawi |
| 7CEC/CP/19 | Malaysia |
| 7CEC/CP/20 | Malta |
| 7CEC/CP/22 | New Zealand |
| 7CEC/CP/23 | Nigeria |
| 7CEC/CP/25 | Seychelles |
| 7CEC/CP/26 | Sierra Leone |
| 7CEC/CP/27 | Singapore |
| 7CEC/CP/28 | Sri Lanka |
| 7CEC/CP/29 | Swaziland |
| 7CEC/CP/30 | Tanzania |
| 7CEC/CP/32 | Trinidad & Tobago |
| 7CEC/CP/33 | Uganda |
| 7CEC/CP/34 | Western Samoa |
| 7CEC/CP/35 | Zambia |

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