## INTRODUCTION

During recent years, many Commonwealth countries have developed new ideas on school building and design, have introduced innovations, and have accumulated valuable experience of planning, managing and executing school building programmes suited to their own educational needs and economic means.

Some of these projects have been publicised but many have not. Educational planners, architects and others concerned with the design and building of schools are not always aware of the experience that has been gained in other countries, and of solutions which have been successfully devised elsewhere for the very problems with which they themselves are confronted.

For climatic, economic, social, educational, cultural and other reasons, school designs, school furniture and building methods which have proved successful in one country may be quite unsuitable for another country. Nevertheless, a fuller exchange between Commonwealth countries of information and ideas in these fields, as recommended by the Fifth Commonwealth Education Conference which met in Canberra in February 1971, may well yield beneficial results. This Occasional Paper is a contribution towards Commonwealth co-operation in school building and design through such information exchange.

The articles fall into three broad sections - planning of school building, the execution of building programmes, and the quality of school building.

## Planning of school building

School building must be related to the general political, cultural, economic and technical climate in particular places at particular points in time. Professor Notley argues the case for including designers of school buildings in the macro-planning processes and for a continuing dialogue between the users and designers of school buildings. The importance of an inter-disciplinary approach is also stressed by Shri J.P. Naik in his account of the development groups which have been established at national and state levels in India and which constitute an important step in facilitating the planning and implementation of school building programmes which combine quality, efficiency and economy. With a similar aim in view, Malaysia is planning to establish an educational facilities development group. The planning of Malaysia's current school building programme is described by Mr. Murad.

School plant is frequently under-utilised. Through the more intensive utilisation of school spaces, valuable economies can be effected and educational opportunities can be given to larger numbers of children. Mr. Srivastava's article describes a study on the use-efficiency of primary school spaces undertaken at the Central Building Research Institute, Roorkee, India, while Dr. El Jack, drawing on experience in Africa, demonstrates the contribution that optimum space utilisation at the secondary level can make to reducing capital cost per pupil.

## Execution of school building programmes

The fostering of a healthy, competent building industry, covering all aspects of the building process, is an urgent development priority in many countries. Miss Pearson suggests strategies which governments can employ in encouraging the growth of locally based construction activities.

The school building activities of the British Development Division in the Caribbean, which aim at achieving collaboration, flexibility, realism and economy, are outlined by Mr. Wood. Imported steel frames with local cladding have been used in many schools built in the Caribbean. In other island communities, in the Pacific, prefabricated construction methods may have their disadvantages. These are described in Mr. Honey's article which proposes an approach that takes account of the local limitations in skills, transport and money and allows decisions to be made locally on the facilities to be provided and the order in which improvements may be effected.

Self-help forms an important element in many educational building programmes and this is particularly true in Kenya. Mr. Muraya's account of "Harambee" school building shows how the efforts of local communities have contributed to the expansion of educational facilities in Kenya. "The buildings" writes Mr. Muraya, "form an important part of the accumulated assets of the nation in education; they are also monuments to the faith the common man has in education."

Two articles describe unusual projects. From Hong Kong comes a description of the building of multi-storied schools which have been necessitated by a shortage of building land. Brother Hortensius gives an account of the Project for the Education of the Deaf in Malawi.

## Quality in school buildings

In countries where the provision of "roofs over heads" is of overriding concern, resources cannot always be spared to improve the physical environment of the classroom. In many countries it is only when an extensive building programme has been successfully executed that attention can be turned to qualitative development. Ceylon has sufficient school spaces for the bulk of its population of school-going age. Dr. Udagama gives an account of the steps taken to gain maximum advantage from the open-hall-type schools which have been built in large numbers, and to provide desk and chairs constructed by lower secondary schoolboys. The importance of school furniture "as part of the ethos of the school, and as a starting point in school design" is the burden of Mr. Medd's contribution which describes changing ideas on school furniture and contends that the provision of a wide range of furniture is increasingly the means whereby a school becomes an educational instrument.

Few innovations in schools during the last decade have aroused more excitement and interest than the open area teaching concept. Mr. Ryan outlines the advantages and problems of "wide open spaces". He reminds us that all those who have a part in building a school must take into consideration recent advances in our knowledge of child growth and development, and the psychology of learning, and in teaching methods and aids.

Mr. Nottle, a teacher in Australia, gives his views on the facilities which will encourage, permit and inspire teachers and pupils to do

their best work, and pleads that those who design schools should give adequate consideration to the views of those who will use them. Finally, Mr. Orlowski describes the work of the office of School Planning and Building Research in Ontario, Canada, which, amongst other activities, arranges workshops where architects, planners, engineers, teachers, administrators and representatives of the community discuss the problems of planning and building educational facilities.

These articles, of course, describe only a small cross-section of a multitude of activities which are going on throughout the Commonwealth to increase the quantity and to improve the quality of school building. That many topics have not been included in this Occasional Paper is all too evident. Nevertheless, the Paper will have served its purpose if it stimulates further exchanges of information among those who work in this field and leads to increased sharing of the professional, technical and administrative skills which, collectively, the Commonwealth possesses in abundance.