

The recommendations of the Karachi Conference of Universal, Free and Compulsory Education of 1960 began to put some figures on the vast numbers of school children to be educated in Asia. The 1962 London conference on educational buildings provided UNESCO with some important advice on just how to go about helping governments to provide suitable accommodations. UNESCO efforts to turn the printed resolutions into classrooms and school desks has now spanned a quarter of a century and its centre of action can be traced from Bandung, Indonesia, to Colombo Sri Lanka and finally to the UNESCO Regional Office in Bangkok Thailand.

In the original mandate, UNESCO was to concentrate on research on primary school building where the needs were the greatest. Throughout much of Asia, in those days, the numbers of primary school buildings were far too few to accommodate the large numbers of school age children. If the governments were to copy the best of the existing school buildings in the countries concerned they would have had to carry out the construction programme with funds which were sorely needed for teachers' salaries, school textbooks, visual aids and science equipment.

Thus from the very beginning of UNESCO's work in school buildings in Asia, the matter of cost was a preoccupation. The London conference had however warned UNESCO strongly against dishing out to the region simplistic solutions of cheap buildings using standardized plans. Instead 'Research and development' through team work by designers, cost specialists and educationists, was the cry of the day. Consequently the UNESCO supported Asian Regional Institute for School Building Research (ARISBR) set out in earnest to get countries to think creatively about their own building and furniture needs rather than to copy 'cook-book' solutions.

Fundamental research was undertaken in determining average body sizes for Asian children, optimizing hearing conditions in open hall classrooms, and accurately calculating the amount of natural light available in the sky. Applied research concentrated on arranging spaces in such a way as to make teaching more efficient and learning more effective.

The knotty problem of lowering costs so that new schools could be afforded by even the poorest countries was raised in every one of the studies. Finding out that Asian children were smaller than European and North American children meant that chairs and desks needed to be smaller to be comfortable and as a bonus this saved valuable timber. Careful study in full scale situations revealed that a substantial amount of space in classrooms was not being used and therefore need not be built (At that time furniture and building standards in many Asian countries were simply copied from those of highly developed countries).

Improving hearing conditions in open hall schools again reduced the need for costly partitions, but more importantly made it possible to easily 'adjust' the sizes of classrooms so that they could reflect closely varied class sizes which might be 80 in grade I and eight in grade V. This too reduced the required floor area of school buildings. One monumental undertaking was the secondary school costs study, where 100 secondary schools in 14 countries (five of them in Asia) around the world were analyzed in great detail to determine how the resources were being used and to identify where savings could be made. The main conclusion of this study

was that the greatest potential savings would be through increasing the utilization of existing spaces. In many schools, the simple rearrangement of the timetable to a 'subject based' system from a 'class based' one could double the school's enrollment. It was also found that verandahs and covered walkways accounted for a significant amount of the total space of the schools and yet they contributed nothing to improved teaching or learning. The use of cheaper building materials and adoption of new construction techniques was also investigated and further potential savings identified.

Research was certainly not the only concern of ARISBR. Group training and advisory services to the Member States of the region filled out the activities and all work was meticulously written up and disseminated.

In 1972 when the first ten years of UNESCO's work in the field was coming to a close a major publication was prepared. This book, School

Building Design Asia, summarizes the work of ARISBR

which had resided for two

years in Indonesia and seven

in Sri Lanka. To this day,

the book is used throughout

the region as the most basic

and comprehensive reference

work available on the design

of both primary and secondary schools.

The following year saw a major redirection of UNESCO's efforts in educational buildings. Resources for

More schools for less money

The Bangladesh Times

05 NOV 1986

5.3

Village schools are needed for Bangladesh's growing rural population.

tially and the staff reduced in

numbers. However, by bring-

ing the nucleus of the

UNESCO team to the Region-

al Office for Education in

Asia (later Asia and the Pa-

cific), the educational building

design specialists were plac-

ed side by side with teacher

educators and educational

planners together with the

existing staff who had com-

petencies in educational re-

search, curriculum develop-

ment and documentation.

In this new environment,

emphasis was placed on help-

ing Member States to apply

the results of research. Ra-

ther than holding training

sessions aimed at providing

a broad knowledge of the field

to classes of trainees brought

together from a number of

countries, the new direction

was to provide tutored in-

service training of national

persons. Trained persons

who had already attended

training courses were brought

to the UNESCO Regional

Office where they could work

through a project which was

policy reforms in their coun-

tries.

The evolution in the team's

work followed the change in

environment. In place of the

research laboratory environ-

ment in Colombo they worked

in a modern office environ-

ment. No longer could pro-

fessional theories be resolved

by calling the carpenter over

to build a full-scale mock up

to build a classroom nor

could they build a classroom

exterior wall which provided

security at night and titled up

during the day to become a

sunscreen. To make up for

this separation from 'hands-

on' research the new Educa-

tional Facilities Development

Service of UNESCO Bang-

kok began to spend much of

its staff time in the field

working shoulder to shoulder

with professional colleagues

who had completed the in-

service training and were now

struggling with turning plans

and reports into large num-

bers of buildings desks and

chairs.

There was, however, some

continued concern with re-

search. Some centred on se-

curity: how to make educa-

tional buildings safe from

fire, earthquakes, hurricanes

floods — and design mistakes

which lead to accidents when

schools are in use. Other re-

search has been done on mak-

ing better use of outdoor

spaces for teaching, ecological

demonstration, playgrounds and sport.

These 25 years have been

effective school buildings and

organizations which have, in a

number of countries, been

able to set in Karachi. In other

places work is achieved through

co-operation between the Minis-

try of Education and other

organizations such as

public works, local govern-

ment and the communities

themselves. Their work has

been facilitated through the

substantial assistance and bi-

lateral sources.

Looking across the region

one can see that about half

the governments of the region

working directly in co-opera-

tion with UNESCO have been

able to substantially improve

the cost effectiveness of their

educational buildings and fur-

niture. Several million chil-

dren work daily in these new

schools in Iran, Afghanistan,

India, Maldives, Sri Lanka,

Bangladesh, Nepal, Burma,

Bhutan, Thailand, Lao Viet

Nam, Indonesia, Philippines

and Tonga. Almost all other

Member States of the region

have benefited from training

or the application of ideas

contained in the publications.

A fresh round of research

and development work is just

getting under way in some 17

countries which are partici-

pating in a new project known

as Development of Educa-

tional Facilities in Asia and the

Pacific. This project is an ex-

tension of UNESCO's normal

work under the regular pro-

gramme but is financed by

an external donor, AGFUND.

The aim of the project is for

countries to develop proto-

types which will be followed

by massive construction pro-

grammes. By now the coun-

tries have sufficiently devo-

loped their own capacities to

carry out these experimental

projects with a minimum of

intervention from UNESCO.

The UNESCO-AGFUND assis-

tance is being used to cover

unusual research cost, visitati-

ons to other countries carrying

out similar work and in some

cases, external consultan-

ts. The regional office sup-

porting team finds itself

doing less drawing these days

but rather making increasing

use of a personal computer.

Some of the problems tou-

ched upon by the Karachi