

Effective Teaching in an Overcrowded Classroom

Halima Khatun

Overcrowded classrooms are causing a great problem to the teaching learning process in schools on developing countries. Education scientists are trying hard to cope with it. Professor Ki Hyoung Oh, Yonsei University, Seoul worked for more than ten years for solution of large pupil and multigrade problems in schools and came up with an innovation called Education Development Project (EDP).

EDP definition of education as "human interaction between the teachers and the learners facilitating value-oriented human development and the transmission and creative development of culture related to human development" sounds a little abstract in the beginning. But appears clear and attainable if one follows its structural approach.

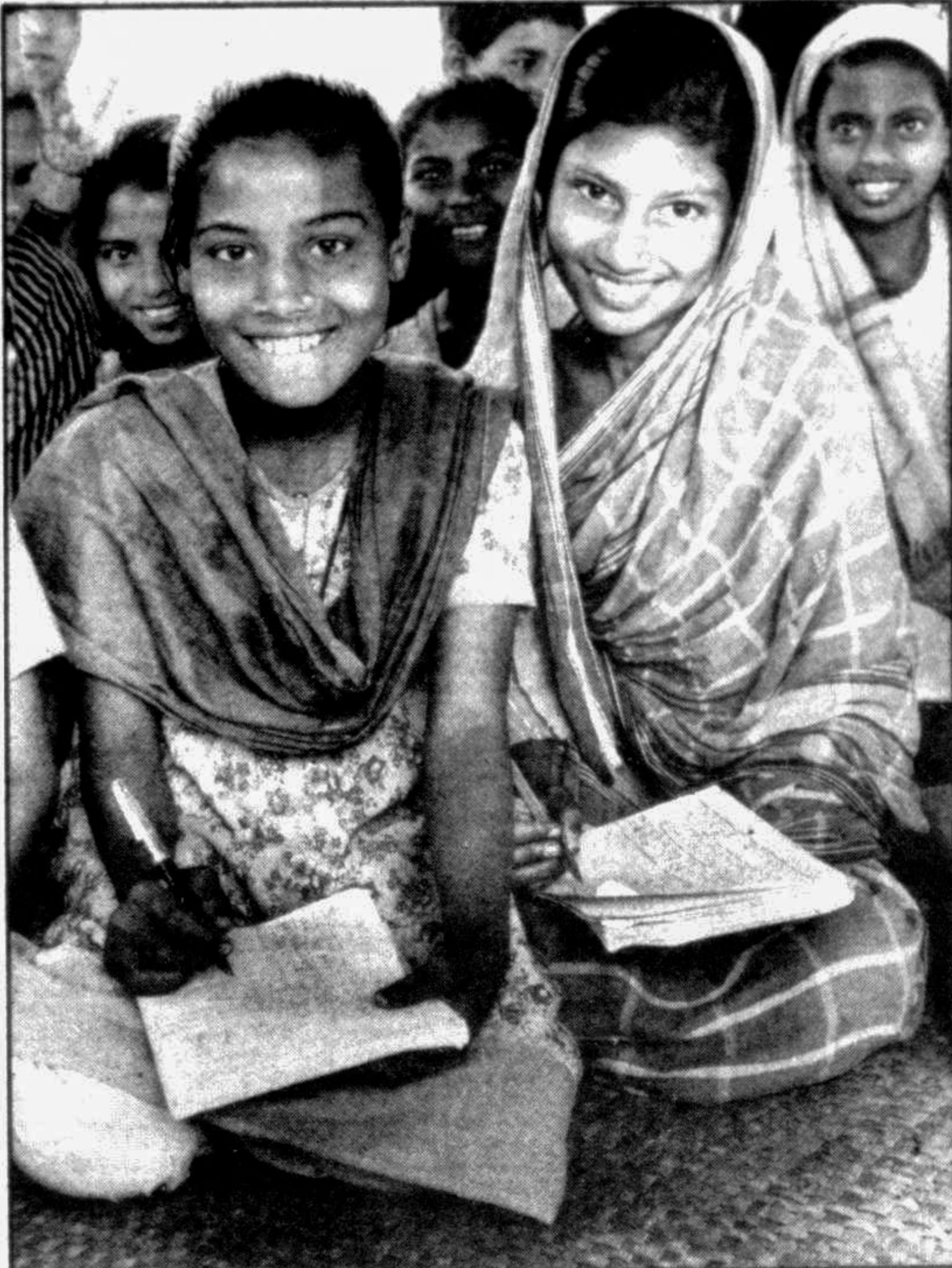
EDP presupposes that education is structural and could be broken down to several levels of sub-systems. Because of this structural nature of education EDP has a comprehensive approach to educational innovation covering the key areas of education such as teaching learning, management-administration and research-development.

The teaching-learning processes projected through actual classroom practice, and the question answer sessions with EDP practicing teachers helps a great deal to understand EDP methods as a solution to the problem on overcrowded and multigrade classrooms.

The secret of the success of EDP method is evident from its use of instructional materials for classroom teaching in a super-large class comprising 80 children. The materials include especially prepared textbooks, charts, flash cards, picture cards, cubes, beads, magnetic board, flannel board, plastic covered work sheets and special kind of pencils.

All these materials are graded and correspond to a well-planned instruction programme suitable for the classes concerned. The materials are used by the teacher and the students simultaneously, thus fostering learning in a very effective way. Children actively participate in learning activity through intelligent use and manipulation of the materials at their disposal. EDP method and materials provide for meaningful interaction between teachers and pupils, and among pupils themselves. The group-paced learning approach provided by this method help both the slow and fast learners to work at their own pace, and to profit thereby.

Another remarkable feature



Education of girls is probably the world's best investment. Nothing else has such power to improve family health, slow population growth, and improve the lives of women themselves. —UNICEF photo.

of EDP method is its built-in evaluation system similar to that of programmed instruction. Evaluation takes place through self-evaluation through the learning process, by the students themselves. By observing the class in action the teacher can know the achievement of the students and assign work accordingly for self-learning and elective learning.

EDP method presupposes teacher training, systematic flow of materials and administrative and supervisory set up for smooth functioning. Most of the teachers had in-

service training regarding EDP method. Direct field work in the classroom also helped them to use the materials successfully. Teachers appeared to be happy and enthusiastic about the use of this innovation in their day-to-day work in crowded classrooms and in single teacher multigrade schools. Specially prepared visual materials contribute a great deal towards imparting basic knowledge and skill, saving both energy and time of students and teachers.

The concept of applied EDP was new but the spirit of EDP is ever present imbedded in

the ideas of improvement of instruction in a teaching-learning situation. Seoul experiment emphasised the for and purpose of using adequate low-cost simple teaching aids by students and teachers simultaneously in large classes. In many countries of the world UNICEF is giving enormous financial help for improving instruction in the elementary level by providing audio-visual materials for classroom use and teacher training. Considering the educational values and effectiveness, similar models could be made and materials produced and be

widely used in elementary schools. EDP method and materials together with "in-school-off-school" innovation in the Philippines may render a great help towards the promotion of quality education in the primary schools, which in turn is sure to solve drop out, juvenile delinquency and other related problems.

The reliability and usefulness of EDP models may be tried out in our country as a pilot project. Such a project may involve a small number of primary schools with super-large classes, systematic preparation and production of teaching materials, and training of teachers and education workers.

The "In-school-off-school Approach" (IS-OSA) as a solution for large classes introduced in the Philippines a decade ago on an experimental basis. This strategy involved the assignment of 80 pupils to one teacher. The group was divided into two—one doing formal in-school work for one week and the other doing off-school work for the week. Two groups earn to school by rotation. Self-learning kit or SLK was used for this approach. SLK consisted of systematically sequenced curriculum material for learning specified skills. It taught a new learning task, reinforced acquired knowledge and enriched the child's experience through the use of community resources.

Each child was given a self-learning kit to take home. During off-school week he learn from the SLK under supervision of the parents or elders, while during in-school week he was under direct supervision of the teacher. Thus the IS-OSA made possible to impart quality education to a large number of students at a lower cost.

The IS-OSA could be used in schools of our country where the class is very big and the room is small. This approach could be introduced on a trial basis and adopted for greater use for improvement of instruction. Successful use of this approach will minimise cost and solve other problems connected with overcrowded classes of our country. It could be started on a pilot basis in selected primary schools and then to their primary and secondary schools in future. Science teaching modules introduced by the Science Education Centre of the University of Philippines had been very successfully used the IS-OSA.

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Improving Skills of Literacy Workers

Hedayat Ahmed

Today the world is witnessing tremendous progress and development in science and technology, but paradoxically more than 900 million people of the world do not have access to simplest technology of reading and writing. They are the ones who are living in darkness, devoid of the most essential pre-requisite which empowers man to determine his destiny. Three quarters of them are in Asia and the Pacific region.

This region was the cradle of many ancient civilizations and cultures which were among the first to use written languages for religious and secular purposes. Therefore, this pervasive illiteracy is not at all compatible to our glorious past. South Asian countries are particularly plagued by illiteracy and they have to catch up with the countries in East and South Asia which have overcome the scourge of illiteracy in their own society.

In 1990 we all celebrated the International Literacy Year. The World Conference on Education for All was held in Jomtien in March 1990. It was jointly organized by Unesco, UNDP, UNICEF and the World Bank. The International Literacy Year and the World Conference have generated great enthusiasm and zeal for education for all.

But the campaign for education for all did not begin in 1990 only. In 1985, the Regional Conference of the Ministers of Education and Those Responsible for Economic Planning urged Unesco to prepare and launch "Asia-Pacific Programme of Education for All (APPEAL)." The twenty-third session of Unesco General Conference endorsed the recommendation and the APPEAL was launched on 23 February 1987.

In the context APPEAL Unesco Principal Regional Office for Asia and the Pacific and Unesco's member states in the region have been working together to develop strategies and methods to promote literacy activities in the region.

Training of literacy personnel has been identified as one of the most important strategies to promote literacy activities and to improve its quality. Therefore Unesco, with the help of literacy experts of the region, has developed "APPEAL Training Materials for Literacy Personnel" (ATLP) as resource package for training literacy personnel.

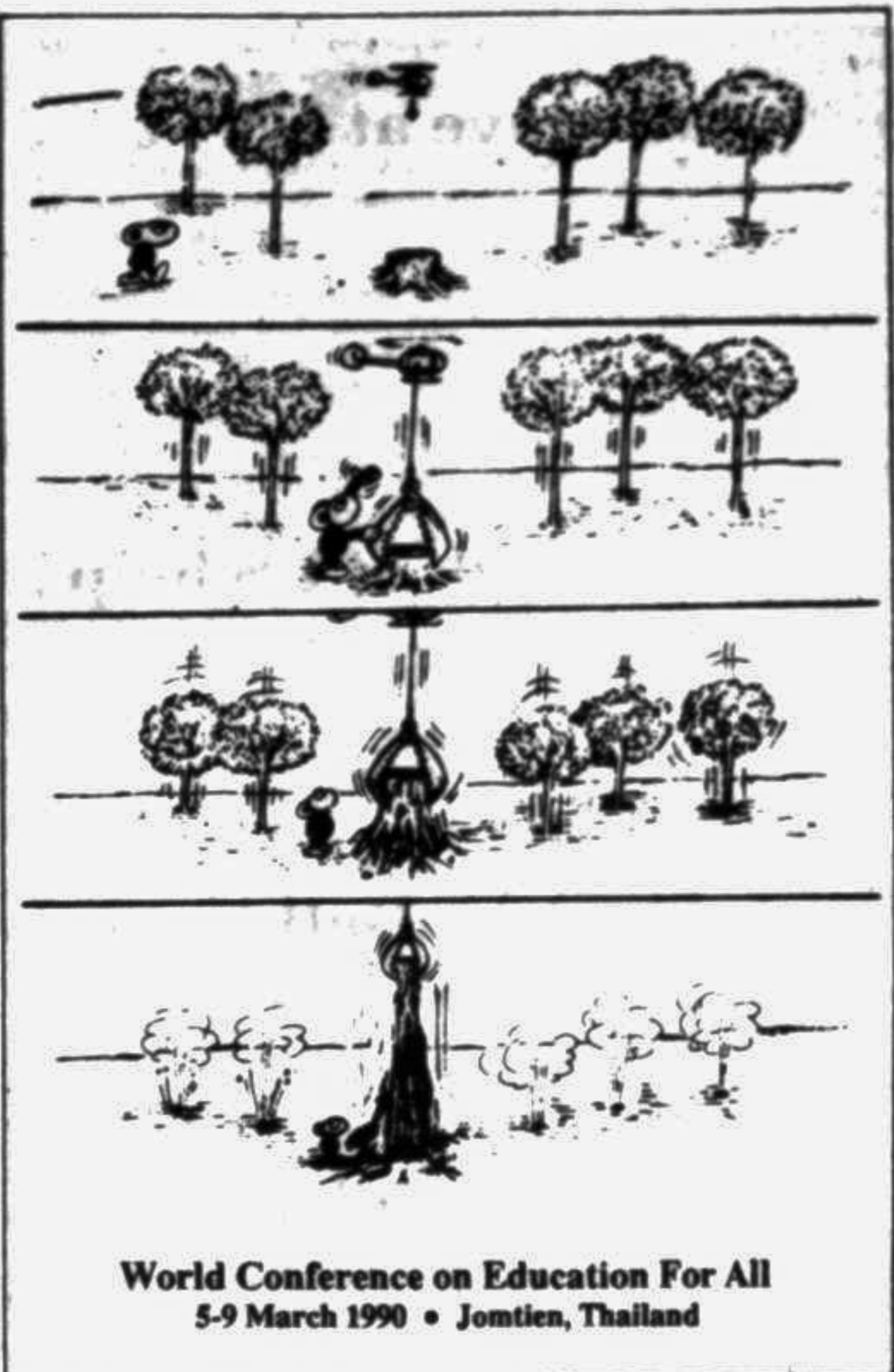
Based on ATLP, my office, has been organizing a series of sub-regional workshops for training of literacy personnel to train key literacy personnel, who in their turn would train

more literacy personnel in their respective countries.

The first sub-regional workshop was held in Thailand in 1989 followed by the second workshop in India the same year. The third sub-regional workshop for South-East-Asia and the Pacific countries was held in Indonesia in 1990. The fourth sub-regional workshop, originally scheduled to be held in Dhaka November, 1990, had to be deferred to January for administrative reasons. The fifth one was held in Port

complexity. Although some countries still have continuing problem of illiteracy, many countries have successfully tackled their own and are now moving towards post-literacy and continuing education programmes. To meet these new challenges, Unesco has started a new project titled: "APPEAL Training Materials for Continuing Education Personnel" in short called ATLP-CE.

Training on methods of needs study, curriculum devel-



World Conference on Education For All 5-9 March 1990 • Jomtien, Thailand

Moresby, Papua New Guinea from 3 to 15 December.

These sub-regional workshops have stimulated series of country level activities. Some countries have translated ATLP into their own languages. So far Bangladesh, India, Indonesia, Thailand and Vietnam have completed the task while steps are underway in Laos and Tonga.

Countries like Bangladesh, China, Indonesia, Malaysia, Nepal, Philippines, Samoa, Tonga, Thailand and Vietnam have organized several such workshops utilizing ATLP materials.

The Asia Pacific region is known for its diversity and

development, learning materials development and training of teachers utilizing systems model based on ATLP and ATLP-CE materials is necessary both for literacy and continuing education personnel.

The World Conference on Education for All has called upon the world community to provide education for all by the turn of the century. The goals of ILY and the World Conference will not be fulfilled, if we cannot eliminate illiteracy and provide basic education for all within the foreseeable future.

The writer is the director of Unesco Principal Regional Office for Asia and the Pacific.

BUET to evolve better water hyacinth fodder

A research project to convert water hyacinth to a more digestible form for cattle fodder has recently been undertaken jointly by the departments of chemical engineering of the Colorado State University, USA and the Bangladesh University of Engineering and Technology (BUET).

The aim of the project is to increase the digestibility of water hyacinth by preferentially degrading lignin which is not digested by cattle sheep and goat. The degradation will be carried out by white rot fungi which will preferentially degrade lignin producing "edible biomass" but spare as much as possible cellulose and hemicellulose.

Bangladesh has great difficulties in feeding its cattle because of scarcity of land and other resources. A desirable approach to overcome the problem would be to grow a high yielding cellulosic mass

which can be used as fodder for the livestock (cattle, sheep, and goat).

Water hyacinth grows readily and abundantly in Bangladesh, but is considered basically a nuisance. However, it meets the criteria of high yield. Water hyacinth productivity ranges from 25 to 40 tons and acre per year.

The problem with water hyacinth is that it contains 15 to 20 percent lignin which is not digestible by cattle. The lignin also impedes the process of digestion of cellulose and hemicellulose.

The principal activity under the project will be to identify a white rot fungi which selectively attacks lignin and then optimize the solid state fermentation condition so that a simple and effective technology is developed for application in the field.

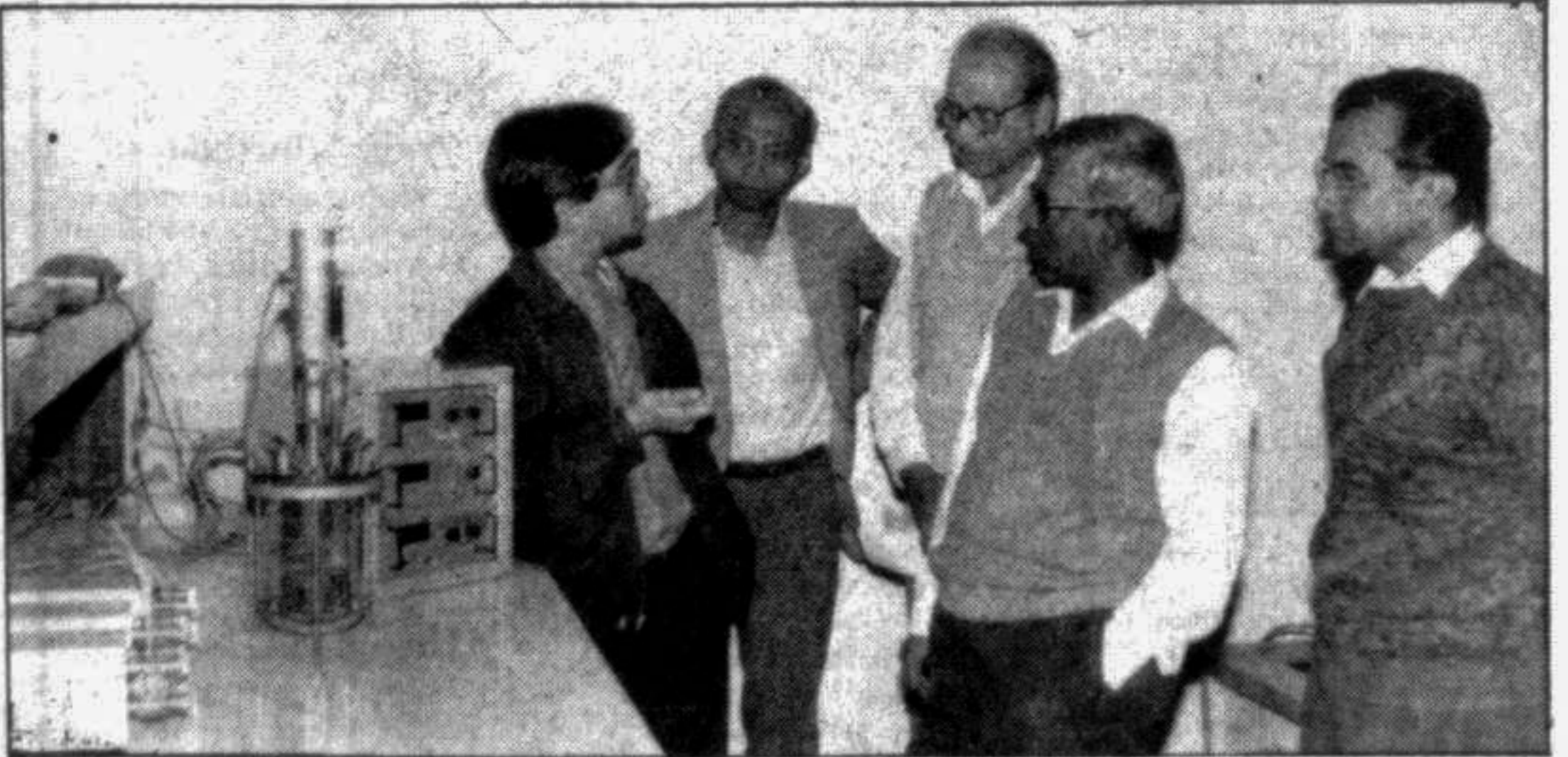
The project BUET sources claim is an important milestone in the area of co-operation with external universities.

It allows BUET personnel to exploit the expertise available at Colorado State University in the field of Biochemical Engineering.

Colorado State University has donated a 2-litre fermenter as a part of the program. BUET will also obtain a number of other equipment for the project.

Dr. Nazmul Karim who is the principal investigator of the joint project and is currently a Co-Director of Colorado Institute for Research in Biotechnology at Colorado State University recently visited the department of Chemical Engineering, BUET. He donated the fermenter on behalf of Colorado State University, held discussions on the implementation of the project.

BUET will receive equipments worth Tk. 20.00 lakh under the program in Science and Technology Co-operation of USAID.



Dr. Nazmul Karim of Colorado State University, USA, handing over a fermenter to Prof. M. H. Khan, Vice-Chancellor of BUET, recently.

NEW FRENCH LIBRARY PLAN A 'SYMBOL OF COLLECTIVITY'

The plan for a new French Library, "Bibliothèque de France", is feeding rumours. The architect and the twenty projects, from among which his plans were chosen, are known. But not everything is known about what the library is to contain.

The "Bibliothèque de France", is to extend and replace the old "Bibliothèque Nationale", whose lack of space no longer enables it to meet its dual mission of preserving and communicating all "the memory of the world". The former royal library was installed on Rue Vivienne in 1666. Since then, it has continued to grow non-stop with the deposit, by law, of everything published in France, bequests, acquisitions and exchanges.

Six thousand places and 150,000 square metres in the east of Paris will enable it to fulfil its vocation and to grow. First of all, it will open up to foreign productions which had not, so far, been systematically stocked. The modernity of the project comes firstly from a collective national catalogue containing all the bibliographical data and the possibility of anyone having access to it via the Minitel interactive teletext system and, secondly, from the link-up with big French and European libraries. This will make it possible for documents to circulate in a material form (as loans, reproductions, and microforms) but, above all, in an immaterial form by having the documents transmitted over a distance.

Magic board If the project is able to meet the extent of human knowledge and the technological possibilities of our time, it still raises a few questions. Indeed, at a time when electronic reading instruments

collectivity".

The twenty architects invited, out of the 244 candidates for the competition, indeed worked at creating a symbolical area. The programme given to the competitors was deliberately a rough outline and teams of researchers are still working today on the mission and exact organisation of the "Bibliothèque de France".

For the creation of a symbolical area, urban qualities are essential and Dominique Perrault's project stood out. It is no doubt these qualities which motivated the President of the French Republic to choose the project of this

young 34-year-old Frenchman from among the four architects selected by the jury.

The east of Paris is a "developing landscape" with Chemetov's Ministry of Finance and the Bercy stadium as its first features. On the seven hectares of land offered by the City of Paris (on the Tolbiac site), the French Library aims to be the new highlight of the east of Paris. It will fit in with the other major public areas along the Seine: Concorde, the Invalides, Trocadero and Champs de Mars. Dominique Perrault's plan takes account of urban demands. Four towerblocks in the corners,

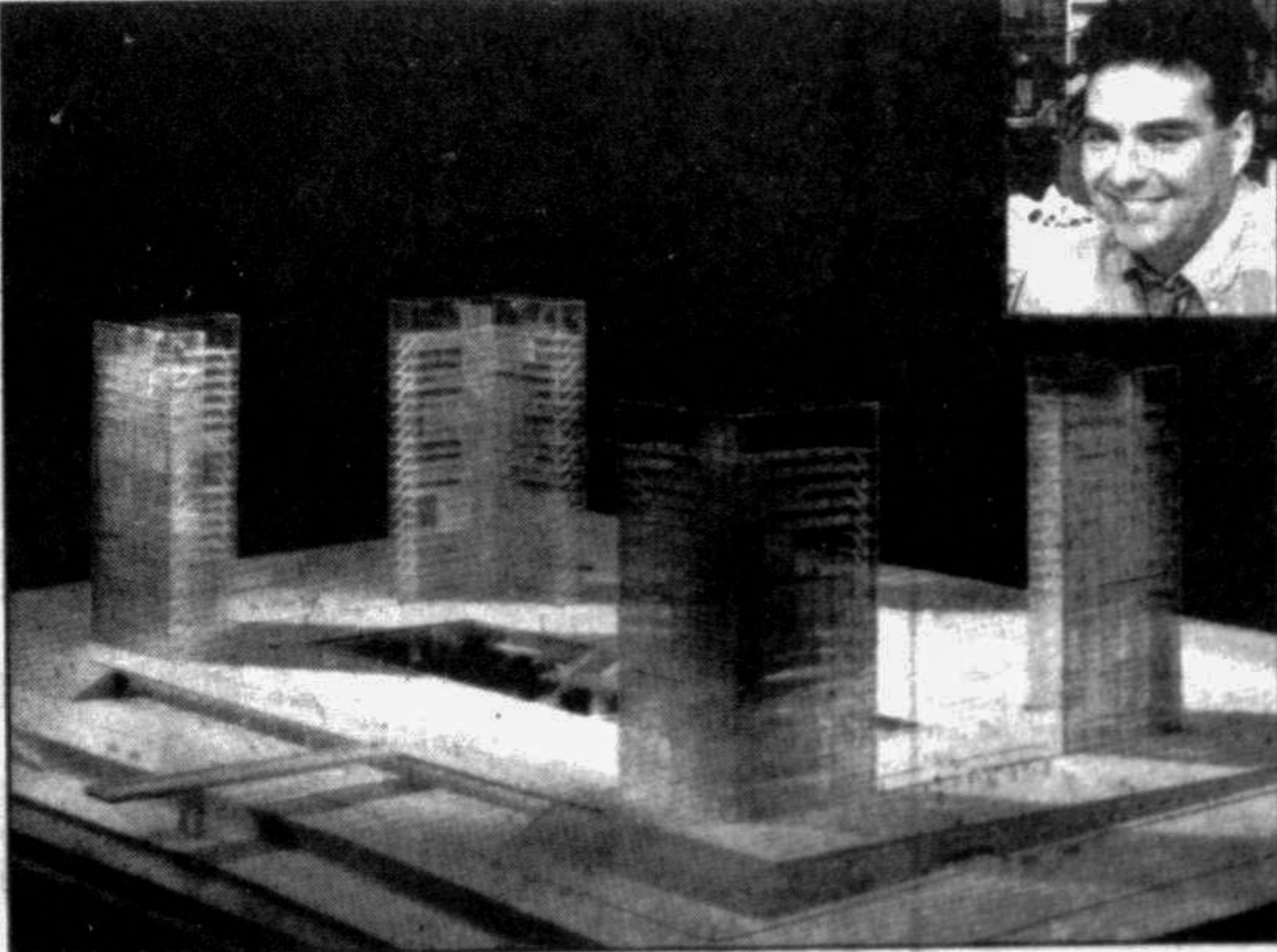
resembling four open books, about a hundred metres high, frame a huge square and a vast garden comparable to the one in Palais Royal, and a large terrace juts out on the Seine.

Figurative function

From the river to the garden, the building will be used for receiving the public, holding events and offering services, with bookshops, exhibition rooms, colloquium and conference centres and cafes. People will be able to stroll around this public area, just like they do along the Seine, from one bookstore to another. At least, this is what the architect had in mind.

The second division of the library is bigger. The 14-metre high area, following the garden, will contain several levels of glassed-in reading-rooms, reserved for readers. This area is designed like a cloister. Around a tree-planted public area, behind the foliage, the reading-rooms are apart from the city and the public area of the library.

The figurative function of the architecture is clearly visible in the four towerblocks, looking like four open books facing one another, housing the book reserves and offices. The transparent walls reveal the floors like lines of shelving and their combined effect gives some measure of the extent of human knowledge. Does this figurative aspect of the building make this public area symbolical? Apparently not. The image is far too literal here and in no way concerns the qualities of space produced by the building. This is the aspect which should be judged.



Model of the new French library and its architect dominique Perrault (inset).

Oscarino Bosquet