The Bangladesh Times

তারিখ 15 JUL 1987
পৃষ্ঠা 6 কলাম 5

Education in early 21st century

'BY 1990, information technology will be the world's largest manufacturing sector. It will be to the twenty-first century what steel-making was to the first half of the twentieth century.

So the question is not "how can we get information technology into education?'" but "how can we get education into information technology.?"

If Britain is to keep up technically and economically, this is how our education system should look in the early part of the next century:

Each child will have his or her own personal work-station a powerful desk-top computer with touch screen, voice input and advanced graphics display.

This work-station will connect the pupil with the "tutor", an artificial intelligence within the main computer.

Throughout 15 years of initial education, the "tutor" will keep a model of each child's ability to solve problems, his or her stamina, determination, preferred method of instruction performance and all details of past and statistically predictable future achievements.

The "tutor" will develop individual learning strategies for each child, getting round personal difficulties in grasping course work. Pupils will learn at their own speed. There will be no need for everyone to do everything at the same pace, the same place or the same time.

Each work-station will be connected to a local area network, a web of high-capacity fibre-optic links involving central main computers. These will contain libraries and amount, in effect, to a local school. Since the work-stations would have portable adjuncts, so that the child could work from home, the conventional idea of a school class may disappear.

Formal exams will be replaced by continuous monitoring with tests before and after specific lessons. Children need never fear the "sudden death" of an examination again because their performance will be automatically recorded by a sympathetic electronic 'tutor'. The "tutor" may tell the student you have just passed another A-one morning: 'Congratulations, level". And the student might reply: "Oh? In what?"

* No child will ever feel stupid or dull. Exhortation to achieve will always be built in and children will have their self-image constantly supported.

There will be no differentiation between black and white, male and female. The "tutor" will be sexless, non-racial, non-sectarian and caring.

* Teachers, for the first time, will be able to monitor children's learning in depth. They will spend time with children that have particular difficulties, without holding back a whole class. They will be the most important resource; the computer "tutor" will be their assistant.

Is all this just a dream? Look at what is already happening in America.

The University of Houston is building a network of 10,000 personal work-stations which will be connected to each other and to several super-mini-computers. The university library will be hooked up and students will be able to key into data bases outside the university.

Eventually, all Texas state universities will be linked into one super network. Similar ambitious schemes are being developed at Carnegie-Mellon University in Pittsburg and at the Massachusetts Institute of Technology.

By the mid-1990s, it should be possible to produce work-stations for about £1,000 each at today's prices. To hook up 8,000,000 pupils and students and their 500,000 teachers would cost about £10 bn — roughly the cost of Trident.

The present annual cost of the education system is about £17 bn and an electronic system could deliver huge savings in running costs.

The long-term objective of producing a technologically numerate population is unassailable on economic grounds.

But there is a spin-off benefit of a child population which would no longer view education and its processes with loathing and contempt.

In the last analysis, the cost of such a system is secondary to the awful cost of not having such a vision.