A Comprehensive

Education Plan

More Than Liberal Budget Allocations Necessary to Achieve Universal Primary Education

HE Bangladesh Parlia ment has recently passed the national budget for 1993-94. The budget has made the highest allocation for education for the second year running. Of the nondevelopment (revenue) expenditure of Tk 93000 million education received Tk 18240 million (19.6%) with Tk 7940 million going to primary and mass education representing 43.5% of the revenue budget for education. In the development. budget of Tk 97500 million, the sectoral allocation for education has been for Tk 9028.6 million (9.26%). Of this amount, primary and mass education sub-sector received Tk 5077:77 There is however no dearth million (56.2%). Thus, in the combined revenue and development budget of Tk 190500 million, Tk 27268.6 million has come to education (14.3%). Of this amount a total of Tk 13017.7 million will be spent on primary and mass education (47.7%) to meet its recurrent and development expenditure.

Present concerns about primary education

The above budget allocations show the priority being attached by Bangladesh Government for the development of primary ed ucation, and for maintaining its present level of activities. But unfortunately, the budget provision for education and primary education in particular. impressive as it looks, gives us little comfort about the prospect of reaching our cherished goal of Education For All' by the year 2000 or soon thereafter through implementation of the national universal primary education (UPE) programmes started in early 1980s.

There are reasons for this skepticism. Primary education has been the dominant subsector in education during the last twelve years in terms of investment and recurrent expenditure. But the progress toward universalisation of primary education has been slow and the goal of attaining universal literacy seems to be still distant. The planned expansion in enrollment in government primary schools has been achieved to a limited extent, but the problems of poor pupil attendance, empty classrooms with students found lottering outside and not attending classes, absentec/unpunctual teachers, low quality of education, inadequacies in classroom accommodation and other physical facilities, and unacceptably high drop-out rate could not be solved as yet. The performance of primary schools on an average, is considered so unsatisfactory that parents, specially poor parents, think twice before sending their children to school, and do not

hesitate to withdraw them on the slightest pretext Compulsion has now been introduced in primary ed ucation. But classroom accommodation and teachers strength have remained almost the same. And popular support for enforcing compulsion on children to attend school is still to be mobilised. The effect of changing the name of the programme from UPE to CPE compulsory primary education) to indicate the strategy of implementation remains to be

Need for participatory management involving teachers

of sincerity on the part of the government which considers the programme as very important for the nation, and makes maximum resources available for its implementation. Then, what is holding back the progress of primary education? The possible answer lies in the teachers who, by and large, do not feel responsible for the success of the programme, Responsibility comes from personal involvement. But the teachers as a class have little say in how the programme should be planned and implemented for the development of primary education. Instead, this

ter committee meets once a to the outcome of the promonth to discuss the progress of studies, training requirements of teachers, pupil activity plan, school supplies, improvement and maintenance of

by Mahmood Aminul Islam

The teaching community is an organised force of over 160000 teachers. They are formed into more than one physical facilities, and schoolstrong association operating at community relations. It also the national, district and thann prepares annual action plans levels to promote and protect their service interests. But they do not find any role to play in the planning and management of primary education. Their professional expertise therefore goes unutilised, although, ultimately the success of the programme will depend upon how efficiently the schools function fulfilling the criteria of full enrollment and maximum retention of primary age children, and impartation of quality edu-

Thailand's example

Here I would like to mention how Thailand has integrated their teaching community into the process of planning and management of primary education. (I was there on a brief study visit in June 1990.)

In Thailand, primary education (free and compulsory) is administered centrally. At the national level, there is the National Primary Education Committee (NPEC) which deals with formulation of policies and

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following the national 5 - year plan guidelines. The suggestions/recommendations made in the committee meetings, where appropriate, are processed through the district and provincial committees and placed before the NPEC to take decisions leading to effective implementation. In other cases the district and provincial committees take action as they

The NPEC has 31 members of whom 12 are teacher represcntatives elected for a 4 - year term. In the provincial committees 6 out of 15 members are elected teacher representatives. The district education committees include one teacher representative from each cluster committee which in turn is formed with all the school principals and some elected teachers. The teaching community has thus been made a part of the system of administration and management of primary education from the national to school level.

A participatory system of planning and management can be introduced in Bangladesh as in Thailand. In each tier of primary administration - national, district, thana and cluster - joint committees with teacher representatives could be formed for the purpose. The -Unicef

level aimed at improving the efficiency of schools.

cluster system (20-25 primary

schools grouped together) was

introduced for the first time in

Bangladesh in 1985, each un-

der one Assit. Thana Education

Officer (ATEO). There are now

around 1800 clusters, but ex-

cepting some recurrent training

of dubious quality conducted by

ATEOs there is hardly any or-

ganised activity at the cluster

The involvement of teachers from the national to cluster level as mentioned above is expected to motivate them to work towards the success of the programme. The proposed system will also make the primary administration transparent and accountable. The performance of each category of officials and concerned institutions for achieving programme targets can be called into question in committee meetings. The processing of information from school upward through cluster, thana and district committees will help the highest policy making body to identify weak nesses in programme implementation and to take timely remedial action.

Some basic reforms to go along with participatory management

Decentralisation of primary education: The introduction of participatory management system has to be accompanied by some basic reforms to get the expected return out of all the efforts and investments being made to develop primary education. Of utmost importance and urgency is the decentalisa-

reasons behind the commonly occurring problems of textbooks not reaching schools in time, teacher vacancies remaining unfilled for long, inadequate and poorly maintained physical facilities, and lax supervision can be traced to the present system of centralised administration. Moreover, in a centralised system enrollment planning and resource mobilisation for each school cannot be done properly.

tion of primary education. The

Lessening student load in primary schools: The other urgent reform in my opinion is to free primary schools from the burden of teaching students in grades I and II Compulsory primary education introduced in 1993 is expected to result in substantial increase in enrollment, initially in the two lower grades. In view of shortage of classroom accommodation in schools and unworkably high teacher-student ratio it has become necessary for primary schools to discontinue grades and II. Instead, they could concentrate on grades III. IV and V which, sooner than later, would have to be run in two shifts. Children can complete first two years of schooling in community supported satellite/feeder schools. The government has already set the trend by opening a number of satellite schools which have proved to be quite popular with the community and are, reportedly, doing well.

Career advancement for teachers: Lastly, it is necessary to create job satisfaction in the teachers and sustain their mo tivation by offering them a definite career line. For example, it should be possible for an aspiring teacher to move up the career ladder without any hindrance and attain the highest office by rendering meritorious service and acquiring prescribed higher qualifications. He/she should have access to facilities (study leave, sponsorship) for higher studies. Annual reporting of performance of teachers should also get a lot more attention than at present

Introduction of participatory management and carrying out the suggested reforms are expected to break the present stagnation in primary education. The suggestions are easily implementable. However, opening of feeder schools all over the country for grades I and II following the model of government supported satellite schools will have its own financial implications which have to be worked

(The writer, a former Additional Secretary Ministry of Education, served as Programme Co-ordinator of a major primary education project in 1985-90)

by Md Ziaul Hassan Khan Majlis OES it really sound odd sort of failure. Man's ability to to call an illiterate maid learn something depends on his servant an education heredity and environment. Due woman? Possibly, one's answer to various combinations of into this question is 'yes'. Is it fluences of these two factors. also applicable to the illiterate everybody is unique. This is mother of a person enjoying a known as the 'law of individual good social status? Hopefully, it difference.' That is why, some is likely to put a person, in this one has a great potentiality for case, in a dilemma in jumping doing something technical while to the same conclusion. The somebody is a promisting one for

higher education. Again, people

In the developed world, there exists a counsellor or guide in every secondary school who, after overhauling the academic history of the previous years of a student, gives guidance regarding the choice of career of that student. In this way, the human resource is transformed into human capital since the right person is in the right place with appropriate education and training.

As some people are some what proud of their genetic hierarchy. so they are unwilling to run the risk of shattering their so-called prestige simply by a trifling avowal. If this is the case, then it can be said that those people are unfamiliar with the minimum requirements for a person to be educated

reason behind it is very simple.

The term 'education' can be defined as: any sort of relatively permanent change in behaviour desired by society. The maid servant displays the behaviour as is expected of her and so does the mother of the influential person. As per the definition both the women in question are educated indeed! The reason of the confusion is undoubtedly the lack of knowledge of the distinction between 'education' and 'literacy'.

Needless to point out that the later is only a part of the former one. So, the two illiterate women have proved to be educated. But what about the socalled qualified youths in relation to the behaviour expected of them? People are being educated in various disciplines like medicine, engineering, economics, political science and so on and so forth. What sort of behavioural change can be observed in most of them? Can they retain their knowledge for applying in the real life situa tion? Retaining knowledge for applying in the real life situation is known as 'external efficiency which is obviously the outcome of internal efficiency The internal efficiency includes: curriculum, syllabus, the education system, the system of examination, the medium of instruction, the efficiency of the teachers etc.

There is no denying the fact that the external efficiency of our youths is lagging behind those of their counterpart of the developed world. Isn't it a farce while the illiterate women are successfully proving themselves to be educated, the so-called literate youths are failing to do so! Now a question emerges as to who is responsible for this

having potentiality for higher education can be classified into two groups. They are: (1) literary potentiality, and (2) mathematical potentiality. Potentiality is a combination of two factors aptitude and attitude.

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What about the picture of this type in the underdeveloped world? Who plays the role of a guide for a learner? Neither at home nor at school. A potential student for a civil bureaucrat is becoming a doctor or an engineer due to the insistence of his guardian. This is applicable to an extraordinary brilliant student because building-up a chosen career is very difficult to-day. But what about the average students in this connection? The aptitude of a student of this type might have been distorted since he is already on the wrong track. And his attitude is really a farcical one: to get a chance in any course of study and thereafter getting a job anywhere - whether or not it is related to his discipline. In such a condition what can be expected from these aimless

Being a purposeless civil bureaucrat how much such a man can contribute to the planning and development of the nation? Examinations are tools, designed for various purposes and to perform various operations. No tool can be perfect but some can be more precise than others, and even a good instrument be mishandled Examinations are used for vari-

To be continued

MAGINE if your desktop computer could act like the on board computer of Star Trek's Starship Enterprise. You would go to your office and ask the computer to brighten up the room with little more light, put on your favorite music, ask the computer to place a call to the downstairs case for your breakfast and then give your schedule for the day. Well buckle up, that day is not

too far away! We have come a long away since computer technology began following the Second World War. Computers are constantly changing the way the modern. progressive world performs scientific research, conducts business, creates art, and spends leisure time.

Computer technology is a vast and growing field. It is impossible to talk about every aspect of futuristic computing in one article. Therefore, I will only attempt to give a mere overview of the vast future. Interface

Most computers of the future will be responsive to natural human modes of communication including touch, gesture, speech, and eye movement. In the beginning, the software applications were written with complex characterbased interfaces, where the user needed to type a specific code to perform a specific task.

As the industry evolved, the interfaces to the software applications have vastly improved. The end-user hardly needs to enter any complex commands to perform any task. Companies like Microsoft, Apple, Xerox, AT & T, Digital, and Sun have revolutionized the computer industry with graphical windowing operating systems.

In a graphical windows environment, the end-user directs a mouse to "point and click" on symbolic graphic icons to perform a computing task. These interfaces are known as Graphical User Interfaces (GUI). To take this user-friendly interface concept one step further. applications are already trying to combine touch screen. sound, motion, and voice activation. Hence, the birth of

Multi-Media technology whereby applications are created with the above-mentioned media for a more natural way of presenting information. Information Management

right away. Needless to say, it may save thousands of lives.

It is not too far fetched to say that a 21st century child will be

Information is the most premedical professionals should

able to access information

cious commodity of today's business society. We need today's information today. For instance, if someone in America comes up with a possible cancer or AIDS cure today, global have access to that information

about the disintegration of the

is done by authorities who have

little knowledge and experience

of conditions in the field. This

top-down approach mars the

enthusiasm of the teachers

when it comes to implementa-

tion. And as they do not partici-

pate in the decision making

process at any stage or level

they prefer to remain neutral as

insight problems suddenly yield an answer without any apparent effort at all.

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Al (Artificial Intelligence) is the branch of computer science that explores the ability of computers to simulate the human process of thinking as described above. Unfortunately, we have a long way to go before computers will actually solve problems based on 'insight'.

-Unicef

plans and their due implemen-

tation, teacher training, cur-

riculum implementation and

quality of education, co-ordina-

tion, and personnel administra-

tion. These powers and func-

tions are suitably delegated to

the provincial, district and

cluster (consisting of 8-10

schools) committees. The clus-

Communication More people now than ever

Computing: Visions of the Future by Faisal Hoque method that, given enough of fort, will bring us to the answer

mail was interactive, live communication with the users who are logged onto the same networking facility. Many networking facilities have been providing a live communication facility where users can communicate live with each other by typing messages back and forth. Unix operating system's 'Talk' and Write are most well known for this kind of interactive commu-

nication. As the world of Multi-Media progresses, the industry is

party, the user can pick up the telephone to carry on with the conversation. Now, with the availability of the multimedia sound boards and microphones, these software vendors are introducing applications whereby the user can talk to someone right from the desktop without even using the telephone.

Simulation in Virtual Reality

Virtual reality. Artificial reality. Virtual world. Virtual environments. These terms all describe the technology of putting humans into environments that are completely computer gencrated. A virtual world is simulated, where the user may get to walk through a furnished apartment when the apparent complex does not yet exist in the real world. Star Trek's "holidic" is the ultimate virtual reality fantasy in which one can create and recreate alternate realities at will, interacting with real and imaginary others in a world of sight, sound, touch, taste, and smell. We may be far away from that kind of virtual reality, but the first steps on this path were taken long ago.

Virtual world technology is growing up. No longer confined to the research lab, virtual reality has been introduced in numerous diverse commercial fields: scientific visualization, industrial product design, product sales, manufacturing operations simulation, financial modeling, weather forecast, and any other areas where people use computers to store, manage, manipulate, analyze, present, and understand complex

The widely used definition of virtual reality is the ability to manipulate objects within a 3D, computer-generated space using a head mounted visual display, data gloves, speech recognition, 3D audio and speech synthesis, computer graphics,

and video imaging gear.

The problems of handling large amounts of data are not new. Experts have been studying the visualization database queries and responses and developing models for browsing information spaces during the past 30 years. Since virtual reality is nothing more than a computer interface, and interactive multimedia incorporates desktop computers. CD-ROM drives, and video and audio technology to provide interfaces to large databases, the path for

itive task that requires selecting from on screen menus. It's about time to develop new ways of working with computers to manage data.

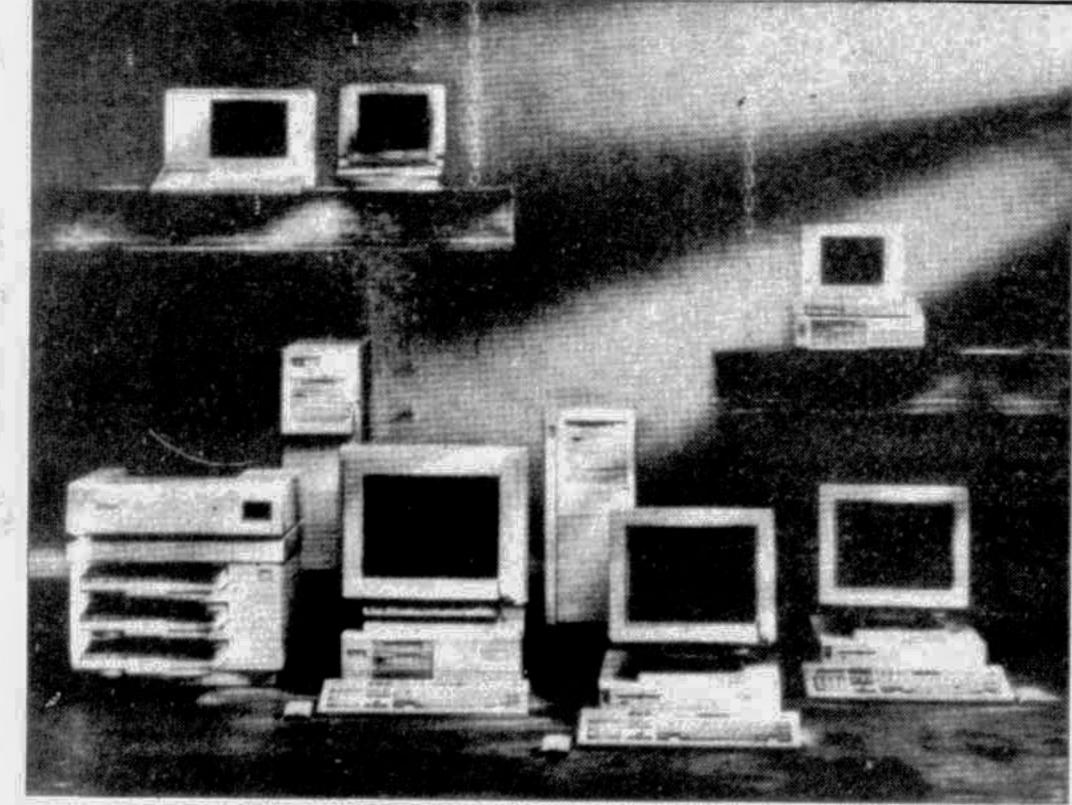
It is not that far away when people will use virtual reality technology incorporated in regular computer applications to predict stock-market, sales forecast, factory problem analysis, and software application design. And those of us who always wanted to turn our reports into paper airplanes will do so - virtually that is - and still be able to collect our next paycheck!

Conclusion Within the past four decades, the computer has

One can no longer ignore the effects of computers in daily life in a competitive society such as ours.

This article merely touched some of the areas of computer applications. As we go forward we will notice vast usage of computers not only in business. science, engineering, and education, but also in art, music, culture, and leisure. Sounds to weird to be true... well not really, because technology will take us where no man has gone before...

About the Author Faisal Hoque works as a Technical Project Leader for Dun & Bradstreet Corporation in USA Mr. Lloque also recently founded



visualizing large amounts of data has already been laid by the industry.

After all, hundreds of thousands of people each day input data in a method modelled after completing paper forms - a nonintu-

evolved from a mere adding device into a complex machine capable of reflecting the mental and sensory abilities of its cre-

The computer revolution is moving so fast that even science fiction finds it hard to keep up.

Knowledge Base, an applied technology firm located in Connecticut. USA to develop cutting edge computer applications. Knowledge Base will concentrate on setting up joint venture efforts to develop computer applications in Bangladesh.

Soviet Union right from his/her school classroom with full motion video, audio, graphics, and text simply by speaking to the Intuitive Cognitive Reasoning

AAh...! The ultimate question-can a computer think? If not now, will it ever think? Well, yes and no. First let us see how humans

solve problems. Each of us has experienced the phenomenon we call 'insight'. Faced with a problem, we search our repertoire of responses, but sometimes cannot find a solution to the problem. Later, we are struck by a sudden "flash of insight" and instantly we know the answer. From a subjective point of view, we are unaware of the trial and error search process. Unlike 'normal' problems, where we know a solution

before are using computers as the primary vehicle of communication with others as desktop computers are becoming the standard equipment for the work environment. Using computers to communicate with

others is not a new concept. The simplest example of daily communication with others via computers is E-Mail, or electronic mail. E-Mail lets a user send an electronic mail to another user via network. People who use computers on a daily basis use electronic mail as their primary means of communication as the computer based communication is not only effective but also brings diversely located people together who might otherwise be unan ire of each other. The usage of the electronic mail has been in existence for last 30 years. The next phase of electronic

munication and Video conferencing right from the desktop. The first step of telecommunication was to provide remôte data distribution from the desktop terminals via modems. To take this one step beyond, the industry has introduced fax capability right from the desktop, where the user can send any document right from the desktop computer to any remote fax machine.

During the last two years, as

the personal information man-

gradually introducing Telecom-

agement (i.e. electronic daily planning, address book, personal note taking, etc.) software flooded the market, personal management application developers have started integrating automatic telephone calling facilities right from the address book applications. Once the call is answered by the desired