

EDUCATIONAL TECHNOLOGY IN 2000 A.D.

*Dr. P.H. Waghodekar,

ABSTRACT

This paper briefly presents the objectives of the education system and state-of-the-art of the existing educational technology. Keeping in view the objectives of the education system, some broad features of the educational technology in 2000 A.D. have been presented. The paper, it is believed, shall prove a thought provoking one to all concerned, namely, educationists, national leaders, social scientists and others.

Introduction

Education plays a vital role in furthering the gross national growth, wellbeing and prosperity. For national development, therefore, right type of education and its associated technology is of utmost importance. The objectives of the education system can be summarized as given below :

-- to develop generations having enduring values of life in society, thereby, yielding peace and tranquillity amongst men, and - to instill amongst generations how to live to the right values of life and bring the entire generation to enjoy a greater quota of intellectual poise, mental stability, health, social happiness and national wellbeing.

History reports that generations after generations, attempts have been made to achieve these objectives. The educational

technology has, therefore, undergone modifications, correction and improvement accordingly.

The State-of-the-Art

The present educational technology is a rigid and formal one, and does limited good to the needy. It, therefore, needs planned organizational changes. The National Education Policy draft of the Government of India is such a step towards the planned changes in education system in India. However, educational technology needs thorough overhauling for achieving the goals cited in this draft. Several socio-economic problems, like, illiteracy, unemployment, drug addiction amongst young generation, rising criminal tendencies, enlarging gap between have and have-nots, etc. are surfacing violently and pose formidable problems to educationists, national leaders, and social

scientists. Planned organizational and management changes can hopefully handle such type of problems. On judiciously employing the organizational intelligence, sentiments and volition, an educational organization can effectively handle an incessant series of issues posed before it to-day. In any organization, there exist organizational intelligence, group intelligence and individual intelligence. Group intelligence is expected to play a significant role in improving the effectiveness of an organization. This group intelligence, usually an outcome of (in) formal small group working, can be effectively utilized, by suitably adopting such productivity tools and techniques as industrial engineering, value analysis/engineering, total quality control, optimizing techniques, OR/MS, etc., for the efficient functioning of a system. However, the application of these optimizing tools presupposes the existence of omniscient and omnipotent (universal) rationality which can help diminish, at all levels of an organization, the opportunity loss to zero. In view of the tremendous growth in information and communication technology, the extent of such a rationality is very much dependent upon the information capability. Information capability includes ability of problem finding, problem cognizing, search, insight, predicting, evaluating and computing. Such an information capability can promote gainful utilization of the opportunities at all levels of the education system. Unfortunately, at present, because of the very formal (rigid) approach adopted in educational technology, neither an individual nor an organization can be seen to possess this type of information capability. The cognitive power usually is badly limited and bounded, resulting in bounded rationality. This, if not realized in the proper perspective and spirit in the foreseeable future, can adversely affect the environment of the education system nullifying the effects of educational

technology in whatever form it has been designed and implemented. Approaches, like, normative theory approach, used in educational technology can help co-ordinate the following :

-- Logical system of work arrangement vs psychological system of human interaction;

-- Precisely designed system vs ambiguous (self-organized) system; and

-- Management theory system vs information system.

In short, educational technology needs integration of such concepts as synthesis, symbiosis and synergy.

Naturally, with rapid advances in science and technology, and informatics and communication technology, educational technology in 2000 A.D. will have to undergo a complete transformation. Some of the broad features of such a transformation have been presented in the next section.

Features of the Educational Technology in 2000 A.D.

Some broad features of the educational technology in 2000 A.D. have been highlighted in this section.

Class-less Learning :

Certain experiments are being carried out within the four walls of a class room in several areas like, values clarification, personalizing education, choice-centred class room teaching, etc. These certainly promote learning centres and do-it-yourself attitude amongst the student-community. It is a learning oriented technology rather than teaching oriented one. However, adoption of

this type of educational technology, especially in view of growing illiteracy and formidable unemployment problem, has got limited utility, mainly in respect of underdeveloped and developing countries. A few foot-prints have appeared on history of those who were the product of the then existing formal educational technology. Majority of the foot prints have been recorded in history of those who had adopted informal educational technology. To-day we talk much high about visual-aids, computer-aided in structions, computer-aided learning and some other ultramodern means used in educational technology. We promote open university and distance learning centres. These too have limited impact on our socio-economic status mainly because of two fold reasons, namely, the formal procedure adopted in educational technology and financial limitations of incumbents. Thus, such a technology can only add additional qualified graduates or diploma holders to the overflowing main stream of educated youth. Obviously, the present educational technology can hardly meet the challenges of tomorrow. We therefore, will have to turn towards class-less learning technology.

Informal Way of Education

Educational technology shall promote informal way of learning. Technology shall move from door to door and self-learning shall be promoted as per the needs, suitability and requirements of people. There shall exist neither examination nor award of any certificate.

Promotion of Home-Learning Centres

Satellite networking shall play a significant role in promoting home-learning centres. Through such centres, necessary

information and skills shall be gathered. LAN can be established with these objectives. There shall be no fixed hours for learning.

Guiding and Counselling Centres

Guiding and counselling centres shall be instituted. These shall function on an informal basis supported by the learned people of the society as a part of their social obligations and duties. As such, students and teachers class shall not exist. And teachers shall be replaced by counsellors.

Exposure to Work-Life and Work-Culture

All organizations involved in such activities as cultivating, manufacturing, medical and other services, etc., shall shoulder the responsibility of cross-and-continuing training of the public in several areas of national and local interest.

Precept with Practice

At present, these two hardly go hand in hand. For example, say, a medium technical institute, undertaking undergraduate teaching for roughly 180 intake per year with her financial outlay of as good as Rs. 60-90 lacs per year, can seldom be seen adopting in her day-to-day working some productivity techniques, like, inventory control, facility planning, etc., taught in class rooms. So also is the case with management and other institutes. In 2000 A.D., the counselling centres shall be the glaring model examples of practice so that right values and attitudes shall be inculcated amongst learners.

Self-Learning and No Teaching

In 2000 A.D., the concept of teaching shall be obsolete. For teaching is a process

which is thrust upon the people by some external agency, whereas, learning is from within. Hence, educational technology shall be prominently self-learning oriented.

Equal Opportunity to All

Irrespective of the socio-economic status or background, educational technology shall be so designed that citizens shall have equal opportunity to undergo the self-learning process.

Scope for the Future Work

This paper has presented some broad features of the educational technology in 2000 A.D. Some more features, like, book-less learning, admission to counselling centres without entry qualification, paperless examination, news bulletin without news paper, microchips for data storage, whole universe as one learning centre, practice followed by precept, illiterate wise, knowledge without alphabets, etc., can be

suggested. The details, like, planning, organizing, directing, execution and control, in respect of each of these features can be worked out. Obviously, this is not a less challenging task.

Conclusion

This paper has stressed the importance of education system for building a nation. The objectives of education system have been presented. The state-of-the-art of the present educational technology has been presented. It has been pointed out that such means as CAI, CAL, etc., have limited applicability because of the formal design inherent in such technology. Such a technology can hardly be expected to meet the challenges of tomorrow. Major feature of the educational technology in 2000 A.D., like, class less learning, home-learning centres, etc., have been highlighted. Scope for the future work has also been presented. The paper, it is believed, shall prove a thought provoking one to all concerned.

* * *