

Distance Education in India : The Dangers of Relying on Expediency and Measures to Maximise the Role of Distance Education in Human Resources Development

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Distance Education means different things to different people, especially in the developing countries implementing it on a wider scale. Some in their overenthusiasm tend to overemphasize the potential of the concept while some others, because of their inherent scepticism about every new strategy for education refuse to accept the need for distance education in whatever form. The only way to strike a balance between these extreme positions is to see clearly what distance education can or cannot do in a given situation. The authors of this article question certain assumptions about distance education as a pedagogic device, and present their views on the strengths and the limitations of the role of technology in Education. The article is polemical, and we thought such polemics do find a place in the ongoing debate on distance education.

1. CONCEPT

Distance Education, the natural development of the 19th Century concept of non-formal education catering to workers and adults, has in the 20th Century with its facilities of the multi-media, become a powerful force in the educational scene of many countries. According to Charles Feasley (1982) the term 'Distance Education' has been used interchangeably with 'open learning' and 'extended degree program' because both represent greater opportunities for learning through flexible adjustments in the time schedule and physical location of classes. The courses through correspondence too could be added to this list because it fulfills the two basic requirements of adjustments of time schedule and location of classes.

The first question that arises is whether all these terms mean one and the same thing even though they can be classified under the cover term 'non-formal'. Isn't there a difference between 'open learning' and 'extended degree program' in terms of the clientele? Shouldn't this difference be maintained to preserve the benefits accruing from the difference, instead of collapsing the subtle variation and reducing them to a common denominator which can then be conveniently manipulated to serve quite unacademic considerations? The irony of the anxiety in neutralising crucial differences is that a major similarity was lost sight of, viz., that these systems, even from the early days of Adult Education were not to be considered as substitutes for the formal classroom education. The confusion that now exists, especially in the developing countries, is due to the lack of awareness of this important distinction between the formal and nonformal systems of education.

2. USE OF TECHNOLOGY : LIMITATIONS

The introduction of technology in imparting instruction has emboldened people to go to the extent of envisioning a future that will be dominated by machine-managed instruction. The Carnegie Commission on Higher Education (1972) proclaimed that educational technology may effect the greatest instructional revolution in education in five centuries. It was claimed that through technology the Distance Education system allowed students a more active role in learning, presented alternative modes of learning to those who do not learn well in the conventional classroom and gave greater flexibility in schedules and location of classes. Motivating greater participation in the learning process through visual presentation of sequential and simultaneous happenings, close-ups of intricate details, possibilities of analysis, comparisons, breaking up of a learning unit into simpler units and the facility of recalling all these operations any number of times without loss of finesse, together with the novelty of 'change' in the learning situation, have been made possible through technology. Besides, according to K P Cross (1976 a) the commitment now moved from education for all to education for each, with the increased use of technology in education. However, it has not been specifically claimed that it can **replace** the face-to-face classroom interaction of the formal system. Isaac Asimov visualises a teacherless situation in "The Fun They Had" in which two children express their disappointment over the telebook and speculate over the fun their forefathers must have had in going to a school that was taught by a human teacher. The implication is that human interaction is as important an influence in the process of education as the

information passed on to the learners. The children definitely lost the joy of being in a human environment and are bored with a machine that could do only what it was programmed to do. The latest to confirm that the 'live' classroom was the best is the University of Ulster report *Videoconferencing and the Adult Learner* (1992) which clearly states that judged by the standards of classroom teaching and learning videoconferencing "can approximate, with varying degrees of fidelity, to the standard of 'real life classroom', but it does not equal them, and can never be 'quite as good'. When, however, it is judged by the standards of open and distance learning, it has a potential, and a challenge of its own". It might seem strange that such a well-known distinction should be reiterated now; much damage has been caused because it was taken for granted and never used as a point of departure.

3. CHARACTERISTICS OF DISTANCE EDUCATION

Several characteristics have been ascribed to Distance Education. A close scrutiny of the various descriptions of Distance Education will show us the differences resulting from the points emphasised in each of these perceptions. For instance Holmberg (1977) sees Distance Education as

- a) applicable to large groups of students as a kind of mass communication, particularly attractive when educational institutions are overburdened;
- b) providing quality instruction by utilising the services of specialists in the field;
- c) using effective methods;
- d) profiting from the economy of the large groups approach as well as eliminating or diminishing residential teaching and allowing study during leisure time;
- e) providing for individualisation in the pace and content of study;
- f) encouraging independent study habits.

On the other hand D Keegan (1986) sees it as being different from

- a) The conventional system because of the quasi-separation of the teacher and the student;
- b) private study and teach-yourself programmes because of the influences of the educational organisation both in planning and preparation of learning materials;
- c) other uses of technology in education in that it allows a two-way communication; and
- d) benefitting from the quasi-permanent absence of a learning group, so that pupils are taught as individuals, with occasional meetings for both didactic and socialisation process.

4. UNIQUE FEATURES

Between 1977 and 1986 the concept of Distance Education has changed from being considered as suitable to

large groups of students in terms of economy of approach and relief to the overburdened educational institutions to focussing on individualisation. It is good that Distance Education is now seen as drawing its strength from promoting individualisation in the learning process, because it will help us to highlight those features of Distance Education which make it unrealistic to equate it with the conventional system and hence considered a substitute for it. Describing the characteristics of the learners in Distance Education Charles E Feasley (1982) says that they are older than their campus counterparts (30-35 years) majority have taken previous college courses and seek additional learning opportunities. Attrition rate is also very high among Distance Education students and most of them do not complete the course as they do in classroom-based courses. One of the reasons for this is attitudinal, once their own differing goals are met then they do not see any reason in pursuing the course further. It is not necessary that one's goals are always co-terminous with the entire duration of the course.

Two issues that emerge from this situation are significant in characterising Distance Education and establishing its uniqueness: it is fully geared to meet the learner's specific needs, exhibiting a great amount of flexibility in its structure and, it is free from the formalities attendant upon the conventional system of education. This is in keeping with the basic philosophy of adult and continuing education which requires that the adult learner should be helped in realising his goals professionally through giving opportunities to equip himself further by using informal means offered to him during his leisure time. The adult learner knows what he wants and looks just for those components in the courses offered and once his needs are satisfied, he does not see any purpose in spending his precious time further on such studies.

Another characteristic mentioned by Feasley is that learners in Distance Education are in the age group 30-35 years. These learners who had some form of education earlier and had to seek employment, now find it necessary to update their knowledge to meet the demands of their employers. They have had the benefit of learning in an environment of the teacher and fellow pupils and have learned how to learn by themselves. They are now in a position to manage their own educational process i.e., are clear about their goals and have decided on the path to be followed.

5. DISTANCE EDUCATION IN DEVELOPED COUNTRIES: SUITABLE ENVIRONMENT

The basic concepts regarding Distance Education have been followed without any compromise in the developed countries. Although there is an attempt now to allow college students to fulfil course requirements through attendance at classes in the campus as well as through

telecourses, to help them cope with the hectic schedule of life. Such lessons are used only by those who are confident of managing by themselves. In societies where the independence of the individual is recognised after adolescence, where the market forces determine employment opportunities, where merit and skill are valued, and structural changes are commensurate with new trends in the social, economic, political and educational ideologies, non-formal education supported by technology has been able to play its role effectively.

6. DEVELOPMENT IN THE FUTURE—ROLE OF DISTANCE EDUCATION

Alvin Toffler (1975) envisages that in the future, the system would allow students to spend more time outside the classroom, in work places, capitalize on the adaptability of the human being, encourage the child to learn through a system of "mentorship" i.e., a mentor corps consisting of writers, novelists, accountants, doctors, plumbers etc., who could talk to the children on what interests them, and disallow corporations from freezing the system of education through their practice of linking jobs with diplomas.

Daniel Bell (1978) considering the impact of automation on the worker says that it "requires workers who can think of the plant as a whole" and consequently the wage once calculated on output, in terms of units of production will now have to be on the basis of planning and organising. In such a society importance will be given to codification of theoretical knowledge and materials sciences; there will also be a change from goods to services and work will primarily be a "game between persons".

In such an environment Distance Education will have a definitive role to play. John Carey (1992) goes a step further and says that the typical tele-course student may not be "an 18 year old male who lives on a farm in a rural area" but rather a "woman over 25 who works, has a family and attends college part time. She takes some of her courses on campus and some through tele-courses in order to accelerate her pace in receiving her degree or simply to help manage a busy schedule of work and family obligations". electronic field trips, Satellite Educational Resources Consortium to help in providing specialists, person-to-person exchanges through electronic mail, and in general a more effective form of interactive tele-communication services will be provided.

Peter Drucker's (1975) prediction that in the years to come there will be a greater demand for "knowledge-workers" specialising in services from their little cells in their homes, is based on the influence that technology already has on the western world and the likelihood of its being increased in the future. To keep pace with the changes in the demands of the economy, more and more

people are going to depend on and benefit from Distance Education which will become more and more modular and utilitarian.

7. DEVELOPING COUNTRIES—SOCIO-ECONOMIC SCENE

Now in the developing countries the scene is quite blurred because of the pressures of over population, fanaticism, pseudo-nationalism, poverty, illiteracy and international market forces. Added to these is the cult of protectionism—a series of concessions to linguistic and religious minorities, socially backward groups, farmers etc.—which undermines the economy and sacrifices efficiency to humanitarianism, lowers standards and shatters the self-confidence of the people. Though these subsidies and concessions may seem justified within the national context, it is interesting to note that the international market does not show any such concessions to developing countries. The dilemma faced by developing countries is how to maintain their identity with dignity in the midst of stifling demands, made by the rich nations. The most troublesome of these demands is the transfer of technology from the rich nations to the third world countries, which in the absence of a suitable environment leads to misinformation, wastage and frustration. The rich nations attempt, often with genuine altruistic motives to bring about changes in the economic structure of these nations by advocating measures which will eventually affect the social, educational, and management structures in these countries. But the changes in these spheres cannot be brought about mechanically as these involve human beings with their deep-rooted ideals, preferences and practices. When these technologies and structural changes are imposed on an unprepared clientele there is always a tendency to reduce them to the elementary level and use them minimally. This results in a lot of wastage. A case in point is the way Distance Education has been used in India.

8. THE INDIAN SCENARIO—CORRESPONDENCE COURSES

In India, non-formal education, in the form of Correspondence courses was given by professional bodies such as the Association of Engineers, and the Association of Chartered Accountants to help their members to qualify themselves for various specialisations. But as a serious proposition to use it for general education, it was recommended only in 1964 by the Kothari Commission. This was done to provide

- a) facilities to all qualified and willing persons who could not join the regular University Courses due to personal or economic reasons or because of their inability to get admission to regular colleges;
- b) an efficient and less expensive method of education;
- c) opportunities of academic pursuits to educated citizens without disturbing their present employment

Right from the beginning, the Correspondence Course

was seen as offering relief to the problems faced by the formal system, viz., rising costs, lack of accommodation, paucity of funds, increase in the number of students, and only marginally as helping employed persons. This trend is seen even after two decades in the Annual Report of the UGC (1982), where it is stated that four out of the six beneficiaries of the Correspondence Courses are poor students who discontinue formal education, students in geographically remote areas, students who regain aptitude and motivation for studies after an initial lapse and students who do not get admission in a regular college. The other two categories are In-service persons and those who look upon education as life-long activity.

9. USE OF TECHNOLOGY IN EDUCATION— VARIED & CONFUSED VIEWS

With the introduction of technology in the non-formal system of education, the correspondence lessons have been either supplemented or substituted by tele-lessons and this provision has reached the sophisticated level of video conferencing and computer aided interactive lessons for individual study. Its immense potentialities have been profitably used in the formal system and much time and labour have been saved through the use of technological devices. It has also ushered in open Learning which has been characterised in the UNESCO Report (1975) as follows:

Such systems are designed to offer opportunities for part-time study, for learning at a distance and for innovation in the curriculum. They are intended to allow access to wider section of adult population, to enable students to compensate for lost opportunities in the past or to acquire new skills and qualifications for the future. Open Learning systems aim to redress social or educational inequality and to offer opportunities not provided by conventional colleges and universities.

10. UNREALISTIC EXPECTATIONS ABOUT DISTANCE EDUCATION

Reeling under the pressure of paucity of funds, growing number of students to be accommodated in schools and colleges and a high percentage of illiterates, India has found it convenient to look at one or two features of Distance Education in isolation and use them individually to solve the basic problem of providing education for all before 2000 AD.

The multi-media approach is considered to be effective in solving all our educational problems. Also, in their euphoric jubilation over having found a solution to a vexed question, supporters of Distance Education have gone to the extent of saying that it is neither a supplement nor a complement to the conventional system of education, not even a competitor but a different species altogether; the third stage in the evolution of education—Gurukul, Classroom and Distance Education. To consider Distance Education in such powerful terms, something

which even the developed countries had not dared to do is naive, to say the least.

In India, the Television, still considered as a means of entertainment and hence a distraction from serious work, has not been fully exploited even in the teacher-assisted classroom. Given the apathy of the beneficiaries, the inability of the teachers to handle the system and the huge cost involved, using Television in the classroom has yet to take-off, and it is only wishful thinking to consider Distance Education at this stage as the third stage in the evolutionary process of the educational system in our country. Educationally, this kind of argument undermines the humanistic element in education and equates education with information.

The Correspondence Course has been very popular in higher education. Since it was offered to those who had already gone through the regular system and were confident of managing their learning strategies it was expected to maintain its identity even while depending heavily on the foundations of the conventional system. But when the need-based courses offered through correspondence were replaced by the courses in the conventional system, to make the correspondence courses equivalent to the conventional to establish equality in the employment market, educate more persons and reduce expenditure, it can be seen that the difference between the formal and non-formal was sacrificed to convenience; the constitutive difference was collapsed to serve political ends. All is not well with the correspondence courses offered here. A recent survey made by Gomathi Mani (1988) among the Post-Graduate students of Correspondence Courses in Madurai Kamaraj University throws up facts which reveal the total lack of understanding of how correspondence courses are to be organised:

- a) Teachers lacked one or more of the following skills:
 - mastery of subject matter and effective communication
 - efficiency in clearing doubts
 - skill in motivating adults
 - use of various teaching methods
 - proper modulation/pronunciation/accent
- b) The difficulties in listening to the radio broadcasts are:
 - Timings are inconvenient
 - Scripts are not sent in advance
 - Variety of methods such as dialogue, discussions, quiz and question and answer sessions could have been used, but not used.
- c) Study Centres should have the following amenities:
 - every district should have a centre
 - should have a full-fledged library, radio, TV etc.
 - a full time instruction for guidance
 - open from 10.00 am to 5.00 pm
- d) Study Material
 - should be sent in advance in one batch to ensure

- better participation in the contact seminars
 - should be properly proof read to avoid mistakes in the lessons
 - language should be simple and easy to comprehend
 - should have exercises for self-evaluation, given at the end of each unit
- e) Response Sheets
- should be corrected immediately with constructive suggestions, and returned without any delay
 - application oriented assignments should be given to prevent copying

What is surprising is that the structure of the lessons, the tone of presentation and recycling for in-built revision of teaching units, which are unique features of lessons through correspondence, are neglected. Even a cursory glance at these lessons will show that they are not different from those found in any standard textbook.

11. IGNOU—DIVERSIFIED COURSES : GOOD ATTEMPT

However the courses offered by the Indira Gandhi National Open University are a point of departure from those offered by the other Distant Learning Centres in the country, in that the spectrum of disciplines offered while including conventional subjects also caters to the special interests of people who wish to acquire in-depth knowledge for the sake of enhancing their professional competence. Courses, for instance, on Informatics, Distance Education, Creative Writing, Computer Application in office Management and Diploma in Higher Education for teachers, to cite a few examples, are certainly of great value to those who wish to know the intricacies of a subject which interests them professionally and not in just a general way as a means of getting a Degree. Besides this, the modular structure of the courses with a built-in flexibility to allow learners to work at their own pace as well as the opportunity to choose various combinations to suit one's needs makes the programmes of IGNOU fulfil the requirements of an open learning system. These features of the IGNOU courses should be made the norm for all open university courses.

12. ALTERNATIVE DELIVERY SYSTEM

The term "alternative delivery system" has been interpreted conveniently as just a difference in the means of conveying knowledge which does not in any way affect the total process of education. It is a pity that in these days when even ordinary laymen are knowledgeable about the courier service and the way it has altered our work ethics, time management etc. as an alternate method to postal delivery, responsible people in education have failed to notice how this medium has to be exploited fully as an alternative delivery method in the educational process. It has not also been realised that the attitude of the learner, mental maturity, goals, and learning strategies

are quite different from those of the learner in the formal system. It is odd that the state should decide on who should go in for the correspondence education. This is implied in the UGC Annual Report (1982) that those who do not get admission in the regular colleges should feel comforted that they can do the same course through correspondence.

13. EQUALITY OF OPPORTUNITIES OR IDENTICAL EDUCATION?

It is also expected that universalisation of education in India can be achieved through Distance Education because of its increased accessibility, high productivity and great flexibility which can ensure equality of opportunity in education. The major premise in this projection of Distance Education is equality in education which leads to equality in society. Commenting on democracy in education Sidney Hook (1978) says

The equal opportunity for an education that society should provide does not require that everyone be given an equal or identical education... There is nothing incompatible with sound educational theory and practice in establishing plural institutions that may be approached through plural paths in a society that conceives of learning as a lifetime endeavour.

We should realise that there is a basic difference between equality and egalitarianism. We should settle for equality and quality rather than for the mediocre and the egalitarian. Mass systems must be more differentiated than elite ones as they cater to a heterogenous clientele, respond to new demands from the market and attempt to deal with a wider range of knowledge. Providing identical education seems sufficient to ensure equality. This short sighted view is blasted by Karl Marx in his Critique of the Gotha Programme where he declares that individuals would be equal at the start but may end up unequal at the finish. Hence equality of opportunity and identical education cannot guarantee the establishment of equality once and for all in a society because individual merit which according to Kant is a categorical imperative that varies, and is specific to different areas of strength in people. The opportunities for realising one's individual merit through diversified courses would bring about equality with a greater sustainability than what may be offered by identical education. Discussing the features of education for varied talents Patricia Cross (1976) says:

School is geared to the development of a narrow range of talent consisting of approximately one-twelfth of the known human abilities; it is not surprising that students whose chief talents lie among the unexploited eleven-twelfths have trouble demonstrating that they can make contribution to society. It is a statistical fact that on any single dimension of human ability half the students in the nation will be below average by definition. Naive egalitarians have the notion that working with the bottom half will somehow raise them to equal

status with the top half. Unfortunately status in society is relative and on any single measure there will always be a lower half. There is, however, a way to reduce the number in the lower half and that is to expand the number of dimensions along which talent is measured. If talent is measured on two independent dimensions, then 75% will be able to average on one or the other dimension. If three independent talents are assumed, the statistical probability is that 87.5% will be above average on any one of the three dimensions.

The goal of education should be to help individuals to realise themselves as human persons through the maximal realisation of their talents, and in doing so we shall be able to offer each individual the opportunity for feeling the pride of achievement in his own area of strength. Hence the attempt to make the courses offered in Distance Education similar to those offered in the conventional system with a view to bringing about parity among the learners will be really counter productive as it will destroy the variety inherent in Distance Education which may offer a good scope for most individuals to realise their capacities fully.

14. DE IN INDIA: A CRITICAL ASSESSMENT

The present Distance Education scenario in India is fraught with gross misinterpretations, unrealistic expectations and simplistic equations. It is true that in the context of a rigid social structure, where hypocritical attitude to the notion of talents is available, the technological aspect alone has been found to be useful and hence it has been magnified out of proportion as being capable of solving all our problems in the field of education. It is also a fact that with the help of the multi-media there has been a considerable increase in the dissemination of information to people outside the pale of formal education because of geographical location, lack of schools, poverty etc. But this cannot be taken to be education, because in the technology-aided education which Distance Education purports to be, it is the competence of the individual that plays a more dominant role than the technology employed. Increasing the accessibility to information is one of the necessary conditions for education but not sufficient in itself to ensure that education take place.

Another reason for this state of hasty generalisations may be because of the compulsion to get on to the Motorway atleast now and hence obliged to keep pace with the others who use Distance Education. The brand of Distance Education that comes to us now is of varied colours and shapes, such that only the fabrications on the basic pattern of Distance Education catch the eye and to those suffering from the anxiety syndrome, the peripheral seems to be the essential, because of its availability and usability. For instance, even in the Open University of Britain, which had started out with a view that technology would be an integral part of a unique system of education, there is now a tendency to accommodate the instrumentalist view of audio-visual aides in Distance Education. Anthony Bates

(1974) commenting on the Open University in Britain says.

Broadcasting is also essential to break down the isolation of the student. Many students never attend tutorials (at study centres) ... many of them value the opportunity to see and hear their professors and ... seeing them — often nervous and awkward — before the television camera makes more human and personal what would otherwise be a very remote and impersonal teaching situation . . . For instance, here is a strong feeling in the mathematics faculty that without the support given by television the dropout rate would be much higher. The assumption is that the television programmes assist the students' understanding and lead to quicker assimilation of material and at the same time, give students the psychological boost of feeling that they belong to an organisation with real people, however remote or distant these may be physically.

What is clear now is that the person-centred environment is the absolute necessity in a teaching-learning situation and if such a situation does not exist, then, it is better to create it, even if it is through the media. Some courses are clearly marked out as instrumentalist in their use of media (substitute for Chalk-and talk, book-and-exam) an others consider the media as helpful in realising a different concept of education such as education as experience or learning as opposed to teaching. This distinction, when maintained strictly, will ensure the most productive use of the media. Otherwise, as it happens in our situation, the power of the media can be so exaggerated as to make it a substitute for the human factor in the process of education.

To ensure that the Indian distance Education system is within the locus of the essentialities of Distance Education in general, the following measures will have to be undertaken in real earnest:

1. The flexibility in the system should be made visible. Instead of making it co-terminous with the conventional system, its modules should be structured to be self-sufficient entities to satisfy the specific needs of those wishing to acquire a level of proficiency in a particular field. They should also be allowed to discontinue, once their goals have been achieved. In such a case, Distance Education can be truly person-oriented rather than group-centred as in the case of the conventional system;
2. Duplication of courses should be avoided through a sharing of the specialisations to be offered by the various Distance Education Institutes depending upon the expertise available in each Institute. This will enable learners to combine two or more Distance Education Programmes, if there is any need to do so for a specific purpose;
3. Course on personal Hygiene, Nutrition, Home Needs, Jurisprudence, etc. need not be linked to examinations

to encourage those who are interested in these subjects but do not have the necessity to pursue it rigorously;

4. Certain programmes could be sponsored by establishments interested in having people trained in specialisations which could be used by them later on. This brings us to the most vexed question regarding Distance Education in our country and that is the unpleasant competition among the Distance Education institutes to lure students to their courses and make as much money as possible out of them. This is due to the practice of considering the Distance Education institutes as self-sustaining and whenever possible even sustaining the parent University. As in other countries, Distance Education should be funded by the State which would put to an end many of the unethical practices indulged in by some of the Distance Education institutes. This could pave the way for a decentralised and national model of Distance Education which would then concentrate on giving quality education through the Distance Education mode.

The lead that has been given by IGNOU in this regard can be accepted as the norm and strengthened further to be established as the nodal agency for monitoring courses offered by all the Distance Education centres. This would ensure that the facilities and expertise available in various centres could be used efficiently for the realisation of the goals of Distance Education.

5. Last of all, the time has now come for us to ask

whether we need to/whether it is worthwhile to produce millions of graduates most of whom are unemployable and the rest unemployed. Only now there are some signs of vocationalisation at the High School stage and delinking of degrees from jobs, being used positively to make higher education useful and productive. If at this stage Distance Education is also associated with this wasteful practice of producing graduates, it will only act as a counter.

Distance Education has the potentiality of offering in a systematic and efficient manner a personalised form of education, much needed during our times when specialisations have become so narrowed down as to defy any group teaching. This uniqueness constitutes Distance Education. The use of the media, and its concomitant advantages are only peripheral in Distance Education. But this uniqueness is undermined by those who are eager to maximise the peripheral features of Distance Education and use them to solve the problems which have been created by faulty planning and lack of determination to priorities for the moral, social and economic development of the people. If it is substituted for the formal system of education, it will deprive learners of the interaction, and environment absolutely necessary for a person upto a certain age in becoming "educated". On the other hand, if it is used as a supplement to the formal system it can enkindle as well as strengthen in each individual the uniqueness which is essential for self-fulfilment.

REFERENCES

- Bates Anthony (1974) "Broadcasting and Multi-media Teaching" in J Tunstall (ed) *The Open University Opens*, pp. 170-177.
- Bell Daniel (1978) "The Coming of the post-industrial society", *The American Review*, Vol. 23 No. 1, pp. 3-12.
- Carey John (1992) "Plato at the Keyboard", *Dialogue*, No. 96, pp. 34-40
- Cross K. P. (1976) *Accent on Learning*, Jossey-Bass, San Francisco.
- _____ (1986) "Education for Varied Talent", *The American Review*, Vol. 20, No. 4, pp. 90-95.
- Drucker Peter (1988) "The Coming of the New Organisation", *The American Review*, Vol. 32, No. 4, pp. 2-8.
- Feasley E. Charles (1982) "Distance Education", *Encyclopaedia of Educational Research*, Vol. 1, The Free Press, London.
- Gomathi Mani (1988) "Evaluation of Distance Education", in B N Koul, et al (ed), *Studies in Distance Education*, Association of Indian Universities and Indira Gandhi National Open University, New Delhi.
- Holmberg, B. (1977) *Distance Education*, Kegan Paul, London.
- Hook Sidney (1978) "Can the University Service Equal Access", Review of *On the Meaning of the University*, ed. Sterling M McMurrin, *American Review*, Vol. 22, No. 3, 1978, pp. 117-120.
- Isaac Asimov "The Fund They Had", *The Earth is Room Enough*.
- Keegan, D. (1986) *The Foundations of Distance Education*, Croom Helm, London.
- MC Kenzie N, Postgate R and Scupham J, (1975) *Open Learning*, UNESCO, Paris.
- Toffler Alvin (1975) "Education and Careers", *The American Review*, Vol. 19, No. 3, pp. 36-46.