UNIT 15  MASS MEDIA AND EDUCATION

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15.1 INTRODUCTION

Education evolved from the social compulsions. Every society has its compulsions and these compulsions drive the society to learn more in order to solve their compulsions. These learning lead to social education. Over a period of time the treasure of learning necessitates to have these learning integrating it into structured education system, may be non-formal or formal. Today, the level of education and use of educational technology are important parameters of development for any society. All over the world, changing technologies and economic reforms are creating dramatic shifts in three key priorities for education:

- it must be accessible for all;
- it must support the continued expansion of knowledge; and
- it must meet growing demands by the market place for adaptable workers who can readily acquire new skills.
Various Indian Educational Surveys show existing gaps between school education in rural areas and in slum areas of cities and urban areas in terms of attendance, retention, learning achievements and drop out rates. The rural educational institutions always have poor attendance, poor retention, low learning and high dropouts. In this changing facade of educational needs, there is growing recognition about the critical role of education and mass media and other communication technologies such as Internet and communication satellite.

Module has been limited to radio, television and computer. It has not discussed print media. Materials on use of radio for education in India is very limited, hence, there is a tilt towards television. Readers may have different views on computer and internet being interactive Mass media for this media but here the authors have included and justified it as mass media.

15.2 OBJECTIVES

In the above context, mass media has been proven as a biggest technological support. The present unit is written keeping this in mind with following objectives:

- to describe the education system in Indian and the use of mass media in education in its historical perspective;
- to discuss the strength and limitation of the mass media as a means of education at different levels; and
- to consider implications and possibilities of use of mass media for education.

15.3 WHAT IS MASS MEDIA

There exists no single clear cut and simple definition of Mass Media. This is largely because of the continuing explosion of digital information communication technologies (ICT). It includes newspapers and magazines, radio and television programme services, electronic publications, teletext and other all edited programmes published daily/periodically through the transmission of written materials and vocal materials readily available to the general public.

Scholars however do agree that the term ‘Mass Media’ incorporates the tools used in the storage, transmission, and delivery of information or data. Others however, use the “Mass Media” to refer to that part of the media which is formulated and designed to reach a very large audience such as the entire population of a given region.

It need to be noted that this term “mass media” does not cover bulletins, catalogues, and all those forms of publications meant exclusively for advertising, business communication, educational processes or the Internal work of companies, institutions and foundations, societies, political parties, church/temple/masjid (etc.) and other organizations, school gazettes, the Official Gazettes, other official publications, posters, pamphlets, brochures and transparencies, and video pages without moving pictures (unpaid reports), unless stipulated otherwise by law!

It has also been used to mean the sum of the public mass distributors of news and entertainment across media that includes newspapers, television, radio, broadcasting and text publishers.

Mass Media has been deeply influenced by a revolution in telecommunications which has greatly altered communication by providing new media for long distance communication. It is for this reason that others look at it as ‘any medium used to transmit mass communication’.
15.4 MASS MEDIA AND EDUCATION

With the advent of mass media, the education system started developing high hopes. Mass media offer equal access to education. They do not only disseminate knowledge where no other means are available but also supplement formal and non-formal instruction. They fascinate the student and provide them with considerable information outside the classroom. Educational programmes on mass media are meant to provide a unique classroom covering a vast area for education of high quality. They help overcome practical problems in school, like shortage of laboratory equipment, libraries and trained teachers. They can respond vigorously to changes in curriculum and can educational materials that are introduce but not available in textbooks.

Bates (1977) writes that television was used in the country like Australia, Canada, Korea, New Guinea, Sweden, UK, and USA and it was found helpful in shaping children' attitude and it can benefit children directly rather to harm them with it. Sinha (1985), found that the comprehension was poor among the young children, particular science programmes. Non-commercial broadcasting is of two types:

- Community education television, and
- Television supplementing formal education and non-formal academic education.

The specific term used to describe the second type is ‘instructional television’. Non-formal academic education refers to courses of study, which have a prescribed syllabus and written examination just as in formal education but do not have regular classroom interaction. It includes correspondence education and open university courses. It extends the school or college curriculum through non-formal systems. Distance education is a form of non-formal education. The term distance education is synonymous with distance learning, tele-teaching, and distance teaching.

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<th>Check Your Progress 1</th>
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<tbody>
<tr>
<td>1) What is basic education?</td>
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<td>2) What are the types of education?</td>
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15.5 TRADITIONAL EDUCATION AND ITS LIMITATIONS

The present day education could not accommodate every one in formal system. Only a few specialized centers of education for a large number of spirants made the task more difficult. However, the situation is changing. Introduction of efficient postal system gave birth to text-based correspondence courses. For a long time, this has been the primary means for delivering distance education, both in industrialized and in developing countries. The concept of distance education programs offered a promising way to meet the educational needs of millions of children and adults, especially in developing
countries where expertise and physical and financial resources are limited and the bulk of the population lives and works in rural or remote areas.

Since education has been, till recently, the responsibility of State, the cost aspect had never been thought about. Increasingly, the State finds it difficult to fully support specialized education. Resource crunch has also affected the quality of education. This has resulted into privatization of education and a mounting pressure on the educational institutions to earn for themselves.

Institutionalised education system has posed a question to the educational planner – How to reach to all those seeking education or to those whom the State intends to make educated. Traditional means of education are neither fully equipped not adequate to meet the needs of large population, spread different geographic terrains. In developing countries, education for all, at least a primary level of education looks like an unrealistic dream unless the conventional strategies are changed and newer technologies are pressed into service.

Check Your Progress 2
3) What are the limitations of traditional education system?
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4) Why mass media was introduced in education system?
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15.6 EXPERIMENTS WITH MASS MEDIA IN INDIAN EDUCATION

15.6.1 Television Support to Education in India

Radio broadcasting existed in India since late 1920, upon which arrived television in 1959. But it was only satellite link that provided boost to the television expansion - signal to any place, irrespective of distance and geographic terrain. Indian visionaries thought of using satellite communication to multiply information and was considered a most important and convenient tool for accelerating the process of education in India.

15.6.2 Induction of Television in Schools

Since the philosophy of Doordarshan includes creation of a ‘Learning society’ through formal and informal education programmes, Doordarshan, a part of the then All India Radio introduced School TV Programmes in some schools of Delhi. The Delhi School Television Project was designed by the Delhi Educational Television Centre and began its broadcasting in October 1961 with cooperation from the Ford Foundation, USA and the Education Department of the Delhi Administration. Initially 250 television sets were installed in various schools or canters in and around Delhi. Three 20-minute programmes were broadcast each morning five days a week and repeated in the afternoon for the benefit of the second shift.

This marked the beginning of television support to educational system in India. Although at miniscule level, this project was considered a success. It encouraged the educational
planners. Indian Space Research Organization (ISRO) took lead in this direction and Doordarshan joined hands with ISRO.

15.6.3 Satellite Television for School Education

The next large-scale television support to education was during Satellite Instructional Television Experiment (SITE)'.

As apart of SITE, the special attention was given to the school children in the age group of 5-12. ISRO and Doordarshan produced 22½ minutes programmes that were transmitted during school hours (10.00 to 11.30 hours) from Monday to Saturday. Since there were four language states covered under SITE, children of a specific language state got to see programme in their respective language (Hindi, Oriya, Telugu and Kannada).

The objectives of the SITE Science Education Programmes were to make children realise that science is everywhere; that their immediate environment can be questioned, understood, explained and manipulated by them using the scientific method. The programmes the learning of the scientific method, more than mere transfers of information. The programme helped in increasing the information and knowledge of science among the school children and the children acquired an attitude of inquiry. The programme also helped in enhancing the general awareness and understanding of children in the areas of Physical, Intellectual, Social, Emotional, Community, Cultural and Environmental Development. Sinha (1985) observed that a few students learned to draw the sketches shown on the TV. They picked up the words like Namaste (A word of greeting), Prathamik Siksha (Primary Education), and Samapt (The end).

15.6.4 Science Teachers' Training as Part of SITE

It was a general realization among the planners of SITE as well as those in the decision making of the educational policy in India that the teachers should be trained to integrate television into classroom teaching.

As a part of SITE, a multi-media package of training of primary school teachers in science was developed to orient a very large number of teachers located at different parts of the country. As a first step 24,000 teachers were trained in October 1975. From villages surrounding the SITE village 10 teachers were selected and sent to each of 2400 SITE villages. Three other series of training courses were held in the summer of 1976 wherein teachers from other neighbouring areas of the SITE villages also participated. The multi-media package covered pedagogic, motivational and enrichment aspects. The components of multimedia package were television programmes, radio programmes, activities, and enrichment material and teacher monitor tutorials. This indicated "multiplier" effect and very significant contribution to primary education.

The objectives of the training programme was to familiarise the teacher with the pedagogy associated with the Science Education Programme and to upgrade teacher's knowledge and understanding of the content of primary school syllabus. The programme also attempted to familiarise the teacher with the textbooks and teacher's guides, and primary science kits prepared by the NCERT and adapted by the States.

15.6.5 Television for Education — The Post SITE Scenario

The experiences learned during SITE led to the establishment of a few national level educational institutions. These institutions were provided with production facilities and later on were allotted transmission time on nation television network. Today, telecast mode is use to support school as well as college level education. The major agencies involved for different segments of target students are:
1. Primary Education - SIETs
2. Secondary School Education - National Open School, SIETs
3. College Education - AVRCs/EMRCs, EMPC-IGNOU

Other than the above Institutions, Technical Teachers Training Institutes, Indian Institute of Technologies, and Adult Education Centres also contribute to the programmes and it is broadcast on ‘Gyandarshan’ Channel. have ETV production cells. They produce programmes for their specific target group.

**15.6.6 Efforts of State Institutes of Educational Technology**

After SITE was over, the efforts of providing television support to education continued. Enrichment programmes for school children was initiated in 1982-83. At Delhi, the erstwhile Centre of Educational Technology and the Department of Teaching of the National Council for Education, Research and Training (NCERT) Aids were merged to form Central Institute of Educational Technology (CIET). CIET was set up by in 1984 to coordinate this national programme.

State Institutes of Educational Technology (SIETs) were established in six states headquarters namely; Ahmedabad (Gujarat), Bhubaneswar (Orissa), Hyderabad (Andhra Pradesh), Lucknow (Uttar Pradesh), Patna (Bihar), and Pune (Maharashtra). In states, that do not have a SIET, local Doordarshan Kendras (television stations) themselves produce ETV programmes for schools. These programmes are mainly syllabus-oriented programmes meant to be viewed in the classroom.

The programmes produced by each SIET are telecast every day for 45 minutes in the regional languages aiming at children of different age groups. To receive these programmes TV sets have been provided to a large number of schools, mainly in the rural areas. Presently the emphasis is on the telecast of programmes related to the syllabus of minimal level of learning as devised by the (NCERT). SIETs also produce some programmes for Secondary and Higher Secondary level of education. Some programmes of teacher orientation/training are also produced by SIETs-CIET. Similar effort is made on producing audio cassettes and distributed among the school. Not much efforts have been made to organise its distribution, dissemination and use.

Learning have been good. Children liked the medium and gain score was high. Unfortunately, not all the schools have been covered under the programme and it created another gap between the “Have schools” and “Have not schools”. The biggest handicap is the electricity; connection in the school buildings and uninterrupted power supply.

**Check Your Progress 3**

5) Mention the mass media efforts for elementary level education?

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6) Briefly mention the mass media efforts for secondary level education?

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15.7 MASS MEDIA IN DISTANCE EDUCATION

15.7.1 National Open School
Programmes for the senior secondary school students were introduced in 1998 by broadcast of curriculum based programmes for the CBSE syllabus. The programmes are produced at CIET and National Open School (NOS) in Delhi. Presently, the telecast is organized on Gyandarshan educational channel. Audio and video programmes are made available to NOS study centres for students to use during their Personal Contact programmes.

15.7.2 The IGNOU Programmes
The Open Universities has been paying particular attention to the rapid advance of the Association for Media-Based Continuing Education (AMCEE) in the USA. The contribution of the Open University, Milton Keynes, UK gave a boost to the process of distance learning through television. In India the Indira Gandhi National Open University (IGNOU) is the nodal agency.

15.7.3 Countrywide Classroom
For the college level education, programmes are telecast under the Countrywide Classroom (CWC) broadcasts of the University Grants Commission (UGC). After the launching of the multi-purpose satellite INSAT, on 15 August 1984 the UGC has started broadcasting its educational television programmes in English for undergraduate students. In the beginning, the UGC Countrywide Classroom also used programmes produced from Germany, the USA, Britain, the Soviet Union, Canada and Japan. The programmes of the British Open University were most popular.

The activity is coordinated by the Consortium for Educational communication (CEC) and the programmes are produced at about seventeen production centres, called Audio – Visual Research Centres (AVRCs) and Educational Media Research Centres (EMRCs), set up at various Universities. The programmes are mostly enrichment programmes and they deal with subjects offered by the University. While most of the programmes are in English, some telecasts are also in Hindi language.

Undergraduate college students in small towns and rural areas are the primary target audience of the UGC broadcasts. Other students and teachers at the undergraduate level as well as the general public are the secondary audience but their needs do not dictate the programme content and approach. The programmes aim to upgrade, update and enrich the quality of education. They seek to arouse the interest of their viewers, to stimulate their minds and broaden their knowledge. From UGC and government resources, many of the colleges were given television sets to use the telecast for the students. Although the Countrywide Classroom is aimed mainly at undergraduate students, it reaches a wide cross-section of society, including academics and the general public.

15.7.4 Gyandarshan
As a joint venture of Ministry of HRD, Information & Broadcasting, the Prasar Bharati and IGNOU, Prashar Bharati was launched on 26th January 2000. It now started a full-fledged satellite channel ‘Gyandarshan’ for education. By 1st November, 2000 it became a 24 hour channel with non-stop transmission, daily offering a rich fare of multi-faceted programming.

The channel has earmarked time slots for curriculum-based as well as career based programmes targeting various groups of learners. Special programmes on art, culture, science and technology, etc., having a wider appeal across different age groups are telecast. The unique feature of the channel is the high degree of interactivity.
The channel has lent support to the students of Secondary and Senior Secondary School through specially designed programmes by NCERT/CIET, SIET, NOS and others. It also covers topics ranging from science and technology to environment, computer education to career counseling. This channel transmits educational programmes for schools, colleges and open learning systems on a regular basis.

On the same line, a regular radio Programme called “Gyanvani” is broadcasting educational programmes through its network.

15.7.5 Increasing Use of Interactive Television

The one-way-video-two-way audio teleconferencing has two major education applications. These are Distance Education and Continuing Education. The first one way video two ways audio teleconferencing modes in education was used for teaching to the students of Indian Institutes of Technology in 1983. The course on satellite communication was telecast from Ahmedabad and all the participating IITs - Chennai, Delhi, Kolkata and Mumbai were linked with satellite terminals.

During 1991-94, a large number of experiments were conducted and by now this technology is well proven. A transponder on board INSAT spacecraft was dedicated to Training and Development Communication Channel (TDCC)² in February 1995. It provides opportunity to a large number of government and non-government agencies to use the satellite link for education and development purposes. ordinary television receiver. At the classrooms level there can be two types of configuration; (a) classrooms, which can interact with the teaching end through a voice link i.e. a ‘talk-back’, and (b) classroom, which does not have this facility, i.e. a ‘receive-only’ locations.

Advantages of interactive educational channel (TDCC):

<table>
<thead>
<tr>
<th>Conventional Education</th>
<th>Satellite Based Tele-education</th>
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<tbody>
<tr>
<td>Limited reach</td>
<td>Distance free</td>
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<tr>
<td>Interactive face to face learning</td>
<td>Interactive education</td>
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<tr>
<td>Travel cost is high</td>
<td>Great savings in the travel costs</td>
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<tr>
<td>Eminent experts cannot reach every place where</td>
<td>Eminent experts can reach and interact with participants</td>
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<tr>
<td>the classes are organized</td>
<td></td>
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<tr>
<td>Lacks uniformity of education</td>
<td>Uniformity of education is inherent</td>
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<tr>
<td>Loss of information</td>
<td>No loss of information</td>
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<tr>
<td>Programme production is not involved</td>
<td>Programme production is very inexpensive as most of it is live</td>
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<tr>
<td>Interactivity is possible</td>
<td>Interactivity is inherent</td>
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<tr>
<td>Instant feedback takes place</td>
<td>Instant feedback is possible</td>
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<tr>
<td>Attendance and attention level is known</td>
<td>Attendance and attention level can be ascertained</td>
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<tr>
<td>Comprehension can be determined</td>
<td>Determining comprehension is difficult</td>
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<tr>
<td>immediately</td>
<td></td>
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<tr>
<td>Long lead time is required</td>
<td>Long lead time is avoided</td>
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<tr>
<td>Timings can be decided locally</td>
<td>Timings are decided centrally</td>
</tr>
<tr>
<td>Repeatability is problem</td>
<td>Repeatability is possible</td>
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</table>
15.7.6 Applications of TDCC for Education

The channel has been extensively used by two major organisations - Indira Gandhi National Open University (IGNOU) and All India Management Association (AIMA). IGNOU is not only one of the earliest users in its experimental stage before it was formally operationalised; it is one of the major users today with 10-15 days utilization in a month. With more than 300 reception terminals at Study Centres, IGNOU has its own studio at Electronic Media Production Centre (EMPC), New Delhi with uplink facility. EMPC is responsible for the overall coordination of Gyandarshan channel. The telecasts are available at different timings on Gyandarshan channel. Some video lectures are also telecast at midnight. The IGNOU also telecasts college level programmes. Beneficiaries of this interactive distance-learning mode are the students and resource persons, and the Academic Counselors.

AIMA also had started using TDCC for distance education from very beginning. It used to plan the channel very regularly on the weekends. On an average four to five days per month were utilized by AIMA. It covered different topics of management for management students enrolled at AIMA centers at different places in different states.

Other institutions such as Institute of Chartered Accountants of India (ICAI), National Institute of Fashion Technology (NIFT), National Open University (NOS), and National Institute of Educational Planning and Administration (NIEPA), and several national organizations/institutions that offer professional certificate/diploma/degree programmes in a distance education mode have also used the channel. The user organisations have established their receive networks while a common uplink is being shared. The use of this network is expected to grow in near future.

Check Your Progress 4

7) How mass media is integrated for distance education?

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8) What are private channel initiatives for distance education?

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15.8 SOME PRIVATE INITIATIVES

While all the private channels are vying with each other for more and more entertainment for attracting viewers, some of the channels also lend its channel for educational purposes. However, this effort is only limited to Zee Network, Discovery and National Geographic Channel.

15.8.1 ZED/ZILS TV: 24-Hour Learning Channel

The popular Hindi entertainment television channel – ZEE Network had initiated ZEE Education (ZED) and offered modular courses on its. In collaboration with Management
Knowledge and Education

and Computer institutes, ZED offered courses on “Management” and on “Computer”. It was a paid course and the student had to enroll themselves with outsourced Centers of ZED, located at more than 200 places in the country. Receiving of these programmes on cable TV required encryptor. ZED was as ZEE Interactive Learning System (ZILS). It has recently launched a 24-hour learning channel that intermingles learning with entertainment. The channel primarily focuses on providing productivity-oriented inputs to the target audiences, with a specific focus on corporate training needs. It will provide a wide variety of education content through its programmes focusing on pre-school children, school children, youth, women, corporate, IT, consumers and other training programmes. The emphasis of the channel is to blend satellite, video, the Internet and multimedia with traditional classroom learning and course material so as to boost learning effectiveness. It will have a new role for the students from ‘being taught’ to ‘learning’ and for teachers from ‘expert’ to ‘collaborator’ or ‘guide’.

15.8.2 Kheda Communications Project (KCP)

SITE was an effort in centralized communication. However, there were some who were conscious of the need for local programmes and were also worried about the centralisation inherent in the technology of direct broadcasting. They conceived the idea of “limited rebroadcast”, giving birth to the Kheda Communication Project (KCP). This involved the setting-up of a low-power TV transmitter in Pij village of Kheda district in Gujarat.

As a part of KCP, syllabus based programmes were produced and the programmes were transmitted for the Kheda children. The programmes were very popular among the children. They started sending their feedback. The teachers were happy to note the interest and progress among the students. Unfortunately, by the time this programme picked up, Kheda was discontinued in 1985.

15.8.3 Jhabua Development Communications Project (JDCP)

After SITE and KCP, the new educational technology evolved. One-way video and two way audio teleconferencing, which were experimented parallel to KCP, were found very useful in education and training. Thus, Jhabua, a draught affected district of Madhya Pradesh, adjoining Gujarat were selected for combining the Kheda experiences and the use of teleconferencing mode of teaching for rural education and development programme. The project was called Jhabua Development Communications Project (JDCP).

The major objective was to educate the rural mass in the areas of watershed development, health and education through satellite communication (TDCC). JDCP aimed at organizing intensive interactive educational for development functionaries and the rural population, including Panchayati Raj members, local NGOs, farmers, women, youth etc. The programmes were mainly in the areas of Health, Panchayati Raj, Government Schemes, and different aspects of Forestry. The experiment originally scheduled for two years, continued as a part of ongoing programme. At the initial stage it was run by ISRO but after four years was handed over to the Madhya Pradesh government.

15.8.4 Other Experiments and Efforts in Use of Mass Media for Education

Some technology experiments were also done with formal and non-formal system which had its bearing on country’s present education system. Four such important national programmes merit mention. These are CLASS, PMOST, Class Room 2000+, and PREAL.
15.9 COMPUTER SUPPORTED EDUCATION

15.9.1 Computer Literacy and School Studies (CLASS)

The history of wide spread use interactive computer and Internet in education system today goes back to early 1980. As a goodwill gesture, the Government of UK had gifted 250 units of BBC micro (simple configuration with 10-inch monitor) computers to India in 1980. The idea was to provide ‘hands on’ experience to the school students. These sets were installed in selected high schools of various states in India during 1984-85. The project continued till March 1999 and covered more than 2300 schools in the country. This attempt showed a great potential for the private entrepreneurs to enter into computer education. The computer has now changed the face and pace of education in India.

15.9.2 Programme of Mass Orientation of School Teachers (PMOST)

Special orientations of a large number of mainly primary/elementary level school teachers were organized under a programme called Programme of Mass Orientation of School Teachers (PMOST). An estimated number of 5,00,000 teachers (50 teachers in one camp) participated in 10,000 teacher's orientation camps conducted in 2,500 training centers for 10 days (09.00 hours to 17.00 hours on all days). SIETs/CIET prepared total 41 modules of 11 to 30 minutes. The programmes for telecast were originally produced in Hindi language. In case of non-Hindi regions the programmes in English were preceded by synopsis in local languages. The objective of PMOST was to create a conducive climate for generating initiative in teachers for implementation of the present education policy at school level.

15.9.3 Class Room 2000+

Classroom 2000+ was primarily conducted in 1993 as a technology demonstration for the application of technologies like TV, computer and telephone to improve instructional quality and efficiency, through distance mode. Electronic Media Production Centre of Indira Gandhi National Open University (IGNOU) was involved in the experiment, which was conducted with six Kendriya Vidyalayas in the countries. The operational feasibility was viewed primarily from the angle of classroom organization namely class size, furniture, sitting arrangements, physical layout of the classroom, space student, placement and location of the hardware - TV set, computer and telephone.

On pedagogy front, the experiment was not considered as success. The students did not gain much. For operational difficulties, teachers and students interaction was not up to mark. The major limitation of this educational technology experiment was that it cannot cover the curriculum and cannot prepare the students for examination. However this was considered good for teaching mathematics and science.

As a technology use, this 10 days long experimental project was successful. But this instructional approach proved to a costly affair as each school needs colour television, computer and telephone facility and keypad for each student. For a country like India, an investment of more than US$ 350 million on educational technology was a heavy burden on the nation.

15.10 EDUCATION RADIO

15.10.1 Project in Radio Education for Adult Literacy (PREAL)

For the first time, radio was used in the adult education classes for spreading adult literacy under the National Literacy Mission (NLM) programme of the Government of India. The project launched in 1990 (broadcast between December, 1990 to June 1991)
selected approximately 3,600 Adult Education Centres (AECs) in selected districts of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh. In total, nearly 108,000 adult learners were selected to participate in this project.

26 radio programmes of 20 minutes duration were produced by All India Radio (AIR). Each programme was broadcast twice a week by concerned AIR station. Radio-cum-tape-recorder (Two-in-one) sets and cassettes were provided to record the programmes and re-run it on other days. Print material was used as supplement for the programme. The objective of the project was to make the participants achieve self-reliance in literacy and numeracy and participate in the process of development.

The project met with limited success because of certain important dimensions such as selection of the Adult education centres, the participants and the instructors, the timings of the broadcast and the training of the centre level. The first pre-requisite is the strengthening the functioning of the AECs, which was not the mandate of the project.

15.11 LET'S SUM UP

As per the statistics (2001) there are more than 638 lakh Primary schools (up to class V), 206 lakh Middle and Upper primary schools (Class VI - VIII), 126 lakh High/Higher and equivalent level of schools (IX - XII), and 8000 colleges in the country. A total number million students are enrolled in Primary schools. We find a sharp decline of the number (only 43 million) when it reached to middle and upper primary level. By the time they go to High/Higher secondary school, this number drops down to 28 million. Dropouts have been reported more in rural and tribal areas.

Education for all is the constitutional agenda of the Government of India and all State governments are fully committed to it. Attempts have been made and today we have nearly 640 lakh primary schools, 126 lakh secondary schools, 8000 Colleges a large number of students enrolled. Still nearly, 35 percent (24 percent males and 46 percent females) illiterates are there in the country. Attempts have been made to reach to all corners but the quality of the teachers as well as teaching have suffered a lot.

Mass media is one way of taking the quality education, more so the specialised education to any where in the country. The mass media helps delivery of education to any far away places in real time and it is most cost effective. Several experiments have been carried out and now there is operational system, which tries to take the tele-education programmes on 24 hour channels. There is need to integrate this media into education system. Even today only, a small number of schools and colleges are equipped to receive and use the programmes for their students. A total integration of tele-education in the school system is required. The others non-school target group will be benefited any way.

The biggest handicap in use of mass media for education or for development is the power supply in the schools. A large number of Primary schools in the country do not have electric connection. Since education is day time affair, probably, they do not need power supply. Even during SITE time special efforts were made to get power connection to television centres in the SITE villages. After more than 25 years the situation in Indian villages needs special attention. It remind us to the popular saying - “Where there is will there is way”. Do we lack national will, certainly not. Yes, we have not tried hard to find out our ways. Time has come and we have to tighten our belt to achieve the goal as fast as we can.

Notes:

1) In India, a Satellite Instructional Television Experiment (SITE) was carried out from 1975 to 1976, using the United States ATS-6 satellite stationed over the
Indian Ocean. The experiment was conducted by the Indian Space Research Organisation (ISRO) working in collaboration with All India Radio/Doordarshan. ITV programs produced domestically were broadcast from Earth stations in Ahmedabad and Delhi via ATS-6.

2) The technical configuration of TDCC consists of three elements - the teaching end, the spacecraft, and the classroom. The Teaching End consisting of a small studio and an uplink earth station. The spacecraft - INSAT satellite has one extended C-band transponder earmarked for the TDCC. A classroom consists of Direct Reception System (DRS), which consists of low-cost dish antenna.

3) KCP, the baby of ISRO, was done as an experiment within SITE. A low-power transmitter in local Gujarati language transmitted special half an hour programme to Kheda district. 550 community TV sets in about 400 villages of Kheda district were covered under this project. The project continued for almost 17 years. Over period of time the number of TV sets increased to more than 1000 community TV sets.

Out of the 90 minutes programme for Kheda villages, the KCP team of ISRO produced 45 minutes programme. These were development and education-oriented, programmes. Other 45 minutes were produced by Doordarshan, the national TV organisation and covered mainly news, topical issues and general entertainment. The audience for Kheda programmes was the small farmers, landless labourers and children.

4) JDCP was conducted in the drought prone district of Madhya Pradesh, selected by Planning Commission, Govt. of India as one of the priority district for Integrated Mission for Sustainable Development. 150 villages were selected where a television set was installed in each village for receiving locally produced television programmes. All the 12 block headquarters were equipped with interactive uplink facility for teleconferencing. The interactive facilities at the block level were primarily used for training to the development functionaries.

This was the third major rural project undertaken by ISRO. This two-year project starting November 1996 was extended for one more year. Afterward the operation and system management has been taken over by the Madhya Pradesh Academy of Administration, Government of Madhya Pradesh who was technically trained by ISRO team.

### 15.12 REFERENCES AND SUGGESTED READINGS


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