

## Educational Radio in India

Professor R V VYAS, Director,  
Kota Open University, Kota, Rajasthan INDIA  
Dr. R C SHARMA,  
Indira Gandhi National Open University INDIA  
Ashwini KUMAR,  
IGNOU Regional Centre, Lucknow INDIA

### The Global Beginning

Radio Technology was first developed during the late nineteenth century and came into popular usage during the early twentieth century. Though sometimes overshadowed by television, radio represents a medium capable of reaching a wide geographic audience at a low production cost with proven educational results (Couch, 1997). Studies by the U.K. Open University have demonstrated that radio has a greater value for weak students who benefit from radio as a supplementary learning tool (Tripp & Roby, 1996). The Agency for International Development has shown that radio is more cost-effective and results in a greater learning effect size than textbooks or teacher education (Tripp & Roby, 1996). Radio has the advantage of teaching subjects in which classroom teachers are deficient or untrained. An added benefit for multi-grade classrooms is that it provides instruction for one group of students while the teacher works with another group. Radio can also bring new or unavailable resources into the classroom (Muller 1985).

Jaminson and McAnany (1978), reported three main advantages of radio: improving educational quality and relevance; lowering educational costs; and improving access to educational inputs particularly to disadvantaged groups. Some of the limitations of radio for education are that interaction is limited; instructor feedback and clarification is generally unavailable; the instruction is uninterrupted and not reviewable; the pace of the lesson is fixed for all students; note-taking is difficult; and that time for reflection on the content is minimal. To overcome these drawbacks, preparation, supporting materials, and follow-up exercises are recommended when possible (McIsaac & Gunawardena, 1996).

The popularity, availability, and low cost of radio made it a convenient and practical medium for use in programmes for learning at a distance and is mostly used in combination with other media, such as with print medium followed by face-to face teaching etc. Although, educational use of radio started around 1930, but perhaps U.K.O.U. was first make its utilization effective. Satyanarayana and Sesharatnam (2000) found that radio is useful in providing remedial tutorials, or some other forms of tutorial based feedback; providing corrections, alterations or updating of material, where print re-make budgets are limited, or where print cannot reach students quickly enough; recordings of naturally occurring events, e.g. political speech, children talking, concerts or performances, talks previously recorded for other than Open University proposes eyewitness interviews at historical events; presenting material in a dramatized form, enabling students to identify with the emotions and viewpoints of the main participants; providing an alternative view to that presented in the correspondence text and/ or television programmes; and enabling students to perceive the different points of view that exist, and observe ideas being challenged, through discussion and interviews.

### The Indian Beginning

The Radio Club of Bombay broadcast the first radio programme in India in June 1923 (Sharma, 2002a). Afterwards a Broadcasting Service was set up (that began broadcasting in India in July 1927) on an experimental basis at Bombay and Calcutta simultaneously. This was done under an agreement between Government of India and a private company called the Indian Broadcasting Company Ltd. In the year 1947 (when India became independent), the AIR network had only six Stations located at Delhi,

Bombay, Calcutta, Madras, Lucknow and Tiruchirapalli with a total complement of 18 transmitters - six on the medium wave and the remaining on short wave. Radio listening on medium wave was confined to urban limits of these cities. As against a mere 2,75,000 receiving sets at the time of Independence, now there are about 111 million estimated radio sets in about 105 million household in the country. Presently the broadcast scenario has drastically changed with 198 broadcasting centers, including 74 local Radio Stations, covering nearly cent-per-cent country's population (<http://www.air.org.in>). As of today AIR network broadcasts nearly 2000 programme hours every day in 24 languages and 146 dialects. It reaches 97.1 per cent of the population, which includes substantial population in rural area, and covers 89.7 percent of the geographical area of the country (source: <http://www.allindiaradio.com>). The AIR is expected to cover an estimated 97.7 percent of population in the country on completion of various ongoing projects under the 8th Five-Year Plan (IGNOU, 2000).

## Major Educational Radio Projects in India

The main projects that describe the growth of educational radio are:

### 1. School Broadcast Project

This project was commissioned in 1937 and the target group was School students. This programme started from Delhi, Calcutta, Madras and Bombay. In the beginning the school programme were not strictly governed by the curriculum. With the passages of time and acquisitions of more experience, the AIR tried to make its radio broadcasts more curriculum oriented, but in absence of common syllabi and time tables in schools, even within the same state, it could not succeed in it's aim.

### 2. Adult education and community development project (Radio Forum)

Commenced in 1956, the Villagers of 144 villages in the vicinity of Poona (in Maharastra state), were the main beneficiaries of this project. This was agriculture-based project, which was originally designed and tried out in Canada. With the help of UNESCO, it was tried in 144 villages of Poona and was named as 'Radio forums Project' (defined as a listening cum-discussion-cum-action group). The members of the forum could listen thirty-minute radio programme on some agricultural or community - development programme, then discuss and decide regarding it's adoption in their own village. This project was a great success. Many action programmes were planned and put into practice.

### 3. Farm and Home Broadcast Project

This project was commenced in 1966 and again targeted at Farmers and villagers. These broadcasts were designed to provide information and advice on agricultural and allied topics. The aim was to educate the farmers and provide them assistance in adopting innovative practices in their fields as per the local relevance. The experts also conducted occasional farm radio schools, which proved to be very effective.

### 4. University broadcast project

This project for University students was initiated in 1965, with an aim to expand higher education as widely as possible among the different strata of society. The Programme consisted of two types- 'General' & 'enrichment'. The general programmes included topics of public interest and enrichment programmes supported correspondence education offered by universities in their respective jurisdictions. School of Correspondence studies, University of Delhi and the Central Institute of English and Foreign Languages, Hyderabad is well known for preparation and broadcast of their programmes through AIR.

### 5. Language Learning Programme

The project, popularly known as 'Radio Pilot project' was started in 1979-80 jointly by AIR and Department of Education Government of Rajasthan, with an aim to teach Hindi to School going children as first language in 500 primary schools of Jaipur & Ajmer districts on experimental basis. The

project was found useful in improving the vocabulary of children. With its success, similar project was repeated in Hoshangabad district of Madhya Pradesh with some modifications but had limited success.

#### **6. IGNOU-AIR Broadcast**

In collaboration with IGNOU, AIR stations of Mumbai, Hyderabad and Shillong started radio broadcasts of IGNOU Programmes from January 1992. Main target group of this project were students of Open / Conventional Universities. Although Shillong started this but discontinued later on. Therefore presently it is being broadcast from AIR Mumbai (Every Thursday and Saturday from 7:15AM-7:45AM) and AIR Hyderabad (Every Tuesday, Thursday & Saturday from 6:00 AM - 6:30 AM) only. This programme is still popular in the respective region.

#### **7. IGNOU-AIR Interactive Radio Counselling (IRC)**

Started in 1998 for students of Open / Conventional Universities, this project is also very successful. In order to bridge the gap between Institutions and learners by instantly responding to their queries and also to provide Academic Counselling in subject area, IGNOU in collaboration with AIR Bhopal started this project in May 1998 as an experimental programme for one year (Sharma, 2002a). With the success of the experiment, it was extended to 8 other AIR stations (Lucknow, Patna, Jaipur, Shimla, Rohtak, Jalandhra, Delhi and Jammu). Presently Interactive Radio counseling is being provided on every Sunday for one hour (4:00 PM - 5:00 PM) from 186 radio stations of All India Radio. This includes two Sundays on the National hook-up. Toll-free telephone facility is available from 80 cities (effective from February 2001) enabling the learners to interact with experts and seek clarification, without paying for their telephone calls. The first and third Sundays of the month, AIR stations of Delhi (Hindi) and Kolkata (in English) broadcast from national hook-up, which 186 radio stations relay either of them. The 2nd and 4th Sunday are slotted for programmes of various regional centers of IGNOU and State Open universities respectively. The slot of 5th Sunday (if any) has also been given to region-based programmes of IGNOU. This programme is gaining popularity day by day.

#### **8. Gyan-Vani (Educational FM Radio Channel of India)**

This project is recently launched (in year 2001) and again the target group is students of Open / Conventional Universities. Gyan Vani (Gyan = Knowledge, Vani = aerial broadcasting) is Educational FM Radio Channel of India, a unique decentralised concept of extending mass media for education and empowerment, suited to the educational needs of the local community (Sharma, 2002b). It is operating presently through Allahabad, Banglore and, Coimbatore FM stations of India on test transmission mode. The network is slotted to expand to a total of 40 stations by June-2002. Gyan Vani stations will operate as media cooperatives, with day-to-day programmes contributed by different Educational Institutions, NGO's and national level institutions like IGNOU, NCERT, UGC, IIT, DEC etc. Each stations will have range of about 60-KM radius, covering the entire city /town plus the surrounding environs with extensive access. It serves as ideal medium addressing the local educational developmental and socio cultural needs (IGNOU, 2001).

Gyan Vani is not only for the conventional educational system but also a main tool in making available the dream of education for all come true. Gyan Vani's main intention is to take education to the doorsteps of the people. Gyan Vani, in addition to giving the hardcore education will also deal with awareness programmes including the ones for Panchayati Raj Functionaries, Women Empowerment, Consumer Rights, Human Rights, the Rights of the Child, Health Education, Science Education, Continuing Education, Extension Education, Vocational Education, Teacher Education, Non-formal Education, Adult Education, Education for the handicapped, Education for the down trodden, education for the tribals and so on. Gyan Vani is available through commercial FM radio set.

### 9. Radio-Vision (Multimedia through Digital Radio)

Pioneered by the BBC, the technique of radio-vision allows the subject matter to be presented through two channels, the audio and the visual. The visuals are presented in the form of still filmstrips, charts, slides, models, etc, while the explanation is given through recorded narration. Educational institutions use this as a substitute for educational television. Radio-vision has its own advantages:

- It is economical
- It can cater to different categories of learners
- It is easy to produce such programmes at the institutional level or at the learning centers
- It provides visual support to the concept that is taught.

A small experiment in the use of radio-vision technique was carried out by The National Council of Education Training and Research, India in 1975-76 using it as one of the components of the multi-media package for in service teacher training designed and operated during SITE. A series of charts and picture cards were presented to about 24,000 participating teachers 2400 centres alongwith verbal explanation provided through specially prepared radio broadcasts. The results were found to be encouraging. (IGNOU, 2000)

A pilot project was carried out in IGNOU in 2001 under UNESCO support for testing the feasibility of using the new digital technology for cost effective transmission of audio-visual courseware. The project proved that FM Radio transmitters and Satellite Radio transponders can be used successfully to transmit, downlink and download multimedia courseware, in this case using the Asia Star of WorldSpace (Dikshit, 2002). The details of the experiment are available at <http://www.ignou.ac.in/unesco/unesco46.htm>

### 10. Radio-text

Radio has been used along with textual data transfer via computer networks simultaneously to create a 'radio-text' environment. The teaching end is normally a FM radio station having data broadcast facility through a computer network. The main points of the radio broadcast are sent through textual mode to the receiving end via a computer network. The learning end has radio listening facility as well as a computer screen to receive the textual data. Since both audio and text are broadcast simultaneously, the learner at the receiving end gets high quality and low cost teaching. An experiment on the use of radio-text at Yashwant Rao Chavan Maharashtra Open University, Nasik, India resulted in the satisfaction of more than 80 percent the learners. It also used for peer group discussion at the receiving end after the broadcast, which indicates radio-text could be used for varieties of objectives (Chaudhary, 1996).

### Conclusion

Although many of the viewers are using television or internet for news and entertainment, along with their use in education, efforts are still on in using radio. Various agencies at the level of conventional and distance universities are making use of radio for broadcasting their educational content as a cheap local supplementary alternative. The above described educational radio projects indicate that radio can be an effective medium in reaching out quality education and training to the needy ones.

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