EDUCATIONAL BROADCAST THROUGH RADIO

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INTRODUCTION

Radio is a powerful mass medium used in education for disseminating information, imparting instruction and giving entertainment. It serves with equal ease in both developed and developing countries. It spreads information to a greater group of population thereby saving time, energy, money and man-power in an effective way. Radio is a simple and cheap medium readily available as a small toy. Now small and handy transistors are available with even poorest of people. A small transistor can carry the message to any place on - the earth. It needs very little for maintenance and cheaper production can be taken up with more and more resources. Radio speaks to an individual so also to millions at a time. Hence, any listener can think the broadcast is meant for him whereas when listened in group all think the massage directed towards them. Each student takes the broadcast as very intimate to him. Due to its portability and easy accessibility radio could found its place everywhere whether it was a field, a school, a kitchen or a study room. Radio is a blind man’s medium and is meant for ears only. It plays with sound and silence where the sound can be any thing like voice or word, music and effect. When one hears radio, simultaneously one can imagine happenings in his/her mind. So it is called as theatre of blind or a stage for the mind. Radio can be listened to simultaneously along with another work like reading also.

Radio can be used as an effective and interesting tool in education both for formal and non-formal education. Where conditions have permitted, it has become well established and wide spread; yet, it seems to us that insufficient educational use is made of this virtually universal method of distribution. People often seem to have been deterred by the repeatedly greater efficiency of other media which, however, have the major defect, compared with radio of being unable to cope for such widespread distributions - or anything like it for a long time to come. The very low cost and adequate reliability in all climates of miniature transistor radios mean that radio broadcasting should more and more be recognised as a particularly suitable medium for educational purpose. Radio, in reality, has been used extensively as an educational medium both in developed and developing countries since beginning. Its educational programmes supported in a wide range of subject areas in different countries. Educational radio has also been employed within a wide variety of instructional design contexts. In some cases it is supported by the use of printed material, by local discussion group, and by regional study centres. It is sometimes so designed to permit and encourage listeners’ reaction and comments. Evaluations are also carried out with the feedbacks received.
HISTORICAL PERSPECTIVE

In United Kingdom, education was taken up through radio just after two years of starting of broadcasting in 1922 with initiation of British Broadcasting Company. This company became British Broadcasting Corporation (BBC) after 5 years. Then educational radio was controlled by an Educational Council. Twenty local radio stations are now in operation in England, each of them broadcasting locally devised programmes. Australian Broadcasting Corporation introduced educational broadcast in 1929 where representatives from schools assisted in their earlier attempt. The State Department of Education took up the responsibility of production since 1939. Presently all the schools receive information about next years’ school broadcast on a regular manner. The broadcasts are more of ‘open-ended’ style giving students scope to draw their on conclusion. Early thirties saw the beginning of school broadcast in United State of America, first with National Broadcasting Company having ‘Music Appreciation Hour’. ‘American School of the Air’ has had a significant contribution by broadcasting daily programmes on science, music, history, literature, and current events. Even prior to 1936, about 202 radio stations were broadcasting educational programmes which gradually came down within next thirty years. It has seen some increase in number with the advent of FM broadcasting by 1945. In Canada also Canadian Broadcasting Corporation (CBC) started school broadcast on an experimental basis at various places. On getting positive response it was made permanent with daily 20 mts. broadcast for schools. It was here in 1941 that radio education was successfully used for providing agricultural information for “Farm Radio Forum”. Here it was proved again that the radio can contribute substantially to the process of transformation of agricultural tradition, as well as some social and economic attitudes in general. Then this was extended to other countries including India. Education through radio in France devotes more than one half of its output for education both in Primary stage as well as in Secondary grades. Japan, though a developed country, has used radio for education since 1933. The Japan Broadcasting Corporation (Nihon Hoso Kyokai—NHK) broadcasts for kindergarten, elementary, middle, high school etc and provides yearly time table of educational programmes, teachers’ guide and text book for students to all the schools. Radio plays a supplementary role in enriching the knowledge of class teachers here in Japan. In Malaysia also educational programmes are broadcast in four of their National language like English, Chinese and Tamil from Monday to Thursday. Utilisation of educational radio in developing countries was more significant and covered various field of the development. Whether agriculture or health, adult education or family planning, the educational element used to take-the-first priority. School broadcast, in Mathematics or Science, Civics or Language, sometimes takes a major chunk of radio broadcast in various places. However, utilisation of radio for school broadcast though
started with developed countries but it had seen its extensive use in developing
countries. Thailand used radio to teach mathematics to school children and for
teachers’ training. Kenya supported correspondence course with broadcast
and Botswana for civics education. Dominion Republic and Paraguay used Radio for
primary education. Adult education was promoted through radio in many countries,
though successfully in Mali, Mexico and Bulgaria.

**INDIAN SCENE**
Radio came to India through amateurs with educational purpose first in 1923 in a small
way and after four years it could find its root here. In India, then it was used for
educational purposes in almost all the possible fields. Being the only instrument to
reach to masses in this country for a long time, its educational role was exploited
thoroughly. All India Radio was a government medium and had the opportunity of
covering the entire Country. It has been mostly used for developmental activities after
independence. As such All India Radio has an objective to broadcast education with
information and entertainment. So in most of its broadcasts the educational element
used to be there. While the accent of all the programmes whether for the general
listener, or specific groups like farmers, women, children, students, teachers or
industrial workers, is on education in the widest sense, some programmes planned
with a specific educational objective. Educational elements in broadcasts consist in
the form of informal, non-formal and formal nature. In every programme some
massage or morals are given with a purpose to educate the listener but in an informal
way. Non-formal educational programmes are broadcast for school drop outs, neo-
literates, illiterate adults, farmers etc. The formal educational broadcast programmes
are for the Primary Schools, Secondary Schools and Universities. Education was first
taken up by Radio in January, 1929 in Bombay on an occasional and informal way to
be followed at Madras next year in April, school broadcast was started with a view to
educate the unprivileged pupil. But in November, 1937 All India Radio, Calcutta took
up educational broadcast in a systematic and regular manner on getting requests
from University of Calcutta and Education Department of Bengal Government.
Seeing the success, the then Controller of Broadcasting issued an instruction to follow
this step by other stations from October, 1938. His objective was very clear, “that
Educational Broadcast should not attempt to replace the teacher (professor) but to
supplement his work”. In post independence years, school broadcast was taken
seriously at radio and most of the main stations started this broadcast in the languages
prevailing in their area. Gradually other auxiliary stations also relayed to their main
channels. They then produce the programmes themselves at a later date.

**School Broadcasts**
All India Radio is putting out school broadcast programmes from 73 stations in
different languages as per the area where the stations are situated. The duration of
each programme varies from 15 to 30 mts. having 20 mts. per day in most of the cases. According to the local requirements their frequency also differs from weekly to daily and mostly on week days. School Broadcast Programmes are meant for formal educations like secondary schools, primary schools and programmes for teachers’ education. Then in non-formal category broadcasts for adults, neo-literate, farmers etc are also included. Secondary School Broadcasts are mostly syllabus oriented, covering textbooks taking local needs into consideration in regional languages. They work as a supplement to the curriculum and cover subjects like English, Sanskrit, Science, Social Studies; Mathematics etc. giving updated information thereby enriching the knowledge. They also stimulate the awareness and curiosity on various branches from science to current affairs. During examinations some of the stations broadcast special capsules of important programmes keeping the examination tension in mind for the betterment of the students’ of class 10th & 12th. Subjects like General Science, Mathematics and Languages are covered up in these programmes with due precautions. During vacations, some stations give lessons to help the student for preparing for entrance examinations for professional courses like Engineering, Medical, Agriculture, Veterinary Science etc. Information on other vocational courses where by students can get exposures about their prospective futures are also broadcast taking experts from different fields. Primary School Broadcast is mostly meant for children up to 10 years and is of enrichment type. The programmes are broadcast for duration of 15 to 20 mts., 3 to 5 days in a week for individual listening. Ideas and concepts from text books and curriculum are adopted and interesting radio production techniques are used for presenting the programmes with a view to see the personality development of the children. There is a feeling that dullness of the classroom, irrelevance of curriculum, rigidity of school timing etc caused heavy dropouts. The post SITE experiment has shown that radio can brighten up a primary school environment and reduce the drop-outs. Hence the present policy is to concentrate on primary school broadcast. These programmes also cover interviews with top ranking children in the field of academics, curricular activities, Sports, Music etc. Short stories, poems, songs, adventure stories and essay written by the Students are also included to bring out their creative talents. To create interesting listening among the students, efforts are made to present lessons in different formats like Talklets, Lectures, Class Room Teachings, Question and Answers, Quiz, Features, Playlets etc. All India Radio separately arranged programmes for teachers also. Like other educational programmes here the teachers’ programmes are of 15 to 30 mts. durations once or twice in a week. The objective of this programme is to familiarise curriculum changes, technology advancements and advance contents that are necessary for teaching staff. Methodology of teaching, child psychology, educational policies and other relevant topic are also covered. New developments in educational technology are also taken up in these programmes for the betterment of the teachers. Subjects like Science, Mathematics, Social Studies, and English etc. have seen number of changes
with time. Teachers have been oriented and up-dated with these changes. Hence, teachers’ training programme through radio played a significant role. The state government of Kerala in collaboration with All India Radio of Trivandrum organised a radio correspondence-cum-contact course for training the teachers in 1975. The State Institute of Education in Assam in collaboration with AIR carried out a radio-cum-correspondence course for science teachers during 1978-79. A training course for improving the standard of English at the upper primary stage was also tried out in the HMP Institute of English, VV Nagar with the help of AIR, Ahmedabad. The Educational Broadcast Unit at Madras and Trichi supported such a training programme of Tamil teachers. In Maharashtra both Nagpur and Pune stations had taken up similar teacher’s training programmes for two months every year. These types of programmes save lots of expenditures, botheration and movements.

Taking part in National Literacy Mission various All India Radio stations’ are producing and relaying programmes to achieve 100% literacy. Programmes are generally based on various topics like development through literacy, behavioural science programmes, educating about various diseases etc. Major concern of National Literacy Mission based programmes is on educating women and girl child. Programme based on importance of literacy, how to eradicate illiteracy, education of students, education in villages, adult education and education for industrial workers etc. are broadcast by All India Radio stations. Talks and slogans are the most popular and effective formats used in National Literacy Mission programmes broadcast. These programmes are broadcast by ten stations on weekly basis for duration of 10 minutes each.

**Management**

Each of the educational broadcast unit of radio station consists of a staff group of one Producers/Programme Executive, an Assistant Editor/Script Writer, a Production Assistant and one or two Presenters/Compeers as per the requirement. They are all qualified teachers with advance training in educational broadcast. The staffs have to update their knowledge by attending both in-service and outside trainings in different places regularly. They have to carry out the planning, scheduling and production of programmes by co-ordinating with different agencies available in the field of education. The programme schedules are prepared in close collaboration with experienced teachers, representatives from education department, state institute of education in informal subject committees. Then these schedules are approved by a higher consultative panel attached to the particular station comprising officials and experts in the field of education. After finalisation of the schedules, booklets and charts are prepared for the entire session by All India Radio and then supplied to all the available secondary schools covered under the listening zone of the Station well in advance. Evaluation forms are provided to the schools with a request to give
feedbacks. These feedbacks are analysed to improve the programme from time to time.

**Formats Used**
The success of educational radio depends on the transmission of high quality programmes which should support the current needs of both teachers and pupils. There is no single “best” format available for utilizing in educational radio. It is only the experience that can help in finding some such solutions. But it has been proved time and again that radio can teach; it can present new concepts and information effectively when good programmes are given. Direct talks are always avoided in this programme. Various formats like Dialogues, Discussions, Interviews, Documentary, Quiz, Docu-Drama, Drama, Demonstration and experiments, Music and Magazines are used. The non-formal educational programmes are originated directly in the concerned stations. But the school broadcasts are planned in co-ordination with other languages stations in the state by sharing the production at different Stations. The planning of these programmes have to be carried out in close co-ordination with all the stations, education department, secondary boards, NCERT, SCERT etc of the state. Better and veteran experts in different subjects are hired to advice for preparing the schedules. Then best teachers available in the subjects are invited to present the lesson.

**Agencies Involved**
Many agencies have been created to look into the successful implementation and improvements of the educational radio programmes. To find its utmost utilisation organizations like Central Institute of Educational Technology (CIET) in National Council of Educational Research and Training (NCERT), State Institute of Educational Technology (SIET) in State Council of Educational Research & Training (SCERT), Training Unit of Teachers’ Colleges Educational Department of both the Centre and the State are established. But they are not getting the required success because of lack of proper co-ordination. Provisions for such facilities were created but they hardly utilised the required context. Now a systematic arrangement is required for proper co-ordination. All the agencies should be brought under one umbrella so that the programmes broadcast should be utilised in an utmost manner. Presently the School broadcast is 7.13% of the total programme in a station. This percentage is expected to go up with educational broadcast becoming broad-based and encompassing formal, non-formal and continuing education. To take care of this growing need Central Educational Planning Unit (CEPU) has been established in All India Radio, Delhi, CEPU, apart from supervising the Educational Broadcasting Units, is also planning a number of innovative serials and making proto-type programmes for broadcast from different stations in various languages. Followings are some such serials:

Vigvan Vidhi: A 13 episode serial on development of science and scientific temper was first broadcast in Hindi, and then followed with 16 other Indian languages. It was the first collaborative programme with the Department of Science and Technology and had a registered listener size of 1.4 lakhs. Science was
taught in a simple and illustrative manner. To make the subject simple charts, toys, illustrations etc. are also given to the common student listeners.

Nisarga Sampad: Started first in Kannada from Bangalore, this 13 episode programme on Social Forestry was also broadcast in other Indian languages including Hindi from all other stations subsequently. This was a systematic broadcast dealing on environment with a set of registered listeners and created a great impact in imparting the knowledge.

Radio DATE: Radio Programme dealing with education on Drug, Alcohol, Tobacco was taken up with 30 episodes first in Hindi, then in other Indian Languages. In association with Indian Council of Medical Research (ICMR), All India Radio broadcast it through out with one lakh registered listeners over 84 stations. In a random survey conducted in rural areas, it was revealed in Karnataka and Goa, over 31% of the users had reduced the frequency of use of Drug etc. About 95% of the listeners rated the programme as “very good” and 92% felt that it would definitely have an effect in helping in discontinuing the habits.

Evolution of Man: Seeing the success of the earlier serials in radio, a mega serial of 144 episodes namely Manav ka Vikas was broadcast in collaboration with National Council for Science and Technology Communication (NCSTC). Unlike earlier cases here all the 18 language versions were broadcast simultaneously. Apart from 10 thousand schools, over one lakh children in the age group of 10-14 years have been registered from different part of the country.

CHEERS (Children’s Enrichment Experiment through Radio):
CHEER Programme was meant for pre-school children of socially deprived classes studying in Anganwadis in the age group of 3-6 years. It was carried out in four states viz Andhra Pradesh, Orissa, Haryana and Uttar Pradesh respectively from Visakhapatnam,Cuttack, Rohtak and Lucknow for a year starting from 2nd October 1992. It was a joint venture of All India Radio, Department of Women and Child Development and National Council of Educational Research and Training (NCERT). The serial attracted the target audience and policy makers alike with a continued demand to replicate the experiment in other languages. The serial was repeated from All India Radio, Lucknow and also extended to Union Territory of Andaman & Nicobar Islands from Port Blair (in Hindi) from 02.10.1995. On persistent demand from the State Government of Andhra Pradesh, CHEER programme was repeated once again from AIR, Vishakhapatnam with effect from 02.10.1996. All these reflect the popularity gained by the serial among target audience. A baseline study was conducted by NCERT in Haryana to find out the impact of the CHEER programme had some revealing facts: (i) Nearly 50% of the Anganwadi Workers were listening to the programme regularly, (ii) Half of them commented the programme to be clear and interesting. (iii)But a very negligible i.e. nearly 4% and 33% of the AWWs were conducting the pre and post broadcast activities respectively, that also without prior planning. (iv)Guide books were not supplied in time and even Radio sets were provided only after a year of completion of the programme, (v) Lack of co-ordination among the implementing agencies and the schedules was responsible for not getting the full impact. The success of such serials and their positive impact on listeners led radio to go for many more such serials on different problems and finding out some solutions. Problems of adolescence was covered in Jivan Saurabh Part I (13 episodes) and Dehleez (52episodes), Marriage incompatibility and Interspouse communication, Family harmony etc. were taken up inJivan Saurabh Part-II (13 episodes) and Tinka Tinka Sukh (104 episodes), Problems of Women was taken in a serial ‘(39 episodes) and pollution problem was covered in “Yeh Kahan Aaa Gayee Hum (52 episodes). In all these programmes outside agencies acted as collaborators and the serials are successfully implemented.

UNIVERSITY BROADCAST
All India Radio broadcasts programme for various target groups. Youth is one such segment for which certain programmes have already been earmarked. In 1969 a separate programme namely Yuva Vani was inaugurated from various Stations with varying duration starting with half an hour to two hours. But the
Programme for young listeners was given since the beginning of broadcasting in India. In this occasional broadcast higher educational opportunity, various courses available in the Universities, admission procedures, eligibility for admissions, introduction of new courses etc were generally covered. Personalities like Vice-chancellors, Professors and the Directors concern for the section were either interviewed or given direct talks. This was an opportunity for the students to know about various options available and opportunities there of. With the regular introduction of Yuva Vani programme, a forum was given to a larger percentage of listeners between the age group 15 to 35 years. The programme was meant for the youth, the youth and by the youth. This was a type of enrichment programme meant for the young listeners with informal education. They not only participated with their talents and problems but also used to listen for their betterment in different fields. Formal University Programme was broadcast from Delhi in 1966 for one hour daily on week days. It came because of the starting of Correspondence courses by University of Delhi in 1961. To facilitate the students of this correspondence course, every day, three different topics of 20 mts. each were taken up in “University on Air” programme at 7A.M. As such though the programme was broadcast from Yuva Vani Channel of All India Radio, Delhi, the schedules used to be prepared with the help of Directorate of Correspondence, University of Delhi. About 700 talks are broadcast annually by the expert professors covering subjects like History, Economics, English, Hindi, Political science etc. They are syllabus oriented and are meant for undergraduate University Examinations. Seeing its success, presently 5 stations like Madurai, Patiala, Chandigarh, Hyderabad and Delhi are broadcasting for student of correspondence courses, respectively for Venkateswar University, Punjab University, Punjabi University and Dr. Bhim Rao Ambedkar University for a long time. It was the only source of contacting lakhs of students admitted in different branches of Correspondence courses. Indira Gandhi National Open University (IGNOU) has been using the radio for its educational broadcasts from select stations of All India Radio (AIR). In November 2001, IGNOU launched an exclusive educational radio, Gyan Vani through FM Channels. Out of 40 Channels allotted to the University for different cities, 26 such stations have already been airing this programme. Each channel covers a radius of nearly 70 Kms and gives programmes of duration between 3 to 13 hours. There has been a review of the entire project of Gyan Vani. Three stations - Bhubaneswar, Jam Nagar and Ludhiana are to be closed and 15 more stations are to be included in phase II, giving stress on expansion in NE States & in A& N Islands.

Interactive Radio Counselling (IRC)
While radio broadcasts are useful in their own way, the fact that broadcasting was an one-way medium for a long time limiting their use in the educational context. Through Phone-in programmes radio has overcome this limitation to a large extent. All India Radio started this” Phone In” programme on an experimental basis sometimes in 1979 at their Cuttack station to be followed at Pune and Delhi within next 10 years. IGNOU has initiated ‘live’ radio counselling sessions through various stations of AIR in bigger way and the response was found to be very encouraging. Apart from its registered students, many others such as parents, potential future students and the general public listen and interact actively during these broadcasts. The regional centres of IGNOU prepare the radiocounselling schedules as per the needs of students located in their regions and conduct the same in collaboration with the respective AIR stations. A typical session is addressed by two counsellors well-versed in the scheduled topic. A radio professional acts as the moderator to regulate the incoming telephone calls from the listeners to ensure a smooth interaction. Radio counselling sessions are held through 21 main AIR stations every Sunday for one hour mostly from 4 to 5 p.m. This programme is also relayed by other 167 radio stations. Once radio counselling takes root, it can be used as an alternative to face-to-face counselling at the study centres or at least as a supplement to it. Some of the inherent disadvantages of the face-to-face counselling, namely variations in academic standards, higher cost and the need for rural students to travel long distances to reach the study centre will all be obviated through extensive and regular radio counselling classes. It is also possible to extend the radio counselling methodology through the forthcoming Gyan Vani educational channel. In India the role of open universities can not be ignored. For
successful implementation of these open universities and correspondence courses, radio can play a very significant role.

FEEDBACK AND EVALUATION
Regular monitoring and time to time evaluation becomes absolutely necessary for improvement of any programme. Especially in the case of educational programmes, it is still more important for a change in regular manner. Collection of data and proper feedback makes the programme more and more useful to the target students. All India Radio has an inbuilt system of evaluations from the reports received from the Headmasters/Principals and direct feedbacks from the listeners. These are critically reviewed and improvements are carried out in future programmes. But that is not proved to be sufficient. Constant monitoring and reactions by outside agencies associated with relevant educational fields can provide more and more scopes for such monitoring and neutral analysis for developing better programmes. Apart from radio, agencies like NCERT and SCERT have also undertaken some very serious studies on different aspects of educational radio. However, many studies on School Broadcast programmes were taken up by the scholars for the purpose of their M.A., M.Phil. or Ph.D. Degrees. All India Radio has its own Audience Research Units (ARU) conducting surveys regularly on different programmes from time to time.

PROBLEMS AND PROSPECTS
Educational Broadcast was occasionally started by All India Radio long back in 1928 and regularised after a decade. Over 7 decades have passed since then. Still it has not been utilised the way it should have been. All India Radio is originating the programme in religious manner providing the printed Schedules, Charts, etc., regularly but the schools are not utilising this programme properly. Different studies at various places proved that the educational authorities, the teachers, the pupils are not giving adequate attention to this programme for various reasons. The surveys undertaken by Audience Research Unit of All India Radio from time to time proved the same, which was also confirmed by many of the agencies time and again. These reasons are many. No special period has been given for this programme though many of the students are interested to listen. Whenever listening arrangements are made in auditorium or veranda of the school, hundreds of students gather there for gossiping but not giving scope for proper listening. Though provision was there for pre and post broadcast discussion on the lessons but it hardly takes place in the school. vii) There is no monitoring or very negligible supervision by the Authorities so the very purpose of the school broadcast is not meted out. All India Radio is a mass medium whose first priority is to provide information and entertainment. So it is very difficult to allot time for such unused programme. Because of this poor response the time for school broadcast gets less importance in comparison to other programmes. Even the timings at places are not adequate and properly suitable for the schools. All the subjects are also not covered from the syllabus in radio. Due to lack of interest at users end there are little efforts to provide a good mixture of programmes to the pupils as per their requirements, so also quality could not be maintained. Teachers are not trained or even motivated to adopt this programme or even its importance. Hence, huge expenditure that is made has almost been wasted. So, many of the stations of All India Radio are reviewing the cases and are either reducing the frequency and duration of the programme or even thinking of stopping it in totality. After proper planning, educational radio can prove to be very effective in a systematic manner to impart the education.