General Article

Community Radio and its prospects in Education

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Abstract

Radio is a powerful mass medium that informs, educates, is inclusive, preserves the local identity of communities and helps reach out to and empower marginalized sections of society. In developing countries, it can add value in several ways, particularly in areas where information, knowledge and technology come at a cost. It has the potential to fill the gap that exists in schools by providing quality education, vocational and skill training to disadvantaged students. The article begins by tracing the history of radio with a focus on the experiments of radio in education across the globe. This ranges from, the BBC's schools broadcasting services in 1924, and programmes for underprivileged children by AIR Madras, to the educational FM channel Gyan Vani being launched in India in 2011. Steering towards the importance of Community Radio and its potential to reach out to underprivileged communities, the paper highlights the educational initiatives launched with community radios by National Council for Science and Technology Communication (NCSTC) in India. The paper also addresses Interactive Radio Instruction (IRI) - a teaching methodology that makes learning fun and evaluating its success stories in India and abroad. Various local-level efforts that have helped in reaching out to the marginalized sections in lieu of improving education has also been discussed.

Key words: Community Radio, Community radio in education, Role of radio in education, Radio Mewat, Radio Media Village

German playwright and author Bertolt Brecht wrote, "Radio is one sided when it should be two. It is purely an apparatus for distribution, for mere sharing out. So, here is a positive suggestion: change this apparatus over from distribution to communication. The radio would be the finest possible communication apparatus in public life, a vast network of pipes. That is to say, it would be if it knew how to receive as well as transmit, how to let the listener speak as well as hear, how to bring him into a relationship instead of isolating him. On this principle the radio should step out of the supply business and organise its listeners as suppliers (Thomas, 2011). The playwright's words highlight the sole purpose of communication as participatory when radio and all other mediums were treated by the state as a source for distribution of information. Citizens are reduced to passive audiences who lend out their ears to mere propaganda and news about various welfare schemes. Their voices are ultimately absent or get lost. This is exactly what can change if Radio serves as an interactive and collaborative medium for communication - a tool for education.

Radio is a powerful mass medium that informs and educates, is inclusive, and preserves the local identities of communities and helps reach out to and empower marginalized sections of society. In particular those, who have missed out on access to opportunities on account of not

having adequate resources - both financial and social. In developing countries, the radio can add value in several ways, particularly in those areas where information, knowledge and technology come at a cost. If we look at the status of education in India, even today in most of the rural areas, schools are without teachers, training tools, lab equipment, libraries and other basic facilities. Radio has the potential to fill this gap by providing quality education, vocational and skill training, particularly, to the disadvantaged students. As an important instrument of mass media, it can complement the formal system of education.

On February 9, 1995, in a historic verdict, the Supreme Court of India said that airwaves are public property and their use "has to be controlled and regulated by a public authority in the interests of the public and to prevent the invasion of their rights" (https://mib.gov.in/document/supreme-court-judgement-airwaves). The apex court's judgment rejected the government's monopoly on broadcasting and democratised the broadcasting space. The court made it clear that "the right to impart and receive information is a species of the right to freedom of speech and expression guaranteed by Article 19 (1) (a) of the Constitution" (https://mib.gov.in/document/supreme-court-judgement-airwaves).

This was a major turning point for Radio in India that saw a spurt in action to make community radios a reality in the country. A community radio station - owned by the people, of the people, and for the people - could become a possibility. In 1996, the Bangalore Declaration (Noronha, June 1998) of media was signed in the presence of 60 people from various sectors including radio broadcasters, policy makers, academicians, media professionals and activists. The Declaration proposed the democratisation of media and focused on many aspects apart from entertainment. The discussions, which suggested a liberal policy for radio broadcasting, stressed to establish a democratic, dynamic and community-oriented communication system at the earliest. The Bangalore Declaration proposed the institutionalisation and expansion of the concept of community radio stations. In the year 2000, the Pastapur Initiative on Community Radio Broadcasting emerged out of a UNESCO sponsored media workshop in Telangana. In December 2002, the Government of India approved a policy for the grant of licenses for setting up of Community Radio Stations to well established educational institutions, including the premier Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs). Anna Radio, at EMMRC, Anna University, Chennai, the first community radio in India, was launched in 2004. The policy was revised in 2006 when grass-roots organisations and other not-for-profit organisations were also granted permission to set up community radios in India. Today, there are approximately 258 community radio stations operating across India.

The evolution of community radio is the result of years of struggle and media activism. Rather than acting as the mouthpiece of the system, community radio lends power to the people. The effort to access the radio communication technology by the communities started just before the First World War (King, G., 2017, pp.18–36). During this period, many community radio practitioners challenged the state and contested the private domination of airwaves. In North America, many community radio lobbyists and activists jammed the radio dial on US- Canada border. Most of these radio activists pirated the broadcast law and continued as unlicensed broadcasters challenging the monopoly. While several histories of community radio exist here is a brief overview: By the 1940s, the community radio

practitioners started to set up their own permanent infrastructures. Latin America's 'Radio Sutatenza', was considered as the world's first community radio. It was established in 1947 by a Roman Catholic priest, Jose Joaquin Salcedo, in Colombia. During the late 1940s, Bolivia witnessed a revolution in the communication field. 'Radio Mineras' was launched in Bolivia in 1949. The station was maintained by the mining workers of Bolivia and it advocated their cause. By 1952, at least 26 community radio stations were maintained by the miners' trade union and workers in Bolivia. The radio stations soon became the political voice of the Bolivian miners who openly talked about their harsh living conditions and aired news related to Union meetings. The radio stations played a key role in organizing the labourers and boosted the working class' resistance. Most of these community radio stations operated with funding from the community itself. The ownership of the channel that vested in the hands of workers changed the social fabric. The Bolivian model inspired the media activists, lobbyists and dreamers alike all around the world, to start similar initiatives (Fraser et al., 2002).

Community radio is something that "emerges from within the community and which couldn't and shouldn't be imposed from above" (Jallov, 2017). The radio programmes should be designed on the basis of community access and it should reflect the necessity and interest of the community it serves. Community radio stations should focus on the local language and should design programmes that take into consideration the local context, and promote local culture, identity, diversity and aesthetics. Advocates of community radio have argued that the role of community radio is to:

6) Empower communities by giving them control of running the radio

7) Promote and build local identity, preserve local dialects, culture and music by focusing on local content

8) Encourage participation from all sections of society and create opportunities for diversity of voices, opinions, dialogues and discussions and strengthen democratic processes

9) Become an agent of social change, inclusion and development

10) Increase awareness about rights and responsibilities, bring about transparency, and promote good governance (Singh, 2018)

The use of radio for educational purposes was piloted with the BBC's schools broadcasting services as far back as in 1924. But, it started playing a pivotal role in education in India only since 1929, when the Radio Club of Bombay started to run children-oriented informal educational programmes on radio. This was followed soon by AIR Madras that started broadcasting a special programme for underprivileged students in 1930. In November 1937, Calcutta AIR started broadcasting systematic educational programmes on a special request from Calcutta University and the educational department of Bengal government. In 1937, the School Broadcast Project was experimented in four metro cities (Delhi, Calcutta, Madras and Bombay). The experiment was quite a success and fuelled similar initiatives (Kurrien, 2008).

In 1956, Adult Education and Community Project (Radio Forum Project) was tested in 144 villages of Maharashtra with the help of UNESCO. The villagers could listen to a thirty-minute radio programme on agricultural or community development, then discuss and decide regarding its adoption in their own village. The participatory project became a huge success. Following this landmark project, the first higher education programme was tried out under the University Broadcast Project in 1965. The School of Correspondence Studies of the University of Delhi and the CIEFL, Hyderabad, designed the education programmes for AIR. The programme was mainly of two types- 'general' & 'enrichment'. The general programmes covered public interest topics and the enrichment programmes focused on correspondence education offered by universities. The 'Language Learning Project, that started in 1979-80, was another landmark project in the educational sector. It was a joint venture of the All India Radio and the Education Department of Rajasthan Government to teach Hindi to school going children. The project was implemented in 500 primary schools of Jaipur & Ajmer districts on an experimental basis. Vocabulary skills of many students improved on account of this project. (Vyas, V & Sharma, Ramesh & Kumar, Ashwini, 2002).

There is no doubt, however, that amongst all the available means of communication, radio has the maximum reach in India, as in most developing countries. In countries where basic infrastructure is lacking like roads and electricity, and facilities like that of sanitation, equipment and teachers are absent, radio can play a major role in providing low cost education to children. (*There are several examples particularly that of Radio Mewat, which are discussed later.)*

While, television is rapidly expanding in urban and rural areas, access to radio networks and ownership of radios is far more widespread, as 97% of India's population can access radio stations. Moreover, attempts were started globally in the early 1970s to apply major developments in applied learning theory, particularly active learning methods, to educational radio for schools, leading to the development of Interactive Radio Instruction (IRI) (Kurrien 2008).

During the 1990s, Indira Gandhi National Open University (IGNOU) started using radio extensively for direct class teaching and for school broadcasting. In 1992, IGNOU collaborated with AIR stations of Mumbai, Hyderabad and Shillong to start broadcast of educational programmes. IGNOU started the Interactive Radio Counselling (IRC) project in 1998. IRC bridged the gap between Institutions and students by instantly responding to their queries and providing academic counselling. 186 stations air the Interactive Radio counselling on every Sunday for one hour (4:00 PM - 5:00 PM). A toll-free telephone facility is available from 80 cities which enables students to talk to experts and clarify their queries. (Vyas, V & Sharma, Ramesh & Kumar, Ashwini, 2002).

In November 2011, IGNOU launched the educational FM channel 'Gyan Vani'. It covers different aspects and levels of education including primary and secondary education, adult education, technical and vocational education, higher education and extension education. The programmes are designed by various educational institutes, NGOs, government and semi-government organisations, UN agencies and ministries. Gyan Vani also covers topics such as women empowerment, consumer rights, human rights, child rights and Adivasi issues. (Roy & Ghosh, 2013). However, All India Radio stopped operation of all 37 stations of Gyan Vani

FM channels from October 1, 2014, due to discontinuation of payments from April 1, 2013 onwards by IGNOU, accumulating outstanding payment of Rs. 21.64 crores (Shashidhar, 2015). It was only in April 2019 that IGNOU reactivated 13 Gyan Vani stations after carrying out the necessary repairs and maintenance works on the aging equipment. (Enarada.com, April, 2019)

The Interactive Radio Instruction (IRI), a low educational technology has shown a very positive impact in developing countries. It is a distance education system that combines radio broadcasts with active learning to improve educational quality and teaching practices. In an IRI classroom, students and teachers can be heard reacting verbally and physically to question and exercises asked by the radio characters and participating in discussions, experiments and other activities as instructed by the radio programmes. The World Bank noted it as a successful experiment in developing countries, declaring, "There is consistent and significant evidence that IRI can increase learning across subject matter, age, gender, and rural or urban location. Students show progressively greater learning with time," (World Bank, 2005). IRI is a teaching methodology that makes learning a fun. Learners sing, ask questions, listen to stories and play games in this method. IRI, which only requires a radio and a facilitator, made education accessible to large number of student community especially in remote areas. IRI consists of 20-30-minute teaching and learning exercises designed for daily classroom activity. The radio lessons are designed around the learning criterion at different levels of science, mathematics, language and other subjects. (Chandra, 2003) Various researches carried out around IRI showed that Mathematics can be effectively taught by radio. The Nicaragua Radio Mathematics Project, funded by United States Agency for International Development (USAID) is a successful example of IRI (lliott, & Lidon,2017). Each mathematics lesson consists of two parts, the broadcast portion and the teacher-directed portion. Students are given a worksheet. The broadcast lesson is turned on. During the broadcast lesson, the radio characters sing, play and talk Mathematics, inviting the students to join. The children can respond orally, physically and in writing. After the broadcast session, the teacher continues the lesson. Students are made to respond in the worksheet provided to them. The worksheets are later collected and sent for evaluation. The study reports revealed that students who were taught through IRI achieved significantly higher scores than those taught through formal classroom interaction. The study also found that radio lessons were particularly effective in raising the level of knowledge of students who knew least. There are many other successful stories of IRI.

Kenya's nationwide weekly radio programmes "Giving birth and caring for your children" combined entertainment, humor and instruction. It was effective in educating the audience about modern child care practices (Hostetler,1976; Jamison & McAnany,1978). The study indicated a general recognition of child care, and most of the community members were able to recall the topics covered by the programme. Pre and post broadcast surveys in civic education project, organised in Botswana by a community college, which provided villagers with basic information about the government and its procedures about citizens' rights and responsibilities, showed a definite increase in people's knowledge and awareness of government (Nwareundu & Thompson, 1987).

In his article "Using Community Radio for Non-formal Education" author Thomas J. (Thomas, 2001) stated that community radio (CR) can be used as an effective medium for education due to its accessibility, availability and affordability. The close- ties with the communities allow community radio stations to know the listener's requirement and give good access to the resource pools. Radio programmes also can use different methods such as radio drama, songs, interview, documentary, panel discussion to educate the people. In India too, community radios, despite the limitations of reach, receivers and quality content as well as that of capacity to teach complex subjects, stations have experimented with broadcasting educational programmes for different sections of societies - students, women, farmers, youth, domestic workers, and factory workers. They broadcast programmes on Math and Science, taught languages like English and Urdu, and worked hard to produce educational content for their listeners. There are many successful stories of community radio's role in education, some of which are mentioned here.

The year 2012 was declared as the Year of Mathematics by the Government of India (Pandit, 2011). As a result, the National Council for Science and Technology Communication (NCSTC), a department of the Government of India, mandated to communicate Science and Technology to masses, stimulate scientific and technological temper and coordinate and orchestrate such efforts throughout the country, collaborated with four community radio stations to pilot a project to teach Mathematics through radio. Mathematics is considered as the language of the universe and its application in daily life made it an important subject for all sections of society. With the programme's huge success, the project was then expanded to 12 CR stations in the first phase and another eight in phase two. With an effort to promote scientific and logical thinking and introduce mathematical concepts in everyday life, 180 programmes were developed by each of the 20 stations. The programme was broadcast every alternate day and was repeated at least twice on other days. The Radio Mathematics Project mainly targeted areas where students have poor access to quality education. The partner stations chose their target audience which varied from pre-primary, primary, secondary and higher education students to factory workers, domestic workers, self-help groups, rag pickers, weavers, farmers, and agriculture labour. The impact was evaluated by a third party and the result was found to be more than satisfactory.

'Science for Women's Health and Nutrition' programme was another landmark in using the radio for educational purposes. The project, once again initiated and supported by the NCSTC, intended to improve health awareness among women as well as that of their families. NCSTC collaborated with 63 community radio stations across the country in four phases for the execution of the project. A total of 365 programmes were produced by each community radio station in one year. The programmes besides promoting healthy eating habits and motivating listeners to lead active lifestyles, disseminated knowledge on health and science. The stations experimented with different formats of programming and included information on the need for a balanced diet, knowledge about nutritious yet inexpensive and locally produced foods, benefits of seasonal fruits and vegetables, healthy cooking styles, recipes, and lifestyle changes that could help women and children reach their full potential. The programmes also emphasised on the need for institutional delivery, pre and post-natal care, importance of immunization, addressing communicable and non-communicable

diseases and more. The programme prioritised issues of tuberculosis, infant mortality rate, mother maternal mortality, low birth weight, communicable/non-communicable diseases, HIV-AIDS and health & sanitation. The effort was to simplify everyday science to ensure a significant and measurable behaviour change in the target groups. As part of the outreach activities cooking competitions, best recipe and quiz competitions, health and nutrition camps, poster competitions etc. were organized on a quarterly basis. Innovative approaches were adopted by the community radio stations to reach out to their audiences and educate them about the need to adopt a scientific approach towards health and nutrition.

Radio Tuition, is one of the most innovative programmes initiated by Radio Mewat, a community radio, licensed to a non-governmental organization, Seeking Modern Applications for Real Transformation (SMART). The idea of this programme was inspired by the abysmal results of the Class X examinations, held by Haryana Board of Secondary Education in 2017. Faring lowest in Haryana were the districts of Mewat and neighbouring Faridabad, where only 4 out of every 10 students passed the examination. The situation was far worse in most of Mewat's government schools where only 1 or 2 students had passed (Kumar, 2017). A survey (unpublished) by, Radio Mewat, was able to uncover the probable reasons behind this which were - non-existent educational infrastructure, unavailability of qualified teachers especially in Mathematics, Science and English, poor sanitation and lack of clean drinking water. The Radio Mewat surveyors found that there were schools that had a teacher-student ratio of 1:300, with no subject teachers- only physical education teachers were present. Moreover, the private schools (with also poor quality of teachers) were expensive and out of reach for majority of Mewatis, whose livelihood depended on agriculture and allied activities. In an attempt to find alternative solutions to these issues, Radio Mewat launched its Free Radio Tuition programme in August 2017. With the stations reach extending to about 170 villages and an active audience of around 28% of the residents within its geography, the radio started a 4 hour 'education only' broadcast every weekend. Teaching-learning modules were developed with the assistance of 'star' (in Mewat qualified and efficient teachers are called Star Teachers) teachers from government and private schools as well as college students. With a mission to cover the entire syllabus of English, Mathematics, Science and Social Studies, the radio started broadcasting the class capsules for Grade 6 to Grade 10. Clarifications were provided over phone. Students started walking into the studio to seek answers to their problems. Seeing the impact and popularity of the programme, the District Elementary Education Officer (DEEO) began promoting the initiative and encouraged the students to listen to Radio Tuition. In 2018 March, the DEEO hosted a meeting with the principals of all government colleges and the team of Radio Mewat. He told the principals to encourage the children to listen to the radio and also asked them to send their 'star' teachers to assist in programme production. The performance of the students of Mewat in the Class X board exams of 2019, is an endorsement of Radio Mewat's efforts. A total of 57.40% students passed the Class X exam and Mewat ranked fifth in Haryana (inputs received from Radio Mewat 90.4). Whereas, in districts that could not benefit from programmes like Radio Tuition, the results continue to be worrisome. (Seth, 2019)

Radio Media Village (RMV) 90.8 FM is the first community radio station in Kottayam district of Kerala. It is run by the prestigious St. Joseph College of Communication (SJCC) which holds a unique reputation of being the first university affiliated media college in South India. RMV broadcasts 17 hours a day, and covers over 80% of the population in the districts of Kottayam, Alappuzha and Pathanamthitta and has an estimated listenership of around 8 lakhs. At any given point of time, there are over 5 lakhs listeners, claims the radio station. Majority of its programmes are on the themes of agriculture, health, education, environment, social welfare, community and cultural development. In 2012, the State Institute for Educational Technology (SIET), Department of Education, Government of Kerala, signed up with Radio Media Village as a partner to broadcast all the educational programmes produced by Vidya Vani FM, of SIET. The programmes reached the most vulnerable communities and impacted the results. This was a huge endorsement of the potential, reach and popularity of the radio station (Inputs received from Radio Media Village 90.8).

Jyotirgamaya 91.2 MHz community radio station, licensed to the Punjab University, in its effort to reach out to the less privileged population, started a new initiative of recording and broadcasting the textbooks for visually impaired students enrolled in the university and living in the neighbourhood. Student volunteers record the text, edit the programmes and then handover the same to the visually impaired students. The effort is to record the entire curriculum for both undergraduate and post graduate courses in both Hindi and English. The content is distributed through pen drives and DVDs as well as broadcast on radio. Though the text books are available in braille, but is not easy to access them and sometimes it is not easy to read them as they become voluminous and are not user friendly. The audio programmes (books) are distributed free of cost to students of government schools and colleges and are much appreciated. Till date 15 textbooks have been converted into audio books and close to 500 hours of radio time have been devoted to this effort (inputs received from Radio Jyotirgamaya 91.2).

These are just a few examples of the role that community radio has played in education.

According to the Dictionary of Education "listening is the art of paying close attention to the conversation of another person or persons in order to obtain selectively verbal and nonverbal clauses to behavioural patterns explicit or implicit." Listening is an important factor in the process of learning. It is an active knowledge guided process. Also, reading is a fairly new skill for humans on the earth, thus the human mind appreciates the spoken words more than letters. Due to the low unit cost, wide popularity and vast coverage, community radio has proved to be an effective educational medium, as it not only speaks but also listens.

Further, radio is also a blind medium that compels its listeners to use their imagination to support the sound message. It has the power to stimulate the abstract thinking of the listener and to enrich his or her power of imagination. It functions in real time; and its codes are purely auditory, consisting as they do of speech, music, sounds, noises and silences (Duby, 1990). Similar to radio programmes, teaching is also basically an oral communication method. Ancient education system mainly depended on listening and speaking. Thus, radio broadcasts not only have the potential to complement teachers in classrooms but, can also be used as their substitutes in their absence. They can promote both -a formal and informal system of learning. Community radio in particular, has the ability to expand the capabilities

of its listeners, add value to what they are doing by delivering content that is useful, need based and makes sense to them. It has the potential to inform, educate and transform their lives.

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