

## **A study on Using Interactive Radio Instruction-Educational Program to Improve the Quality of the primary Education in Tribal Area**

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### **Abstract**

The radio is one of the oldest medium of transferring information and it is an innovative factor which science has located in the hands of society. It becomes an important social and educational device in closely every country in the world. Correctly, the radio may become an invaluable aid in education. Radio broadcasting has proved to be most effective medium of the communication and it also used simply to remote regions too. The radio program has been broadcast in India for the first time in Bombay in June 1923. After the broadcasting the several services and setup were made to experiments the radio processes. Finally the Radio club of Bombay has done several experiments on radio to set up in Bombay and Calcutta concurrently. The interactive radio instruction (IRI) is an educational programme provides an outstanding opportunity to learners, especially from remote places, to interact with the learner and teacher through the radio broadcasting. The study has been conducted by the researcher with the help of an interview and questionnaire for teachers, school authorities and students. By the opinion of interview from various authorities do raise issues and suggest important consideration regarding the conditions that the support of the using of radio programme at primary school in tribal area. The study reveals that the interactive radio is conventional well, but needs more attention to be effective and well implementation in all regions.

**Keywords:** Educational radio program, Interactive Radio Instruction (IRI), Primary school level, Quality concern, Tribal area

**Introduction:**

Educational radio program has been broadcast all around the world for the enhancement of quality education system. It was first developed in the late 19<sup>th</sup> century and become more popular during the early 20<sup>th</sup> 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). And Studies and described “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). International development agency has expressed that the radio is one of the most cost effective learning platform (Tripp & Roby, 1996). “The Language Learning Programme project, which is 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” (Professor R V VYAS). Saikia, Juru. (2014) did research on “Uses of Radio for teaching English to sadri Students of upper primary schools in Assam” The Sadri children go to the regional medium (Assamese) government schools and learn English as part of their curriculum in these areas. In Assam, the medium of communication of these schools is Assamese. It is also found that the quality of instruction and the teaching of English in these schools are very poor. The students as well as teachers do not have proficiency in English. The English language teacher gets great help through the usage of radio lessons. The use of radio in Indian schools has been fairly extensive. “Radio has the ability to reach millions of people simultaneously, yet it speaks to an individual personally. The listener feels a great companion in his radio especially when it is discussing something so relevant, sensible or personal to him” (Kuewumi, 2009).

**What is IRI?**

Interactive radio instruction (IRI) is an instrument designed to deliver active learning through radio sets. There are many audio lessons got developed to instruct students and guide the teachers via different activities, games, and exercise which bring a careful, structured knowledge, information and skills. “During short pauses built into the radio scripts, teachers and students participate in the radio program during the course of an academic year, often more than 100 time in daily 30min to 1-hour lessons, reaching verbally and physically to question and exercise post

via radio characters. Learners also participate in group-work, experiments and other activities. In this way IRI-Educational Radio Programme exposes learners to regular, curriculum-based content and models effective teaching and activities for teachers” The world bank report (2005). The United States Agency for Informational Development (USAID) has founded IRI in the year 1970 in Nicaragua, Stanford University. “Evaluation data gathered between 1975 and 2000 demonstrated that IRI had improved learning IRI (Tilson, et al.; Leigh, 1995; Carrales, 1999; Bosch, 1997; Dock and Helwig, 2001). In addition, IRI was repeatedly found to narrow achievement gaps between boys and girls, as well as between urban and rural students (Tilson et al, 1991; Hartenberer et al, 1996; Bosch, 2001). Program during this time period often had relatively well improving quality. IRI project of the last decade have focused more on addressing critical and urgent deficits in meeting Education for all (EFA) goals, and have had fewer resource to gather data learning outcomes” (Jenifer and Thukral 2009). The objectives of Interactive Radio Instruction program is varied countries to countries. In Karnataka, India it was initiated to supplement the present teaching-learning process where teachers can get helps to teach and the students to learn. “The IRI are pre-recorded programs based on the school curriculum. They are aired through satellites and radio is used for the broadcast of the programs. The content was designed after a detailed analysis of the requirements of the targeted students and teachers. Teachers are trained to conduct the radio classes and are provided with guides and reference material to operate a radio class” ( Bakshi and Jha). The educational radio program “English is Fun” is currently running in different Indian states like Madhya Pradesh, Chhattisgarh, Karnataka, Bihar, Jharkhand etc. “The project has been active in India since October 2003, and aids education systems in India in attaining goals set forth by the Sarva Shiksha Abhiyan (SSA). The Interactive Radio Instruction Program (IRI) has been found to have significant impact on improving student learning gains. Evaluation studies have indicated that IRI has an impact on the comprehension and speaking skills as well as the Math, EVS and Social Science knowledge. It has also been consistently building the capacities of teachers to engage students in effective and joyful learning” Archana Nambiar (2010). At present, two educational radio programs have been running in the state Madhya Pradesh though the Interactive radio programme which is known as ‘English is fun’ and ‘Jhilmil’. “In India, the medium of instruction in the vast popular of government rural and urban schools is the local language. English is today announced as a second language in Class I in most of these schools. However, even after numerous years of its required study, vast numbers of students finalizing high school are unable to speak, read or write simple English. Therefore, for supreme of these students, access to higher education, employment, technical knowledge, and the world of computers and the Internet, will also be limited. The primary cause for the insufficient command of English of high school leavers is that their teachers themselves have a very limited knowledge of English. Consequently, little English is spoken or transacted in the classroom. More over neither their pre-service training, nor the limited opportunities for in service training, has

equipped teachers to teach English as a second language” (Centre for learning Resources, India). There have been seen the state government has a positive attitude towards running the educational radio programs and to keep continuing the educational radio programs like ‘English is Fun’ and ‘Jhilmil’ which have been seen as a good medium to engage students. At the present Madhya Pradesh state has total no. of 14 radio stations i.e.- Bhopal, Gwalior, Jabalpur, Indore, Chhatarpur, Rewa, Guna, Khandwa, Shivpuri, Chhindwara, Betul, Shahdol, Balaghat and Sagar.

**The IRI-Educational programme is as follows:**

<b>Classes</b>	<b>Programme Name</b>	<b>Subjects Covered</b>	<b>Broadcast Timings</b>	<b>No. of Programme</b>	<b>Day</b>
<b>I-II</b>	English is Fun Level I	English Language	12:05 to 12:35	120	Monday to Friday
<b>III-V</b>	English is Fun Level II	English Language	12:45 to 1:15	80	Monday to Wednesday
<b>IV-V</b>	Jhilmil	Environmental Science	12:05 to 12:35	40+	Thursday to Friday

### **Objectives of the Study:**

1. To study the feature of Interactive Radio Instruction (IRI)-Educational Radio Program.
2. To study the current position/implementation of Interactive Radio Instruction (IRI)-Educational Radio program.
3. To compare the interest and motivation level of Male and Female students on IRI Educational Radio Program.
4. To study the attitude of students and teachers on IRI Educational Radio Program.
5. To identify the effectiveness of educational radio program currently running in the schools.

### **Hypothesis:**

- H<sub>0</sub>: There is no significant difference in the interest level of Male and Female students on IRI Educational Radio Program.
- H<sub>0</sub>: There is no significant difference in the attitude of students on IRI Educational Radio Program.

- H0: There is no significant difference in the attitude of teachers on IRI Educational Radio Program.

**Methodology:**

Descriptive survey technique has been adopted in this study to achieve the insight of students’ and teachers’ interest, attitude and listening patterns of educational radio programmes. Simple random sampling technique has been employed to select the true representative from the population. The total no. of 30 teachers and 60 students have been selected from primary schools which are being located in tribal area of Madhya Pradesh state of India. The investigators have developed self made questionnaire tool for both teachers and the students for primary sources. Further the investigators collected secondary data from various research papers, radio programs, thesis, newspapers etc. On the basis of nature of the data- the following statistics have been employed in this study, i.e- Mean, SD, t-test, Percentile and graphical representations.

**Data Analysis:**

Gender	Mean	SD	t-value	df	Significance
Male	2.18	.392	0.770	32	0.447
Female	2.27	.517			

**Table No. 1**  
**Students’ Interest & Motivation on Educational Radio program**

The level of interest and motivation of the students towards educational programs score has been found statistically not significance at 0.05 significance level i.e.- the calculated t- value is 0.770 whereas the table value is 2.037. So it is shown that the table value is greater than the calculated value  $2.037 > 0.0770$ . Hence the null hypothesis is accepted. There is no significant difference between the interest and motivation level of Male and Female students on Educational Radio Program studying in primary school of Madhya Pradesh state.

Radio Programs	Like	Dislike
Jhilmil	64%	36%
English is Fun Level I & II	82%	18%

**Table No. 2**  
**Students interest of educational radio program**

The above table no.2 shows the interest on educational radio programs of primary level school students. If we compare the programs, students are more interested on English is fun program as compare to the Jhilmil educational radio programs.

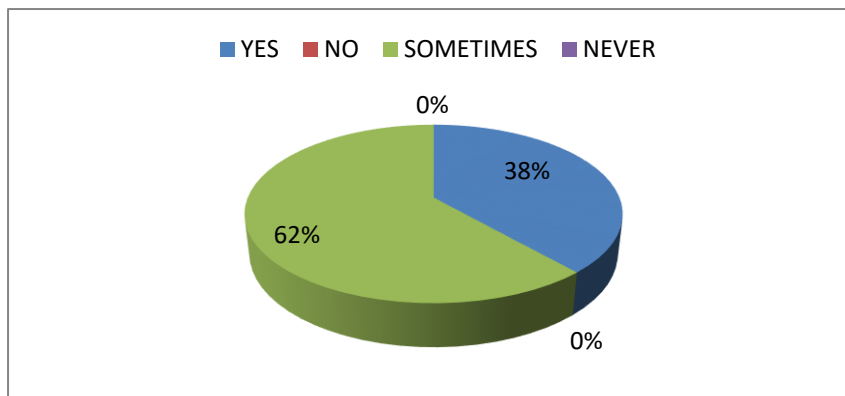
Gender	Mean	SD	t-value	df	Significance
Male	9.636	.859	1.030	32	0.311
Female	9.454	.711			

**Table No. 3**  
**Attitude of students towards Educational Radio program**

The table no.3 indicates that the attitude of primary school students towards educational radio program, which are running in the educational institutions in Indian states for the quality development of school education. The data says that there is equal attitude of both male and female students towards the educational radio programs. Both the students have equal interest and attitude on educational radio programs.

**Findings:**

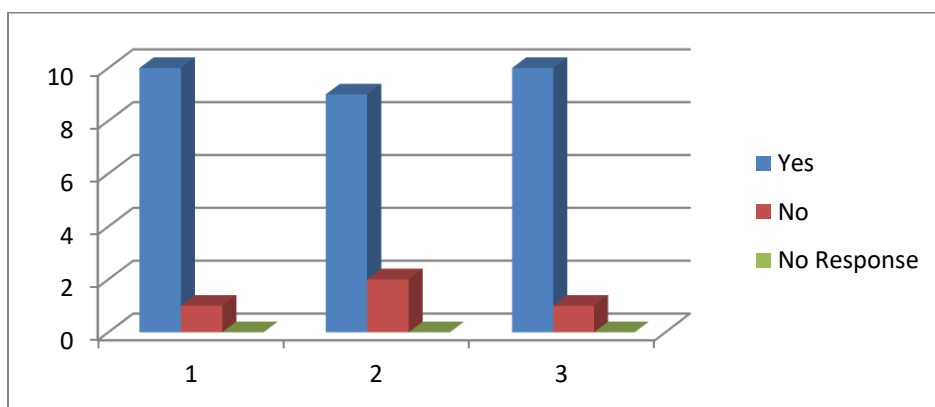
The study has identified that the present status and availability of radio at school, 92% respondents believed that their radio is in working conditions, which are being used in school education, only 8% respondents have reacted that the radio is not in functioning conditions. The educational radio programs have been running since 1996 and attitude of teachers and the students towards listening and participation of educational radio program have been found effective. But there have been identified that the network problems. 62% teachers responded there is network problems, only 38% teachers responded positively mentioning that it is running smoothly.



**Fig. no.1**

**Radio Network Status**

Most of the students have positive attitude towards the educational radio program “English is Fun” both the Level - I & II, the study identified 82% students like this program, only 18% students have a negative attitude towards this program because of language problems. The Jhilmil educational radio program is also one of the most favourite educational radio program for the children, 64% students have said they like this program very much, only 36% students don’t like it.



**Fig. no.2**  
**Teachers’ attitude on IRI Educational Radio Program**

The above figure represents the attitude of teachers on IRI Educational Radio Program. It clearly shows that there is positive attitude from teachers’ side. Very few teachers have reflected un-willingness towards the educational radio program. According to them, the program is not effective in management system and to run properly; rather it is just waste of time. It diverts the student mind and creates problems in concentrations in other classes.

**Conclusion:**

The Educational Radio Program is a way to bring quality improvement in teaching learning process of school education. By using this IRI program, a teacher become empowered and familiar with media technology along with the academic works and it also enables them to enhance the innovative teaching skills. The using innovative technology brings innovative ideas in student’s mind which helps them in various fields like music, speech, dramatization etc. to sustain the student’s interest in the class. At present the Radio programme at a primary school level is using as a per functionary manner. But it is in the hands of a teacher to use it in a positive way, when preparing a timetable the teacher must mention the Educational Radio Programme in it. They must follow and make necessary preparation to broadcast the programme effectively and compulsorily. Even the higher authorities of the school, School Management Committee and

Head master of the school must carry out a follow up whether the programme is continuously running or not. They must encourage the teacher to follow and use innovativeness in their teaching learning process. Overall development of a pupil is possible by three ways. One is school and teacher, the other is the parents. All are also having the equal responsibilities of overall development of the child. The parents must follow the academic programme of a child and they should continuously visit to the school, enquire and get information about programme of the school and progress of their child.

**Suggestions:**

- All the government schools teacher who has been teaching in elementary schools should have proper information and training on handling the IRI educational radio program and students at school.
- The state government and the RGSM office of Madhya Pradesh should issue the programs guideline before the starting the academic session. Proper days and timing must mention in the guidelines.
- The training on Educational radio programs should be done at block level so that the actual problems can be identified and discussed for the solutions.
- Investigation of proper implementation should be done every month at least once.

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