
Research Notes

A Study of the Utilisation of Educational Media at Primary Stage

SARAT KUMAR ROUT*

ABSTRACT

This study examined the existing status and utilisation of educational radio and television programmes produced by Central Institute of Educational Technology (CIET), National Council of Educational Research and Training (NCERT) New Delhi and broadcasted through Gyan Vani (educational FM radio channel) for Educational Radio(ER) programmes and DD-1(National TV Channel), Gyan Darshan (Educational free cable channel) for Educational Television(ETV) programmes respectively. A sample of 60 schools run by Municipal Corporation of Delhi (MCD) was randomly selected from three educational zones in Delhi. Views and opinions on the utilisation of educational radio and television programmes were collected through questionnaires and opinionnaire. The results revealed that only 50 per cent schools have been utilising educational radio programme while 27 per cent schools have been utilizing educational television programme. Further, regularly/occasionally listening and viewing schools of these media were unsystematic in the process of utilisation. It was found after close scrutiny of collected data from the headmasters/headmistress (H.Ms), teachers, students and informal observation done by the investigator that the genuine cause of non-utilisation of educational mass media was apathetic attitude of the teachers than anything else, though they showed positive attitude towards them on pen and paper. The attitude of schools regularly/occasionally utilising (listening and viewing) media programme were found to be casual.

*Lecturer, Department of Education, RCIT, Najafgarh, New Delhi 110 043
Email: Saratrout2007@rediffmail.com

Introduction

During first half of the last century, the printed and written word alone reached millions of unreachable students. The advent of digital convergent media like telecommunication, radio transistor and then the television made the whole process easier, faster and easy access of information and also encouraged interactivity and interconnectivity. It has become now possible to spread education of better quality education to masses with minimum cost. The main function of education is communication of knowledge, skills and attitudes. The mass media have great potential in communicating it effectively. Formal educational setting, where teaching is merely a function of passing of knowledge, the main aim is to transmit the message in a form which facilitates the student to grasp it, understand it and share it. Audio-visual aids can contribute enormously to a communication process of its nature by making the subject matter more easily accessible and by increasing the retention factor. The students' opportunities for learning can be increased and enhanced by using a wide range of instructional aids. Therefore, radio and television as an instructional medium can play an instrumental role in accomplishing the goals of effective and systematic teaching.

The educational mass media, namely radio and television, can play important role in India to counter attack its problems and limitations particularly in the area of primary education like low enrollment, high dropout, stagnation, low achievement, poor standard of living, resource crunch, poor training facilities for teachers, lack of motivation among teachers, parents and community, unattractive instructional process, etc. On the other hand these media could be booster to address the emergent needs to provide increased access of quality education in formal and non-formal systems. *The National Policy of Education* (NPE, 1986) rightly remarked that *Modern communication technologies have the potential to bypass several stages and sequence in the process of development encountered in earlier decades. Both the constraints of time and distance at once became manageable. In order to avoid structural dualism, modern educational technology must reach out to the most distant areas and the most deprived sections of beneficiaries simultaneously with the areas of comparative affluence and ready availability.* Increasing realisation that these media could contribute to the attainment of learning provides an impetus to greater utilisation of them.

Justification of the Study

The function of radio and television as a medium for classroom instruction has completed nearly 77 years and 46 years in India, respectively. Research studies conducted on utilisation of educational radio revealed the poor utilisation of school broadcast programmes (AIR, 1964; AIR, 1972; Basu, 1996; Biswal, 1981; CIET, 1980; CIET, 2004; Goel, 1980; Kumar, 1954; Mohanty and Giri, 1976; Muhkapadya, 1993; Nagaraju, 1982; Sesharatnam, 1994; Shukla, 1977). Similarly, studies conducted on utilisation of educational television (ETV) programmes revealed that ETV programmes actually remained under-utilised (Shah, 1977; CIET, 1992; Chaudhary, 1991; Behera, 1995; Singh and Singh, 1983; Sharma, 2003; Reddi, 1996). The common reasons of such sorry state of affair include: (i) non-availability of programme schedule; (ii) lack of interest of custodian teachers; (iii) overloaded syllabus and paucity of time to complete the prescribed courses; (iv) non-functioning radio and TV sets; (v) lack of correlation between the school broadcast programme and monthly scheme of studies; (vi) poor maintenance of TV sets; (vii) erratic power supply, etc. Further analysis of review indicates that more studies on effectiveness and less studies on utilisation aspects were conducted in India. Nearly 90 per cent studies were conducted during the time of Satellite Instructional Television Experiment (1975-76) and Indian National Satellite Project (1983-84). Major changes in the field of educational technology took place after 1986 when the new Educational Technology (ET) scheme was launched by Government of India as a follow up to NPE, 1986 with a view to enhance the reach and quality of education provided to a large number of learners. Major recommendations of NPE (1986) and its Programme of Action (POA), 1992 made an impact on the production and utilisation of mass media. These include national level intervention of media inputs for spread of quality of education like (i) granting autonomous status was given to seven State Institutes of Educational Technology (SIETs) located in Uttar Pradesh, Bihar, Orissa, Gujarat, Maharashtra, Andhra Pradesh and Karnataka for production of educational media programmes for school children in their respective regional language; (ii) distribution of 2,56,566 Radio-cum-Cassette Players (RCCPs) and 37,129 Colour Televisions (CTVs) in primary schools under the Educational Technology (ET) scheme; (iii) launching of India's first truly dedicated educational TV channel, Gyan Darshan on January 26, 2000 by the Ministry of Human Resource Development (MHRD) and Prasar Bharati with Indira Gandhi

National Open University (IGNOU) as the nodal agency; (iv) launching of Gyna Vani in November 2001, an educational FM radio channel, operating through several FM stations from various parts of the country, and (v) commissioning of dedicated satellite system for education EDUSAT in the air on 26th September 2004. With regard to this scheme the Parliament Standing Committee on MHRD in its 46th Report on demands of grant inter-alia recommended as under: *“The committee is constrained to observe that CTVs and Computer supplied by the government to the schools are not being utilised effectively. The committee, therefore, recommends that effective evaluation be made each year and physical achievements as per targets may be brought out also”* (CIET, 2004).

Forgoing discussion shows that at planning and policy making level, continuous efforts have been initiated to materialise the goals of NPE-1986 and its Programme of Action (POA) 1992 for better utilisation of educational radio and television in schools. It is, therefore, imperative to know the extent to which educational media are utilised in school in the country. What are the factors responsible for the effective use? Whether factors, responsible for non-utilisation of educational media are perennial or a new factor replaced old one? How do the clientele react to educational media?

In order to answer the above questions, a series of studies of different nature focusing on the varied aspects and dimensions of educational media is the need of the hour. The study under investigation is one such attempt.

Objectives of the Study

The following objectives were formulated in the present study.

- (1) To study the extent of utilisation of educational media programmes at primary stage.
- (2) To study the utilisation process of educational media programmes,
- (3) To study the causes of non-utilisation of educational media programmes.

Delimitations of the Study

The study has been delimited in its scope as given below:

- (1) The study was confined to Class-V students, Headmasters/ headmistress (H.Ms) and teachers of primary schools run by Municipal Corporation of Delhi (MCD).

- (2) The study was restricted to educational radio programmes broadcast in Gyan Vani (educational FM radio) and educational television programmes telecast at DD-I (National television channel) and Gyan Darshan (Educational free cable channel).
- (3) The study was concerned only with educational radio (ER) and educational television (ETV) programmes produced and relayed by CIET (NCERT) New Delhi.

Method

The study was intended to find out utilisation status of educational mass media at primary school stage. Therefore, normative survey method was employed.

Population and Sample

All headmasters/headmistress, teachers and students of MCD primary schools in Delhi state having Radio-cum-Cassette Players (RCCPs) and Colour Televisions (CTVs) facilities constituted population for the present study. Keeping in view the delimitation, the sample for the present study was drawn in two phases.

(I) Sample for First Phase of Study

In the first phase of study, three educational zones namely, Najafgarh Zone, Rohini Zone and South Zone, out of twelve educational zones in Delhi were randomly selected. Further, 20 schools were randomly from each of the three zones, where both RCCPs and CTVs facilities were availed, thereby selecting a total sample of 60 schools. In this way, all the H.Ms (60) and two teachers from each school (120) were included in the sample.

(II) Sample for Second Phase of Study

On the basis of data collected in the first phase it was found that 30 schools utilising RCCPs and 16 schools were utilising CTVs. Therefore, to study the third objectives, i.e. utilisation process of educational media programmes, only the response of the H.Ms, teachers and students of these listening and viewing schools were taken into consideration. In all, 30 H.Ms, 60 teachers and 300 students (10 students from each school) were covered. Further, 16 H.Ms, 32 teachers and 160 students were included in the sample to study the utilisation process of CTVs.

Tools Used

The following three tools were developed and used.

1. Questionnaire for the Headmasters/Headmistress

The questionnaire for the H.Ms comprised of 13 questions on the aspects and sub-aspects like background of the schools, information on media facility in the school, functioning of educational media programmes, provision for time table, maintenance of radio and television sets, etc. Further, questionnaire was divided into two sections. Section-I consisted of seven questions relating to the extent of utilisation and causes of non-utilisation of educational media and section-II contained six questions relating to the process of utilisation.

2. Questionnaire for the Teachers

Questionnaire for the teachers comprised 21 questions on the same aspects and sub-aspects used for the H.Ms along with some new sub-aspects such as supply of broadcast and telecast schedules in advance, information about educational media programmes, instructional activities conducted by the teachers during the time of listening and viewing of the programmes, etc. Further, questionnaire was divided into two sections. Section-I consisted of seven questions relating to extent and causes of non-utilisation of educational media programmes and section-II consisted of 14 questions relating to the process of utilisation.

3. Questionnaire for the Student

Questionnaire for the students comprised 16 questions on identified areas such as information about the availability of media facility at school, activities conducted by the teachers during the time of listening and viewing of educational media programmes, information about the listening and viewing conditions and timings of broadcast and telecast, preference of school subjects by the students, etc.

Procedure

The researcher personally visited all the schools spread in three educational zones and administered questionnaires and opinionnaires on H.Ms, teachers and students for collection of relevant information. The information collected were tabulated and analysed by using simple descriptive statistics, i.e. computing percentages.

Results

On the basis of the analysis and interpretation of the results, the following main findings have emerged out of the present investigation.

I. Extent of Utilisation

Working Conditions of RCCPs and CTVs: About 78 % of the H.Ms of the schools reported that RCCPs were in working condition and about 40% of them reported that CTVs were in working condition. The remaining 22% of the H.Ms in case of RCCPs and 60% of the H.Ms in case of CTVs reported that these sets were not in working condition.

Utilisation of RCCPs and CTVs: About 50% of the H.Ms of schools admitted utilising RCCPs. Out of them 30% were using it regularly and 20% used it occasionally. On the other hand, only 27% of the H.Ms admitted utilising CTVs. Out of them 10% were used regularly and 17% used occasionally.

- *Availability of Transmission Schedule in Schools:* Not a single school had received transmission schedule from any agency as stated by the H.Ms and teachers.
- *Provision of Fund for Repair and Maintenance of RCCPs and CTVs:* Table 1 shows that cent per cent of utilising schools of RCCPs and CTVs have been repairing and maintaining sets regularly. For minor defects they have been managing funds from various sources, such as hobby fund, science fund, P.T.A fund and H.Ms fund. For major defects they were writing to zonal offices of MCD schools.

TABLE 1
Provision of Funds for Repair and Maintenance of RCCPs and CTVs

Media	N=H.Ms	Yes	No	Sources of Funds
RCCPs	60	30 (50)	30 (50)	Hobby Fund-12 (20) Science Fund-9 (15) P.T.A. Fund-5 (8) H.M.Fund-4 (7)
CTVs	60	16 (27)	44 (73)	Hobby Fund-9 (15) Science Fund-4 (7) P.T.A. Fund-3 (5)

(Number within parenthesis indicates percentage)

- *Supervision by the School Inspector:* It was found that in maximum schools (more than 85%) supervision was not done properly by the school inspector. Some teachers have also mentioned that they collect information by phone instead of coming to the schools. Further none of the H.Ms or teachers endorsed that school inspectors came to enquire about the functioning status/process of RCCPs and CTVs programmes.
- *Awareness of Educational Media Production Agency:* Though majority of the H.Ms admitted that they were aware of educational media service, but less than 40% of them correctly mentioned the title and name of broadcast and telecast channel. As far as teacher's responses were concerned, 70% of the teachers admitted that they were aware of educational media. Nearly 50% and 43% of them correctly mentioned the title and name of broadcast and telecast channels, respectively. Further 18% of the H.Ms and 36% of the teachers could correctly respond name of the production agency.
- *Participation in Seminar or Orientation Programmes on ER and ETV:* Small percentage (33%) of the H.Ms have attended seminar and orientation programme.
- *Educational Media User-Teachers Training:* Small percentage (23% and 18%) of the teachers have attended user teachers training on ER and ETV programmes, respectively.
- *Contribution of the Teachers in Production Process:* Majority of the teachers were not involved in production process of ER and ETV programmes. Only a few percentage (8%) of the teachers were involved in writing educational radio script.

II. Utilisation Process

(i) Response of the H.Ms and Teachers

- *Purpose of Utilization of RCCPs and CTVs Sets:* All the H.Ms of the utilising schools of RCCPs and CTVs responded that they have been utilising these for listening and viewing to the content-based educational media programmes. This was further corroborated by 95% of the teachers of the same schools as well, whereas five per cent of the teachers of the utilising schools did not respond about the purpose of utilisation of RCCPs and CTVs. It is a positive feature to note that cent per cent of the H.Ms of the utilising schools of RCCPs and CTVs have been using these sets for the

purpose of listening and viewing to the content based educational media programmes.

- *Provision of Separate Period in the Timetable:* The data on accommodation of the broadcast and telecast programmes in school time table is given in Table 2(a) and (b).

TABLE 2 (A)
Provision of Separate Period in the Timetable for Listening of ER Programmes

Respondents	N	Yes	No	Display of Timetable on the Notice Board	
				Yes	No
H.Ms	30	13 (43)	17 (57)	5 (17)	8 (26)
Teachers	60	24 (40)	36 (60)	12 (20)	12 (20)

(Number within parenthesis indicates percentage)

It may be seen from Table 2(a) that 43% of the H.Ms and 40% of the teachers of the utilising schools of RCCPs reported that they have a provision of separate listening period for ER programmes in the timetable. On further probing, only 17% of the H.Ms and 20% of the teachers reported that they are displaying it on the notice board. On the other hand, 57% of the H.Ms and 60% of the teachers of the utilising schools reported that they did not have any provision of separate listening period in the timetable. However, they have been arranging listening time by utilising the classes of other subjects.

TABLE 2 (B)
Provision of Separate Period in the Timetable for Listening of ETV Programmes

Respondents	N	Yes	No	Display of Timetable on the Notice Board	
				Yes	No
H.Ms	16	5 (31)	11 (69)	2 (13)	3 (18)
Teachers	32	8 (25)	24 (75)	3 (10)	5 (15)

(Number within parenthesis indicates percentage)

It is evident from the Table 2 (b) that 31% of the H.Ms and 25% of the teachers of the utilising schools of ETV programmes responded that they have provision of separate periods in the timetable for

viewing purposes. Further probing revealed that only 13% of the H.Ms and 10% of the teachers were displaying it on the notice board. 69% of the H.Ms and 75% of the teachers of the utilising schools of ETV programmes revealed that they have no provision of separate period for viewing purposes in the timetable. They also reported that the classes meant for other subjects are adjusted many a times while viewing ETV programmes without prior intimation.

- *Separate Room Facility for Listening and Viewing:* Information in this aspect was collected from the H.Ms and incharge teachers.

TABLE 3 (a)
Separate Room Facilities for Listening of ER Programme

Respondents	N	Yes	No	Arrangement of Classes		
				Respective Classroom	Science Room	Computer Room
H.Ms	30	-	60	27 (90)	02 (07)	01 (03)
Teachers	60	-	60	53 (88)	04 (07)	03 (05)

(Number within parenthesis indicates percentage)

Table 3 shows that cent per cent of the H.Ms and teachers pointed out the lack of separate room for listening of ER programmes. The data further indicates that about 90% of the H.Ms and 88% of the teachers of the utilising schools of ER programmes were arranging classes for listening in the respective classrooms. Nearly seven per cent of the H.Ms and equal percentage of the teachers reported that they were arranging classes for listening of ER programmes in science room. But only three per cent of the H.Ms and five per cent of the teachers responded that they have been arranging classes for listening of ER programmes in computer room.

TABLE 3 (b)
Separate Room Facilities for Viewing of ETV Programme

Respondents	N	Yes	No	Arrangement of Classes		
				Respective Classroom	Science Room	Respective Classroom and Hall
H.Ms	16	-	16	8 (50)	6 (38)	2 (12)
Teachers	32	-	32	17 (53)	11 (34)	4 (13)

(Number within parenthesis indicates percentage)

It is evident from the Table 3 (b) that none of the schools have separate room for viewing of ETV programmes. When asked about the arrangement of the class for viewing of ETV programmes, nearly 50% of the H.Ms and 50% of the teachers responded that they were arranging it in the computer room. Besides, about 38% of the H.Ms and 34% of the teachers reported that they have been arranging viewing classes in science room. The remaining 12% of the H.Ms and 13% of the teachers reported that they have been arranging it in the respective classrooms.

It is thus clear that none of the schools have separate rooms for listening of ER programmes and viewing of ETV programmes. Further, it has been observed that the utilising schools have been using different rooms, viz. respective classroom, hall, science room, computer room for listening and viewing the same.

- *Satisfaction of Teachers with the Listening and Viewing Conditions:* Majority (more than 88%) of the teachers were not satisfied with listening and viewing conditions of ER and ETV programmes due to small size of the classroom, noisy environment and small size of CTVs, shortage of speaker.
- *Maintenance of Records about Utilisation:* It may be noted that only seven H.Ms (i.e. 23%) produced the utilisation record of ER programmes as per the request of the investigator during the time of data collection. On the other hand, 37% of the H.Ms reported having maintaining the utilisation records of ETV programmes.
- *Organisation of Pre-broadcast and Telecast Activities:* About 15% of the teachers of the utilising schools of RCCPs have been organising pre-broadcast activities such as introducing topics, establishing rapport with the students, and providing information about content coverage. The remaining 85% of the teachers responded that they were not organising pre-broadcast activities. The main reasons of not doing so were non-availability of transmission schedule and overcrowded classroom.
- *Organisation of Post-broadcast and Telecast Activities:* About 60% of the teachers of the utilising schools of RCCPs have been organising post-broadcast activities, namely asking questions on key learning point, relating text to programmes and giving home work relating to programmes. The remaining 40 % of the teachers responded that they were not organising post-broadcast activities.

In case of CTVs about 31 % of the teachers of the utilizing schools reported that they have been organizing post-telecast activities, namely asking questions on key learning point, and relating text to programs. The remaining 69 % of the teachers responded that they were not organizing post telecast activities.

(ii) Response of the Students

- *Awareness about Educational Radio and Television Programmes:* A large majority (more than 90%) of the students were aware about ER and ETV programmes and its timings.
- *Interest of the Students in Listening and Viewing ER and ETV Programmes:* A large majority (More than 78%) of the students were interested in listening ER programmes and viewing ETV programmes. The reasons of such likeness were – it helps them to understand study matter, helps to gain more advance knowledge.
- *Preference of ER and ETV Programmes:* A large majority of the students preferred to listen ER programmes on language, moral stories, history and science. Majority (more than 50%) of the students preferred to view ETV programmes on science, history, themes related to geography, various forms of arts, moral stories and mathematics.
- *Place of Listening and Viewing:* Majority of the students were listening ER programmes while sitting on the bench in their respective classroom. On the other hand, majority of students view ETV Programmes by sitting on the floor covered with carpet in the computer room/common hall/science room.
- *Maintenance of Discipline of the Media Classroom:* Majority (more than 64%) of the students have reported about indiscipline in the class during the time of listening and viewing of ER and ETV programmes because of noise from the peer groups due to overcrowded classroom and interruption on part of the other teachers.
- *Need of Pre- and Post-broadcast and Telecast Activities:* More than 75% of the students felt the need for pre-broadcast and telecast activities. Similarly a large majority (more than 81%) of the students were in favour of post-broadcast and telecast activities
- *Note Taking by the Students:* Not a single teacher was encouraging children to take notes on important points while listening and viewing ER and ETV programmes.

- *Feeling of Loss*: Majority of the students were feeling loss of new ideas, if they were absent in educational media classes.

III. Causes of Non-utilisation

Non-utilisation of these media in places, where the infrastructure and other facilities are available, is a matter of concern. H.Ms and teachers of 50% and 73% schools admitted non-utilisation of RCCPs and CTVs for listening and viewing of ER and ETV programmes, respectively. When asked about the reasons for non-utilisation, the H.Ms, teachers listed various reasons (Table 4)

TABLE 4
Causes of Non-utilisation of ER Programmes

Sl.No	Causes	No. of H.Ms	No. of Teachers
1.	Transmission schedule not made available	25 (83)	53 (88)
2.	Timetable already crowded	21 (70)	41 (68)
3.	TV set was out of order	28 (64)	55 (63)
4.	Difficult to organise listening by all students at the same time	18 (60)	40 (66)
5.	Radio set was out of order	17 (57)	36 (60)
6.	Teachers not oriented to the pattern of using radio in education	14 (47)	20 (33)
7.	Lack of synchronisation of radio lessons with classroom teacher	10 (33)	35 (58)
8.	Erratic supply of electricity	12 (40)	27 (45)

(Number within parenthesis indicates percentage)

It may be seen from the Table 4 that most important cause of the non-utilisation of educational media was non-availability of transmission schedule as stated by 83% of the H.Ms and 88% of the teachers. The next cause of non-utilisation was due to syllabus load which was responded by 70% of the H.Ms and 68% of the teachers. The next cause in descending order was the mechanical defects of CTV sets which was responded by 64% of the H.Ms and 63% of the teachers. The space of the classroom, where radio and TV sets were installed, was not adequate enough for the viewers. This has been stated as by 60% of the H.Ms and 66% of the teachers. Mechanical defects of radio did not allow its use as stated by 57% of the H.Ms

and 60% of the teachers. On the other hand, teachers were not oriented to the pattern of using radio and television in education, as stated by 47% of the H.Ms and 33% of the teachers. Lack of synchronization of radio and television lessons with classroom teaching was observed by 33 % of the H.Ms and 58% of the teachers. Erratic supply of electricity was cause for non-utilisation of ETV programmes as stated by 40% of the H.Ms and 45% of the teachers.

A closer scrutiny, however, showed that the underlying problem appeared to be more of lack of interest for use of RCCPs and CTVs than anything else. Some schools, nevertheless, had genuine difficulties, which included non-availability of programme schedule, trained personnel to repair the sets, separate room for listening and viewing, discouragement from parents, sets were out of working order, erratic electricity supply, lack of separate period and trained teachers to use it as medium of education, etc.

Suggestions for Proper Utilisation of Educational Media

1. Monthly transmission schedule prepared by CIET (NCERT) and IGNOU needs to attach guides notes, feedback schedules and scope of each programme besides day-wise programmes for different grades. It may be helpful to school teachers in integrating school broadcasts and telecasts into classroom instruction.
2. The first and the foremost steps towards the effective utilisation of the school broadcast and telecast service should be that the State and District Education Department may explicitly place due emphasis on the use of radio and television as a part of their educational pattern.
3. State Department of Education in cooperation with CIET needs to send the transmission schedules and feedback schedules to the schools.
4. State Department of Education should make a mandate for including school broadcast and telecast programme as a part of regular timetable.
5. New RCCPs and CTVs sets need to be provided to the utilising schools to handle the problem of multi-section of the students in a grade.
6. State Department of Education should provide adequate fund for maintenance of the sets and construction for separate building for media classroom/audio-visual classrooms.

7. CIET in collaboration with the State Department of Education should organise training and orientation programme for school inspectors and teachers, so that they can organise pre- and post-broadcast activities and answers the queries of the students.
8. The teachers and students may be given more chance to participate in the production of ER and ETV programmes, so that they would be encouraged to utilise the ER and ETV programmes effectively.
9. State Department of Education may organise workshop and seminar for teacher educators, so that they can persuade the pupil teacher during their pre-service training for using this programme when they will become teachers.
10. The School Inspector should provide proper guidance to schools on a regular basis on school broadcasts and help them to remove their difficulties on this aspect. They should take account of radio listening and television viewing in their inspection reports.
11. Grade-specific and stage-specific programmes need to be broadcasted and telecasted.
12. CIET should avoid repeat broadcast and telecast ER and ETV programmes.
13. No deviation should be made in the programmes schedule without prior intimation to all concerned.
14. Stringent rules may be made for the cable operators for giving signal related to Gyan Darshan channel.
15. Circular must be passed by the State Government to Power Grid Corporation to supply power during the school broadcast and telecast timings.

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