

CHAPTER I

INTRODUCTION

1.0 INTRODUCTION

The world witnesses a highly competitive race heading towards progress. Each and every country either consciously or unconsciously is participating in that race. Any country, for its progress, has to look after its economic, political and social demands continuously aiming towards an all round development. Analysing the process of all round development of a nation, it is seen that the educational system plays a vital role in generating qualified and trained manpower instrumental to development. If educational system is considered as a sub-system of the national system, continual reorganization and modification of this sub-system is most essential, and it can be brought about by improving the methods, media and techniques involved in it. This improvement in the methods, media and techniques can be carried out by the application of the principles, theories and laws of the physical and behavioural sciences. Application of these principles, theories, etc. to make the educational process effective in terms of achievement of objectives is known as Educational Technology. This is a broad organized body of knowledge applied in a variety of ways in many different settings. It is through the vehicle

of research that this technology has been evolved, and now it is in the process of advancement. Educational technology has been made use of in different ways. Some of these are technology of mass instruction or large group instruction and the technology of individual instruction. Radio, television, projector, films, newspapers, etc. are implements of the technology of mass instruction, whereas teaching machines, programmed learning materials (PLM), textbooks, etc. belong to the technology of individual instruction.

In the modern world, new knowledge is created every moment. There is a constant need for change in the educational system, due to the increase in population, socio-political changes and the speed at which knowledge becomes outdated. More people have to be educated for an increasing span of their lives so that they can absorb more of the expanding and changing body of knowledge. To meet these needs, the aforesaid media of communication and the new methods and techniques of instruction have appeared on the scene through development of science. Inventions like radio, television, films, etc. which are the offsprings of the principles of physical sciences had been mainly used for entertainment purposes. Educational technologists have made them enter into the arena of instructional process for various advantages like wide coverage, uniformity of presentation, economy of costs etc. In the recent decades programmes of radio

and television have been broadcast for educational purposes all over the world to meet the pressing needs of day to day developments. Schramme et al. (1967) have termed them as the new educational media in action. They have stated:

Developing countries every where, struggling to meet their vast and urgent educational demands, are confronted by formidable obstacles: shortage of teachers, facilities and money; outmoded curricula and instructional materials; inadequate and overtaxed administrative structures; scattered populations hard to reach; traditions and inertias resistant to change. Searching for ways to overcome these obstacles, educational leaders and planners in these countries have been asking persistent questions - of the IIEP among others - about the so called 'new educational media', such as television, radio, films and programmed learning. Might these be of help to them? Specifically, they have asked; Can these new media produce good educational results? What do they cost, can we afford them - and under what circumstances? What are the practical administrative, logical problems involved? How do we plan their use and how do we get started?

It is hoped that these new media can be used to upgrade instruction at different levels, to train teachers, to extend the school to pupils who have no schooling, to help develop literacy and fundamental education and to facilitate adult education, health education and other essential activities in the community. Before putting them into action, the potentialities of the media are to be ensured individually and in various combinations. The paragraphs below intend at discussing the potential of radio as a medium of instruction.

1.1 RADIO AS A MEDIUM OF INSTRUCTION

Radio came into picture earlier than television. It goes without saying that radio, in spite of the introduction of television still occupies a predominant place not only in the field of mass communication but also in the field of education. It is an informal educational institution to which all, irrespective of age, sex and qualification, have access. It can serve persons ranging from a primary school child to his grandfather. As Barlow (1967) puts it, "Since radio began forty years ago, it has become part of everyday life for countless millions of people". This offspring of the physical science has become so popular that it has generated in people not only interest in listening to the programmes coming through it but also in developing skills of designing various materials for broadcasts. As it has been noted;

Having outgrown the magic of its early days, the radio has gradually assumed its destined role of man's newest and the most articulate companion. In countless homes in many countries, it has come to install itself as 'one of the family'. (Paul, 1977)

The educational planners, educational theoreticians and the teachers have realized that in radio they have a teaching aid of great power. As a tool of education, its need in real classroom situations is felt by educational

planners, research workers and teachers. It is a gadget through which information of all kinds can be provided in the classroom, which the teacher alone cannot. Levenson (1958) while stressing this aspect of the importance of radio in the classroom has remarked:

Radio and television provide the classroom with windows on the world with magic carpets that transport pupils to other lands, to other sections of their own land and to new and different climates of opinion and culture.

There will be very little doubt about the innumerable benefits that radio broadcasts bestow both on teachers and students through the programmes of their interest. Considering its real importance in the teaching-learning situation, Cauling (1957) says, "With radio, the child is still free to move about the room as in the BBC' music, movement and mime series or he may examine maps, pictures, specimen or BBC pamphlets which he listens". Radio can help the teacher to keep his knowledge uptodate, can provide realistic content for academic studies, can keep listeners in touch with leaders and experts and also can provide upto the minute information by bringing together a variety of things, people and places. Talking on school broadcasts through radio, Kapoor (1961) has stated that a good school broadcast can give the teacher, through its matter and the freshness of its presentation, an additional means of developing his own effort and a

greater incentive to sustain thought about his own craft. The benefits to the students are numerous. Among them are a new joy in learning, increased knowledge, a greater command of vocabulary, capacity for more concentrated and more critical listening, and increased fluency and confidence in speech and discussion. Taking a gestalt view of the above words, one may infer that radio can do everything. No, certainly, it does not mean that. As a carpenter uses various tools and selects them for different purposes, radio can be used as one of the materials like books, pictures, etc. in the instructional process. It is comparatively inexpensive and as such it can be within easy reach of all kinds of educational institutions. By improving the quality of radio programmes for educational purposes, a desirable impact can be brought about. The future of radio will be founded on the transmission of high quality programmes which meet current needs of the teachers and their pupils.

1.2 SCHOOL BROADCASTS THROUGH RADIO

Radio broadcasts in India, started in the year 1927 by private agencies, were taken over by the Government in the year 1930 and operated in the name of Indian Broadcasting Service. The nomenclature of All India Radio came into force from 1936 and it is functioning in the name of "Akashvani" since 1957. It is the biggest media

organization of the Ministry of Information and Broadcasting and its programmes are received by more than twenty million¹ radio receiver sets from 84² stations scattered over the whole country. The programmes are beamed from 157 transmitters covering 77.6 per cent of the geographical area and 89.35 per cent of the population of India. Also the external services transmission presents programmes in 17 foreign languages and eight Indian languages for about 56 hours per week.

For students in schools, 35 stations broadcast programmes based on the school curriculum and 20 auxiliary stations relay these programmes to reach students in the interior regions. Even before A.I.R. came into existence, there were occasional broadcasts for schools from Bombay and Calcutta from January 1929 and April 1930 respectively. However, regular broadcasts of a thirty minute programme for school children were begun twice a week at Calcutta from November 1937, due to the demands placed by both the University and the Department of Education of Bengal. Being encouraged, A.I.R. invited a number of educationists to give their views and suggestions on starting regular broadcasts for schools. Getting a positive response from the educationists and a fair indication from the educational authorities to cooperate in drawing up

1. As on 31st December, 1977.

2. As on 31st December, 1978.

programmes and allocating funds for schools to buy radio sets, the A.I.R. started broadcasting the programmes for schools from Delhi, Calcutta, Madras and Bombay without waiting for the schools to acquire radio sets. It was hoped that the starting of the programmes would motivate schools to buy radio sets. Pamphlets were distributed to the schools owning a radio set. This was taken seriously and the A.I.R. named these programmes as educational broadcasts. In the year 1956, the Government of India, through the Director General of A.I.R., tried to organize the programmes and extend help for better utilization of school broadcasts by the schools. Circulars were issued to the State Directorates of Education for its full utilization. Since then, the A.I.R. through its different stations has been transmitting a series of programmes for school students in more than a dozen languages from 35³ stations for different regions of the country. These programmes are beamed under the banners of primary school broadcasts and secondary school broadcasts. Subjects covered through these programmes are varied in nature such as Regional languages, General Science, History, Geography, Social Studies, etc. Also, the government is incurring heavy expenditure (about Rs.45,000=00 per station) in organizing these programmes every year.

3. As on 31st December 1978.

1.3 SCHOOL BROADCASTS, AND A.I.R., CUTTACK

The first programme of school broadcast from A.I.R., Cuttack was transmitted on 24th October, 1960 for the school children of Orissa. The frequency of broadcast was thrice a week on alternate working days for a duration of thirty minutes commencing from 12.30 P.M. The students of classes IX, X and XI (now grades VIII, IX and X) were the beneficiaries of the programmes. Subsequently, improvement came in respect of time, duration and continuity of the programmes. At present, programmes are broadcast on each working day from 12.30 P.M. to 12.50 P.M. for the students of all the grades except grade X. Some programmes are also re-broadcast on Sundays to enable the absentees to listen at home. The programmes are simultaneously broadcast by the ancillary stations at Sambalpur and Jeypore to give wide territorial coverage in the State of Orissa. All the programmes are based on the curricular units as outlined in the syllabi for different subjects. The planning of the programmes for the whole year is done in advance in collaboration with the subject committees appointed by the Board of Secondary Education, Orissa. There is also a consultative panel which advises the A.I.R. on different aspects of school broadcasts from time to time. Not less than two hundred programmes spread over different curricular subjects for different grades are presented every year. In recent years the "English by radio"

programmes prepared by Central Institute of English & Foreign Languages (CIEFL) are also broadcast along with these programmes. Teachers' notes on the programmes on English and Oriya are sent to the schools for facilitating utilization at the listening end. For this, the Educational Technology cell of the Department of Education of the Government of Orissa collaborates with the A.I.R.

1.3.1 Production of Programmes

The A.I.R. has a separate unit called the "Educational Broadcast Unit" which looks after the overall organization of the programmes, the selection of topics and the selection of teachers; and the unit has a producer, a compere, a script writer and an assistant editor.

Teachers and experts from the secondary schools and other institutions are selected to write the scripts and present the programmes with the help of persons they select. Sometimes A.I.R. artists also participate in programmes where more expertise is required. Ordinarily, the programme is recorded in the studio of the A.I.R., Cuttack. The editor, after listening to the programme, finally okays it and the programme is kept ready for broadcast. Each programme has the components of the signature tune, a brief introduction of the topic by the editor/producer, the content, an entertaining song and the closing announcement followed by the signature tune.

1.3.2 Listening in the Schools

Schools are supposed to register their names with the A.I.R. as listening schools. Every year before the commencement of the academic session, pamphlets, charts, teaching notes, evaluation blanks etc. are sent to the listening schools in advance. The pamphlet contains the necessary instructions for effective listening and the appropriate activities to be conducted to supplement the broadcasts.

As the programme is broadcast at a time when the children are in the schools, the Board of Secondary Education, Orissa has prescribed a period in the school timetable for listening to the school broadcast programmes.

During the broadcast period, in some schools, a transistor radio-
/ set is carried to the classroom; in some others the students listen to it either in the staff common room, headmaster's office, verandah or any other room depending upon the availability of the physical facilities. The teacher-in-charge is supposed to remain present for listening along with the students and perform the accompanying activities to supplement the programmes.

1.4 SOME BASIC ISSUES

For effective functioning, any system should operate with ^ascientific base, systematic planning and critical experimentation. The system of school broadcasting

involves personnel of different professional fields and large amount of financial resources. The programmes beamed from this system are received by a large audience scattered over different parts of the state. Such a vital programme should have long ranging objectives, planning, organization and an efficient administration. Each of these aspects should be guided by the researches in this specific field and by those done in the related fields like - communication, technology of broadcasting, etc.

Even though programmes are prepared, broadcast and received by the audience, some basic questions remain to be answered. What is the impact of these programmes? Are the objectives behind the net work fulfilled? A clearcut and /detailed information about the objectives, adequacy and quality of the programmes is not available at hand. Does the planning at the transmitting end take proper care of these basic elements while transmitting the programmes? Do they have expertise in doing the things according to the psychological and educational background of the children? Do they meet the real academic needs of the children? What about students' reactions? Do they enjoy the programmes? How far do they accept or reject the presence of radio in the classroom? What about teachers? ^{it} Is/not a mere repetition of subject matter for them? Do the School Broadcast Programmes (SBP) help them to gain new methods and technique of teaching? Do they feel

that their knowledge is updated by listening to programmes meant for children? There is a feeling among teachers, administrators, and educational planners that the extent of listening to SBP is not very much encouraging. It is not because the programmes are bad, quite a few of them are good and some of the best teachers in the state are involved in their planning and presentation. Persons involved in instruction also appreciate in theory the utility of the SBP. Random visits to schools from time to time reveal that often the set is out of order or it is locked up for safety in the headmaster's office or it is installed in the headmaster's residence. Only an extensive survey can reveal how many children actually listen to the programmes. Even in the schools where listening to SBP is a part of everyday curricular activities, the technical knowhow of the effective listening and their appropriate utilization appears to be missing among the broadcast user teachers. Do they need some sort of training on the utilization of these programmes?

1.5 NEED FOR RESEARCH

Considering all the preceding issues, it appears that this medium of broadcasting has entered education by itself and still operates in isolation. Perhaps the educational authorities and the teachers fail to see the worth of the programmes and consider the

SBP to be an exclusive concern of the A.I.R. Lack of co-ordination seems to be prevailing in the organization and administration among the different sub-systems of the educational system. Also, efforts to consolidate and integrate the missing links between the transmitting end and the receiving end are not maintained adequately. This may be done through a systematic evaluation of each of the aspects connected with this system, which, in turn, might provide the basic footing for scientific planning, organization and implementation.

Any system, in terms of its attainment of pre-set objectives, should start with a research base. Even if it does not start with a research base, some attempts should be made to study the operating system on the basis of which re-organization can be brought in by bringing new elements into the picture and connecting them meaningfully. Alternate approaches can be structured and the best ones be selected according to necessity.

School broadcasts, when looked at in relation to the instructional situation, involve various components like teacher, students, instructional aids, instructional techniques, etc. To enable the SBP to attain its desired objectives, study of the existing situation in terms of the availability of needed components, finding the gaps, if any, and organizing them systematically to function.

meaningfully, researches are very much essential. Researches should go ahead with systems approach with a view to awakening the total system like a vehicle mechanic, checking the functions of each of the individual elements fitted into the machine. Before planning for research, the findings of the previous researches should be taken into consideration and the gaps found should be attempted to be bridged up.

1.6 RESEARCHES DONE ON SCHOOL BROADCASTS

Although half a century has passed since the inception of educational broadcasts in this country, sufficient researches have not been done for bringing an improvement in the system. The investigator has not come across any study at the Ph.D. level. Two studies have been found to be conducted at M.Ed. level and a few more were taken as departmental projects.

Joseph (1976) conducted a survey to study the effects of school broadcasts on the students of secondary schools of Baroda city. Through observation, interview and questionnaire, data were collected from students, teachers and principals belonging to 22 secondary schools of English and Gujarati medium. The main findings were:

- the timings of the radio lessons seem to be odd and unsuitable.
- Ninety per cent of each radio lesson is directly connected with the textual matter.
- the quality of the programmes has remained static for a long period.
- teachers are not given special training and instruction regarding the use of radio lessons.
- neither do the authorities nor the teachers persuade or provide chances to the students for listening to radio lessons.
- there is no proper coordination between the radio station and the schools.
- the Audience Research Officer's work does not seem to be very fruitful and effective.
- students like to listen to the radio lessons and they are aware of its usefulness.
- students like to listen to radio in groups rather than in seclusion.
- teachers believe that provision for radio lessons

should be made in the school time table.

- a reasonable number of teachers are found to be attending the educational broadcasts meant for them.
- when radio lessons are utilized in schools, on rare occasions, the teachers are found to be - conducting neither preparatory nor follow-up activities.
- the present educational broadcast programmes are found by teachers to be partially fulfilling their objectives.
- most of the schools under study were found without a radio and those that are in possession of it, keep it as a matter of decoration rather than a matter of utilization.
- hardly any school is found to have made provision for radio listening in their school time-table.
- teachers in general are found to be ready to utilize a part of their time in the school for radio lessons.
- the listening to the educational broadcast is

enhanced when the topic is interesting and the unit is made enthralling by the inclusion of episodes and other scenes from everyday life.

- radio lessons are devoid of expert guidance and are the source of enormous waste of money and manpower.

The study carried out by Shantha (1976) through questionnaires and interviews of pupils, teachers and heads of 12 schools of Bangalore city reveals that:

- majority of students, teachers and headmasters were in favour of the school broadcast being held in the afternoon session.
- majority of the students, teachers and headmasters wished the entire period of 45 minutes to be devoted to broadcast use.
- there is a need of having pre and post broadcast activities for supplementing the radio lessons.

The survey conducted by Mohanty and Giri (1976) on 65 secondary schools of Cuttack, Puri, Ganjam, Mayurbhanj and Dhenkanal districts of Orissa through

questionnaires to teacher monitors shows that:

- the students are not usually exposed to the school broadcast programmes in their own classrooms.
- the teachers in majority of cases do not attend the programmes along with the pupils.
- most of the programmes are in the term of narration and discussion.
- pre and post broadcast discussion does not seem to be organized in most of the schools.
- most of the respondents wish to have more time for school broadcast programmes.
- most of the programmes have contributed to the development of knowledge both of teachers as well as students.

A project was taken by the NCERT (1975) to study the functioning and utilization of school broadcast programmes in Jaipur (Rajasthan). In this study, an attempt has been made to assess both the transmitting and receiving ends. Data concerning SBP were collected from officials of District Education Department, officials of A.I.R., and teachers and students belonging to 28 higher secondary, secondary, middle and primary schools.

The findings show that:

- the A.I.R. had the liberty to broadcast to schools without being adequately and continuously guided in this respect by a well-represented body of the Education Department.
- different sub-committees of school broadcasts have worked independently and have not co-ordinated in presenting the programme series in a joint and sequential manner.
- the Inspectorates of schools did not have an upto date list of schools having radio sets.
- there is ^{or no} little dialogue between A.I.R. and Inspectorate of schools about the schools which have listening facilities and need supply of programme chart and other supportive materials. The lists maintained by the two agencies in this respect were essentially different from each other.
- Only a negligible number of primary schools have listening facilities.
- the A.I.R. does not get a picture of the utilization of school broadcasts and reaction of the audience towards these.

- officers of the Inspectorate generally do not take the utilization of radio into account during their inspection of the schools.
- in none of the 28 schools taken for study, was radio tuned to school programmes on the day of the visit by the investigators.
- out of 583 students, only 55 students from three schools were aware of the day and the time of school broadcasts for their respective classes.
- non-availability of programme chart, and time table being too crowded to accommodate a period on radio lessons were the main difficulties for non-participation in radio lessons.
- among the various reasons for under utilization of radio lessons, lack of a firm policy and emphasis by the educational authorities on school broadcasts emerged to be the most predominant one in the minds of the heads of the schools.
- radio lessons not synchronizing with teaching of a particular subject in classroom was another important reason in that respect.

- the teachers recognized the potentials of school broadcasts in giving better and new information to the students. But at the same time they believed that radio lessons were not complete in themselves and these were not presented in an interesting and effective manner.

Another study by NCERT (1977) planned to assess primary school broadcast was conducted in Jalgaon (Maharashtra). In this study, a comparison has been made between 63 primary schools under the Jalgaon District Educational Project and 16 non-project schools having radio sets. The Jalgaon District Educational Project launched in 1970 had an action programme on use of radio in the primary schools. One hundred fifty primary schools were provided with radio sets, of which 63 schools were selected randomly for the purpose of this study. Data were collected from heads of the schools, teachers and students through questionnaires and interviews from both project-schools and non-project schools. The comparison shows that as many as 92 per cent of the project-schools utilized radio as against 25 per cent non-project schools. Among various factors that contributed to relatively greater acceptance of radio in the project schools, the salient ones were organizational structure of the project, provision and maintenance of radio sets,

teachers' guidance notes, supervision by project staff, maintenance of records, etc.

The limitations on the way of fuller utilization of radio as revealed by the study are due to problem of synchronization of radio lessons with the sequence of teaching in the class, lack of provision in the time table, radio sets being out of order, poor reception by radio sets, lack of separate radio room, lack of liaison between the district education department and the district educational project, etc.

The study further reveals that the teachers held a positive attitude towards the school broadcasts; both teachers and students liked the programmes such as poems set to music and dramatised history lessons more than other programmes.

The investigation conducted by Sudame, Biswal and Sahoo (1977) through an exploratory study enquired into the planning and administration of educational broadcast programmes at the transmitting end of A.I.R., Cuttack. The important findings of this study show that:

- among various educational broadcasts, the school broadcasts seems to be more systematic in terms of its planning and administration but the number of programmes broadcast over a

year does not appear to be sufficient for covering the curricular units of different grades at the secondary level.

- a few schools have registered with the A.I.R. for listening to school broadcasts.
- the educational broadcast unit is poorly staffed in terms of the amount of work needed to be done.
- there is a need for more co-operation from the agencies like schools, Directorate of Education, Educational Technology Cell, Post-graduate Departments of Education and the Research Units of University Teaching Departments.
- evaluation reports are not received adequately from the heads of the schools.

Despite the absence of sufficient researches, and despite the disappointing findings of those researches, there are on the air many broadcasts highly enjoyable and educationally valuable to pupils and teachers. However, comparatively a few teachers and students utilize this resource made available through technological advancements. Radio broadcasts, like books, magazines, motion pictures and other teaching aids, can be used effectively for the

achievement of educational objectives. The possibility of radio as a medium of communication, as an agency of education, and as an equipment of magical attraction have only been touched so far. So its place and role in the instructional process are yet to be searched through experimental methods before putting it into real practice.

1.7 THE PRESENT STUDY

Considering the above research findings, it was felt that this programme has not been popularized and sufficient attention has not been drawn towards the educational value of this medium. Further, these studies have only gathered information regarding the organizational structure at the transmitting end and the state of utilization of SBP at the receiving end. Each of them has attempted to find out the causes of poor functioning and non-utilization of the programmes. But attempts to bring solution to the problems are missing in all those studies. The gestalt of the findings of these researches shows that there is a wide gap between the transmitting end and the receiving end of SBP. The present study has aimed at bridging up the gap between the two ends by bringing new elements and connecting them meaningfully. Hence, it was thought to be necessary to study the present position of secondary school broadcast programmes both at the transmitting end and receiving end in detail, and to find out various possibilities for their enrich-

ment by organizing
 / concomitant supplementary activities.

Rationale

Any instructional process involves the use of various equipment and techniques which are the products of the physical and behavioural sciences. For understanding, controlling and increasing the efficiency of any instructional process, it is not wise to study the use of various equipment and techniques in isolation. They have to be considered as a total system, meant for the attainment of the instructional objectives.

SBP, being an instructional setting in wider instructional process, involves man and material and it again requires continuous interaction with the learners for getting the optimum learning outcome. In order to obtain the continuous interactional situation, organization of certain instructional activities based on the principles and theories of behavioural sciences is called for. Maximisation of the instructional activities in terms of achievement of objectives, is possible by bringing additional materials into the picture. Through systems approach, the instructional process in the presence of SBP can be accelerated by activating each of the components involved in the whole process. It can be led to the optimum height by connecting the components in a meaningful manner. Since SBP of twenty minutes' duration has a place

in a fortyfive minutes' time period, the possibility of organizing pre-broadcast, during broadcast and post-broadcast activities cannot be ruled out. Pre-broadcast activities may arouse interest and bring readiness in the minds of the students to receive the contents of the programmes broadcast. Activities like viewing at the time of listening and writing the key points coming through the broadcast, may also help sustain the attention throughout the programme. Further discussion in the post-broadcast session may also help in recapitulation and consolidation of the communicated facts and ideas in the minds of the students. Hence, it is expected that this cumulative effect of the activities which may be the components of an alternative instructional strategy in different sessions of the broadcast would influence the achievement of the students.

Before developing an alternative strategy, it will be useful to study the ongoing process of its objectives, adequacy of the programmes and the quality of production along with the facilities available for the recipients and their reaction. This may help in designing the instructional strategy and see its effectiveness. Feasibility of the strategy also needs to be studied keeping in view its implementation in a larger set up. This will help the educational planners and administrators to utilize it successfully.

Keeping these ideas in view, the investigator aimed

to examine the present position of SBP functioning at the secondary school level, to develop instructional strategies for their effective utilization and to determine the effectiveness of the strategies in terms of the students' achievement.

The title of the study is "DEVELOPING STRATEGIES FOR EFFECTIVE UTILIZATION OF SCHOOL BROADCAST PROGRAMMES IN ORISSA STATE".

1.7.1 Objectives of the Study

The following objectives were set for conducting the study:

1. To study the school broadcast programmes in terms of the following:
 - (a) Instructional objectives,
 - (b) number of programmes broadcast,
 - (c) content coverage,
 - (d) script writing, and
 - (e) quality of the programmes.
2. (A) To study in general the facilities provided by the high schools of Orissa for use of School Broadcast Programmes (SBP), and
(B) To study in particular (1) the facilities available and the arrangements made for the

reception of SBP in the schools making use of it,
 (ii) Use of SBP in classroom situations, and (iii)
 Reaction of students towards SBP.

3. To develop and try out instructional strategies for the effective utilization of school broadcast programmes by:

- (a) developing instructional materials such as visuals and supporting work books, to be used during the broadcast.
- (b) developing instructional activities like discussion, guest talks, role playing, quizzes, field trips, team teaching, note taking, etc. for pre-broadcast, during broadcast and post-broadcast activities.
- (c) integrating the elements described in (a) and (b) above with the SBP.

4. (A) To compare the effectiveness of the developed instructional strategies with the radio broadcast alone experimentally in terms of students' achievement on criterion tests.

(B) To study the reactions of (i) students towards the strategies and (ii) teachers towards the implementation of the strategies.

5. To study the feasibility of the strategies in terms of time, schedule, and cost.

This study, in fact, attempts to consolidate and integrate the missing links between the transmitting end and the receiving end. Effort is also made to organize the inter-alia components in both the sub-systems of the total instructional process and link them meaningfully keeping in view the achievement of instructional objectives.

1.7.2 The Hypothesis

The following hypothesis pertaining to objective 4 has been formulated for the purpose of the present study.

Students undergoing the developed strategies will perform better than those who undergo the School Broadcast Programmes alone on the criterion tests given.

1.7.3 Limitations of the Study

1. The study is confined to radio broadcasts only.
2. The study of the facilities provided and arrangements made for use of SBP is limited to those schools where SBP is in operation. Hence, the extent of generalisability will be limited. It is an attempt to know the trend of SBP in respect of its utilization.
3. The strategy does not aim at replacing the existing frame of reference. It is just an attempt at

improving the existing School Broadcasting System.

The subsequent chapters present the details of the study in respect of each of the objectives. Chapterisation has been done by discussing the methodological details and outcomes regarding each objective in one chapter. This way of reporting is adopted for the sake of convenience and maintenance of logical continuity only. Chapter II presents the study of aspects like objectives, number of programmes, content coverage, script writing and quality of the programmes broadcast. This is purely confined to the transmitting end only, whereas in Chapter III, facilities available and arrangements made for use of programmes and reaction of the students at the receiving end has been reported. Chapter IV presents the basis, development and try-out of an instructional strategy. Again, in Chapter V, reporting has been made about the effectiveness of the developed instructional strategies in comparison to the existing one. Chapter VI presents the feasibility of the developed strategies in terms of time, schedule and cost. Taking into consideration the findings of the foregoing chapters, and taking a gestalt of it, suggestions are given in Chapter VII along with the future researches needed in the field of educational broadcasting through radio.

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