

## **CHAPTER II**

### **REVIEW OF RELATED LITERATURE**

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#### 2.1. Introduction :

An immense increase in the field of education with an explosive speed and the fundamental changes in the scientific and technological areas have directly and indirectly changed the process and practices of education. Simultaneously, part of the old knowledge becomes **obsolete**. This phenomenon has a direct influence on the syllabi, curriculum, text-book etc. in the formal educative system. The teacher now cannot claim that he has content mastery for all. He is continuously a senior learner. Further his method of teaching has to adjust itself to scientific method and emphasis has to be laid towards the development of such an instructional strategy as can help the students to acquire knowledge effectively and speedily. For this, teaching has to be a well organised process which can help the teacher to equip the students fully for expected learning outcomes. Conventional method cannot bring out the desired goals from the teaching learning process.

whereas the use of different media expose the students to a wide variety of information and experiences.

Every research project should be based on relevant thinking and research that has preceded it. When completed it becomes part of the accumulated knowledge in the field and so contributes to the thinking and research that follow. For any specific project to occupy this place in the development of a discipline, the investigator must be thorough with both theory and research. ( Fox, D. J. 1969 P III )

Once the problem is formulated, an extensive literature survey is an important step which helps the investigator in his study. The investigator must be well acquainted with upto date information about what has been done in a particular area he has undertaken for research. This enables him to avoid the task of duplicating and helps him in the formation of basic theories, assumptions or hypotheses in deciding what suitable method will be appropriate for collection of data and its analysis and interpretation. To keep track of the numerous researches conducted, the investigator needs to refer ' Volumes of education research. '

1. Third Survey of Research in education  
( 78-83 ). Dr. M. B. Buch., Publication  
Department, National Council of Educational  
Research and Training Ltd. Link House, 1986
2. Fourth Survey of Research in Education.  
M. B. Buch., Publication Department,  
National Council of Educational Research  
and Training Ltd., Link House, Vol. I 1991.
3. Fourth Survey of Research in Education.  
M. B. Buch., Delhi Publication Department,  
National Council of Educational Research  
and Training., Link House, Vol. II 1991.

2.2. Various studies were conducted in the following  
six areas concerning Media.

- A) School Broadcasts and T. V. Programmes.
- B) Use of Visual and audio-visual aids.
- C) Multimedia programmes.
- D) Instructional media.
- E) Use of Mass media.
- F) Miscellaneous studies.

These are described accordingly.

#### 2.2.1. School Broadcasts and T. V. Programmes.

Biswal, B. (1980), Developing Strategies for effective utilisation of school broadcast programme in Orissa State. ( Ph.D. Edu. MSU )

Objectives :

1. To study the school broadcast programme in terms of instructional objective, number of broadcasts, content coverage, script writing and quality of the programmes.
2. To study the facilities provided by the high schools in Orissa for viewing school broadcast.
3. To develop and try out instructional strategies for the effective utilization of school broadcast programmes.
4. To compare the effectiveness of the developed instructional strategies with the radio broadcast alone.
5. To study the reactions of students and the teachers towards the strategy.

#### Procedure :

The study was conducted in two phases. On the first phase the survey of the studies of the school broadcast programmes and development tryout and modification of the instructional materials were done whereas in the second phase, the effectiveness of the strategies was studied.

The All India Radio, Cuttack and the school listening to the broadcast were the samples for study. In order to study the facilities and reactions, questionnaires were developed and used by the investigator. Criterion tests were developed to measure the achievement. Unstructured interviews were used to collect data. Data collected was analysed and interpreted by using statistical technique like analysis of variance.

#### Findings :

The major findings of the investigator were -

- The objects of different subjects of the school broadcast programmes had remained the same throughout the academic year 75-76 to 79-80 and the objectives for most of the subjects were not in specific terms.

- The number of broadcasts for particular grades was less and for some there was no programme. Several subjects were neglected.
- Experts were not given training in writing scripts for radio lessons and they felt that teacher in the schools did not know how to make use of school broadcast programmes.
- Sixty two percent of the schools were not using school broadcast programmes.
- No guidance was given to the students regarding use of school broadcast programmes. The teachers were not trained for the same.
- Teachers expressed a need for a special radio work book.
- Teachers felt that English lessons were difficult for the students to understand. Students had shown interest and half of the students expressed their desire to have radio lessons daily.
- Students achievement was found to be above 56 % in two programmes, above 60 % in two

- programmes, above 60 % in ten programmes and above 70 % in four programmes selected for this purpose.
- The strategies developed for effective utilization of school broadcast programmes were significantly effective when compared to the radio broadcast alone, students and teachers favoured strategies.
- The strategies were feasible in terms of time schedule and cost involved.

Jagdish Singh, and Shukla, S. ( 1980 )

A case study of school broadcast in Delhi Centre for educational technology. ( N.C.E.R.T. New Delhi )

Objectives :

1. To examine the extent of radio utilization in Delhi Schools.
2. To understand the conditions that encouraged or impeded radio utilization.
3. To study teachers attitude towards school broadcasts.

4. To study the process of programme planning and production and liaison between the directorate of education and Akashvani in various stages of programme planning and production.
5. To study the **comprehensibility** of radio lessons on part of the students.

Procedure :

A structured questionnaire was prepared, containing a few open questions in order to elicit teachers comments and suggestions. The field investigators **visited** every third school out of 532 schools having listening facility. The investigators collected information from the records as maintained by the schools in respect of school broadcasts. The information was also attained through observation, discussion, interviews etc. Comprehension of programmes were studied by a pre and post-test design. These tests were administered by the investigator. The data was analysed by using percentages and other descriptive statistics.

Findings :

1. The Director of Education and Akashvani did

little to train the script writers for the school radio broadcasts.

2. Of the schools having radio sets did not utilize it for radio programmes.
3. Only in the 32 % cases, there is some proximity in time between radio programmes and the teaching of those lessons in class.
4. 40 % of the radio programmes were not related to the syllabus.
5. Non-availability of programme chart and lack of awareness of radio programmes were some of the difficulties in the utilization of school programmes.
6. After listening to the programmes, the experimental group gained on all programmes to the extent of seven to seventeen percent.

Passi, B. K., P. C. Sansanwal, D. N. and Syag,  
R. N. ( 1980 ). Survey of Starting Radio  
Broadcasts for Primary and Middle school teachers  
of Madhya Pradesh State. Department of  
Education, Indore University.

Phutela, R. L. (1980), A study into utilization and comprehensibility of School Television programme in Delhi. Centre for Educational technology N. C. E. R. T., New Delhi.

Objectives :

- i) To determine the extent of utilization of school television programme.
- ii) To study the factors responsible for under utilization of the programme.
- iii) To study teachers attitudes towards the school telecasts.
- iv) To study the process and liason between the various agencies involved in the production and utilization of the programmes.
- v) To find out the performance of teachers regarding the subjects for teaching through televisions.
- vi) To study the level of **comprehensiveness** of the STV programmes in the students of different classes.

#### Procedure :

A questionnaire was constructed based on content factors, motivation factors, presentation factors and viewing condition. A four point attitude scale for assessing the attitude of the teachers towards STV programmes was also included. The sample was drawn from the higher secondary high schools and middle schools of Delhi. The investigator visited the school without prior information at the time of the telecast. Comprehension tests were administered to the students both before the telecast and after the telecast. The data obtained was analysed by use of percentage and 't' tests.

#### Findings :

- Many teachers did not find the STV programmes useful as they were not different from class-room teaching and were not presented in a manner to sustain students' motivation. The quality of the programme was not good. The number of programmes was not adequate.

- About thirty eight percent schools in the sample possessing TV sets were utilizing STV programmes. The reasons for not viewing were TV sets being out of order, functions in schools, examination etc.

- Most of the teachers from these schools accepted TV as a welcome help and agreed to the positive statements like teachers too learn about better methods of teaching.

- The results of four out of five comprehension tests showed real differences in the learning of the subject matter, indicating that these lessons were well understood.

Oberoi, N. ( 1981 ), Development and Evaluation of radio vision as an instructional system.

( Ph.D. Edu. SGU )

Jois, S. ( 1982 ), A study of the Instructional Radio users in Karnataka, Educational technology cell, Department of State Educational Research and Training, Bangalore.

) Nagaraju, C. S. and Ramkumar, V ( 1982 ), School Broadcasting, utilization by High Schools in Bangalore district. ( ISEC, Bangalore )

Goel, D. R. ( 1982 ), A study of School Broadcasts in India. ( Ph.D. Edu. MSU )

#### Objectives :

The objectives of the investigation were :

- i) To study the functioning of social broadcast units with respect to different aspects of the programmes such as transmission, script preparation etc.
- ii) To find out the extent of utilization of school broadcasts in school.
- iii) To explore the possible role of colleges of education in the scheme of school broadcast programmes.

#### Procedure :

For studying the functioning of school broadcast units, all the thirty five stations of AIR producing

school broadcast programmes were included in the study. Out of these eight stations were visited personally for indepth study. Five script writers from each station were contacted. The extent of utilization was studied in schools in the state of Haryana. Data was collected by using questionnaires for producers of these programmes, scriptwriters, studentteachers, headmasters and principals of colleges of education. The data was analysed by using frequency **distribution** , percentages etc.

Findings :

- **Co-ordination** between school broadcasts units and state departments of education in different states in organising school broadcasts were not adequate.

- The objectives of particular programmes were not enunciated at most of the school broadcast units.

- A very limited portion of the syllabus were covered through these programmes.

- The majority of the scriptwriters received no training in preparing scripts.

- In none of the schools was there provision for a school broadcast period in the time-table.

- The majority of the Principals of colleges of education thought it advisable for the pupil teachers to listen to the school broadcasts programmes and offer suggestions to the AIR for improving these programmes.

Nagaraju, C. S. and Usha Ramkumar, ( 1983 ),  
School Broadcasting utilization by High Schools  
in Bangalore district. ( ISEC, Bangalore )

#### Conclusion :

Eleven studies have been conducted in this area. Out of eleven, nine studies are based on school radio broadcast and two studies are based on TV broadcast. From the review of these studies, it is clear that radio and T. V. are effective in instruction. Most of the studies were based on survey method. It is also observed that the

scriptwriters were not trained. Tools used for data collection were questionnaires, interviews and direct approach. Some studies noted that there was no special provision for school broadcast in the time-table.

In short, most of the studies conducted to find out the condition and use of school broadcast programmes in school.

#### 2.2.2. Use of Visual and Audio-visual Aids

Golani, T. P. (1980), Use of audio-visual aids in the secondary schools of district Thane.

( Ph.D. Edu. Poona University. )

Objectives :

- i) To create awareness among teachers and headmasters of secondary schools about the importance of audio-visual aids.
- ii) To help in raising the academic standard in secondary schools of Thane district.
- iii) To know the existing situation regarding audio-visual materials in the secondary schools of Thane district.

- iv) To elicit the opinions of headmasters and concerned teachers about the measures for providing better and improved materials on audio-visual education.
- v) To present these measures in the form of concrete proposals and their implications for secondary schools as well as for the professional courses in training teachers and preparing materials for audio-visual aids in education.

Procedure :

A survey was conducted in 217 secondary schools in Thane district. Experiments were conducted in twenty schools to demonstrate the advantage of using audio-visual aids in subjects like Science, Social studies, Mathematics and languages.

Findings :

- According to the opinions of the secondary schools under survey, the teaching aids were essential and useful in developing clear concepts and in stimulating learning.

- The audio-visual aids being expensive, the schools could not afford purchasing them. Tape recorder, radios, TV sets were not affordable for most schools.
- Audio-visual aids could not be made available in time of requirement.
- Audio-visual aids were not available in rural areas due to lack of transport.
- The teachers had many other duties in addition to teaching, which resulted in lack of time for teachers and preparation of requisite material for the use of these aids.
- Specially trained teachers were not employed in a single school for their use.
- Storing and accomodating these audio-visual aids was a common problem faced by all the schools.
- No monetary funding was done by the government and the use of these aids was promised and monetary help was provided.

- The fullest value of the teaching aid could be realized only when the teacher was thoroughly trained to use it to the best possible advantage.

- The students learned better than when audio-visual aids were used and they also sustained more interest in the learning activity with audio-visual aids.

Ramchandra, K. T. ( 1980 ), A study of use of visual aids by teachers of University of Agricultural Sciences, Bangalore. ( Ph.D. Edu. Agri. SCU, Bangalore )

Rao, L. N. ( 1984 ). A study factors influencing the effective use of audio-visual equipments and materials in class-room teaching. ( Ph.D. Edu. STU )

Objectives :

- i) To find out the present position of the audio-visual equipment and materials in the east and west Godavari districts of Andhra Pradesh.

- ii) To determine the factors hindering the effective use of audio-visual materials in class-room teaching.
- iv) To ascertain the attitude of respondents towards the factors influencing the effective use of audio-visual equipment and materials in class-room teaching.

#### Procedure :

The study was conducted on a sample of eight schools by making four types of questionnaires for the availability of audio-visual equipment and materials and their effective use in class-room teaching. The tools selected for the purpose were questionnaires on availability of equipments and materials and their use.

#### Findings :

- Poor condition of audio-visual equipments in school.
- Significant relationship between the management and the availability of audio-visual material.

- Relation between the type of school and availability of audio-visual aids.
- Association between presence of audio-visual aids and the age of school.
- No significant use of audio-visual equipment in class-room teaching.
- Absence of sufficient equipment and materials was the foremost hindering factor for the effective use of these aids.

Conclusion :

From the review of the studies related to use of audio-visual aids and the visual aids in teaching school subjects, very few studies were conducted in this area. Most of the studies conducted used the survey method. These studies were related with how many schools have facilities of these aids and problems in using media. It is also concluded that if the teachers were well acquainted with the audio-visual aids and financial facilities were provided by the government for the purchase of these aids, they would prove effective for learners achievement.

### 2.2.3. Studies related to Multimedia Programmes :

Mullick, S. P. ( 1979 ), An inquiry into the relative effectiveness of linear style Book format and Multimedia programme. ( Ph.D. Edu. SGU.)

#### Hypotheses :

The hypotheses of the above study were -

- i) There will be ample gain in the scores of students taught by the book format programmes and multimedia programme as measured from pre-test and immediate post-test or relation test on the identification of terms and their recall.
- ii) The multimedia programme and book format programme will teach differently with reference to the objectives measured by the **comprehension** and application drawing and teacher made test.
- iii) The multimedia programme group is expected to do better in as far as the objectives measured by oral tests are measured.

iv) The book format programme group is expected to commit fewer spelling errors than the multimedia group.

Sample :

The sample consisted of 444 children studying in three English medium schools of Delhi; of whom 204 children belonged class V and 240 to class VI.

Findings :

- The multimedia programme was superior to the book format programme when gain was measured by the tests of identification and recall of terms, comprehension, application drawing and teacher made tests and also when the time for completion was taken as a criteria.
- The multimedia programme was suitable for average level groups in intelligence and general science, when the teacher made tests were used.
- The Book format method was particularly found suitable for low level students in English of class VI when the teacher made test was used.

Ravindra, M. J. ( 1982 ), Development of Multimedia instructional strategy for teaching science ( biology ) at secondary school level. ( Ph.D. Edu. MSU ).

#### Conclusions :

Two studies were conducted in the field. The first study in this area was related to effect of multimedia and the book format proved the superiority of the multimedia to the book format. The other study was related to development of multimedia instructional strategy for teaching of science.

#### 2.2.4. Research related to instructional Media

Kothari R. G. ( 1985 ), An investigation into efficacy of different instructional media in the teaching of **Mathematics** to the pupils of class IX in relation to certain Variables. ( Ph.D. Edu. SPU ) 1986.

#### Objectives :

The objectives of the study were -

- i) To investigate the efficacy of instructional media I ( visual projection ) over instructional media II in terms of achievement.
- ii) To investigate the efficacy of visual projection over programmed learning material.
- iii) To investigate the efficacy of activities and experiments over programme.
- iv) To investigate the efficacy of visual projection over the traditional method of teaching.
- v) To investigate the efficacy of visual activities and experiments over the traditional method of teaching.
- vi) To investigate the efficacy of programmed learning material over the traditional method of teaching in terms of achievement.

Procedure :

Factorization of the type  $a^2 - b^2$  and expansion of expansion of  $(a + b)^2$  were selected for preparing transparencies and programmed learning material. The

criterion tests for both the units were prepared. The pre-test post-test control group design were adopted for the purpose of studying the efficacy of different media. The experiment was carried out in two schools. Four groups of class IX, pupils having 30 pupils in each group were selected for implementing the instructional media while the other four groups were treated as control groups. The Junior Index of Motivation ( JIM scale ) and test of reasoning ability were used for collecting necessary information about the variables. The analysis of co-variance was used to draw conclusions.

Findings :

- Visual projection, activities and experiments were equally effective for Unit I while visual projection was superior to the activities and experiments approach for unit II.
- Visual projection was superior to programmed learning material for unit I, while it was equally effective for unit II.
- The approach of media activities and

experiments was superior to programmed learning material for Unit I but they were equally effective for unit II.

- Visual projection was superior to the traditional method of teaching for units I and II.

- The activities, experiment approach and the traditional method were equally effective for both units.

- Programmed learning material and the traditional method of teaching were equally effective for units I and II.

- The results clearly indicated that the instructional media I namely visual projection, was comparatively more effective than activities experiment and even programmed learning material. The low achievers were more benefitted by programmed learning material than high and average achievers.

Desai, K. V. (1985), An investigation into the efficacy of different instructional media in the teaching of science to the pupils of class VIII in relation to certain variables. ( Ph.D. Edu. SPU )

Objectives :

- i) To compare the achievement of pupils in science learning through different instructional media and the traditional way of teaching.
- ii) To compare the achievement of pupils in science learning approach and the traditional way of teaching.
- iii) To compare the achievement pupils in science learning through slides with discussion approach and the traditional way of teaching.
- iv) To compare the achievement of pupils in science learning through the experimental approach and the traditional way of teaching.
- v) To compare the achievement of pupils in science learning through the programmed learning approach and slides with discussion approach.

- vi) To compare the achievement of pupils in science learning through the programmed approach.
- vii) To compare the achievement of pupils in science learning through slides, under discussion approach and the experimental approach.

Procedure :

The density, specific density of a solid and the all its structure were selected for the preparation of the material for the instructional media. The programmed learning material. slides and laboratory experiment were designed. The criterion test was prepared on the units selected for experimentation. The Junior Index Motivation scale and the reasoning ability test were used for measuring motivation towards schools and the reasoning ability of the pupils. Four equivalent groups with respect to motivation towards schools and reasoning ability were prepared. In each group there were twenty five students, one group was taught through programmed learning, second group was taught through slides with the discussion approach, the third group was taught through the experimental approach and the fourth group was taught

through the traditional approach. The analysis of co-variance was used to test the various hypotheses.

Findings :

- The programmed learning approach was more effective than the traditional way of teaching science.
- The slide with discussion approach was more effective than the traditional way of teaching science.
- The experimental approach was more effective than the traditional way of teaching science. In the teaching of science, the experimental approach was the most effective of all the approach.
- The programmed learning approach and slides with discussion approach were equally effective.
- The use of instructional media indicated the possibility of improvement in the methodology of science teaching, raising the standard of

science education in secondary schools and the development of taste and interest in the younger generation for the science subject.

- The major educational implication of the study is that there is not one method of teaching science. The teacher should be experimental minded and should use different approaches in the light of different objectives, Media was effected in the teaching of science.

#### Conclusions :

The review of the various studies related to instructional media, indicates that studies were conducted in Science and Mathematics. The traditional way of teaching was compared to the programmed learning. The method of study was experimental method. The use of instructional media indicated the possibility of improvement in the methodology of science teaching. It was also noted that the methods of science teaching were innumerable.

#### 2.2.5. Studies related to the Use of Mass Media :

Paigaonkar, A. ( 1978 ), The use of Mass Media for second language teaching in India with special reference to radio and T.V. ( Ph.D. Ling. Poona Uni. )

##### Objectives :

- i) To conduct a survey of the availability of English and Hindi teaching programmes through the mass media in India.
- ii) To see how far the principles of linguistics, the principles of psychology of learning and the considerations about the **Socio** - cultural conditions of learners were used in preparing English and Hindi lessons for the mass media.
- iii) To find out the facts about the conditions in which planning, preparation and evaluation of English and Hindi lessons for the mass media took place.
- iv) To see how Hindi and English programmes based on mass media were being utilized by teachers and pupils.

#### Procedure :

The programmes studied were Hindi teaching on Pune radio through Marathi, English teaching on Bombay, Pune and Delhi televisions under the subject television programme, English teaching through the marathi paper ' Kesari ' from Pune.

The design of the study was based on survey method using observation, interviews, questionnaires. Content analysis was also carved out.

#### Findings :

- Script writers and subject experts of radio and T. V. lessons for schools had the knowledge about the principles of linguistics and pedagogy but did not have the training needed to use the media. This was reflected in the actual lessons produced. English lessons through the newspapers and Hindi on radio for general public did not reflect such knowledge and training of their producers.

- Teachers in the schools of Pune, Bombay and Delhi lacked awareness of the principles of

linguistics and their application to second language learning. No training was given to them from any source.

- Rural teachers were more aware of the radio as an available medium of teaching second language than their urban counterparts but the situation was reverse with the rest of the media.

- It was hypothesized that use of English and Hindi lessons transmitted through radio and television would progressively decrease as one moved from the urban upper class schools to the urban lower class school, suburban schools and rural schools. A meaningful comparison could not be made between radio and television as the number of TV sets was very few in the rural schools.

#### Conclusion :

The study was based on survey method. The major finding in this area was the need for sufficient training

in the use of mass media. Radio and T.V. played an important role in teaching-learning process but the teacher needed to be aware of all these programmes.

#### 2.2.6. Research Studies related to Miscellaneous Studies :

Kakur, R. ( 1981 ), An inquiry into the effectiveness of Self-instructional audio cassettes in developing teaching skills among students teachers in three phased study. ( Ph.D. Edu. Pan Uni. )

objectives :

- i) To develop instructional materials for the skills of probing questioning, explaining and illustrating with examples.
- ii) To prepare audio cassettes of the instructional materials prepared by the investigator for the above mentioned teaching skills.
- iii) To develop the skills of probing,

questioning, explaining and illustrating the examples through self-instructional audio cassettes.

- iv) To examine the effect of self-instructional audio cassettes on the general teaching competence of student teachers.

Sample :

It consisted of thirty two student teachers taken from Dev Samaj College of Education for Women, Ferozpur City.

Findings :

- Teachers of the experimental groups made continuous progress component-wise and as a whole in the skills of probing, questioning, explaining and illustrating with examples.
- The traditional techniques of teaching also helped continuous progress in the performance of student teachers.

- Both the techniques of training, traditional and microteaching were effective.
- The experimental group exposed to both the treatments showed better performance than the control group exposed to the traditional techniques only.
- Immediate pinpointed and self feedback through audio cassettes was an effective way of improving the performance of student teachers in the use of different teaching skills.

Shastry, S. N. ( 1982 ), A study of the effectiveness of using educative toys in teaching science for primary standards. ( Government teachers training institute, Hassan, N. C. E. R. T. Financed. )

#### Hypotheses :

1. Science teaching through educative toys might not be as effective as through the traditional methods.

2. Science teaching through educative toys might not increase comprehensive easily.

Procedure :

Toys, Models and figures based on one or other concept included in Primary School science syllabus were used. Two sections of standard V of a primary school in Karnataka were selected. The experimental group was exposed to science teaching through toys for an academic year. Some of the toys were prepared by the teacher investigator while the others were from children's collection locally available or from toy manufacturers. The selection of toys was dependent on their relevance to the concepts in Physics, Chemistry and Biology which could be taught through toys. The same teacher taught both the groups so as to minimise the difference likely to arise because of the different teachers. The selected teacher was oriented to teaching of science through toys. Data was available with the help of questionnaires, observations and school test materials.

### Findings :

- The experimental group did considerably better on the post-test than the control group. Indirectly, they became aware of the treatment.
- Comparison of school marks of the two groups revealed a steep rise in the marks of the experimental group.
- There was a marked difference in the attitude towards learning science among the experimental group.
- The students of the experimental group more interest in science irrespective of whether it was taught in the first or the last period.

Singh, V. ( 1983 ), Effectiveness of media with reference to class-room Ethos. ( Ph.D. Edu. SGU)

### Conclusions :

On the basis of the three studies in the area of Miscellaneous studies, it is clear that toys are very

important in teaching-learning process and also the effect of self self-instructional audio cassetts in developing teaching skills among the student teachers.

### 2.3. Conclusions, Remarks on Review of Related Literature :

The findings revealed that major studies were carried out in the use of audio-visual packages. But an attempt to prepare a media package was left untouched in relation to the teaching of science in secondary schools.

The various studies carved out reveal that the use of multimedia in teaching and learning does produce effective and marvellous results in terms of learner achievement. But the fact is that teachers refrain from using this instructional strategy in their day to day teaching. A lot of research work is still needed to determine the various **problems** faced by the teachers in the use and availability of these new emerging media. Teachers, script writer, producers of educational programmes for radio and television all need to be trained if we accept some good out of these new technological advancement.

Further, the investigator did not come across any study which dealt with the preparation of a multimedia package and its effect on the learners achievement and changes in his cognitive structure in science.

Hence the investigator selected this problem  
" Effect of Multimedia package on learners achievement in  
Science. "

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