CHAPTER I

INTRODUCTION

Significance of the Study

A fabulous variety of mechanisms has been devised in this modern age of communication for gathering, transmission and presentation of information about the world and its inhabitants. The far-off informations were only available by the first-hand experience or through the interpretation of language in the past; but now by the push of a switch one is exposed to the variety of sights and sounds of the world. However, the idea of communicating message by use of audio-visual aids is not a new one. The modern and well advanced tools of communication like television, radio, press-materials etc. are the latest developments of the age-old concept of communication in the human mind. In support of this view Saettler makes the following statement in one of his articles.

> The general concept of audio-visual communication has existed since primitive man first taught his children to observe, imitate and participate in activities vital to the survival of the tribe.[1]

Since the primitive stage of man, the methods of communication have undergone various changes and are known by different professional terminologies as multisensory aids, visual aids, visual education, visual instruction, mechanised teaching, planned instruction, instructional materials etc. Reviewing the early efforts made in the audio-visual education movement, Saettler further states that,

> Comenius has been, commonly and erroneously, considered the father of visual education. Nevertheless, he exerted a prodigious influence upon the audio-visual communication movement. His belief that nothing can be learned that has not first been presented to the senses led him, in 1638 to write the renowned ORBUS SENSUALIUNI PICTUS.[2]

This was probably the first illustrated book written especially for children. With the development of science and technology old communication techniques have been improved and new ones are being developed.

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[1]Paul Saettler, "Conceptual Legacy of Audio-Visual Communication," Audio-Visual Communication Review; 3 : 4, Fall, 1955 p.274.

[2]Ibid., p. 276.

The use of communication techniques has become most common and necessary in the process of education since the inception of human civilization. However, it is often quite slow to employ new and improved methods for the transmission of ideas in the process of education. Even after the invention of paper and printing, lectures and manuscript notes prepared by the teachers were thought to have some pedagogical superiority over the products of the printing press.

Benjamin in his editorial notes in the book " Audio-Visual Aids to Instruction " by Mcknown and Roberts also writes that, " Even to-day an occasional university professor draws forth his daily quota of facts and theories from his lecture notes in disregard of the economy of time and effort which might be gained by having his students consult the same printed sources from which he derives his own classroom wisdom. "[3]

The horizons of educational values and ideas are broadening. Education aims at the all round development of human abilities. Rapid development in science puts a great pressure to change the traditional methods of teaching and

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[3]Harry C.Mcknown and Alvin B. Roberts, Audio-Visual Aids to Instructions; (New York: McGraw Hill Book Co., 1949) p.26.

to adopt psychological approach. Education being the global programme cannot ignore the vital media or techniques which have created scientific progress.

Mcknown and Roberts very clearly explains the scope of audio-visual aids in teaching as follows :

> The school was as simple in building, curriculum, organisation and administration as the community that supported it. It was relatively inexpensive. The school-master, carefully selected but largely unsupervised, taught what he wanted to teach and taught it in his own way. And, considering his limited educational ideals, program and equipment, he was probably at least successful in his work.
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> Population grew by leaps and bounds, villages with favourable industrial and commercial advantages rapidly became cities, inventions and discoveries increased man's interests and activities, mental and social boundaries were pushed back and society in all its phases became much more complex. Paralleling these other developments, formal education also increased in purposes, extent and complexity; the one-room rural school became a large and often and immense plant, little or no special equipment grew into a great way of appliances, materials and devices, the three R's developed into an amazing schedule of general and diversified curricula, unspecialized teaching gave way to specialized instruction; the single untrained school-master was replaced by a faculty of more or less well-prepared specialists, and of course, the small cost grew into a large expenditure.[4]

The educational institutions from the kindergarten stage to the university stage are the major contributors in the development and preparation of the child for successful living in the future complex society. Hence, the

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[4] Ibid., p. 1.

programmes for them should be organised for creating better learning situation by the use of modern instructional technology. Babcock emphasises this point by saying: " Children are important, their time in school is important; we have no right to be reckless with either one. Think of the potential power of these new media in the acculturation of a generation which have no choice but to live in a world in which the people on the most distant continent are next door neighbours. "[5] Further, Finn stressing the future importance of the electronic machines in the intellectual progress quotes the words of Simon Ramo as under :

> The most significant factor of the coming technological age may well be the new man-machine partnership in intellectual activities. The next decade will see the advent of the period in which electronic machines become highly active in the intellectual activities of the world; in which the capacity for gathering and using information, the overall brainpower of the world, is increased by many fold.[6]

Thus, there will be an increasing scope of the electronic aids in education in the future. Stressing upon this point Harrison also remarks :

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[5]Chester Babcock, " Evaluating Educational Innovation, " Audio-Visual Instruction, 9 : 5, May, 1964, p.268.

[6]James D. Finn, " Instruction Technology, " Audio-Visual Instruction, March !65, p. 192.

> Looking to the future, there are strong reasons for expecting that the range and scope of audio-visual aids would continue to expand at an increasing pace. More children will spend more time learning a great deal more material. The pressure is increasing and in these circumstances it would be essential to turn to mechanical aids for their contribution.[7]

Thus, the significance of mechanised audio-visual aids in modern education is well recognised. The educationists in India have also recognised the importance of audio-visual tools in modern education. Emphasising the importance of new methods of instruction in modern education in India, Chak, Director of Education in the State of Uttar Pradesh, in his talk in the Joint Indo-Australian Seminar held under the Colombo Plan at Lucknow in 1955 stated :

> We are in the midst of great changes and cherish great hopes. Life is gaining in richness and variety. The barriers of space are vanishing as the frontiers of thought are getting wider. Knowledge in its numberless branches is calling for a pursuit as endless as ever. The demands on our educational institutes, therefore, are very great, for they have to equip the child for a society that is becoming everyday more complex and baffling.[8]

However, the actual use of the modern instructional materials in educational system of our country is far from satisfactory. It is necessary to make our educationists and

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[7]Report on the Proceedings of the Annual Audio-Visual Aids Conference 1963, published in Visual Education, August/Sept., 1963, p.14.

[8]C.N.Chak, "In the Midst of Great Changes," A Report of the Joint Indo-Australian Seminar held under the Colombo Plan at Lucknow. Ministry of Education, Government of India, Delhi, 1955. p.7.

teachers sensitive to the inadequacies in this field, so that they can keep themselves in touch with the new developments in communication media available in the advanced countries.

Many educationists comment that the teachers in India appear to have very little understanding about the importance of audio-visual education. Its use is largely ignored in their day-to-day work.

The teachers should be provided enough opportunity to realize the value of the mechanized aids in teaching and develop a correct concept about the same during their training in the teacher training institutions, as is popularly stated that the teacher does not teach in the way he was told to teach, but he usually teaches in the way he was taught.

The teacher training institutions are facing to-day the spectrum of new social, physical and technological developments which necessitate constant re-evaluation and continuous re-adjustment of the curriculum and training programmes offered by them. Knirk and McConeghy while proposing the need for re-adjusting the role of teacher training institutions in the modern technological age state :

> A new concept in teacher education is the introduction of progfammes designed to prepare teachers to use instructional media effectively. This innovation is indicative of the changes which are evident in our society and our educational process. The role of teacher, the student, and parents has changed in varying degrees with the advent of the space age. Schools are undergoing certain changes which affect the entire educational process; curriculum changes due to new courses in areas such as computer programming; new methods such as programmed instruction and television instruction to teach established courses; and increased numbers of clubs or classes designed to help students use their leisure time more effectively.[9]

As a result of the changing needs of the society, the teacher education institutions are called upon to provide suitable training in the use of modern instructional materials to the teachers in general. To provide such type of training audio-visual education to all teacher-trainees, the teacher education institutions should have experts in audio-visual education. The need for such communication experts at the teacher training institutions is expressed by Knirk and McConeghy as under :

> One of the many problems created by this changing educational model concerns the increased use of all forms of instructional media. Educational television, programmed instruction, computer technology and other new devices have been introduced to the schools and demand proper operation and usage. This creates a new role in the educational industry- that of communication specialist whose major task should be to consult with teachers in the proper use of new and conventional media.[10]

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[9] Frederick G.Knirk, Gary L.McConeghy, "Programming Teacher Education in Media The Wayne State Approach." Audio-Visual Instruction, October '64, p.527.

[10] Ibid.

The teacher education institutions therefore, are the training centres for such specialists in communication. The experts in audio-visual education in the training colleges should serve as the models of modern teaching technology so that the teacher-trainees may get an opportunity to observe the proper use of the various instructional devices. This observation will motivate the teacher-trainees to use audio-visual materials properly in their practice-teaching. Finally, they will get the first-hand experience of an ideal use of such materials in their practice-teaching under the guidance and supervision of the experts. The idea of the new media of teaching to be provided in the training programmes of the teacher education institutions is emphasised by Knirk and McConeghy in the following words :

> Teacher education institutes must provide courses which not only describe the role of media but also use the media in the courses themselves. Colleges of education should be concerned with developing an attitude on the part of their graduates that some things can be done better by media instruction than by live instruction, and an awareness of new media and methods of using them in the classroom.[11]

The success of the educational institutions depends upon the efficiency of their teachers. The efficiency of the teacher depends upon the quality of training they receive in the planning for teaching including the use of modern instructional materials. There has been a rapid increase in

[11] Ibid., p. 542.

the primary and secondary schools in India during the last two decades. This increase is justified when the percentage of illiterate persons is very high. However, a special care is needed to see that the standard of teaching does not deteriorate when educational facilities are expanded.

Properly trained teachers and the latest instructional methods are the two important aspects in upgrading the standard of teaching. For this purpose one of the things which is of paramount importance is improving the existing primary and secondary teacher training institutions and creating new ones on the modern lines. The improvements and future developments in the teacher training institutions require the study of their existing training programmes especially in respect of the audio-visual education programmes because the proper use of the latest instructional techniques increases the efficiency of the teachers of all subjects. The present study is undertaken with a view to evaluating the organisation of audio-visual education training programmes of the secondary teacher training institutions in India so that they can be reoriented in terms of the needs of our times.

Objectives of the Study

Purpose of the study is to have a critical evaluation of the organisation of audio-visual education training programmes in the secondary teacher training institutions in India.

The chief aim is to study the present set-up of audio-visual education programme and the kind of training opportunities in audio-visual education given to the teacher trainees in the secondary teacher training institutions.

The specific objectives of the study in relation to the problem stated above are as follows :

1. To determine the objectives of the audio-visual education training programme implemented by the teacher training institutions.
2. To survey the following organisational aspects regarding the audio-visual education training programme offered by them.
    - A. Curriculum construction.
    - B. Staffing pattern.
    - C. Training activities.
    - D. Selection of candidates for audio-visual education as special field.
    - E. Evaluation of teacher trainees.
    - F. Availability of audio-visual aids and equipments.
    - G. Research and Publications in the field.
    - H. Financial implications.

3. To make an objective appraisal of the present audio-visual education programmes and to develop criteria for determining the position of teacher training institutions with reference to their audio-visual programmes.

4. To suggest some measures for improving audio-visual education training programmes with a view to preparing competent teachers equipped with proper skills in teaching methods.

Explanation of Some Terms

For the sake of clear understanding of the statement of the problem, it is essential to explain the meaning of some terms and connotation in which they are used in this thesis.

1. Critical evaluation. It means in the context of this study a complete assessment of three phases only : (a) implementation of the objectives of audio-visual education training programme, (b) organisation of the audio-visual education training programme in view of the objectives, (c) appraisal of the training programme in audio-visual education as well as the trained teachers in view of the objectives.

2. Organisation of audio-visual education training programme. This refers to a process of training programme based on the specific objectives of equipping the teacher

trainees with the skills of methodical teaching with audio-visual aids and the understanding of various aspects such as curriculum construction, staffing pattern, training activities, selection of candidates for audio-visual education as special field, evaluation of teacher-trainees, research, publications and finance involved in the entire training programme.

3. Audio-visual education. The meaning of this term here is as follows : It is a branch of instructional technology which deals with the production, selection and utilisation of the instructional materials and handling as well as operation of audio-visual equipments.

4. Audio-visual training of teacher. This term indicates a process of helping the teacher trainees in acquiring the skills for the production, selection, and proper use of the instructional materials and operation and handling of audio-visual equipments.

5. Secondary school teachers' training colleges. This term includes all the teacher education institutions engaged in preparing teachers for the secondary school only. All such colleges established in India by the year 1965 are covered in this study.

Procedure of Study

According to Best's classification of educational research, there are three types viz. Historical, Descriptive and Experimental Research.[12] This study involves survey, description, recording, analysis and interpretation of the prevailing position and practices of audio-visual education training programmes in the teachers' colleges in the country. This research therefore, is of descriptive survey nature.

The population of this study consisted of all the 247 teachers' training colleges in the country. Thus, the area of operation being very wide, it was beyond the physical reach to collect the data by any personal interview method.

However, some sample visits to the neighbouring teachers' training colleges, within the physical and financial reach of the investigator were made. During these visits the observations and discussions were confined only to the audio-visual education training programme in the colleges. These visits helped in determining the appropriate items of inquiry and observation for the study. All the items ultimately led to the development of the mixed type of questionnaire with open-end and closed questions.

[12]John W.Best, Research in Education. (Prentice-Hall Inc., Englewood Cliffs, N.J., 1959), p.12.

The expert opinions were invited on the items of the questionnaire to make it more precise and valid. Reviewing, pre-testing and final selection of items were made to administer questionnaire for the collection of data.

To ascertain the right population of the colleges operating audio-visual education training programme, a preliminary survey in all the 247 teachers' colleges in the country was made through short and simple questionnaire by mail.

Out of 247 teachers' colleges 115 colleges (46.5%) were conducting audio-visual education training programme, 93 colleges (37.7%) were not conducting the same and 39 colleges (15.8%) did not respond.

Omitting these 93 colleges, not conducting audio-visual education training programme from the total of 247, the remaining 154 colleges were taken under the population for further study. Amongst the colleges reported above which conduct this programme, the number of Government colleges is highest. The next position goes to the private colleges and the university colleges are very few. The details regarding the tools and sample are given in Chapter III.

Basic Assumptions

The study is based on some assumptions drawn from the current literature and from the investigator's personal observations on the audio-visual education training offered in teacher education institutions.

1. The present position of audio-visual education training programme in the teacher education institutions in India is in an infant stage.
2. Adequate training in audio-visual education to the trainees in the colleges is likely to help them in using effective methods of teaching.
3. Training facilities in audio-visual instructional methods and materials are inadequate due to the want of sufficient funds for this programme.
4. There is a need for developing teacher education programmes in India on the basis of the modern technological advancement.

Organisation of the Study

The sequence of the remaining chapters is briefly out-lined here.

Chapter II presents the frame of reference concerning the development of the movement of audio-visual education in the teachers' training colleges in India. The recommendations of various committees and conferences at the national level are also briefly stated. An attempt

is made to give a brief picture of the development of audio-visual education departments at the national and the regional levels.

The theoretical principles of organising and administering the audio-visual education training programmes in the teachers' colleges are also out-lined from various authoritative sources and publications which constitute the current literature in the field of audio-visual education.

Chapter III deals exclusively with the method of study and procedure of collection of data. The treatment of the problem was made by the descriptive survey method. The data of this study were collected by the mailed questionnaires. A nation-wide approach for the collection of data was made by including all the 247 teachers' training colleges in the country upto the year 1965. The data, thus collectedare presented in tables, graphs and figures.

Chapter IV includes the presentation, analysis and interpretation of the data of the organisation of audio-visual education training programmes in the teachers' training colleges of the country. All the items of the data after analysis give the prevailing picture of the audio-visual education training programmes in the country.

It further shows the position of audio-visual education training programmes at the different institutions sponsored by Government, semi-Government and private bodies.

Chapter V shows the critical interpretations of the data with a view to improving the audio-visual education training movement in the teacher education institutions.

The colleges were grouped on the basis of the replies about the objectives they keep for the audio-visual education department. The classification is as follows :

(a) Colleges aiming at imparting general training.
(b) Colleges aiming at imparting special training.
(c) Colleges aiming at the production and extension services in audio-visual education.
(d) Colleges aiming at doing research and publication in the field.
(e) Colleges aiming at doing the follow-up and evaluation of the audio-visual education department.

To determine the extent of the achievement of the above stated objectives, a list of the requirements for the fulfilment of the same was prepared. Further, the three point scale to measure the achievements of the objectives was developed. The opinions from the experts in the field were invited to make the scale more accurate and perfect.

Chapter VI gives the summary of findings and conclusions drawn from the analysis and interpretations of the data. Finally

some measures are suggested for improving audio-visual education training programmes in the teachers' colleges in India.

The relevant references of the study are included in the Bibliography after Chapter VI. The sample of tools used and check-list for evaluation of the Audio-Visual Programme for the Teacher Training Institutions are appended for reader's reference.