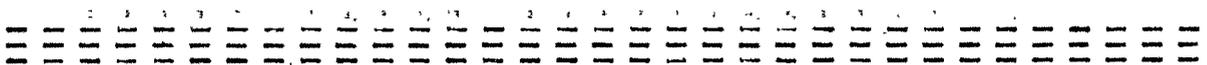


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\*\* CHAPTER : I \*\*  
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I N T R O D U C T I O N



EDUCATION AS A SYSTEM :

A system, is an assemblage of several interrelated elements, meant to accomplish well-defined goals. These elements constituting the system, are the inputs of the system, and the goals it functions towards, are the outputs. The organisation of a system would first of all demand the specification of the outputs. This would be followed by the processes of identification, selection and sequential organisation of inputs, to realise the outputs. These processes are more or less definite in case of a physical system, as for example, a computer, wherein specified inputs in the form of programmes, are fed to result in desired outputs. This is because of the causal relationship between the input variables and the output specifications, the extent of manipulability of the inputs, and the precision in the measurement of accomplishment of the output specifications. On the other hand, behavioural systems,

have a comparatively lower degree of specificity in terms of defining appropriate input variables. In such systems, therefore, inputs hypothesised to lead to the specified outputs, would be selected. These hypothesised relationships between inputs and outputs can be established through empirical studies designed for the purpose. Improvement of the system is effected by continual evaluation of the system through a built-mechanism of feedback.

The educational system is a behavioural system where the inputs are, the learners, the subject-matter, methods of teaching, teacher, the instructional situation etc, and the outputs are the objectives of instruction. These various aspects of the system form subsystems of the main system, and have a complex interrelationship among them so that change initiated in any one aspect will have implications on the other. As such, changes envisaged in the output, can be expected to be brought about by manipulation of the inputs. However, as in any other behavioural system, in the educational system too, the input-output relationship lacks specificity. It is not an additive model wherein specific set of inputs can be causally related to definite outputs. In fact, for definite outputs, it would be possible to select various combinations of inputs from the entire universe of instructional inputs. Therefore, the first step in the systematic organisation of instruction

would be the specification of the outputs, which are, in other words, the instructional objectives. This would be followed by the identification of input alternatives, selection and organisation of the inputs in a manner as to achieve the desired objectives. The measurement of the extent of achievement of the instructional objectives would constitute the evaluation, thereby providing feedback to the system, on the basis of which, the system can be renewed. Evidences, obtained through this process would indicate, how the various inputs are correlated with the outputs. Such evidences would indicate the relative effectiveness of various instructional inputs in specific instructional situations. Nevertheless, the evidences obtained in the specific situations, would have limitations, so far as their applicability across several situations is concerned. To overcome this, there would be a need to conduct alternative input studies in a large number of situations. This would aid generalisability of the evidence. Another method of overcoming the limitation would be, to conduct such studies in controlled situations, where the influence of intervening variables could, to a great extent be minimised, thereby establishing more reliable and definite relationships between input variables and output specifications. This would, in other words, generate the domain of research studies on input effectiveness.

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In an instructional situation composed of a defined set of learners, for a particular content matter and for a given organisational set up, the only inputs manipulable are, the modes of treatment and presentation of the content matter; or in other words, the media. There have been several definitions of media, ranging from one enumeration as projected materials, non projected materials, audio materials, and three dimensional materials to media as "means" or "vehicle" of transference of ideas. The latter definitions are made more comprehensive by including in the general domain<sup>a</sup>, all media.

As mentioned earlier, empirical studies on media, would help establish the relative effectiveness of media and aid instructional decisionmaking. Studies on media effectiveness may have to be carried out in different disciplines, basically because, disciplines themselves have unique structures and this might influence the selection and organisation of media in the teaching of discipline, and its effectiveness of operation. Such an attempt is made in the present study where the discipline is history.

THE BROAD AIMS OF TEACHING HISTORY :

The necessity of putting history into the curriculum has been advocated on various grounds<sup>or</sup>, ethical, cultural utilitarian and intellectual. These are long range aims which can be achieved in course of time. The following are the claims of the subject matter.

First of all it is the story of man and his development in society. How man began his life in a shaky manner and how he rose to the present position through the co-operative efforts of many great persons are interesting matter to study. Besides, the knowledge that the present is a gift of the past, gives a connecting link with the great people of the bygone age. No one can live in isolation. Today's luxuries and comforts are the result of the strenuous effort and sacrifice of many and a knowledge of it makes one understand the contribution to the world culture made by diverse races. Dewey (1943) rightly points out that our interest in the past is not for its own sake but because it helps to explain the countless forms and forces of social life in the present and the future. Without a knowledge of the past, much that we find around us would be meaningless. The Indian Independence Act of 1947 would be unintelligible unless one had a knowledge of the political, social and economic history of India in the 18th 19th and the first four decades of the 20th century. It is the present, which history tries to explain but one should go a step further. The great aim in history teaching is the cultivation of the "forward look" encouraging the student to have a vision of the future. It is more vital to create the future than to gain an exhaustive knowledge of the past.

In the second place history widens one's mental horizon and tends to make one, cosmopolitan in one's outlook. The study of widely differing groups of humanity in various stages of development with the differing customs, practices, laws, sanctions and institutions is in itself a liberalizing influence. The conviction also grows out of the study that, in spite of the seeming outward difference, there is a spiritual affinity between man and man as they are often found to be striving towards the same ends and goals. The realization of this essential unity of man is well calculated to foster the spirit of kindness and tolerance towards other nations and peoples and is a sure bond of international sympathy and goodwill.

In the third place history provides a special kind of mental training which the pupils will find extremely useful when they grow up and have to solve the problems of everyday life. They not only have to visualise conditions and civilizations widely different from their own but also have sympathetic understanding of them. They have to collect, examine and correlate facts in an impartial manner and to express the result methodically in clear vivid language. Their presentation of the subject matter must be free from bias and prejudice and their judgement based upon facts. The social and political questions of controversial nature make them compare and contrast, to weigh evidence and from

existing data, to arrive at conclusions legitimately supported by such data (Happold 1927). In other words it gives them training in sifting out truth from the mass of data available.

In the fourth place, in the words of Sanderson (1927) history furnishes to the child a splendid guide to a vast store house of knowledge in which the child may search at will. With its vast panorama of actions and events of an exceptional variety it is singularly well fitted to satisfy the eager curiosity of the child whose hunger for knowledge for its own sake must be satisfied at all costs.

The moral or ethical aim of history is another important aspect that should be stressed while teaching history. Selected anecdotes from the lives of great people are presented in a simple clear language in order to make the pupils feel the reality of them. History thus can inspire mankind of noble deeds, universal love and virtuous life. At the same time they make the pupils realise that wrong and injustice entail misery and degradations, for that is the great lesson of history. Biographies of characters like Hitler are examples of failure of genius misapplied.

The ethical, cultural, utilitarian and intellectual aims are broad and can be achieved after years of systematic training. But to achieve them, they must be broken down into specific objectives which can be achieved in a short time.

Ordinarily six specific objectives are derived in the history lessons.

THE OBJECTIVES OF TEACHING HISTORY :

The first objective of history teaching is the acquisition of knowledge. Knowledge is defined as an "Awareness, mental apprehension familiarity or acquaintance with facts, persons, places or things & such nature as to preclude reasonable doubt" (Good 1945) It is established when the learner encounters two objects or ideas in such manner that subsequently one of the objects or ideas will tend to remind him of the other. Several interrelated knowledge are established when the learner encounters more than two objects or ideas in such a manner that a later re-encounter with one of them will tend to recall the others to his mind. Related knowledge may also occur in still more complex patterns that are subject to recall.

Acquisition of knowledge is required in all school subjects and in all areas of human activity. It is in the content subject like history it receives comparatively greater emphasis. In this area of study the pupil has to acquire a knowledge of terms, concepts, events, symbols ideas, problems, trends, personalities, chronology and generalization related to the study of history. The acquisition of knowledge can be seen in the behavioural changes

in the pupils when he is able to recall information learnt and recognise them when he finds them mixed with others. Usually a teacher of history lists the knowledge items in the lesson and teaches them systematically and in the end measures them by administering tests, oral or written.

The second objective of history instruction is the development of understanding. It is defined as "the mental power, faculty or function whereby the meaning of phenomena or propositions is apprehended." (Warren 1934). The comprehension of materials read, heard, seen or otherwise experienced, is another way of characterizing this outcome in at least approximate terms. In history, the pupil is expected to understand terms, facts, principles, events, trends etc. related to the subject. Understanding is revealed by the exhibition of certain specific behavioural traits. Comparing and contrasting is one such specification. If the teacher teaches Shershah and Akbar separately and asks the pupils the question "in what ways both of them were similar?" it is a question on understanding. The pupil has to bring into focus the facts relating to both the emperors and find out the similarities between them. Afterwards a discussion may take place. Specifications of behaviour like classification, comparing and contrasting, giving illustrations, summarizing and identifying the relationship between cause and effect, means and ends etc. come under the objective understanding.

The third objective of teaching history is to develop the ability to apply the acquired knowledge to new and unfamiliar situation. Application is defined as the "employment of an item in the way suggested by its relations; e.g. employment of a theory to the discovery of fact or the facts to suggest a theory" and "employment of principles in meeting practical problems (Warren 1934). It is also defined more narrowly as "the type of activity.... in which the pupils attempt to apply what they have learned." (Good 1945). The ability to apply can be acquired as a result of instruction and of experience in non-educational situations also, even though they are greatly dependent on the learner's mental ability.

There are two types of applications viz physical and mental. Through teaching of history it is the latter that is attempted. The acquired knowledge is put to use in a new situation. The behavioural specifications belonging to this domain are analysing the problem to identify the issue, selecting knowledge relevant to the problem; establishing relationship; predicting in a given situation; and suggesting verification, method of attack and solution. Very often a problem situation is provided and the pupil, using his acquired knowledge finds out a solution. The application is purely mental and is to a great extent influenced by knowledge. In knowledge subjects like history such mental exercises can find

a place in measuring the ability of the pupils to apply their knowledge in new situations.

The fourth objective of teaching history is the development of skills related to it. A skill is defined as "anything that the individual has learned to do with ease and precision; may be either a physical or a mental performance" (Good 1945). A second definition specifies it as "a rapid, efficient performance, mental or physical, which has been learned" (Harriman 1947). In a subject like history skills like drawing maps, charts and diagrams, and model making are developed.

The fifth objective of teaching history is the development of certain interests. While presenting the subject matter, the teacher has to present extracts from the original sources such as eyewitness accounts. By providing such information, his interest towards the subject or the character could be kindled and it would enable him read more source materials. The specifications of behaviour under the objective interests are, developing interest in reading books, collecting pictures, coins etc. visiting historical places and museums and writing articles about history. This objective would take a long time to realise, for, developing interest is a slow process. In any class the history teacher has to sow the seeds of interest and when it sprouts he has to nurture it with care. In course of time

the interests develop and begin to show forth in visible patterns of behaviour.

The sixth objective of history teaching is the development of desirable attitudes. The evidence of the presence of desirable attitudes are cosmopolitan views, objective outlook, patriotism, love for one's cultural heritage and development of democratic values. This objective is reflected in the reorganization of the content of history by giving the proper place to the heroes of peace such as reformers, leaders, philosophers, inventors and a host of others who helped to shape the destiny of mankind in constructive ways. A study of the lives of such great people may develop in the pupils healthy attitudes. But it would take a long time to realise this aim and so the history teacher must attempt to develop it in a variety of ways.

The above mentioned six objectives spread over the cognitive and affective domains. Learning experiences are to be provided so that the pupils may develop the desirable qualities in course of time.

#### THE UNIQUE CHARACTERISTICS OF HISTORY AS A DISCIPLINE :

As has been mentioned earlier, each discipline has certain unique characteristics which would influence the selection of media to be utilised in teaching-learning process for that discipline. In the following, are presented certain unique characteristics of history.

The first characteristic relates to the moralists' arguments. One of the broad aims of history is ethical or to teach morals. It is a known fact that the child is interested in personalities associated with power and action. Characters like, Timur, Babar, or Clive are more interesting to him than saintly characters like Buddha, Nanak or Kabirdas. This difficulty is partly overcome by interesting anecdotes and judicious use of teaching aids. Again the child is tempted to measure goodness with success. But in history, it is often found that all successful people are not always good. The teacher has to labour hard to instil in the child the love for justice, courage, truth and charity, for their own sake and not for any material advantage accompanying them. If the characters of virtue are not palatable to the young mind, it is his responsibility to make them interesting.

The second characteristic pertains to the nature of the subject matter which is abstract. In history, observation and experiment are not possible. Since direct experience is ruled out the teacher has to rely on the vicarious experiences. When the past cannot be brought back, the teacher has the responsibility of making the past real. Kalpper (1929) has suggested ways of making the past real by vivid oral presentation, pictures, dramatization tableaux, correlation with other subjects and visiting places of historical interest. So the teacher has to make use of all the available resources to make history concrete and make it

maningful to the pupils. Audio visual methods very often come to the rescue of the teacher in removing such abstractness. Movies make the past scenes re-live. Dramas make it enchanting. All these resources are often to be made use of by the teacher.

Thirdly there is scarcity of visual aids in certain subject areas. In history, especially in the subject area of cultural history the visual aids are rare. When the teacher is expected to teach the evolution of architecture or the Indian contribution to painting, pictures are absolutely necessary. To some extent history teaching is affected by such lack of resources. In course of time such materials may be made available to the average classroom and such difficulty will be overcome.

The fourth major characteristic of history is that it attempts to reconstruct the past. This generates difficulty due to the fact that the relics of the past, which are available in the present day, do not reflect the real splendour of the bygone ages. What we have in the present is only the weather beaten fragments of the past. The child may find it difficult to visualise the splendour of ancient civilizations, if he is shown a few photographs of the excavated sites. What is needed is the careful reconstruction of the past using historical imagination based on the solid facts of archaeological discoveries. The past, if presented through such life like realistic pictures, better learning

could be achieved. Effort is needed in this direction to reconstruct the glorious past of every nation's history.

From what has been presented with regard to the characteristics of history and the difficulties that are generated in teaching it, it may<sup>be</sup> inferred that media selection in history teaching is not a simple task. The teacher has to apply logical discretion while engaged in the process. The foregoing, acts as a logical precedent, to identify the suitable media alternatives for the teaching of history in the present study.

#### INSTRUCTIONAL ALTERNATIVES IN THE TEACHING OF HISTORY :

Though there are several methods in vogue, still the changed classroom environment needs alternatives to cater to individual differences of learners. At a time when there is an abnormal increase in the size of classroom population and the phenomenal increase in the amount of materials taught under the title history, the history teacher has to look constantly for new methods. Since individual attention is not always possible, self study techniques, can easily be employed in the average classroom. One such alternative method is programmed learning.

#### PROGRAMMED LEARNING IN TEACHING HISTORY :

Though programmed learning materials have been widely used in other disciplines, in history, its use is very limited. Probably it is due to the scarcity of validated

programmes. A few programmes which were tried out for M.Ed. dissertations have proved to be effective. Two such programmes are note worthy (Chelladurai 1976, Kammabiran 1978). The details about them are given in Chapter II.

To organise history teaching in a manner as to incorporate the unique characteristics outlined earlier, namely, that of reconstructing the past, abstractions involved, and the need of visual materials; amalgamation of the said three characteristics with programmed learning and filmstrips, is needed. Details regarding this aspect are presented in what follows.

#### PROGRAMMED FILMSTRIPS AND THEIR PLACE IN THE INSTRUCTIONAL PROCESS :

As stated earlier, the programmed learning materials could be administered through a variety of means. If they are projected on a screen, to be viewed by the whole class it becomes a projected programme or programmed filmstrip. Such filmstrips contain pictures, maps, charts, and all the necessary equipment for learning. Besides, each frame contains information, and a challenge for which the answer is provided in the succeeding frame. The pupils are supplied with score sheets to record their answers. Just as the other programmes which are individual paced, the programmed filmstrips are group paced. Such programmes on film are called programmed filmstrips as visualised by Dale (1969). Some of its special features are mentioned hereunder.

The first quality of programmed filmstrip is that it includes the element of pictures. The visual stimulus is made full use of. The abstract nature of the subject matter is removed by the introduction of lifelike pictures and charts. Even abstract concepts like the doctrine of the transmigration of souls, which is a common belief in India, can be portrayed effectively through pictures. Such pictorial representations of abstract facts make learning effective.

Its another quality is that it is group paced. The group is led from frame to frame gradually. The frame is shown till all the pupils in the group have responded to the challenge provided in it. Since the step-size is small group pacing does not pose any problem to the teacher.

The third characteristic is its response demand. Like any other programmed learning material, the pupil has to respond to each frame in the score sheets provided.

The fourth characteristic is the immediate feedback given in the succeeding frame, Erroneous responses are corrected by the pupil himself.

Lastly its skip proof feature makes it different from the other programmed learning materials. The pupil has to view all the frames and he is not allowed to skip over any frame. Thus it combines the virtues of programmed

learning with visual educations and makes it interesting to the pupil.

CONSIDERATIONS FOR SELECTING THE MEDIA :

It may be noted that the present study which attempts to study the relative effectiveness of media, the following considerations were made in the selection of alternative media.

First of all there is difficulty in making history realistic because of the lack of equipment at the present time. Till such materials are made available to all schools, useful instructional materials must be developed locally. With the available resources one should find out the possibility of developing such materials to meet the needs of the classroom.

Programmes available for history are few. The programmed filmstrips are complete instructional materials and they have a definite place in the educational system. They appeal to the visual sense, offering the necessary stimuli through pictures, charts etc. Such programmes can be viewed in the average classroom situation and so it is a proper equipment for most of our class-rooms.

Again the programmed learning materials are individual paced but the programmed filmstrips are meant to be group paced programmes. How far such group pacing is feasible must be ascertained through proper investigation.

Very often the effectiveness of programmed learning materials is compared with the conventional methods. But very few studies have been done in combining the programmed learning with other methods. How far does the presence of the teachers and the teacher pupil interaction influence learning while the pupils learn through programmed learning materials is something that must be studied.

Again the studies done so far show that programmed learning is effective in imparting knowledge. But very few studies have been done in developing programmes which would be equally effective in realising the other objectives such as Understanding, Application and skill. Research is needed in this area.

Lastly the purpose of teaching any subject is the realisation of its long range aims through years of teaching and training. In every class the teacher has to effect a little change in the pupils towards the ultimate goal. If the learning is retained the longterm objectives may be achieved in course of time. Testing of immediate retention and retention<sup>§</sup> after a lapse of time may form part of such a study.

Keeping in mind the considerations stated above the study is done to explore the possibility of preparing and validating programmed filmstrips as an effective instructional medium.

Three media therefore, are under investigation in the present study. There are :

- i) Programmed filmstrips
- ii) Programmed filmstrips with teacher
- iii) Conventional method of teaching history.

The study is aimed at studying the relative effectiveness of these three media in the teaching of selected units of History.

SCOPE AND LIMITATIONS OF THIS STUDY :

This study is meant to find out the effectiveness of programmed filmstrips in history. The first step is to develop such filmstrips for a few units. So the scope is confined to only a few units.

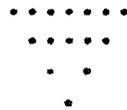
To find out the effectiveness of programmed filmstrips, they must be used in combination with other methods. It is not possible to assess its worth without such a study and so it has been used with the conventional classroom method. It gives rise to three such combinations which are explained in detail in the succeeding chapters.

Again most of the programmed learning materials prepared in history are meant to develop the knowledge objective. But the other objectives also must be given due consideration. So objectives like understanding, Application and skill are to be emphasised.

It would be effective if the study is done in the real classroom situation. Without dividing the class into groups and if studies are done by the teachers themselves, such studies would throw light on the efficacy of the new method tried. In this study the classroom structure is not disturbed and the pupils are taught by their own teachers in order to get valid data from the real classroom situations.

This study is delimited to only four of the objectives of history teaching. Knowledge, understanding, Application and skill are the readily observable and measurable objectives. This being an experimental study the realisation of objectives are to be measured immediately and so the long range objectives are left out for some other investigation.

Thus the study has been delimited to the study of four objectives, in the classroom situation in combination with other methods. The details about the study are explained in Chapter III.



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R E F E R E N C E S  
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