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CHAPTER - I

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INTRODUCTION

1.1 Introduction

Every individual is born with certain degree of general ability and one or several specific abilities. It is the environment in which one lives that nurtures and shapes one's all round development. Of the number of environmental factors, the home and the school play the most prominent roles. For nurturing the learning potential the school has been regarded as the potent force.

As far back as 1800 Pestlozzi Speaking, on the need of 'psychologising education' emphasised the fact that the role of the teacher is not only to impart knowledge but also to understand the student who has to receive what is taught to him. Later John Adams came out with famous percept for the teacher, " If teacher's business is to teach John Latin, he must know both John and Latin".Though a school or a teacher can not add to the potentialities of the students but they can help the students in actualizing their potentialities, which the student as an individual already possesses. Teacher, instructional methods,text books and other resources do contribute to the improvement of class room learning as they have their own merits but they will not be effective in the absence of students endeavour for learning whatever may be the efforts made to strengthen and modify the instruction-al process, the quality of the output depends mainly on the

learning potentials of the students.In order to explore
adequately the learning potentials of students, it is
important to study how students learn, what different
factors affect their learning, why in the same class under
the same instructional process some are high achievers and
some are low achievers.

In order to find out possible solution of the above
mentioned issues the literature on learning, learning process
and learning strategies were examined and reviewed.

1.2 Learning

Different psychologists and educationists defined
learning differently. Ignoring the differences of these
definitions, the significant implication that can be deduced
from their definitions is that learning originates from the
individual's active response to his environment. It means the
learner is an active participant in the process of learning.

Learning brings change in behaviour and this change
may be and is often an increased capacity for some types of
performance.Hence it can be said that learning is a total
change both gross and subtle which occurs in an individual as
a result of his responses to stimuli present and past.

It specifies what the organism is capable of doing. A
standard assumption is that learning involves more or less a
permanent change within organism. Once something is learned

it is permanently stored in the memory.Apparent loss of
learned information is assumed to be not due to deficit in
storage but due to a deficit in retrieval,that is getting the
information out of storage.

Learning is fundamental to education . It includes
perceptions, meaning, understanding, principles and insight.
Thus learning is a fundamental process of characteristics of
mind. The modern view of learning attempts to provide a rich
and varied experience with dozens of mental, emotional and
physical reactions. Learning is not a single,simple process
but rather a complex series of procedures.

Learning will depend upon the integration and the
perception of the learners. The things learnt are integrated
into the dynamic personalities of the learners. They are
truly a part of the person and not something memorised for
the sack of repetition on demand. They will not remain
dormant but enter into subsequent behaviour.Integration means
that the learner identifies himself with the learning
experiences, that the learning outcomes become a part of his
personality, that the skills and abilities, attitudes and
principles are woven into the already existing fabric of his
knowledge and abilities.

Learner who set up goals learn more rapidly and with
eventual integration.Learners do not do well when they do not

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see the value of goals. Learning depends upon how the learners perceive the goal,the other persons and all factors in the situation.

Most important of all are his perceptions of himself. Students possessing high self-concept usually achieve success according to their abilities. Children or adults whose self-concept is of a fearful nature, of a person not quite sure what he can do or how to do it, usually do not succeed.

1.3 Characteristics of learner

According to Burton (1962) the characteristics of a learner are :

- The learner, like all organism is a unitary integrating whole and seeks always to maintain equilibrium or balance.
- The learner is an active, behaving and exploring individual. He is goal seeking organism, pursuing aims to satisfy needs, thus maintains equilibrium.
- The learner had his own personality, a set of aims,values and social habits and also has a pattern and rhythm of growth peculiar to the individual.

A notable difference exists between individuals in speed of learning,energy input, depth of feeling, facility of insight.

A learner may be immature in relation to one set of standards and experiences and quite mature in relation to

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another.

In short the learner is unitary, integrating, goal-
seeking active organism who maintains equilibrium. He has his
own ideas,aims,values,insight and ways of learning.

1.4 Learning Process

The learning process is very important in education.
Most of the time learning process is referred only to cogni-
tive nature which is usually covert behaviour. It includes
learner's skill,mode of attending and perceiving,likes and
dislikes,motivation and needs and his ideational activities.

The whole learning process is affected by a learner's
perception of him, of others and of the activities involved
in the process.

Learning process can be very well understood with the
help of Figure 1 developed by Mayor R.E. (1988).

Figure 1
Information Processing System

```
                                    rehearsal

                              attention      ┌──────┐
INPUT ────── │ SM │ ─────────────────→ │ STM │ ──────────── OUTPUT
             └────┘                     └──────┘

              retrieval         ↓   encoding
                              │ LTM │
                              └──────┘
```
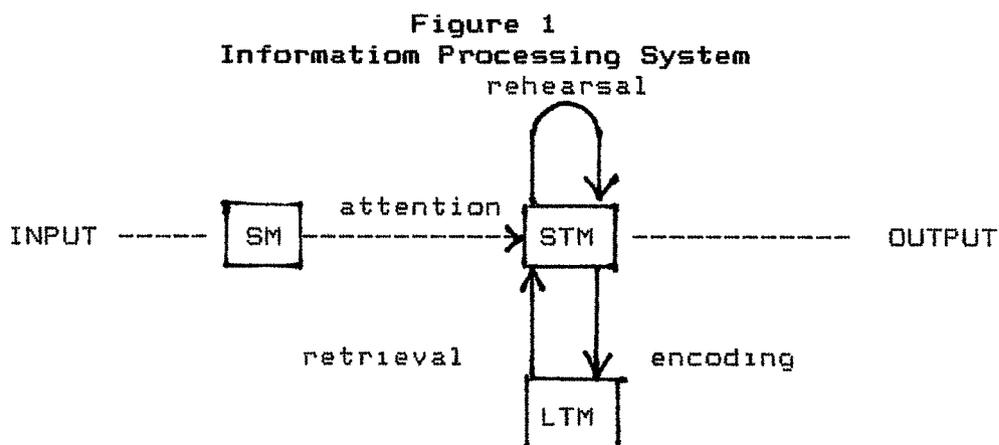
Figure 1 shows an information processing system. As it is seen, this model consists of three memory stores such as Sensory memory (SM), short term memory (STM) and long term memory (LTM). It also shows four control processes like attention, rehearsal, encoding an retrieval.

Learning is based on information taken in by the students, that is appropriate input. Information from outside world, such as from instructional materials or teacher's lecture enters the system through sensory memory (SM). Since information in this store fades rapidly, the learner must pay attention. By attending to a particular piece of information is SM, the learner is able to transfer that information to short term memory (STM). Once information has reached STM, a learner may actively think about the material. Since information in STM fades, it is necessary to actively rehearse the material. Then next step is to transfer the information from STM to LTM, that is process of encoding. Encoding refers to the process whereby the learner transforms new information into a form which can more readily related to the old information which is already stored in memory. Storage refers to the holding of information in memory.

Information held in LTM is permanent but may difficult to retrieve due to interference. Finally the knowledge is transferred from LTM to STM which is known as retrieval. Retrieval refers to the process where by information is brought forth from memory. The out come of learning depends on

both what is presented and the existing knowledge with which it is assimilated. Therefore, the type of existing knowledge, that is, retrieved and used in an assimilative context during learning would influence what is learned.

Information input is the prerequisite of any learning. At this phase the individual should be aware of significant,relevant information, be able to make distinction between relavant and irrelavant information and be able to relate these information with the past experiences. Otherwise confusion may arise.

At the phase of processing, the information should be processed step by step in proper sequential order. Many a time individual loose the thread of what he was doing in account of distraction. When the simple information are combined into complex ones, the confusion arises and it makes processing difficult. The individual is unable to cope with multiple conditions. He can not process the information presented in sequence.Sometimes the amount of information and the number of clues with the individual is able to pickup is insufficient to cope with the task. The obstacles could also arise when input is selective and when there is too much available information and they no longer be related to one another. Obstacles in processing can also be due to the rate at which the responses need to be made and processing is too slow or when the amount of information which needs to be

processed is beyond the individual's capacities. To cope with such situations a great deal of experience of ordering, arranging and categorising information is required.

The rate of intake of information is equally important. Individual's inability to process the information speedily can cause the obstacles. Other obstacles to processing are due to fatigue when the individual is forced either to work very fast or to continue too long when there are too many alternatives, the individual can not make adequate choice and give up task by becoming tired. If he is blamed for this without understanding the cause, he is likely to become emotionally upset and nothing positive can be achieved. It, therefore, is important to understand the cause and analyses the situation for his progress and development in learning
process.

Careful planning, selecting and adopting appropriate strategies of study will help in achieving the goals and getting the result with less effort.

1.5 Learning Strategies.

Psychologist's interest in fundamental thought process, encoding mechanisms, ways of acquiring information gave rise to cognitive styles and learning strategies. Styles are separate, unique patterns of perceiving and receiving

information. A number of or a combination of learning styles towards a specific purpose is what is termed ,as learning strategies. Cognitive styles were identified by eminent psy chologists who followed strategies like rehearsal, problem - solving, reasoning and reaction time experiments.Just as both heads' and 'tails' are two sides of the same coin, the cognitive strategies and learning strategies are the two aspects of information processing.

An individual's approach to a task is called a strategy. It includes how a person thinks and acts, when planning, executing performance on a task and its outcomes. A strategy can be successful or unsuccessful. The most successful strategy is one, that is, both effective and efficient. A strategy is different from a basic skill or a study skill.A basic skill or a study skill usally consists of a set of steps or a procedure related to meeting a specific demand. A strategy consists of critical guidelines related to selecting the best procedure and how to make decisions about its use.

Learning theorists like Dansereau (1978) defined learn- ing strategies as a set of processes or steps that can be used by an individual to facilitate to acquisition, storage and /or utilisation of information. Brooks, stimutis and O'Neil (1985) conceptualize six dimensions for learning strategies :

(1) **Generalizability** - the degree to which a learning strategies is applicable to a wide variety of learning

situation.

(2) **Scope** - degree to which a learning strategies is appropriate for processing varying amounts of information.

(3) **Directness** - the extent to which a learning strategies is used to directly facilitate the acquisition of new information.

(4) **Level** - the extent to which a learner directs his/her processing at executive level.

(5) **Modifiability** - the degree to which a learning strategies can be changed to meet the needs of particular situation.

(6) **Modality** - the sensory or processing system emphasised to acquire and utilize information.

Gagne and Beard (1978) refers to strategies as `Executive control processes'. This view is corroborated by Norman. Where he includes the `regulatory system'. These regulatory or control processes that constitute a strategy are used to monitor and modify continuous cognitive processes or operations. Hunt (1978) refers to strategies as `quick decisions making processes'. According to Fail and Bisanz (1982) a strategy is a sequence of activities rather than a single or unitary events.

According to Schmech Ronald R,(1983) a learning style is a "predisposition on the part of some students to adopt a particular learning strategy, regardless of the specific

demands of learning task". In other words, a learning style is consistent over various situations. Under the same perspective, he regards a learning strategy as a pattern of information processing activities used to prepare for an anticipated test of memory. This definition is corroborated by craik and Lockhart (1972) who view memory as a by-product of thinking. The existence of task specific strategies rather than predisposition strategies has been the argument put forward by researchers like Laurillard (1979), and Ramsden (1979) Batting (1979) on the other hand, talks of the flexibility of selecting strategies specific to the task requirements.

The fact that comes to light from this argument is, that learning strategies can be understood from two platforms, consistency, Uniformity and general patterns in learning strategies, as well as individual differences in learning strategies.

In the present study definition given by Dansereau is adopted. Here learning strategies mean set of processes which facilitate learning process.

From the forgoing discussions the following points are emerged :
-- the individual is actively involved in the process of learning.

- the information is transmitted in acquisition processing and storage/retrieval stages.

- each individual has specific styles or ways of processing information.

- these styles are unique to the individual.

- learning is dependent upon the combinations of these styles.

- learning strategy is a combination of various learning styles.

- problem solving is a matter of a strategic use of learning style.

- these strategies can be identified.

- a successful learning strategy can be repeated.

Based on these central points the present investigation is designed to inquire into the factors influencing the learning strategies of the students.

1.6 Limitations of the present study

The present study proposed to investigate the factors influencing the learning strategies of the students. It should be mentioned that this study focuses on the schools of Baroda city only.

The present study restricts only to the secondary school stage particularly IXth standard students. This is because secondary school stage is a very crucial period

during human growth and development. Upto standard IXth, the schools have the freedom to conduct their own examinations within the set syllabus,using the prescribed text books. Yet the objective of schools is to prepare the students for the final centrally conducted Board examinations at the end of ten years of schooling, leading to the secondary school certificate. Because it is important for schools to show high pass percentages the schools themselves conduct'selection examinations' and filter out students who are academic risks.To the student aspiring for higher education, the Xth standard exam is a crucial examination, as the marks obtained decide entry to specific stream.This is also a filtering stage for the students who opt for vocational education in the polytechnics. The above mentioned reasons made the standard Xth more crucial, as all students,teachers,parents tighten the belt for the best possible performance,become alert and absolutely conscious.

Another reason for selecting these students was their availability. Xth standard students are busy in preparing for appearing at S.S.C. examination and they can not spare their time to respond to the questionnaire, which are used for research purpose only, as it is crucial year for them . Moreover principals of the schools also do not allow any re searcher to collect data from Xth standard students.

The class VIIIth is considered as the delta

class,students are not much settled and matured to give
responses. Hence the investigator has preferred IXth standard
students.

Further the study is specifically for Gujarati medium
students and specially the students from Anami group
co-education schools and independent Co-education schools.

Anami group schools have some special features and the
investigator wants to know whether there is any impact of
such types school on student's learning.

Sex is one of the variable to be studied hence the Co-
education schools (were) both boys and girls studied together
are selected.

Further the study restricts to four anami group schools
and for independent schools.

1.7 Rationale of the Study

In our country, one of the acute problems of education
is low levels of scholastic achievement of the students. It
is well known to us that in S.S.C. Examination the rate of
failures is very high, often exceeding 60%. Therefore the
problem of under achievement in school has acquired alarming
dimension.

The causes of failures may be many .The general cause of failures may be the economic condition, social and psychological conditions,educational back ground of previous generations,physical conditions of the learner,examination system etc. Mostly the under achievement is either of the two reasons which sometimes overlaps (a) mental disability or low intelligence arising from heredity or disease or injure. (b) inability to (preform) upto the level of one's intelligence, due to emotional conflict, lack of motivation, orientation, poor study habits etc. The second category attracted the academician to study the problems of under achievement or failures.

If the students fail,it means that time, energy and money are wasted. Failure in education is costly in the developing country like India where the limited funds are at its disposal. Hence there is a need to help students to know the weakness in their manner of studying and there by help them to understand the factors underlie the achievement not upto the level. Many researchers tried to study the causes of failures or under achievement of the students but there is hardly in India any attempt is made to study the learning and study strategies of the students. The scientific analysis of learning and study strategies of the students would ensure maximum academic achievement.

It is always emphasised for overall development of the students. Hence along with curricular activities, the co-curricular activities are also given important. When students involve themselves in such activities they get less time for curricular activities, but these students are being ignored in giving proper guidance in their study. If such students are made aware of their study strategies, they can use them effectively in whatever short time they get for their academic work and can have better result in academic as well.

Such a study would help the learner to know his/her strengths and weaknesses in learning. After knowing where his/her strength and weaknesses lie, the student might concentrate on a particular weak areas. It would help the teachers also to be far more diagnostic in their assessment and give specific information to students about where they have deficiencies, how serious these deficiencies seem to be and what they need to do to enhance their chances for academic success. The assessment information can be used to evaluate the course. These data help the teachers in planning, implementing and improving the instructional context and delivery.

Thus such a study would be useful to the learners, teachers, counsellors and parents.

1.8 Scheme of Chapterisation

The first chapter deals with the background of the study and conceptual frame work of learning, learning process and learning and study strategies.It discusses the meaning of learning,characteristics of learner,learning process,learning strategies,limitations and rationale of the study.

The second chapter deals with review of related literature including few allied studies.

The third chapter entitled 'plan and procedure' presents the design of the entire study. It includes the introduction,title of the study, operational definition of the term, objectives of the study,variables under study. It also narrates the sample,description of the tools used, procedure of data collection and statistical techniques used.

The fourth chapter presents analysis,discussion and interpretation of the data in three parts. Each part ends with the observation.

The fifth chapter deals with four case studies.Here detailed study of two students who scored highest on learning and study strategies inventory and two students who scored lowest, were made.

The sixth chapter gives a brief summary of the present study which is followed by findings and the conclusions of

the study.It also gives suggestions for further researches in the area of learning.

At the end,are given appendices which includes a copy of each tool in English and Gujarati.