CHAPTER - I
INTRODUCTION

1.0 INTRODUCTION -

What all the great teachers appear to have in common is love of their subject, an obvious satisfaction in arousing this love in their students, and an ability to convince them that what they are being taught is deadly serious.

Epstein (1981, p.xiii)

No system of education can rise higher than the level of its teachers, is a notion which still holds good when we are entering into the twenty-first century.

The more thrilling 21st century characterised by countless spin-offs, stemming from scientific and technological advances in the domain of space, nuclear energy, the marvel of the chip technology, the development of computer information and break through programmes of multi-media communication. There is a process of giving relevant knowledge, imparting essential skills, enkindling innate capacities and generating desirable attitudes, values through teaching.

Historical development of the term ‘teaching’ reveals that teaching was brought of as more or less a skilled trade, in which one with a competent store of knowledge developed skill for assigning lessons, making explanations, doing remedial work and testing.

VIEWS OF TEACHING -

Teaching as an art -

The teaching is considered to be an art because it involves skills to disseminate knowledge, to maintain the interest and attention of the learner and the delicate handling of the problems of the learners to modify his behaviour.

Teaching as a science -

The teaching is an applied science because it incorporates systematic and methodical approach. The system and method, the experimentation
and trial, the probing and enquiry are the bases for any scientific knowledge. As they form the basis of teaching learning process hence we can say that teaching is definitely a science.

**Teaching as a profession -**

Teaching stresses the involvement of intellectual competence, the ability to perform all those skilled services upon which the continued functioning of modern society depends. Therefore, we can say that the meaning thereby that teaching is a profession.

We can conclude teaching as means ‘causing to learn’. Here we can say that nothing has been taught until it has been learned and effective teaching has meaning if it does not lead to effective learning.

Effective teacher provides the students opportunities for learning. He facilitates the interactions among the students. He organises to construct the knowledge. In short, teaching is effective to the extent that the teacher acts in ways that are favourable to development of basic skills, understandings, work habits, desirable attitudes, value judgements and personal adjustment of students.

**The following techniques of teaching enable us -**

1. To make teaching effectively.
2. To make learning interesting and profitable.
3. To quicken the pace of learning.
4. To foster the development of knowledge.
5. To add variety and newness to the lesson.
6. To overcome possible hurdles during the act of teaching.
7. To simplify the complex phenomenon.
8. To make teaching interactive.
9. To develop inquisitiveness among the learners to learn further.
1.1 HISTORICAL DEVELOPMENT IN TEACHING METHODS -

1.1.1 Ancient Education -

About 3000 BC, with the advent of writing, education became more conscious or self-reflective, with specialized occupations requiring particular skills and knowledge on how to describe an astronomer, etc.

Philosophy in ancient Greece let to questions of education method entering national discourse. In his Republic, Plato describes a system of instruction that he felt would lead to an ideal state. In his Dialogues, Plato describes the Socratic method.

The first early universities of Taxila and Nalanda could be taken as first step towards institutionalisation of teaching and acquiring knowledge. The objective of ancient education was “Sa Vidya Ya Vimuktaye”. The teacher was reversed and his reward was the honour that community accorded him for his serious. His role was considered more important than that of the student’s parents in moulding acolyte’s personality.

1.1.2 Medieval education -

Comenius, in Bohemia, wanted all boys and girls to learn. In his The World in Pictures, he gave the first vivid, illustrated textbook which contained much that children would be familiar with in everyday life, and use it to teach the academic subjects they needed to know. Rabelais described how the student Gargantua learned about the world, and what is in it. Rousseau in his Emile, presented methodology to teach children to elements of science and much more. It, he famously sketched books, saying the world in one’s book.

From the point of view of methods and techniques of acquiring knowledge, there was considerable development and refinement of observation. Logical analysis as a tool for refinements of ideas and to arrive at generalizations was also considerably developed.
1.1.3 20th Century Education -

Teaching Methods -

Teaching methods are best articulated by answering the questions, “What is the purpose of education?” and “What are the best ways of achieving these purposes?” For much of prehistory, educational methods were largely informal, and consisted of children imitating or modelling their behaviour on that of their elders, learning through observation and play.

Modern media and materials like radio, television, films, slides, etc. have made the teaching methods more interesting and lively. The “broadcasting” in true sense of the term has made the teaching of good teachers available to many sitting in far-flung areas. Thus the methodologies are likely to be revolutionised by increasing and imaginative use of various audio visual aids most of which are electronic and have now caught the attention.

Changes in Teaching After Independence -

The regular classroom setting also neither encourages nor allows the student teachers the opportunity to test alternative methods of teaching essential for developing effective teaching strategies. The traditional style of education is burden some and boring for the learners. Use of some innovations can make it interesting and learner oriented. Technological materials and methods useful in the teaching-learning process range from chalk board to television.

In a document of Ministry of Education it has been mentioned that, “Challenges of Education : A Policy Prespective” has mentioned, “Teacher performance is the most crucial input in the field of education. Whatever policies may be laid down by Governments at the national and State levels, in the ultimate analysis, these have to be interpreted and implemented by teachers as much through their personal example as through teaching-learning processes” (1985, p.54). Further, we have reached the threshold of the development of new technologies which are
likely to revolutionise the classroom teaching. Unless capable and committed teachers are in service, the education system cannot utilise them for bringing about desired national development. Teachers should be well-equipped professionally in order to make education a potential instrument of social change.

The National Policy on Education (1986) has aptly observed: “The status of the teacher reflects the socio-cultural ethos of a society, it is said that no people can rise above the level of its teachers. The Government and the community should endeavour to create conditions which will help to motivate and inspire teachers on constructive and creative lines. Teachers should have the freedom to innovate, to devise appropriate methods of communication and activities relevant to the needs and capabilities of and the concerns of the community.”

The POA (1986, pp.182-83) has rightly mentioned: “Education requires media support which is related to the curriculum as well as enrichment. Curriculum-based education also requires materials which the teacher can draw upon in the course of his teaching. This could be provided in the form of charts, slides, transparencies, etc. Video technology offers considerable potential for improving the quality of education especially at higher levels.”

Thus, the teacher should use it as a means of bringing, class management, school organization, and so on. It has to be realized that teachers are not always born, they are often made. For “making” teachers, various media, methods and materials should be utilized appropriately “in right place, in right time and in right manner.” Teaching methods should be rightly regarded as the handmaid of the teaching profession.

1.2 INNOVATIVE SOCIALISED TECHNIQUES -

Collective Teaching - it’s defects -

The pupils are taught collectively and are not treated as individuals, the teacher takes it for granted that all of them have the same ability and intelligence and will be able to study at the same rate. In reality, the quicker
pupils are compelled to study at a slower speed which makes them feel bored and waste their time, while the slower pupils appear to be keeping up with the rest of the class but their actual progress is very little, and they have not understood the lesson at all. This often causes discouragement and makes them lose interest in their studies. Again, all the pupils are expected to study a certain amount for 35 or 40 minutes at a stretch, according to the length of the period indicated in the time-table. This is based on the assumption that all the pupils are expected to work at the same rate and will experience the same type of difficulties in that subject. Actually, we find pupils who are at different levels of attainment in different subjects, and therefore they require to devote varying amounts of time to different subjects forms are merely convenient ways of behaving which people have adopted in order to work effectively and economically, it is the spirit of the teacher and the pupils which creates a socialised activity or discussion."

1.2.1 Socialised Techniques - Objectives

The main objectives of socialised techniques may be outlined as follows -

1) To increase activity on the part of the pupils. Pupils learn by doing and by actual participation.

2) To teach pupils to work together in a friendly and co-operative manner-to develop social consciousness.

3) To develop a sense of responsibility in pupils.

4) To reduce the amount of formality which characterises the traditional lesson, and thus establish a friendly feeling between teachers and pupils.

5) To encourage naturally diffident pupils to become more self-confident.

6) To make pupils know each other and to understand them-selves.

7) To help the individual develop the capacity for clear and responsible thought, for planning and for reporting.
8) To prepare pupils for adult life when they will have to deal with the complexities of politics or economics or cultural pursuits.”

9) To help pupils utilise and develop their natural interests and make the subject-matter useful.

1.2.2 Various Forms of Socialised Techniques -

‘Discussion’ which is the chief means of socialised teaching in the class-room can be organised in the following ways :-

1. The Informal Group Plan
2. The Institutionalised Group Plan
   a) The Symposium
   b) The Panel Discussion
3) The Self-Directing Group Plan
4) The Seminar Group Plan

Advantages and Outcomes of socialised techniques -

1) Pupils learns to plan activities
2) common interest and purpose are discovered
3) Practice in leadership is gained
4) Initative is encouraged
5) Independence of thought is achived
6) Training in courtesy is given
7) Ability to report is developed
8) Pupils learn how to take part in discussion
9) Practice is had in pasing judgment
10) Extensive experience is made possible
11) Self-confidence is gained
12) Respect for others is developed
13) Co-operation is learned
14) Teachers know pupils better
15) Pupils have greater admiration and respect for teachers
16) Learning is more highly motivated.

It must, however, be noted that these methods will not completely replace other methods. Under the circumstances, they can merely be used as supplementary devices. Their use in teaching cannot be denied. It is hoped that increasingly the old set lesson of ‘chalk and talk’ will give way to such corporate activities and discussions.

1.3 TEACHING PROCESS -

1.3.1 Meaning and Nature of Teaching -

Teaching :-

_Teaching is an intimate contact between a more mature personality and a less mature which is designed to further the education of the student._

- H. C. Morrisn

According to Burton, “Teaching is the stimulation, guidance, direction and encouragement of learning. This comprehensive meaning of teaching says that learning should be stimulated, guided, directed and encouragement through teaching. Teaching is thus a communication between two or more persons who influence each other by their ideas and learn something in the process of interaction. Robert Gagne (1965) defined teaching in a psychological manner when he says, “Teaching means arranging conditions of learning that are external to the learner. These conditions need to be constructed stage-by-stage, each stage is the just acquired capabilities of the learner, the requirements for retention for these capabilities.”

Kulkarni (1968) has therefore defined teaching as “the process wherein conditions are deliberately created (environment organised) to enable a specified learner (or group of learners) to behave in a specified manner, to perform or to experience certain desired objectives.

In the dictionary of education, Good (1959) has given a narrow and the broad meaning of teaching. According to the narrow meaning,
teaching refers to the act of instructing in educational institutions. Under the broad meaning teaching implies the management by an instructor of the teaching learning situations including:

i. direct interaction between teacher and learner.

ii. the proactive decision - making process of planning, designing, preparing the materials for the teaching - learning conditions and

iii. post-active redirection (evaluation, redesign and dissemination).

From Good’s definition, three major factors emerges:

a) Teaching is an instructional activity which takes place in educational institutions.

b) Teaching is a managerial activity which is concerned with organisation of teaching - learning situation and

c) It is an interactive process between the teacher and the student which involves proactive, decision-making activities like planning, designing, preparing the materials for the teaching - learning situations and post-active redirections.

**Principles of Teaching**

There are some general principles / maxims of teaching which are essential for a teacher not only as a theoretical background, but also as a practical application. A successful teacher should know about these principles and try to follow them as far as possible in his teaching practices.

1. From Known to Unknown
2. From Analysis to Synthesis
3. From Simple to Complex
4. From Whole to Part
5. From Concrete to Abstract
6. From particular to General
7. From Empirical to Rational
1.3.2 **Components of Teaching** -

Teaching technology as a concept can be classified into 4 components.

1) Man power  
2) Methods  
3) Materials  
4) Media  

As method, it implies making use of few devices such as team teaching, lecture supporting methods, personalised system of instruction.

As materials, it comprises instructional materials, text-books, manuals, written/print material.

As media, it implies audio or visual or both media, such as TV, tape, films etc. teaching aids to supplement effective teaching and to promote better learning. Whatever be the method, material or media, it requires man power to operate / utilise in the teaching learning environment. Thus, the four M’s constitute a whole sequence of chains of inputs / facilities in teaching technology.

1.3.3 **Structure of Teaching** -

It consists of three variables.

1. Teacher as an independent variable  
2. Student as dependent variable  
3. Content and the strategy of presentation as intervening variables.

**Teacher as an independent variable** -

The teacher does the planning, organizing, leading, and controlling of teaching for bringing about behavioural changes in the students. He is free to perform various activities for providing learning experiences to students.

**Student as the dependent variable** -

The student is required to act according to planning and organisation of teacher. Teaching activities of the teacher influence the learning of the students.
Content and the strategy of presenting as intervening variables -

It lead to interaction between the teachers and the student. The content determines the mode of presentation-telling, showing and doing etc.

1.3.4 Phases and Stages of Teaching -

Jackson divides the teaching act into three phases of teaching as shown below.

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TEACHING

Pre - Active phase  
  (planning stage)  
  
  Interactive phase  
  (Implementation stage)  
  
  Post - Active phase 
  (Evaluation stage) 
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Phase of Teaching -

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Teaching

<table>
<thead>
<tr>
<th>Phase</th>
<th>Operations</th>
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<tbody>
<tr>
<td>PREACTIVE PHASE - I</td>
<td>Fixing up the goals &amp; content</td>
</tr>
<tr>
<td>INTERACTIVE PHASE - II</td>
<td>Decision about strategy</td>
</tr>
<tr>
<td>POSTACTIVE PHASE - III</td>
<td>Diagnosis of the learner</td>
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<td>Action and Reaction</td>
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<td>Appropriate Testing Device</td>
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<td></td>
<td>Feedback to Teaching</td>
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1.3.5 Competency for Teaching -

The effective teaching can be classified into four type competencies.

1) Competency of subject matter
2) Competency of Teaching skill
3) Competency of Teaching behaviour
4) Competency of problem solving

These competency develop the quality of teaching which are related to content and instructional methods.
The following are good qualities of teaching - learning.

1) Managing classroom activities organized domineer.
2) Dynamism in teaching style.
3) Warmth and acceptance in teaching.
4) Flexibility in teaching and
5) Creative teaching style.

The competencies and quality of teaching enables the teachers to understand four stages of learning.

a) Learning to know
b) Learning to learn
c) Learning to do and
d) Learning live co-operatively

The awareness of these aspects of teaching is essentials for selecting appropriate instruction method.

1.3.6 Criteria of Effective Teaching -

Teaching effectiveness is perceived as an aggregation of qualities like:
(i) knowledge of the subject matter; (ii) clarity and understanding; (iii) presentation skills; (iv) Human relations and rapport with the students; and (v) class management. All these factors determine effectiveness of teaching. There are three major criteria for assessing effectiveness of teaching viz. i) Product, ii) Process and iii) Presage.

These concepts may be discussed here for clear perception.

The first criterion is the product effectiveness. Product is what students learn and advocates of this criterion emphasize that the best test of teaching effectiveness is how much and how well students achieve. This includes achievement in the three domains : Cognitive, effective and psychomotor. For example, students gain in the content of the subject, knowledge and understanding their achievement in affective aspects like attitude, interests, appreciation and so on and students gain in
psychomotor skills like drawing, handwriting, handling equipment, conducting experiments, preparing teaching aids and other related abilities. The difference between the pre-teaching and post-teaching behaviour is the measure of product effectiveness.

The second criterion is process effectiveness. Assessment of teacher’s effectiveness is made in terms of what the teacher does, what the students do, the interaction between them and so on. The examples of this criterion are:

a) Teacher behaviours like explaining, questioning, leading discussions, counselling, evaluating, etc.

b) Students, behaviour like attentiveness, participating in discussions, conducting experiments, workshop activities and so on.

c) Teacher-students interactions like exchange of ideas, teacher-directed and student directed exchanges, warm reception and mutual responses. In the teaching process, the presentation of the subject matter, fluency, skills in using various methods, techniques and audio visual aids creating interest and humour, generating motivation and morale. The teacher may assess himself, students may evaluate, supervisions and colleges may check the teaching effectiveness. In teaching work, teacher’s behaviour, the climate in the classroom and interactions determine the process effectiveness.

The third criterion is presage effectiveness which is mainly concerned with predictive factors. A teacher’s present and future effectiveness is judged on the basis of his Cognitive ability, personal appearance and other characteristics. The instances of this criterion are cognitive competence of teachers, amount of college workload, grade points, personal qualities and so on. All this can be judged indirectly on the basis of records, tests and ratings in and outside the classroom.

On the whole, most of the researchers have pointed out the following characteristics for effective teaching -
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a) intellectual efficiency
b) creativity
c) flexibility
d) personal rapport
e) involvement
f) confidence
g) motivation
h) understanding
i) techniques as well as methods of presentation

1.4 LEARNING PROCESS -

1.4.1 Meaning and Nature of Learning -

Learning is called the modification of behaviour. It implies change in knowledge, understanding, skills, interests, habits, attitudes and so on.

Skinner has therefore defined learning as “a process of progressive behaviour adaptation”. Crow and Crow has considered learning as “the acquisition of habits, knowledge and attitude”. According to Munn learning is “more or less permanent incremental modification of behaviour which results from activity, special training of observation.”

Kulkarni (1986) has summed up all these elements of learning in his definition. According to him learning means “relatively permanent change in behaviour which occurs as a result of experience or practice”. On the whole, learning can be defined as the process of effecting changes in behaviour that brings about improvement in our relations with environment.

Learning is a complex process by which an organism faces new problems, acquires new knowledge, develops new mode of behaviour which tends to persist and create a general behaviour pattern of organism in more or less degree. All this brings about changes of behaviour in doing, expressing one’s thoughts, feelings, attitudes called learning.
Principles of Learning -

The learning depends on the following.

i) Experience of the learner
ii) Capacity and motivation
iii) Methods in which the learning materials are presented to the learner
iv) Meaningful or difficulty of learning task; and
v) Interaction between the above variables.

1.4.2 Conditions and Constraints of Learning -

1) Readiness to Learn
2) Motivation
3) Participation and interaction
4) Freedom and flexibility
5) Experimentation and Innovation
6) Feedback
7) Practice

1.4.3 Characteristics of Learning -

1. Learning is purposive or goal-oriented
2. Learning is an active process
3. Learning is individual
4. Learning is socially conditioned
5. Learning is the response of the whole individual to the total situation
6. Learning is creative and transferable

1.4.4 Elements and Implications in Learning -

Elements in learning may be presented in following form -
1.5 TEACHING - LEARNING PROCESS -

Teaching learning has four aspects - teacher, student, learning process and learning situation. The teacher creates the learning situation for the student. The process is the interaction between the student and the teacher. Teaching and learning relationship or interaction may be explained with the help of a diagram.

**FIG 1.1 TEACHING-LEARNING PROCESS AND TEACHER-TAUGHT INTERACTION**

Teaching-learning process is a means through which the teacher, the learner, the curriculum and other variables are organised in a systematic manner to attain pre-determined goals and objectives.
1.5.1 Framework for Analyzing the Teaching - Learning Process -

A framework for describing the teaching - learning process is presented in above table. The elements in this process include the following.

**Teacher characteristics** :- including the teacher’s existing knowledge concerning the subject matter and how to teach, that may be required for the teaching strategy selected.

**Teaching strategy** :- including the teacher’s performance during teaching such as what is presented and how it is presented.

**Learner characteristics** :- including the learner’s existing knowledge concerning facts, procedure and strategies, that may be required for the learning strategy selected.
**Learning strategies**: including behaviours that the learner engages in during learning that are intended to influence affective and cognitive processing during encoding.

**Encoding process**: including internal cognitive processes during learning such as how the learner selects, organizes and integrates new information.

**Learning outcome**: including the newly acquired knowledge that depends on both teaching and learning strategies.

**Performance**: including behaviour on test of retention and transfer.

### 1.5.2 Classroom Teaching Model

![Diagram of Classroom Teaching Model]

**FIG 1.2 CLASSROOM TEACHING MODEL**

This model is quite explanatory for factors affecting teaching process in classroom and achievement of goals etc.
FIG. 1.3 CLASS TEACHING SYSTEM
1.5.3. Class Teaching System -

Before attempting to teach, the teacher must know that what he intends to teach. He must have a clear idea of the objectives around which his teaching plan has been developed. He must also know what the students are already able to do, and pitch his instruction at the right level.

The outcome of the teaching and learning process is that terminal behaviour will reflect what the trainees are now able to do as a result of their participation in the learning experience. Learning will be identified as a relatively permanent change in behaviour brought about by this experience.

The above figure 1.3 shows teaching as a system. The input is a lesson which depends for its success upon effective communication between teacher and students. During the lesson, teacher activity together with student activity, when combined, will hopefully produce a satisfying learning experience for all concerned.

1.6 COMPONENTS AND TYPES OF TEACHING METHODS :-

College-teaching has been viewed as two dimensional : - (i) intellectual Excitement, and (ii) Interpersonal Rapport. The former has again two components; Clarity of an instructor’s communication and their positive emotional impact on students. Clarity of communication is related to what one presents, and positive emotional impact results from the way in which material is presented. Besides this intellectual arena classroom is a highly emotional and interpersonal arena, which includes students’ motivation, morale, liking and disliking. These two dimensions are however intermingled and overlapping for bringing about effectiveness in teaching. Khanna (Sharma and Ahmed Ed.; 1987, p.16) has succinctly remarked : “An important parameter for improving the quality of education lies in the art of imparting education or, in other words, on teaching methods or teaching style. It is perhaps necessary to have a look at the various methods of teaching which are followed in different university/college students.”
Teaching aims at facilitating learning. Every teaching is therefore required to plan and direct the promotion of learning among students and for that purpose in view a variety of activities are undertaken by him. But a college teacher is more obsessed with “what” - his subject matter than “how” the methods and techniques of presenting the subject matter. Methods of instruction at the higher education level may all into two broad categories, namely, the mass method and the individual method. Mass method comprises lectures, demonstrations, practical experience, syndicate method, group discussions and the use of audio-visual aids. Individual method comprises mostly individual assignments, programmed learning and computer assisted instruction. Teaching techniques vary from the Expository to Discovery (or Enquiry) methods and somewhere in between there are techniques like discussions which are partly Expository and partly Inquiry. Expository techniques of teaching are teacher-centred and suitable for large groups. Examples of such methods are lecture, demonstration, symposium, Radio/Television talks. Inquiry methods of teaching are student-centred and meant for individual students. Each student works by himself and learning on his own using inquiry approaches. Instances of this method are self-study, Field Work, Student Assignment, Individual Experiment/Project and so on. Group discussion techniques are interactive and participatory in which students and teachers are involved equally more or less. These conferences, tutorial Group, Role-playing, Group Project, simulation, etc. come under this category.

At the higher education stage, expository approaches or techniques are more often adopted as a large quantum of knowledge or information can be communicated to large groups in a short time by these methods. A proper mix of expository and inquiry techniques can be more successfully adopted in higher education. Basic information may be transmitted through the former, for example, lectures to large classes, but group discussions should be held and practical workshop activities can be organised in groups individually. Individual students should be encouraged
to make progress according to their ability through assignments, problems and projects.

1.7 OBJECTIVES AND CRITERIA FOR SELECTION OF GOOD METHODS :-

The Secondary Education Commission (1965, pp.84-90) has laid down some objectives of good methods of teaching which equally hold good for higher education also. According to the commission good method should aim at:

i) Inculcating among the students desirable values and proper attitudes in habits of work;

ii) Creating in their minds a genuine attachment to work and a desire to do it as efficiently, honestly and thoroughly as possible;

iii) Shifting the emphasis from verbalism and memorisation to learning through purposeful, concrete and realistic situations;

iv) Providing opportunities for the students to make practical application of the knowledge they have acquired in the classrooms;

v) Training the students in the techniques of self-study and the methods of acquiring knowledge, personal effort and intuition.

vi) Developing the capacity for clear thinking and clear expression in speech and writing; and

vii) Expanding the range of the students’ interests so that they might be able to explore different fields of creating creativity and choose one, if necessary, for specialization at a later stage.

VARIOUS METHODS OF TEACHING -

Common methods used for teaching of psychology are as follows:

1) Lecture Method -

Lecture method is most commonly followed in colleges and schools in large classes. In lecture method only the teacher talks and students are passive listeners. Since the students do not actively participate in this method of teaching so this method is a teacher controlled and information centred.
2) **Lecture-cum Demonstration Method** -

In this method of teaching performs experiment before the class and simultaneously explains what he is doing. This method combines the advantages both the lecture method and the demonstration method.

3) **Heuristic Method** -

The method requires the students to solve a number of problems experimentally. The students are led to discover facts with the help of experiments, apparatus and books. In this method child behaves like a research scholar.

4) **Assignment Method** -

In this method of teaching science, the given syllabus is split into well planned assignments with a set of instructions about solving the assignments.

5) **Project Method** -

A project is a unit of whole hearted purposeful activity carried on preferably, in its natural setting.

6) **Concentric Method** -

This is a system of organising a course rather than a method of teaching. It implies widening of knowledge just as concentric circles go on extending and widening.

7) **Inductive-Deductive Method** -

I) **Inductive Method** -

In this method one is led from concrete to abstract, particular to general and from complex to general rule. In this method we prove a universal law by showing that if it is true in a particular case it is also true in other similar cases.

II) **Deductive Method** -

Deductive method is opposite of inductive method. In this method the learner proceeds from general to particular, from abstract to
concrete. Thus, in this method facts are deduced or analysed by the application of established formula or experimentation.

1.8 EDUCATIONAL PSYCHOLOGY -

Educational Psychology is the branch of Psychology concerned with 1. studying how people learn from instruction, and 2. with developing educational materials, programmes, and techniques that enhance learning. Educational psychologists conduct scientific research both to advance theory, e.g. explaining how people learn, teach, and differ from one another - and to advance practise, e.g. determining how to improve learning. Although perhaps best known for studying children in school settings, educational psychologists also are concerned with learning and teaching of people from infancy through old age, in school and out of the school.

1.8.1 Aims of Teaching Psychology -

The aims of educational psychology may be sub-divided into two classes.

1) General aims  2) Specific aims

1) General aims :-

The general aim and object of educational psychology is to search for and discover principles and facts that conduce to the development of a balanced personality in the educand.

2) Specific Aims :-

The general aims of educational psychology reveal some of its particular objectives. These particular objectives are -

i) To prove the notion that the study of educational psychology helps learning, makes improvement in social behaviour and brings success in the formation or adjustment of personality.

ii) To help determine the aims of education, based on a study of desirable behavioural patterns that have arisen from the process of education.
iii) To contribute towards the development of an unbiased and sympathetic attitude towards the child.

iv) To assist in the complete and proper understanding of the nature and importance of social relationship.

v) To acquaint the teachers with such principles and laws of education that can be utilised by them in solving problems arising in teaching.

vi) To help the teacher in developing an insight into the results of his own teaching and into the habits of others with regard to teaching.

vii) To provide teachers with such factors and methods as may help them to analyse and understand their own behaviour and that of others.

**OBJECTIVES OF EDUCATIONAL PSYCHOLOGY -**

1) Appreciate the need and significance of the study of educational psychology in understanding, analyzing the development of the learner in general and during childhood and adolescence in particular.

2) Understand the process of development in its different dimensions and the factors affecting them.

3) Understand the self-concept, well-integrated and balanced personality.

4) Understand the nature, extent and causes and techniques for helping children with special needs especially in integrated settings.

5) Have the basic knowledge of approach and techniques for factors, conditions and tactics, which facilitate or obstruct learning.

6) Design learning situations to enable learners to use various styles and strategies of learning.

7) Understand group structure and dynamics as relevant to school groups in general and classroom groups in particular.

8) Apply the knowledge of principles and techniques of educational psychology to facilitate optimum learning development and adjustment.
1.8.2 Weightage in Curriculum on Educational Psychology for B.Ed.

**Stage -**

Weightage According to Courses

<table>
<thead>
<tr>
<th>Course paper and section</th>
<th>Title of paper and section</th>
<th>Marks</th>
<th>Weightage in terms of time in hours %</th>
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<td>Paper II</td>
<td>Development of Learner and Teaching Learning process</td>
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There are total six papers contains 600 marks and educational psychology contains 100 marks paper for Shivaji University, Kolhapur curriculum.

**In the SNDT University :-**

There are two separate theory paper. Each contains 100 marks and total of 200 marks for Educational Psychology.

**BRANCHES OF PSYCHOLOGY -**

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Psychology

General Branches                         Applied Branches
1. General psychology                   1. Clinical psychology
2. Abnormal psychology                  2. Educational psychology
3. Child psychology                     3. Industrial psychology
4. Physiological psychology             4. Psychology of Business management
5. Animal or Comparative Psychology     5. Crime psychology
7. Differential Psychology              
8. Para Psychology                      
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1.9 NEED FOR THE RESEARCH -

Higher education is to realise its objectives through suitable methods and techniques. These are mostly reflected in the curriculum and syllabus which are transacted through various teaching - learning activities.

The report of Secondary Education Commission (1965, p - 85) has aptly observed, “But every teacher and educationist of experience knows that even the best curriculum and the most perfect syllabus remain dead unless quickened into the life by the right methods of teaching and the right kind of teachers”.

There should be adequate scope for students’ participation, interaction and activities, good methods must enable students to acquire the qualities of leadership, initiative, co-operation discipline, etc. It should develop problem-solving ability, capacity, of personal achievement and independent work besides team / group activities.

In a class there is scope for interaction, collective perception, emotional cohesiveness shared aims and so on which contribute to the effectiveness of group teaching in more than ways.

Teachers must be fully aware of and well conversant with the various methods or techniques of teaching as soldiers are required to be conversant with the use of various arms and ammunition for fighting effectively. Which methods or approaches they should use at a particular time or for teaching a particular topic or for realising a particular objective will be determined according to their individual judgements or decisions. There should not be any set formula to dictate how to teach and no methods or techniques should be rigidly followed at any stage or level of education. The right methods or approaches need be decided, rather adjusted to the dynamic needs of human nature and classroom situations.

Teachers of higher education generally give most importance to acquire and transmit knowledge. They never care to know how far students have assimilated or grasped their new ideas. They are not concerned about their abilities to communicate their strategies effectively
and evaluate their own performance from time to time. More often they
don’t feel the need to evaluate their abilities. Vendanayagam (1989, p.7)
has rightly observed that all efforts are made to cover the syllabus rather
than uncover it for the students to explore, analyze and critically study in
order to assimilate the knowledge and make it their own.

Many teachers do not treat teaching as a complex process calling
for competencies in various knowledge and skills. They should master
different teaching skills and understand the adolescent psychology,
classroom management, pedagogy and methodology. Their postgraduate
degrees showing their mastery in a particular subject but their research
experience cannot ensure good teaching. Imitation and emulation are the
only methods through which young teachers learn the teaching skills and
other “tricks of the trade” for improving their professional competence.
It is therefore felt essential to expose teachers to various teaching methods.
They should be encouraged to try out the methods found useful and
favourable. Proper guidance and supervision can be provided to them by
experienced and skillful teachers. Methods may vary from subject to
subject, from topic to topic and from teacher to teacher. An adequate
knowledge and practice of vital principles of teaching methods and
learning theories can help the teachers to improve their performance in
classrooms.

Methods of teaching vary according to the size of learners’ group.
For instance, lecture or seminar method is followed effectively in a big
class of 40 to 50 or above and role playing or brain storming techniques
can be adopted with profit in a small group of 15-20. There are some age
old methods like lecture, which are followed invariably in most of the
classrooms particularly at the stage of higher education. But learning
according to individual interests and make progress according to
individual capacity are possible only in individual teaching like
programmed learning, or assignment or tutorials, group discussion,
simulation, symposium, buzz group techniques etc. are efficiently adopted
in small groups for providing both individual and group treatment.
The researcher has taught Educational Psychology to B.Ed level for last 6 years. It consists of facts, definitions, theorems, laws, experiments, formulae, examples etc. Researcher found that, all these aspects would be taught by adopting traditional method of teaching only. But, if we adopt a method of teaching according to content, then what will be the effect on students’ achievement, by taking this fact into consideration a researcher develops this theory.

1.10 RATIONALE FOR SELECTING METHODS -

Any method or strategy of teaching can be selected for the study but for selecting such methods of teaching the following aspects need consideration:

1. The selected methods should have a strong theory base.
2. It should be of immediate use for college learning.
3. From the practical point of view it should be feasible and easy to handle.
4. The methods selected should have wider acceptibility both from teachers and pupils.
5. Sufficient material, literature or information on the methods should be available. So that it will be easier for teachers to implement.
6. There should be adequate scope for students’ participation, interaction and activities.
7. Teacher should know how to balance the individualised and group methods.
8. Students should acquire the qualities of leadership, initiative, cooperation, discipline etc.
9. There should be development of problem-solving ability, capacity of personal achievement and independent work.
1.11 STATEMENT OF THE PROBLEM -

THE EFFECT OF LECTURE SUPPORTING METHOD ON STUDENT TEACHER’S ACHIEVEMENT -

Stating the Problem -

There are many more issues related to this area, they are

1) How many methods are useful at this stage ?
2) Which objectives will be achieved with this methods ?
3) Are there some units which can be introduced with these methods?
4) What will be the effect on the learner’s achievement ?

These questions need a series of systematic research studies. Hence the present problem is selected.

1.12 DEFINITIONS OF THE TERMS USED -

1. Effect -

Difference between Lectuer Supporting Methods and conventional strategy after implementation of the given programme.

2. Lecture Method -

Lecture is carefully prepared, oral presentation of a subject by an expert in the particular field.

An instructional procedure in which the lecturer seeks to create interest, to influence, stimulate or mould opinion to promote activity, to import information or to develop critical thinking, largely by the use of verbal message with a minimum of class participation. Illustrations, maps, charts or other visual aids may be employed to supplement the oral techniques. (Dictionary of Education)

Caster V. Good

3. Lecture Supporting Method -

Techniques other than the lecture, used to teach particular subject to develop creativity, radical ideas and bring about changes in attitude and behavior of the students and teachers.
4. **Student Teacher -**

   A graduate or a post graduate in any faculty admitted in Azad College of education for B.Ed.

5. **Achievement -**

   The successful teaching of a goal used particularly to refer to real-life successes and when evaluating a person’s life.

1.13 **OBJECTIVES OF THE STUDY -**

   The objectives of the study were as follows:

   \[ O_1 \] - To develop self instructional material for lecture supporting methods

   \[ O_2 \] - To study the comparative effectiveness of Symposium Method and Lecture Method in terms of student teacher’s achievement in the unit-test based on specific units in Educational Psychology.

   \[ O_3 \] - To study the comparative effectiveness of Seminar Method and Lecture Method in terms of student teacher’s achievement in the unit-test based on specific units in Educational Psychology.

   \[ O_4 \] - To study the comparative effectiveness of Group Discussion and Lecture Method in terms of student teachers’ achievement in the unit-test based on specific units in Educational Psychology.

   \[ O_5 \] - To study the comparative effectiveness of Brainstorming Method and Lecture Method in terms of student teachers’ achievement in the unit-test based on specific units in Educational Psychology.

1.14 **HYPOTHESES OF THE STUDY -**

   The hypotheses of the study were as follows:

   \[ H_1 \] - There is no significant difference between student teachers’ achievement in the unit-tests after using Symposium Method and Lecture Method of teaching.

   \[ H_2 \] - There is no significant difference between student teachers’ achievement in the unit-tests after using Seminar Method and Lecture Method of teaching.
H₃ - There is no significant difference between student teachers’ achievement in the unit-tests after using Group Discussion Method and Lecture Method of teaching.

H₄ - There is no significant difference between student teachers’ achievement in the unit-tests after using Brain Storming Method and Lecture Method of teaching.

1.15 SCOPE, LIMITATIONS AND DELIMITATIONS -

SCOPE -

The scope of the present study is as follows.

1. The present study is limited to the academic subject Educational Psychology only and specific units in it.

2. The study is limited to 120 students admitted in AZAD COLLEGE OF EDUCATION, SATARA.

3. The study will be conducted in the college AZAD COLLEGE OF EDUCATION, SATARA, which is located in the urban area.

4. The study is limited only to four lecture supporting methods as symposium, seminar, group discussion and brain storming.

LIMITATIONS -

1. The sample to be selected for the study was of two divisions.

2. The sample to be selected for the study was of 120 students out of 160 student teachers’ who belongs to Azad College of Education.

3. The population of the sample was the student teachers admitted in one year teacher training course.

4. The study was restricted to the population of students who opted for Marathi as their medium of instruction.

5. The findings of the study would be applicable only for methods of teaching related to small group mode technique.

6. The present study was confined to verbal behaviour only.

7. The tools developed were tried out with limited population and finalised in the light of suggestions made by the experts.
DELIMITATIONS - 

1. The study was confined to only four lecture supporting methods of teaching. i.e. Symposium, Seminar, Group Discussion, Brain Storming.

2. The investigation was confined to the higher educational college.

3. The experiment was conducted in Azad College of Education, Satara only on government aided college of education affiliated to Shivaji University, specifically situated in urban areas.

4. The experiments were conducted only on B. Ed. students studying Educational Psychology.

5. The study was confined only on the achievement of Educational Psychology.

6. The study was further restricted to select some units from the course of Educational Psychology (B.Ed).

1.16 ASSUMPTIONS - 

1. Some units in Educational Psychology can be taught using other than lecture method.

2. In the college of education lecture supporting methods are applicable.

3. Radical ideas can be developed.

4. Attitude towards Educational Psychology can be developed.

5. Creativity and attitude understanding can be measured.

6. Effective performance can be achieved by using certain teaching strategies.

1.17 SIGNIFICANCE OF THE STUDY -

The study will be useful to student teachers, teacher educators and colleges of education infollowing ways.

A) Student Teachers -

1) Development of the sense of responsibility and co-operation as well as the powers of self-reliance and self-confidence.
2) Evaluate their skills in arranging, formulating and presenting facts in a systematic manner.

3) Questioning power will be developed through participation.

4) It will be useful for promoting the power of developing deep into matter and deriving principles from the context.

5) Proper study habits will be developed by the students so that they can proceed according to the pace they deserve and potentially they have.

6) Adequate resources like books, journals, pamphlets and other materials along with electronic media like computer, video and audio cassettes will be available to students for self-study and creating interest in intellectual pursuits.

7) In the absence of external direction and imposition, the learner will plan, implement experiments, explore and learn according to their interest and ability.

B) Teacher Educators -

1) Aims of teaching can be achieved.

2) Different objectives will be achieved by teaching various subjects.

3) Recognition of specific needs of individual students.

4) Special skills in planning and monitoring discussions, directing and evaluating concrete outcomes will develop.

5) College teachers will receive instruction in how to present intellectually exciting presentation, to lead engaging discussions or to relate to students in a way that promote motivation and independent learning.

6) They will master different teaching skills and understand the adolescent psychology, classroom management, pedagogy and methodology.

7) It can help to improve their performance in class rooms.
C) Colleges of Education -

1) It will be useful for developing a conceptual framework and theory of instruction through the instruction material.

2) It will inspires a sense of appreciation among other departments of the university and colleges.

3) Teacher education departments will be, therefore conduct special innovative programmes.

4) It will be applicable for suitable interhuman relationship; adequate communication and deep understanding through teaching strategies.

1.18 THE SCHEME OF CHARACTERISATION -

The scheme of characterisation is as follows:

Chapter I: Introduction

Chapter one deals with a brief historical retrospect of ‘teaching’. It consists of aims and objectives of teaching, development of Psychology curriculum. Further it covers nature, concept of teaching and learning process. Components of teaching, various methods of teaching, rational for selecting lecture supporting method. Finally it puts together statement of the problem, definitions, objectives of the study, hypothesis of the study, scope of limitations and delimitations, assumptions, significance of the study.

Chapter - II: Review of Related Literature

It is composed of the earlier studies done in the following areas -

i) Researches in teaching strategies.

ii) Researches in Lecture Supporting Method.

Further these researches classified as in India and abroad. Finally there is a concluding remarks on the methods of teaching. It throws light on the gaps in the studies and the need of selecting this problem for the study.
Chapter - III : Lecture Supporting Methods

This chapter is related to lecture supporting method as the innovative strategies. It consists of objectives, concept characteristics, mechanism functions and assumptions, application, various roles, advantages, limitations of lecture supporting method.

Chapter - IV : Methodology of the Study

This chapter is composed of the values of experimental method, choice of experimental design, it’s limitations, validity, selection of the sample, variables, selection of subunits. It also consists of tools for data collection, equivalence of experimental groups. Test used for equivalence of experimental groups, conduct of the experiment, statistical measures to be used and the daywise programme to be implemented.

Chapter - V : Analysis and Interpretation of Data

1. Relative effectiveness of Symposium method and Lectuer Method in terms of student teachers’ achievement in the unit test based on specific units in Educational Psychology.

2. Relative effectiveness of Seminar method and Lectuer Method in terms of student teachers’ achievement in the unit test based on specific units in Educational Psychology.

3. Relative effectiveness of Group Discussion method and Lectuer Method in terms of student teachers’ achievement in the unit test based on specific units in Educational Psychology.

4. Relative effectiveness of Brain Storming method and Lectuer Method in terms of student teachers’ achievement in the unit test based on specific units in Educational Psychology.

Chapter - VI : Summary, Conclusions, Recommendatins and topics for further study

It comprises a brief summary which is followed by major findings, educational implications for student teachers’, for teacher educators and colleges of educations. It points out certain topics for further studies.