

CHAPTER - I

INTRODUCTION

#### 1.0.0 HIGHER EDUCATION AND ITS PURPOSES

"One of the main tasks of education in a modern society is to keep pace with the advance in knowledge" (Education Commission, 1966).

The universities have a crucial part to play in the life, welfare and strength of a nation. Their principle objective is to deepen man's understanding of the universe and of himself. In broad terms, the functions of the colleges and universities in the modern world may be said to be, (1) to seek and cultivate new knowledge, to engage vigorously and fearlessly in the pursuit of truth, and to interpret old knowledge and beliefs in the light of new needs and discoveries; (2) to provide the right kind of leadership in all walks of life, to identify gifted youth and help them develop their potential to the full, by cultivating physical fitness, developing the powers of the mind and cultivating right interests, attitudes, moral and intellectual values; (3) to provide society with competent men and women trained in agriculture, arts, medicine, science and technology and various others professions, who will also be cultivated individuals imbued with a sense of social purpose; (4) to strive to promote equality and social justice and to reduce social and cultural differences through diffusion of education; and (5) to foster in the teachers and students, and through them in society, generally the attitudes and values needed for developing the 'good life' in individuals and society. (Education Commission, 1966).

From these points, higher education must learn to encourage individuality, variety and dissent, within a climate of tolerance. To realise the objectives is not an easy task. It must be attempted only with a comprehensive plan. That plan must include basically a radical improvement in quality and standard of higher education and research besides meeting manpower needs and improvement of organisation and administration at university level.

#### 1.1.0 ROLE OF METHODS OF TEACHING AT COLLEGE LEVEL

The great humanist and educational philosopher, Desiderius Erasmus (1466-1536), attached greater importance to the method of instruction. He felt the right kind of method of instruction can raise an average student to a creditable standard of scholarship (Power, 1970). A method is a tool to be used in guiding and directing the learning activities. It is a mode of communication between the teacher and the taught.

At the higher education level teaching does not just confine to mere transmission of knowledge. It involves, as the objectives of higher education stated under the caption 1.0.0, discovery, synthesis and application of new knowledge. Consequently teaching would have to aim at, developing certain higher order skills.

Under the following captions the various specific methods employed or are being employed at present are provided.

### 1.2.0 SPECIFIC METHODS OF TEACHING

Methods of teaching have evolved and transformed along with the human history through its philosophical, social, political and scientific revelations and changes. Some of the outstanding methods of teaching are:

#### 1.2.1 Imitation and Memoriter:

Among the primitive people, since all learning was preserved by tradition, the methods of instruction were those of imitation and memorization (Graves, 1926). They did not aim at surviving by experimenting with the precarious. They were content if they lost none of the experience of their ancestors. All teaching was informal. Children commenced to imitate their elders first in play. As they grew older they imitated their elders more closely by participating directly in the hunt, agriculture, domestic duties and in religious ceremonies. The more advanced the culture, the more it was perpetuated by story and oral tradition.

#### 1.2.2 Socratic Dialectical Method:

Socrates (469-399 B.C.), one of the greatest teachers of all times aimed to teach not so much by transmitting knowledge, as by enquiry into what might be accepted as to be valid knowledge. This enquiry was carried on through the give and take of conversation, which Socrates guided by a cleverly put sequence of questions. Plato (427-347 B.C.) employed dialectical method in his academy. Aristotle (384-322 B.C.) made chief improvement on the Socratic dialectic by emphasizing the role of concrete experience in teaching methods.

### 1.2.3 Scholastic Method:

Jesus Christ (1-33 A.D.) made use of simile and parable in his teachings to the masses. His material were always drawn from the familiar background of his listeners. He encouraged questions.

### 1.2.4 Lecture:

In mediæval universities the teacher read out from his book while the student took notes. When books became more abundant, the 'lecture' turned from dictation and exposition to an exercise of giving summary of authors or a commentary on the authors. The University of Halle, was the first institution to make important amendments in the 'lecture' system of the medieval universities. It transformed 'lecture' into a procedure of systematic presentation of a growing field of knowledge.

### 1.2.5 Prelection:

Jesuits in their schools founded at the time of counter reformation used the method 'prelection', in the teaching of humanities. 'Prelection' was meant to be a preliminary explanation of a passage. It was a variety of lecture method. What the Jesuits did was to take this method tried by centuries of experience, and for the most part 'Prelection' meant, memorization.

### 1.2.6 Disciplinary method:

This method is to tax the students' abilities to the utmost by setting them even disagreeable lessons and then, holding them strictly to their accomplishments. Disciplining itself was the philosophy of this method.

### 1.2.7 Method of Sense Realism:

Comenius (1592-1670) theorized the procedure of teaching everything through senses, sense experience. At any time more than one sense organ was to be activated. This particular method got added up with a romantic angle with the contribution of Jean Jacques Rousseau (1712-1778). He postulated that this method of teaching should involve the inner sense, feeling of the students. "Give the child the wish and any method will then be suitable". Johann Bernhard Basedow (1723-1790), follower of Rousseau, turned the ideology of romantic method into practice in his experimental school; 'Philanthropinum'. The school curricula included play, handicrafts, gymnastics and field trips.

### 1.2.8 Object Lesson Method:

Johann Heinrich Pestalozzi (1746-1827), the famed Swiss educator, postulated this method which commences with teacher's presentation of sense impression of the object of a lesson. After these impressions take effect the teacher proceeds to name the object. Once named, the object could be studied in its form. Finally, these abstractions held in defining the object. Pupil activity is the essential part of the learning process. The Pestalozzian method put a greater burden on the resourcefulness of a teacher than the old recitation method.

### 1.2.9 Monitorial method:

Andrew Bell (1753-1838) and Joseph Lancaster (1778-1838) contributed this method. The essence of this method was for master to instruct monitors, who in turn instructed the boys under them. It was possible to teach large number of pupils through this method. However, it was more a method of administration. Its main contribution was certain classroom aids; wall charts, slate, sand-board, etc.

#### 1.2.10 Herbartian method:

John Friedrich Herbart (1776-1841) based his method of teaching on the principles of psychology of learning. It involved undertaking teaching activity under five steps - (1) preparation; motivating the student, (2) presentation; presenting new knowledge, (3) association; knitting new knowledge into the old, (4) systematization or generalisation, and (5) application; giving assignments to be solved by students according to the rules developed.

#### 1.2.11 Self-Activity method:

Friedrich Froebel (1782-1852) emphasized self-activity of the pupil providing an opportunity for play and freedom. Froebel used limited range of objects. Froebelian kindergarten employed 'gifts and occupations', which yielded remote symbolic knowledge suggested by the quality of the object, or gift. He tried to use social forces. It was a continuation of social relations already well developed at home. In the never-to-be-forgotten kindergarten circle the child was to learn that he himself was both a whole and also a part within a whole.

#### 1.2.12 Problem method:

John Dewey believed the teacher's method should capitalize on the inborn active propensities of children. While solving a problem, objects become known. This process involves, (1) sensing a problem, (2) exploring and clarifying, (3) suggesting of principle, (4) reasoning out the implications of those suggestions, (5) finally testing the suggestions, hypotheses or theory. Preparing individual for life is the social angle of the method.

### 1.2.13 Project method:

William H. Kilpatrick's main thesis was purposeful activity to experience a fact and appreciation of the same. Encouraging pupil to be productive, is the main tenet of this method.

### 1.2.14 Unit Plan method:

Henrep C. Morrison thought children should be taught so as to gain mastery of what they are studying. The process involves, (1) exploration of work; by teachers - questioning and discussion, (2) presentation of basic frame work through lecture or demonstration, (3) assimilation of collected data; (4) organization, logical statement of conclusions, and (5) recitation; originally ~~written~~ form-presenting the results of the student's work.

### 1.2.15 Socialized Recitation:

To develop qualities of initiation and cooperation to reduce the dominating position of the teacher, without reducing the inherent authority, this method was thought out to be a procedure where students recite not to the teacher but to the class. The pupils ask questions to each other. This involved organizing the classroom on the pattern of a political institution. This attached greater importance to each individual pupil and encouraged all to participate more freely in the class activity.

### 1.2.16 Individualized Instruction method:

Fredric L. Burk (1862-1924) solved the problem of permitting children to proceed through school at individual rates of progress. More notable contribution was of Dalton or Contract plan of Helen Parkhurst; Teacher makes a contract with pupil for which the pupil himself was free to



budget his time. Only after completion of one contract another can be entered into. Under this Plan classrooms become laboratories and teachers become consultants.

Another plan which received widespread attention was that of Winnetka plan under the influence of Burk at Winnetka, Illinois. This plan visualizes that children proceed at individual rates of speed and the same child proceeds at different rates in different subjects. As a result children are given diagnostic test to determine what goals and tasks they can each undertake. After working at their own rate of speed they are to take to a self-administered test, to find whether he is ready for the test by the teacher and for undertaking new task.

#### 1.2.17 Supervised study:

To remedy the deficiencies of provisions for study at home, encouragement from parents, and improvement of study habits, study periods in study halls are provided. A long classroom period is allotted in which, part of it is meant for recitation and other part, for the study under the supervision of a teacher. In addition, literature is provided on how to deal with the lesson. It is done on the lines of Dewey's problem solving technique.

#### 1.2.18 Most Modern Methods of Instruction:

The modern methods of instruction include:

Discussion Method: This method acquired importance with the onset of democratic thinking. This method reduces the all pervading role of the teacher relegating him to the background. It gives greater importance to individual students. This method helps in developing the ability of critical thinking. It helps develop a sense of honouring

others' ideas and also to understand them. However, the pre-requisite is that all the students must have adequate preparation on the topic for discussion and they must have the ability to plan and conduct the discussion period systematically failing which the entire exercise might end up in serious dissensions of the group, let alone helping develop certain skills; besides, a very limited amount of subject matter can be covered. It is practicable for a limited group only.

This particular method has two variations: (a) Tutorials and (b) Seminars.

(a) Tutorials:- It has been defined by Robbins Committee on Higher Education (1963) as a dialogue between one teacher and one pupil based on the pupil's written work.

University Education Commission (1949) explains tutorial method to be an intimate way the teacher directs and develops the thought process which must always be an activity of student himself. Its function is a kind of intellectual midwifery.

It is essentially an individual instruction method. It aims at developing thinking and expressive skills. It tries to provide in depth knowledge, develops regular habits of study, writing and discussion. In an experimental study at the department of Chemistry, University of Edinburgh, U.K. (1962) the optimum size of a compatible tutorial group has found to be of twelve members. However, its effectiveness is conditional. The teacher must have adequate experience and high scholarship, be temperamentally suited and the student must have full confidence in the teacher. Some time it might end up in too much attachment defeating the academic purpose.

(b) Seminar:- The difference between this approach and the earlier one is, while the earlier one is individualized discussion the later is group discussion. Its merits and demerits resemble that of discussion methods discussed earlier.

The latest adoptions of some of the older methods of instructions and some new methods are discussed here under. They are mainly categorized under four major modes:

- (1) large-group instruction-
- (2) medium-group instruction-
- (3) small-group instruction, and
- (4) independent study

(1) Large-group instruction:

i. Non-mediated large-group lecture:

This method involves a formal lecture clearly organised and delivered by the teacher without interruption. The value of this type of method depends on individual teacher's special abilities in the preparation and presentation of his lecture. The aim of such lecture is to summarise, to clarify, to stimulate, and to humanize, the subject matter to be taught. It should synthesise, evaluate, criticise, compare ideas and facts. Operationally a lecture of this type should start with a brief orientation of the topic and presenting matter giving always simple relevant examples with due attention to the entire class. Delivery to be at an average pace. Voice to be full of expression and loud enough to be heard by the entire class. In the end the summary of the lecture is to be provided.

ii. Mediated large-group lecturing:

This method involves use of a variety of communication material and devices so as to enhance the explanatory

effect of teachers' own comments. Appropriate and audio-visual aids are to be used to clarify and to supplement teachers' efforts. This was used at the Pennsylvania State University. They have a specially designed building known as the 'Forum'. The building consists of four lecture halls, each having a seating capacity of 395. The building is of circular shape with a central core having upper level equipment for projecting 2 by 2 inch,  $3\frac{1}{2}$  by 4 inch slides, 16 mm film and c.c. television. Teaching with the help of all these highly technical equipment is done by a group of specialist teachers. This has a number of advantages, individual teachers have more time to prepare and specialize in a particular field.

It involves paying special attention to course design which means specifying behavioural objectives, sequencing objectives, identifying each objective element, selecting or designing suitable media and planning for supplementary instructional measures like follow-up discussions, independent study schedule and meaningful assignment.

### iii. Other large-group teaching formats:

a) in-person lecture forum - The teacher presents his topic without interruptions. After the completion audience can ask question in the designated period.

b) symposium - a number of people present their points of view. A person acting as moderator asks questions and also concludes the session with a summary of the proceedings.

c) Amplified telephone interview or tele-lecture - visiting experts who cannot afford personal presence at the class can deliver lecture to remote class while sitting at his own residence or office. This technique requires a variety of skills from the instructor who arranges the tele-lecture.

## 2. Medium-group Instruction:

(i) Informal lecturing:- Mayhew (1960) suggests an informal lecture ought to provide some evidence, raise some questions, point out certain possible conclusions and then leave the students to followup and reach their own conclusions. This techniques has certain requirements to make it effective. Preplanning provocative questions, asking students to volunteer to answer, studying students' reaction while lecture discussion is proceeding, involving as many as possible calling at random, giving as much time as possible for the students to answer, acknowledging students' answers, accustoming students to listen to questions carefully and from time to time introducing pause and silence, all could make an informal lecture effective.

### (ii) Medium-group discussion Patterns:

(a) Panel discussion - this pattern involves a group of three to six experts and with a chairman talking about a particular topic before the class. It is a mode of interplay of agreement, disagreement and elaboration. Chairman talks as and when necessary to keep the discussion on track and summarises. The task is to arrive at a solution of a problem through group thinking. After panel presentation students of the class might ask questions.

(b) Debate-discussion - This techniques differs with the earlier one only in one respect. While in the former each participant gives ideas and they interact. In the present technique two or more speakers take definite points of view both for or against. This helps in developing the ability of winning an argument.

(c) Dialogue - This technique aims at exploring an area for pointers of discussion on a given topic. It involves an

interview of an expert by a student or the instructor of the class. Summary of the interview shall be given by the interviews or an observer.

(d) Buzz groups: This particular techniques emphasises active participation of each member of a group in the discussion on a selected topic. The procedure involved is a selected matter be presented to a group after which the group is to be divided into sub-groups of equal size. Each sub-group has to select one leader and one reporter for their respective sub-groups. It is the responsibility of the leader of a sub-group to see that each member of his sub-group presents his idea to the sub-group. The reporter records the deliberations of the sub-group. Thereafter all the sub-groups re-form into the original large groups. Each reporter of sub-group presents a summary of his group's reactions. The questions or ideas expressed by the sub-group could be answered or reacted to by the large group when all the sub-groups have presented their respective reports.

(e) Brainstorming: This technique enables a group to do collective thinking in a creative manner. Emphasis is to derive as many ideas as possible from each member. The procedure provides for a free atmosphere where the individual member does not have any kind of fear or hinderance to express his ideas to the group. Ideas expressed by one member get adopted and elaborated by another member. Thus any ideas given shall be made use of in arriving at the final thinking of the group.

(iii) Role Playing:

This technique is helpful for the application of principle studied by the students, enabling them to understand others' motives by means of acting out other's roles

and in increasing the students' awareness of psychological and sociological problems.

This technique can further add to a variety of classroom activities.

The procedure for selecting a situation is careful preliminary planning of who to play which role followed by discussion on how to present the situation of role play.

(iv) Demonstration:

This technique helps in focussing attention on the procedures involved in doing an activity or in manipulating an apparatus or conducting an experiment. Effective demonstration shall have to determine the objectives and content of the demonstration, explaining the purpose and outcomes of the activity, and trying out once before the actual demonstration before the class. Attention should be paid to see the reaction of the students during the demonstration. In the end, discussion, evaluation, and summarizing the demonstration helps the students to retain much. Using gadgets like Videotapes helps in crystallizing the demonstration.

(v) Laboratory Instruction:

This particular method aims at developing scientific attitudes besides developing certain skill of scientific nature; stating and delimiting a scientific problem, controlling relevant conditions which might interfere the results of a study, making measurements, treating and interpreting data and drawing relevant conclusions.

Broadly defined this method can be put to use for any

subject of study, the only difference being that while the science subjects have laboratories social sciences have society itself as a laboratory.

Care must be taken not to rely on cook-book exercises for experiment, Unstructured experiments or problem-solving experiences are preferred to that of structured experiments.

(vi) Field trips and Community study:

Field trips and community studies help students to develop skills of collecting and arriving at judgement in a fairly unstructured ways, they enrich the classroom instruction.

There are several problems which will be encountered in successfully conducting field trips and community studies. These problems can be controlled to a greater extent by considerable systematic planning. Planning should take care of regarding when, where and whom to contact to collect the required data taking permission from the concerned authorities, preparing guiding material, planning follow-up discussions and evaluation of the work.

(3) Small Group Instruction:

Small-group instruction aims at maximizing teacher taught interaction. Often the group ranges from five to fifteen members. The two compatible methods of this nature are small-group discussion and seminars.

(i) Small-group discussion:

The main emphasis of technique is to develop the students' skills of critical thinking and problem solving. It is an exercise in groups' reflective thinking but is neither



a debate, nor a persuasion. The goal is gaining in sight into others' point of view instead of conquest of others.

The **single** most requirement for a successful small-group discussion is the selection of a well defined problem. The rationality of a problem is decided by its relevance to students' life sphere, interests it creates in the students, novel so as to increase curiosity, controversial thus being conducive to discussion and finally has a limited scope.

The instructor should always try to enliven the discussion of the group by providing direction and guidance with all the background of the expertise he has at his command.

(ii) Seminars:

Seminar is a form of class organization in higher education in which a group of advanced graduate students engaged in research or advanced study present their theses or views under the general direction of one or more staff members. Seminar provides scope for a discussion of problems of mutual interest (Good, 1959). However, there can be two approaches; one is where an instructor takes a dominant role of guiding the entire proceedings by raising questions and at the same time acting as an expert arbiter. Another approach is where an instructor provides the basic material for the discussion and sets delimitation. The students take up the major contributory part by expressing their views on the selected problems, or presenting their prepared reports or assignments on the problem selected for discussion. The main purpose of the seminar decides the approach to be taken. If it is for preparing the students to acquire a degree, the former approach is suitable whereas for arriving at a more dependable and plausible solution to a problem the later approach is

advisable. To make the best use of a seminar the instructor must take care to see that all the students participate in all the stages of work starting from collection of relevant material to providing the theoretical framework of the problem, avoid himself doing major part of the work and talking, and use the seminar as a means of making students aware of and appreciate the process of small-group discussion and deliberation.

#### (4) Independent Study:

Developments in the field of educational technology resulted in a number of individual learning approaches. These provide for individuals' convenience, growth of capability, and speed of progress. In addition, these approaches give credence to the concept of life-long learning.

A 'contract' plan is used to make the entire approach systematic. Evaluation of the work takes into consideration the amount of work (number of separate contracts), the quality of work, involvement and contribution in discussions, and examination performance.

The most common types of independent study approaches are: (1) assigned reading, (2) assigned listening, (3) assigned viewing-slides, filmstrips, museum displays, (4) programmed learning assignments-especially computer assisted programmes, (5) writing assignments, (6) committee assignments, (7) oral reports, (8) creative projects, and (9) work experimental internships.

##### (i) Assigned reading:

This approach helps develop right reading habits in students. The ability to exercise judgement in book selection

tion and the ability to organize collected information get enriched by this technique.

Alexander and Burke identify five kinds of reading which a college students should practice; (1) Scanning for books, where relevant information is available; (2) skimming for references; (3) skimming for main ideas without going into full details, (4) reading critically and at the same time grasping full meaning of information, and (5) interpreting and applying the material read to one's own intellectual or academic necessity.

(ii) Assigned Listening:

This technique is the direct result of technological developments. It facilitates individual study at one's own convenience, and place of residence. The listening laboratory which was used for mainly foreign language learning, now became a major versatile tool for learning any subject matter. Students need dial an appropriate number combination to hear desired programmes. Many hundreds of students can listen to the same tape at one and the same time without any trouble. However, low-cost cassette tape recorders much replace these complex installations.

(iii) Assigned viewing:

This is yet another benefit of technological advancement. Students view films, filmstrips, slide cartridges in cubicals within the library or learning resource centres. This technique provides for reviewing once seen visuals which has a built-in flexibility.

(iv) Programmed and Computerized Instruction:

This technique presents learning material for self-instruction and in small segments which includes evaluation of individuals' comprehension of the same. This works on the basic principle of immediate feedback of success motivates better learning. The sequence is, learn, check and if successful proceed to next bit and if encountered with failure either relearn or branch off for further instruction. Learning material can be presented in printed form or in complicated teaching machines by several uses of tapes, audio-visual projects or dial-access systems or even by computers. This particular method is used and always supplemented by other methods of learning. A computerized device was developed at the University of Illinois and known as PLATO (Programmed Logic for Automatic Teaching Operations). It is self operated. A student communicates with the device and in response the computerised device displays a verbal or visual problem. The student types out his solution and then presses the 'Judge' key of the electronic typewriter key board attached to the device. The device displays evaluation of his solution, either as 'O.K. proceed to next item' or as 'return to frame 20 and begin again'. A full record of students' achievement is recorded in the computer memory. Even an entire groups of students' record can be maintained.

(v) Paper and written reports:

This procedure helps develops students' ability to locate and collect data and also one's own written expression. Besides, it provides a ready product of students' ability and a measure for the instructor to evaluate students' performance. In order to overcome the pitfall of students' short cut methods the teacher has to take

certain steps like, restricting list of topics for assignment, giving a week long time for the submission of assignment along with a list of bibliography, if possible conducting an interview or atleast asking few relevant questions, including question on the assignment, in the examination and to ask the students to present a brief oral report of their assignments.

(vi) Committee work:

Another technique of consequence in the individual study approach is committee work, which involves preparing a report or a discussion in the class by each individual student. Adequate prior planning must go into the making of this approach. Meetings between the instructor and the committee before actual presentation of work enhances quality of work.

(vii) Oral reports:

This is yet another technique through which individual students' skill of collection of material or data, organizing the same, and presentation of the report are developed. Students are advised to make an adequate note of their report and to always keep on track, besides concentrating on using better communication skills. Using of gadgets like tape recorder and videotape recorders helps a student to know his own performance.

(viii) Creative Projects:

This technique is the best means of grading a students' individual capabilities. A 'cook-book' variety of project is the least quality as compared to a prototype project which is of medium quality and a new inventive or original project which is of highest quality of individual ability.

(ix) Work experience and Internships:

This technique helps provide the students with all the practical knowledge of task, be it teaching (internship) or taking part in a business organization at different levels of management or other wise. No amount of reading, teaching or laboratory work can equal this technique.

(x) The Postlethwait Audio Tutorial Plan:

A technique involving multi-media was developed by Purdue University, by Dr. S.N. Postlethwait. It involves putting a student through a number of varied activities. It provides for (1) one-hour-per-week session of film showing, lectures, and announcements, (2) a daily night long sessions of independent laboratory study in carrels, (3) weekly quiz session of the member groups, and (4) undertaking two independent miniature research projects. The technique was found to be effective and of relatively less cost of men and material.

After having gone through numerous methods of instruction ranging from primitive methods to that of modern technological times, we can see that each method has its own relevancy and profitability besides having short-comings. Ultimately it is the need of a particular situation with all its inputs and the output requirements that decide the use of a particular method.

### 1.3.0 LECTURE AS A METHOD OF INSTRUCTION

In early societies, without formal agencies of learning, and deprived of professional teachers, society itself was a school, and every tribesman a professor (Power, 1970). The method of instruction that early men found most appropriate to such circumstances was through 'invitation'. The more

advanced the culture, the more it was perpetuated by story and oral traditions.

In ancient Indian education method was a similar mixture of wise percept and practice that honoured percept more in the breach than in observance.

At the beginning of each 'lecture' the pupil embraces the feet of his teacher ... the teacher pronounces one word or two ... the pupil repeats (Keary, 1938). As regards the institutions ... there used to be a number of teachers, who set up as 'gurus' and attracted by their reputation, a small number of pupils came to live with them. After initial ceremonies the 'guru' used to recite verses from one of the 'Vedas', explain its meaning and metre (Siquera, 1960).

Confucius the greatest Chinese philosopher was credited with the maxim,

"when I have presented one corner of a subject, and the pupil cannot make out the other three, I do not repeat the lesson" (Power, 1970).

This clearly shows that the method of instruction was invariably a formal lecture.

Jewish education is reflected in one word 'Shānah' which means 'to repeat' or 'to teach'. The Talmudic writings of the Jews direct a teacher ... the teacher should strive to make the lesson agreeable to the pupils by clear reasons, as well as by frequent repetitions - (Brubacher, 1947). This clearly expound the method of instruction to be 'lecture'.

Early Greek education continued the ancient method

of invitation and 'memoriter'. Socrates, Plato and Aristotle injected new method of dialectic. But with Aristotle the method saw its last days.

Roman educational traditions, the next in line of the history of educational philosophy, sanctions a Roman boy after completing his studies in grammar, could go on to a higher schooling and study 'rhetoric', which is aimed at teaching how to master the art of oration, in buildings specially meant for lecturing and possessed by certain reputed masters. Thereby 'lecture' occupied a prestigious position in the sense that it was recognised as a special skill which needed to be given and taken by reputed few.

The whole realm of christian education made use of scholastic methods of instruction. Jesus christ taught with similies and parables. Thereby we see that 'lecture' gave credence to meaningfulness unlike ancient informal 'memoriter' type.

Lecture as a method of instruction took a definite shape during medieval and renaissance period of human history. The custom of the professors at medieval universities was to lecture to their students. Isocrates as far back as 4th century B.C. placed the level of effectiveness of a lecture at a higher panel than a book. Even Plato chose lecture in place of a book. In all the universities that were established in middle ages 'lecture' was intended to supplement the more individualized instruction. There were general and extra-ordinary lectures given on selected texts and on subject matter of interest. General lectures were more or less a dictation of subject matter whereas extra-ordinary lectures were special explanation provided on selected texts. The university of Halle (1694), which



has often been called the precursor of the modern university, was the first to make important amendments in the 'lecture' system of the medieval university.

At the time of counter reformation the central feature of the Jesuitical method of instruction was the prelection, a variety of the lecture method (Brubacher, 1947). The method involved initial reading of a selection of a chosen author, followed by repetition and expansion and thereafter to analyse and relate each part and discuss its appropriateness. What the Jesuits did was to take this method, tried by centuries of experience, and bring it to the highest polish it had ever received.

Around the early part of 19th Century Henry Barnard who was surveying on the instructional procedures, commented on lecture method in the following sentences. ...

"this medieval device evidently had the vitality not only to survive in the higher institutions of learning but to spread to lower ones as well"  
(Brubacher, 1947).

Again another survey done in 20th century (1964) by the University Grants Committee, Britain, observed, ...

"... at most universities the lecture remains in most subjects the main vehicle for instruction, and the tutorial or seminar fulfils a secondary role".

The situation in our country seems to be similar as it is common knowledge that lecture is the main method of instruction at all stages of education.

### 1.3.1 Features of a lecture - Objectives

It is claimed that the lecture method may be used to achieve three main kinds of objectives:

- (1) transmission of knowledge,
- (2) promotion of thought, and
- (3) changes in attitudes.

It was claimed that an oral method is clearer and less wasteful of time when dealing with complex material (Hale Report, 1964) University teachers also regard the lecture as a means of awakening critical skills in the student. (Hale Report, 1964). There is evidence that he, the teacher, will be more effective if he is fair-minded, presents more than one point of view, considers the students' view points first, presents his own conclusions first if the students do not have already have one, and requires some reconsideration of the issues (Bligh, 1972).

However, research evidence shows that a lecture can only effectively help in students' acquisition of information. Albeit the experiments conducted on methods of teaching suffer with inadequacy of scientific evidence. It becomes difficult to control the interacting variables. Bligh (1972), expresses, that -

" I have shown only that the traditional form of lecture, with continuous exposition from the teacher, is not conducive to student thought, it is possible that other styles could be more successful, and this possibility must be explored ..."

### 1.3.2 Advantages and disadvantages of lecture method of instruction

Lecture as a method of instruction has certain inbuilt advantages over other methods. Lecture, if delivered properly has been considered, (1) to help students learn new subject matter easily and at a faster rate, (it is effective to introduce new topic, giving over view and for quick review of work completed), (3) it can provide most upto date information, (4) it is most economical of staff time - more information in less amount of time can be given, (5) it can be given to a large number of people at one and the same time, (6) it assures uniformity of material transmitted to listeners, (7) it is highly adaptable to the needs and conditions of the teaching learning situation, (8) it is amenable to recording and transcription, (9) it permits spontaneity, and (10) it is at its best when organised and systematic.

At the same time a lecture has certain weaknesses like; it (1) can not cater to individual needs, (2) has little opportunity to judge understanding and reactions of listeners accurately, (3) heavily relies on students note taking ability, (4) demands sustained aural and visual concentration of the listeners, (has limited opportunity for student participation in the process), (6) may help little to develop high level intellectual skills and attitudes, and (7) requires careful preparation.

To conclude the discussion it can be said that there are various methods of teaching. Among the methods the lecture method, which is a medieval device, seems to have the vitality not only to survive in the higher institutions of learning but to spread to the lower ones as well (Brubacher, 1947). At most universities the lecture remains in most

subjects the main vehicle for instruction and the tutorial or seminar fulfils a secondary role (UGC, Britain, 1964).

The situation obtained in India is not dissimilar to the situation obtained in Britain and other advanced countries. Thus it can be generalized that 'Lecture' is the most popular method of transmission of knowledge, particularly at the tertiary level of education.

In view of the significance of lecture method an attempt is made in the present investigation to analyse the lecture to find out the factors that make a lecture effective. The identification of such factors which contribute to the effectiveness of lecture method could help in vigorous use of such factors where through the equality of the lecture can be improved.