# TAMIL NADU TEACHERS EDUCATION UNIVERSITY

Chennai-600 097

Course Material for B.Ed.( First Year)

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Course 7 (a): Pedagogy of Economics
(Part –I Methodology)

**Unit I** Aims and objectives of teaching Economics

**Unit II** Planning for Instruction

**Unit III Practising the skills in teaching Economics** 

**Unit IV** Methods Of Teaching Economics

**Unit V** Resources for Teaching Economics

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## **UNIT I Aims and objectives of teaching Economics**

## **Objectives:**

- To obtain knowledge on the nature and scope of Economics.
- To understand the aims and objectives of teaching of Economics.
- To examine the need and significance of teaching of Economics.
- To explore the values of teaching of Economics.

#### INTRODUCTION

Most of the people learn informally in the society through their experiences as they get exposed to certain real life situations. However, those who want to make a career in different dimensions, they need to learn it formally. For this, they need to learn it properly, that is possible through pursuing a formal course structure. This gives them a proper understanding of economics. They can apply this knowledge in different context. According to Samuelson and Nordhaus ("Economics"; sixteenth edition; 2000), "Often economics appears to be an endless procession of new puzzles, problems, and difficult dilemmas. But experienced teachers have learned, there are a few basic concepts that underpin all of economics. Once these basic concepts have been mastered, learning is much quicker, and more enjoyable".

#### **MEANING**

Economics is the social science that is concerned with the production, distribution and consumption of good and services. The term economics comes from the Ancient Greek – oikonomia, "management of household, administration" from oikos, "house" + nomos, "custom" or 'law", hence :rules of the house (hold)". Economics deals with the study of various activities of man directed towards acquisition of wealth and earning of money.

## **NATURE**

Economics is the science that deals with production, exchange and consumption of various commodities in economic systems. It shows how scarce resources can be used to increase wealth and human welfare. The central focus of economics is on scarcity of resources and choices among their alternative uses. The resources or inputs available to produce goods are limited or scarce. This scarcity induces people to make choices among alternatives, and the knowledge of economics is used to compare the alternatives for choosing the best among them. The numerous human wants are to be satisfied through the scarce resources available in nature.

Economics deals with how the numerous human wants are to satisfied with limited resources. Thus, economics not only covers the decision making behaviour of individuals but also the macro variables of economies like national income, public finance, international trade and so on.

"Economics aims to explain how economics work and how economic agents interact. Economic analysis is applied throughout society, in business, finance and government, but also in crime, education, the family, health, law, politics, religion, social institutions, war, and science. The expanding domain of economics in the social science has been described as economic imperialism". This shows the nature of economics in modern context. It tells that economics can be used for raising the living standard of people and their welfare, however, it also wants that economic issues or economic, objectives might become a tool in the hands of people, who want to exploit it for unknown motive like separation from others.

## **SCOPE**

Scope means province or field of study. It is very difficult to define economics because economics is very dynamic subject. Its scope keeps on changing rather expanding. There are divergent views about the scope of economics due to continuous growth in the subject matter of this subject.

#### 1. Economics – A Science and an Art

a) Economics is a science: Science is a systematized body of knowledge that traces the relationship between cause and effect. Another attribute of science is that its phenomena should be amenable to measurement. Applying these characteristics, we find that economics is a branch of knowledge where the various facts relevant to it have been systematically collected, classified and anlyzed. Economics investigates the possibility of deducing generalizations as regards the economic firms can be very easily measured in terms of money. Thus, economics is a science.

**Economics – A Social Science**: in order to understand the social aspect of economics, we should bear in mind that labourers are working on materials drawn from all over the world and producing commodities to be sold all over the world in order to exchange goods from all parts of the world to satisfy their wants. There is, thus, a close inter-dependence of millinons of people living in distant lands unknown

to one another. In this way, the process of satisfying one has, thus, to study social behaviour i.e., behaviour of men in-groups.

b) **Economics is also an art**: An art is a system of rules for the attainment of a given end. A science teaches us to know; an art teaches us to do. Applying this definition, we find that economics offers us practical guidance in the solution of economics problems. Science and art are complementary to each other and economics is both a science and an art.

## 2. Positive and Normative Economics

Economics is both positive and normative science.

- a) **Positive Science**: it only describes what it is and normative science prescribes what it ought to be. Positive science does not indicate what is good or what is bad to the society. It will simply provide results of economic analysis of a problem.
- b) **Normative science**: It makes distinction between good and bad. It prescribes what should be done to promote human welfare. A positive statement is based on facts. A normative statement involves ethical values. For example, "12 per cent of the labour force in India was unemployed last year" is a positive statement, which could be verified by scientific measurement". "Twelve per cent unemployment is too high" is normative statement comparing the fact of 12 per cent unemployment with a standard of what is unreasonable. It also suggests how it can be rectified. Therefore, employment is a positive as well as normative science.

## 3. Subject Matter of Economics

Economics can be studied through a) traditional approach and b) modern approach.

- a) **Traditional approach:** Economics is studied under five major divisions namely consumption, production, exchange, distribution and public finance.
  - 1. **Consumption**: The satisfaction of human wants through the use of goods and services is called consumption.
  - Production: Goods that satisfy human wants are reviewed as "bundles of utility".
    Hence production would mean creation of utility or producing (or creating) things
    for satisfying human wants. For production, the resources like land, labour, capital
    and organization are needed.
  - Exchange: Goods are produced not only for self-consumption, but also for sales.
     They are sold to buyers in markets. The process of buying and selling constitutes exchange.

- 4. Distribution: The production of any agricultural commodity requires four factors, viz., land, labour, capital and organization. These four factors of production are to be rewarded for their services rendered in the process of production. The land owner gets rent, the labourer earns wage, the capitalist is given with interest and the entrepreneur is rewarded with profit. The process of determining rent, wage, interest and profit is called distribution.
- 5. **Public finance**: It studies how the government gets money and how it spends it. Thus, in public finance, we study about public revenue and public expenditure.

## b) Modern Approach

The study of economics is divided into: i) Microeconomics and ii) Macroeconomics.

#### 1. Microeconomics

Microeconomics analyses the economic behaviour of any particular decision making unit such as household or a firm. Microeconomics studies the flow of economic resources or factors of production from the households or resource owners to business firms and flow of goods and services from business firms to households. It studies the behaviour of individual decision making unit with regard to fixation of price and output and its reactions to the changes in demand and supply conditions. Hence, microeconomics is also called price theory.

#### 2. Macroeconomics

Macroeconomics studies the behaviour of the economic system as a whole or all the decision-making units put together. Macroeconomics deals with the behaviour of aggregates like total employment, gross national product (GNP), national income, general price level, etc. so, macroeconomics is also known as income theory.

Microeconomics cannot give an idea of the functioning of the economy as a whole. Similarly, macroeconomics ignores the individual's preference and welfare. Hence, the study of both micro and macroeconomics is essential to understand the whole system of economic activities.

# AIMS AND OBJECTIVES OF TEACHING ECONOMICS AT THE HIGHER SECONDARY LEVEL

Placing India in the categories of economics, it comes under the developing economy. It has poverty, overpopulation and unemployment as its major problems. The most important feature of our country is that 70 per cent population is residing in the rural area and major part of economy is based on its agriculture. No doubt, India, as a developing country, has achieved a considerable growth and development in the area of agriculture, industry, and important improvements in the area of education for the constructive attitudinal change towards the social and economic development in the country. Therefore, the teacher may have the important aims of teaching economics in his mind to make his students able to understand the application of economics in their daily lives and the whole economic structure of the country as follows:

- To make the students able to know the impact and consequences of British rule on the Indian Economy.
- To make the students able to acquire knowledge of various economic terms like various definitions of economics and economy, capitalistic, socialistic and mixed economy, developed and developing economy.
- 3. To make the students able to understand the various causes of population explosion, consequences and its various remedial measure in India.
- 4. To make the students aware about institutional set-up and main sectors of the Indian economy like private and public sectors.
- 5. To make the students able to understand the various causes of poverty, unemployment, price rise, inflation and their remedial measures.
- To make the students able to understand the economic explosion of consumers, rights of consumers in the society.
- 7. To make the students able to understand the complete infrastructure of the Indian economy, like transport and communication network, power and irrigation and various monetary and financial institutions.
- 8. To make the students able to understand the significant contribution of agriculture to national income, employment, state revenues, industries, food, equipment and trade.
- 9. To make the students able to understand the mutual relationship of agriculture and industry and a balanced industrial structure, the importance of small and large-scale

industries and its various regional disparities and future aspects of industrial developments.

- 10. To make the students able to know the importance of foreign trade in Indian economy, its volume and composition and direction of export and imports;
- 11. To make the students aware about the role of state in the promotion of economic development, and other terms like fiscal and monetary policies, economic planning and its need, objectives and various strategies and the whole economic development under the various five-year plans since independence of the country;
- 12. To make the students able to draw various types of diagrams, tables, charts, and graphs used in showing data on the various aspects of Indian Economy and
- 13. To develop the attitudes of the students towards the constructive social and economic development of the nation as a whole.

#### NEED AND SIGNIFICANCE OF TEACHING OF ECONOMICS

Man is a social animal. The social nature of man and the instinct of living together and cooperating with one another, needs adjustment of behaviour according to some accepted rules. This relationship of dependence of man on each other has been growing and developing with the development of civilisation and culture. It is not only growing but also becoming complex.

In the present day society human needs have grown so enormously that now it has become very difficult to say which human need is main and which one is a subsidiary need. In such a situation human needs always remain unfulfilled and the individual is in a constant trouble for the achievement of needs and fulfilment of wants. To achieve this aim of satisfying his wants the individual is always busy in performing various types of activities. In the present day society all you to needs and wants can be satisfied only if you have enough wealth and money. Thus, all human activities are directed towards earning money and acquiring wealth. It means that most of the human activities are economic activities.

Economics deals with the study of various activities of man directed towards acquisition of wealth and earning of money.

In India we have very old Economic traditions. 'Arthashastra' of Kautilya was used during 'Gurukul' system. Then the morality in economics was stressed more. In present context,

economics today may be considered as the boon of British rule in India which brought the subject of economics to Indian school education. Today the growth is seen by quantity of consumption, where items are used & thrown fast. Economics has become the centre of various activities. Each and every subject is viewed from its economical angle because one always likes subjects which fetch more money in one's future life. Economics has both practical and economic value. It occupies an importance position in Education and curriculum has become an integral part of education system.

## VALUES OF TEACHING OF ECONOMICS

The value of the study of economic is as follows:

## **Conceptual Values**

#### 1. A Field of Information

The study of economics helps the students to broaden their knowledge. Students can be aware about most of the interesting and logical facts about the behaviour of human beings. The students increase their knowledge through the study of various economic theories, important principles, laws and generalisation. New facts and problems in economics also induce the reservoir of information among the students.

## 2. A Field of Training in Mental Horizon

It is the reasoning power that leads human beings towards achieving certain goal of their lives. This reasoning power is increased through the study of economics. Mental horizon of the setback is sharpened. The teacher put an economic problem before the students. The students try best possible to make good analysis of economics problems. In economy students study various theories of value, of wages, and interest, international trade, solution of various financial problems and demand and supply of various goods and services in different form of market etc. these theories develop mental power of the students.

#### 3. A Field of Cultural Value

The cultural values are developed through the better correlationship of material and non-material things of the society. Economics makes study about material and non-material things. It studies how individual produce and make better utilisations of the goods and

income in his life and his human behaviour in utilising these goods and services. Developing human behaviour through utilising different material goods leas to various cultural values in the society. Proper balance is required to develop cultural and the teaching of economics provide better understanding about the food use of various things in life.

## 4. A Field of Mutual Cooperation

Being social instructs in human beings, he has to make social relationshiop with others in his social surroundings. He has to fulfil his basic requirements to sustain his life. It is not possible to complete these requirements without the help of others. He satisfies his various wants with the cooperation of others. This process leads to a sense of mutual cooperation among the persons. On the basis of cooperation all the activities of economy is possible. The students learn through the study of various concepts in economics, liked cooperative marketing, cooperative banking system, terms of trade, successful functioning of industry etc.

## 5. A Field of Citizenship

Every country desires to make its good citizens. The study of economics provide intelligent and good citizens to the society. The students of economics learn completely how to make better utilization of goods and services of the country. The formal training is given to all the student through teaching various economic concepts from the very beginning of schooling like from grade I to X grade in the form of social studies. Later on, most of the interested students offer economics as a disciple to make higher study for their profession. No doubt they contribute better in the constructive development of the society that leads to a sense of good citizenship. They have good faith in democratic values of life. They appreciate and solve the various problems of agriculture, industrial production, a system of banking and circulation of money more clearly in the social forces of the country.

## **Practical Approaches**

A subject is supposed to be useless if it does not contribute practical value in the life of the individual in the society. The importance of the study of economics to the society and the individuals is clear on account of its use in daily life of the individuals. Economics helps human beings in the proper management of their home. Every individual desires to achieve the maximum utility or satisfaction from the use of his limited resources. It is the theory of consumption that leads the individual to become good householder. An understanding of economics is essential for successful businessmen. Various economic theories, principles, law and other concepts regarding economy provide number of techniques to the businessmen in their daily routine to carry on their business. Most of the students offer economics in schools and colleges in the field of social sciences. They offer this course only because of its professional importance. The students of economics get employment in trade, banking, agriculture, industries, insurance and other private and public sectors.

Every society is to think firstly about the strong structure to improve better income of the people. It is the main aim of social reformers and economists to serve the human beings in the society. The complete development of the society depends upon economic growth plus social change. In democratic system of the country, people elect a number of pliticians and ministers to form a government. For the better function of government, good politicians and ministers are needed. They must have the complete understanding of political as well as economic structure of the country. To remove poverty and unemployment is the basic aim of any type of economy. The standard of living ot the people can only be possible through e economic growth and economic development. The people of the country would be able to understand economic structure well who have studied the economics. These people can contribute better to make economics structure strong. This strong and effective economics structure ultimately helps the people to raise their standard of living in the society.

## **CONCLUSION**

Economics as a discipline of social science has a practical approach to enrich economic value among the students for their daily life as well as for profession. Most of the students offer Economics as an important discipline of study in schools and colleges. The whole system of the society depends upon the effective economic structure and strong economy of the society. Each and every individual tries to maintain standards of living in the society. Society comprises its rich and poor people. The study of economic is required formally or informally to make the best

possible utilisation of their limited resources in their daily life to maintain certain norms and conduct of society.

## **Questions for Discussion and Reflection**

- 1. Discuss the nature and scope of Economics.
- 2. Enumerate the aims and objectives of teaching of Economics.
- 3. Describe the need and significance of teaching of Economics.
- 4. Critically analyse the values of teaching of Economics.
- 5. Economics Is it a Science or Art? Justify.

## UNIT II PLANNING FOR INSTRUCTION

#### INTRODUCTION

Planning is essential in any sort of activity and more so when a teacher is going to a classroom for teaching a subject. Especially for an Economics teacher, it is absolutely essential that he plans the topic well in advance so as to make his teaching interesting and efficient by organizing simple activities. Planning helps the teacher in systematic presentation of subject matter. The teacher has to plan every step and should go to the classroom with a written plan. Effective lesson planning requires the knowledge of the physiological developments and the intellectual maturity of the students. It also requires knowledge about the needs, interests and abilities of the students. The knowledge of psychology of learning, principals of teaching, previous knowledge of the students, and effective mastery of the subject matter are essential for lesson planning.

#### **LESSON PLANNING**

Different teaching methods are available for teaching Economics and all these methods are discussed in an earlier unit. Similarly various teaching aids are available for transacting the curriculum. Before going to the classroom the teacher has to select the appropriate method for teaching the topic and also the proper teaching aid which will help the learner to understand the concepts in the topic. This is sometimes called planning the strategy.

- The lesson plan stimulates the teacher to think in an organized manner. It helps the teacher to outline the objectives properly.
- The lesson plan helps in creating the interest of pupils towards the lesson.
- A proper correlation is established between the new and old lesson.
- The lesson plan provides guidance to the teacher as to what and how he should teach.
- This compels the teacher to think about using teaching aids.
- This helps the teacher to choose the best teaching method.
- The lesson plan inspires the teacher to ask proper and important questions.
- This helps the teacher to teach, keeping in the mind the individual differences.
- The subject matter is organized in a time frame and with proper sequence.
- This develops self-confidence in the teacher.
- This helps the teacher in evaluating his teaching.

## **Definition of Lesson Plan**

Bossing defines, "A lesson plan is an organized statement of general and specific goals together with the specific means by which these goals are to be attained by the learner under the guidance of the teacher on a given day."

In the words of Lester B. Stands. "A lesson plan is actually a plan of action. It includes the working philosophy of the teacher, his knowledge of philosophy, his knowledge about students, objectives, material to be taught and his ability to utilize effective methods."

## **Components of a Lesson plan**

Teacher should follow specific steps in writing lesson plans. J.F. Herbart and other educationists after him have emphasized the following steps. These steps are called as Herbartian Formal steps. They are:

- 1. Preparation or Introduction.
- 2. Presentation.
- 3. Comparison or Association.
- 4. Generalization.
- 5. Application.
- 6. Recapitulation.

## 1. Preparation or Introduction

According to J.F. Herbart the mind of the students must be prepared to receive new knowledge. It is first like preparing the land before sowing the seed.

This step should be brief and nothing new to be told to the students. The teacher should ascertain what the students know already related to the topic and should provide a link between the previous knowledge and the new lesson. This step may involve.

- (a) Testing the previous knowledge of the students
- (b) Arousing curiosity by the novelty of experimentation or activity.
- (c) Use of charts, pictures and models.
- (d) Skillful discussion.

This is most important step because "well-begun" is half done."

## 1. Presentation

Immediately after the preparation, the aim of the lesson should clearly be stated. This becomes the second step.

In the second step the actual lesson begins. Students get new ideas and knowledge. The teacher presents the subject matter to the students. The students passively listen and learn the ideas told by the teacher. The teacher may demonstrate any experiment, use any aid or do any activities.

## 2. Comparison or Association

The new ideas or knowledge learnt should be compared and associated with already known ideas and facts. It is felt that knowledge is not like piling up of bricks, but it is like a tree that grows. This step is most important when the teacher is estabilishing principals or generalizing definitions.

#### 3. Generalization

In most of the economics lessons teachers have to arrive at certain generalizations. Formulas, principles or law are to be established. As far as possible the students should draw out the conclusion themselves. Sometimes the student's generalizations may be incomplete or irrelevant. At this time the teacher should guide them to make corrections.

## 4. Application

A lesson of economics will be incomplete if the rules or formulas are not applied to new life situations. It is always the desire of the students to make use of generalizations and to verify whether they really work in new situations. Knowledge becomes clear and meaningful in this stage.

## 5. Recapitulation

This is the last step in the process. Here the teacher ascertains whether the students have understood and grasped the subject matter or not. It is generally done by on of the following ways:

- (a) Asking suitable questions on the topic taught.
- (b) Applying a short objective type test.
- (c) Asking the students to label the unlabeled sketch.

It should be remembered that these forms of Herbartian steps are not final. These are tentative guidelines. We should not always try ton rigidly follow them. Moreover it is not possible to follow all these steps in all types of lessons.

In the modern days these Herbartian steps are included in four steps, which are as follows:

- 1. Preparation
- 2. Development
- 3. Review
- 4. Assignment

In this you know very well about preparation. The second step development involves the activities of both teacher and students. Teacher helps the students to learn the lesson. Both the students and teacher participate in the development. The teacher is expected to develop the lesson with students' participation. The third step review is equivalent to recapitulation. The forth step assignment is the homework to be given to the students. These are the four steps involved in the lesson plan.

## **Advantages of lesson planning**

Lesson plan is actually a plan of action. A teacher without lesson plan ends his efforts to keep proper discipline in the class and discouraged with his failures. A teacher with good plans is also tried, but his tiredness is tempered with the joy of satisfaction. The advantage of lesson plan can be listed as follows:

- 1. It makes the teacher's work regular, well organized and systematic.
- 2. It prompts confidence and self-reliance in the teacher.
- 3. It helps the teacher to proceed with particular aims in view and thus makes him conscious of interests and attitudes to be developed in the students.
- 4. It renders a saving in time, for the students have a better understanding of the subject and develop some desirable attitudes in a specified time, while in the absence of a plan it might have taken more time for the similar understanding.
- 5. Lesson plans establish proper connections between different lessons of study. Therefore, they provide continuity in the teaching process.
- 6. It stimulates the teacher to introduce striking questions and illustrations.
- 7. It provides greater freedom in teaching, for a teacher who has properly planned his lesson, enters the classroom with confidence; without any anxiety, ready to attack the problem and prepared to carry it out like a skilled workman.
- 8. It helps the teacher to plan the teaching aids to be used din the class, well in advance and also ensure their workability.
- 9. It avoids wastage of time.

#### Criteria of a Good Lesson Plan

The following are the criteria of a good lesson plan. Any lesson plan should contain these criteria.

- 1. A lesson plan should be written and well prepared assuming that teacher has gone through the matter from all aspects.
- 2. General Objectives also called non-behavioural objectives objectives of the lesson should be clearly stated.
- 3. Specific objectives also called behavioural objectives should be clearly stated.
- 4. Types of aids that are to be used along with the situation in which they are able to be used should be used.
- Content, learning experiences and evaluation tools and procedure should be stated.
- 6. Review and assignment should be written at the end of the lesson.
- 7. A good lesson plan should reveal the type of activities to be performed by the teacher and the students.
- 8. Active participation of the students should be made possible in the lesson plan.
- 9. Questions should be well planned and unambiguous.
- 10. There should be provision for individual attention.

## STRUCTURE OF A FOUR FOLD LESSON PLAN

#### Content

The teacher elicit the content to be taught to the students in the classroom. The students develop skills in terms of cognitive, affective and psychomotor domain after attending the teaching session of this content.

## **Specification of Behavioural Outcomes**

Specification of behavioural outcomes helps us to state the instructional objectives of various school subjects. These objectives, however, are too vague for the teacher. They should be specific and must be expressed in behaviours terms. Vague, general objectives often do not offer an adequate enough direction to the teacher. As a result, he cannot prepare and organize appropriate learning activities for his pupils. Hence the need for specifications. We have also discussed that the term specifications mean specific objectives or behavioural objectives. The

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statement of a specification contains an action verb. The statement of specification should be in

the form of the students achievement and not in the form of the teachers intentions.

**Learning Experiences** 

Learning Experiences results from the active participation of students in the stimulus situation

which the teacher provides in the classroom. It is the interaction of the learner and the situation

provided by the teacher. It should be purposeful, continuous, interactive based on facts,

concepts, principles, generalization for making learning experience more functional and

effective in teaching learning process.

**Evaluation** 

The teachers can adopt internal and external methods of evaluation to assess whether their

transaction is proper according to the pedagogy of teaching in economics classrooms. So the

objectives, learning experience and evaluation are the three interrelated and interdependent

aspects in the teaching learning process.

MODEL LESSON PLAN - ECONOMICS

Name of the School:

Topic: Course of Prices

Name of the Student Teacher:

Standard: XI

Name of the Guide Teacher:

Subject: Economics

Date:

Time: 45 Minutes

**Instructional Objectives: The Pupil** 

1. acquires knowledge about the causes of price rise in India.

2. understands the various aspects of problems of price rise.

3. analyses the situation of price rise and also various policy measures taken by the

government.

4. develops skill in drawing inference about forthcoming price rise problem due to recent

oil price rise.

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## **Specifications: The pupil**

- 1. recalls and recognises the economic problems of the price rise in India.
- 2. understands the relationship between prices and purchasing power of money.
- 3. compares the prices of different commodities from time to time and from place to place.
- 4. explains the effect of rising price on the growth and development of an economy.
- 5. list out the various types of indicators of price trend
- 6. examines the necessity of revising trend of prices.
- 7. classifies various causes of price rise.
- 8. illustrates the course of prices and various types of policy measures taken by the government.
- 9. understands the place given to the problem of rising prices in various plans.
- 10. explains about the need for price stability.

## **Teaching aids:**

Charts, graphs, pictures showing price rise in India

Content	Specification of behavioural outcomes	Learning Experiences	Evaluation
On August 2, 1990, Iraqui armed forces invaded state of Kuwaot. This event gave rise to an international economic problem of rising price of oil. Due to this prices of other commodities also rise.	recalls and recognises	Pupils answers the following questions:  1. Iraqi occupation of Kuwait gave rise to which international economic problem?  2. What is the implication of raising transport cost on the prices of the commodities?	
Course of prices.  Price mechanism has a significant place in a planned economy. Changes in prices bring changes in the purchasing power of money also.		Student understands the relationship between prices and purchasing power of money.  Student explains the effect of rising price on the growth and development of an economy.	What do you mean by purchasing power of money?  What happens to the purchasing power of money when the prices rise?

At high prices money commands lesser commodities and at lower prices more commodities.	compares	Student compares the prices of different commodities from time to time and from place to place	Rising of price of petrol affected which sector of economy directly?
Rising in oil prices economically hit international community.	explains	Student explains the effect of rising price on the growth and development of an economy	Siowaia
Indicators of price trends	List out	List out the various types of indicators of price trend.  Defines the word deflation.	What do you mean by GDP?
Trend of prices in India	Examines	The student examines the necessity of revising trend of prices in order to understand nature and complexity of the problem.	The rising trend of prices in India started at what time?
Second world war leads to the trend of price rises	classifies	The student classifies various causes of price rise.	What was the reason for price rise?
Immediately after independence the Government formulated various economic policies	illustrates	The student illustrates the course of prices and various types of policy measures taken by the government.	When the economic planning was adopted in India?
Economic planning in India began on an optimistic note.	understands	The student understands the place given to the problem of rising prices in various plans.	A rupee of 1969 is worth only 11 paise presently. Why?
Domestic supply situation was favourable and could easily meet the rising demand pressure	explains	The teacher explains that every plan has been eloquent about the need for price stability.	What happened to the general price index?

# **Assignment:**

- 1. Trace in brief the trend of prices in India beginning with first five year plan.
- 2. Describe about the general price index.

Name of the Guide Teacher

Name of the Student Teacher

#### UNIT PLAN

#### **Unit Plan**

"A unit may be defined as a means of organizing materials for instructional purposes which utilizes significant subject matter content, involve pupils learning activities through active participation intellectually and physically and modifies the pupils behavior to the extent that he is able to cope with new problems and situations more competently".

#### H.C. Morrison

#### What is a Unit?

A unit is a large subdivision of subject matter with a common fabric of knowledge. The unit is not just blocks of subject matter, but is composed of both method and content. Thus, a unit organizes instruction and increases the probability that instruction will be presented in a cohesive, meaningful and logic way. A properly planned unit integrates many type of activities, some of which provide new information and others help pupils evaluate and retain this information. Units of break up a course into meaningful segments that is larger than lesson plans. They are organized around specific topics so they are neither a block of subject matter nor a series of independent lessons, but represent a careful organization of subject matter and learning experiences. So a unit can be treated as a 'compound' of lessons and not a 'mixture' of lessons.

#### **Definitions of a Unit**

**Burton:** 'the important thing to provide a combination of subject matter and processes which will have real meaning for the learner which will aid him in continuously integrating his learning is through h a unit'.

**Preston:** 'A unit is as large a block of related subject matter as can be over viewed by the learner'.

**Stanford:** 'A unit is an outline of carefully selected subject matter which has been isolated because of its relationship to pupil's need's and interests'.

#### Characteristics of a Good Unit

- It should keep in view, the needs, the capabilities and the interest of the pupil
- It should take into account the previous experience and background of the pupil
- It should provide for new experiences which the students have not done before
- The length of the unit should maintain interest of the pupil till the last
- The material of the unit should consist of familiar and related topics and not as remote and strange one
- It should be related to social and physical environment of the pupil
- It should help to anticipate and satisfy some of the future needs of the pupil
- It should be a part of the sequence that permits growth from year to year
- It should be a results of the co-operative planning of the teacher as far as possible
- It should provide the basis for its evaluation
- It should be flexible enough to provide individual differences
- It should permit a variety of field trips, experiments, demonstrations, and projects etc.
- It should be practicable in the given setting

## **Steps in Unit Planning**

- 1. Content analysis (the What of the unit)
- 2. Objectives with specifications (the Why of the unit)
- 3. Learning activities (the How of the unit)
- 4. Testing procedures (evidence of achievement)

## i. Content analysis

In unit planning emphasis is placed on analyzing the content into terms, facts, concepts, situations, processes, generalizations, principles, laws etc. the analysis helps the teacher to get a thorough I n-depth of the subject understanding and this also increases the confidence of the teacher.

## ii. Objectives and specifications

After analyzing the content, teacher should identify the general and specific objectives of the content.

## iii. Learning activities

Learning is not a pouring in process, but a gradual process that comes about as a result of experience. Activities like field trips, experiments, demonstrations and projects can be used in different settings. The experience can be backed up with reference books films and slides. Keeping in mind of the individual differences, the psychology of learning, the content and objectives, suitable learning activities can be planned to which the students will be exposed during the course of the unit.

## iv. Testing procedures

The last step is the choice of suitable evaluation tools and techniques through which teacher can evaluate the content coverage and teaching method used.

## Format of a Unit Plan

1.	
2.	
3.	

Sl.No.	Concepts	Activities/ strategies		Evaluation	No. of Periods

## **Advantages of Unit Planning**

- 1. It is establishes general as well as specific aims of teaching.
- 2. It breaks up the entire work into smaller sections, small enough so that pupils can easily grasp the scope of these during a brief overview. Short tasks are easily completed than long ones.
- 3. It helps to cater the needs, nature and aptitude of the students.
- 4. It is economical in terms of time.
- 5. Since several activities are involved it helps to develop the skills in the students.

6. It develops self confidence among students because it provides opportunities for meaningful experience wherein they can organize and review their learning.

7. It gives an overall view to handle each and every lessons as the unit structure.

## BLOOMS TAXONOMY OF EDUCATIONAL OBJECTIVES

One of the most important aspects of teaching learning process is the specifications of instructional objectives. The over-increasing aspects of various courses, services and activities in secondary schools make more emphasis on instructional objectives. Dr.Benjamin S Bloom (1956) gave the idea of classification of educational objectives. He classified educational objectives in to three main areas or domains called Cognitive, Affective and Psychomotor. The three domains are interrelated and mutually dependent.

**Cognitive Domain:** The cognitive domain comprises the acquisition and manipulation of factual information. It is also concerned with intellectual skill and abilities of the students.

**Affective Domain:** The changes in interests and values and the development of applications

**Psychomotor Domain:** The development of manipulative or motor skills

The three domains of learning do not occur in isolation but rather work together to make up one whole being.

#### **Cognitive Domain**

Cognitive domain includes those objectives which deal with the recall and recognition of knowledge and development of intellectual abilities and skills.

Blooms et al.

Benjamin S Bloom and his co-workers have done the taxonomical classification of this domain in 1956. The domain contains six major objectives arranged in an order on the basis of increasing complexity of tasks. Each of these six is further divided in to specified behavioural objectives.

## **Categories in the Cognitive Domain**

## 1. Knowledge

This is the first and the lowest level of cognitive domain. It includes recall of information such as specifies, facts, methods, processes, generalizations, patterns etc., Thus, the knowledge objective emphasizes what can be described as memory.

## 2. Comprehension

This second category includes translation, interpretation and extrapolation. This is also related to the use of ideas. It refers to a type of understanding of the materials or literal message contained in a communication.

## 3. Application

This third level includes the ability to apply abstract ideas to a concrete situation. The abstraction may in the form of general ideas, rules or procedures or generalized method.

## 4. Analysis

It means the "breakdown of the materials into the constituent parts and detection of the relationship of the parts and of the way they are organized". Analysis includes analysis of elements, analysis of relationship and analysis of organizational principles.

## 5. Synthesis

This category is just the opposite of analysis. Synthesis is the "putting together of elements and parts so as to form a whole. This involves the process of working with pieces, parts, elements and arranging and combining them in such a way as to constitute a pattern or structure, not clearly there before".

#### 6. Evaluation

It is the assignment of symbols to phenomenon, in order to characterize the worth or value of a phenomenon, usually with reference to some social, cultural or scientific standards. Evaluation involves judgments in terms of internal evidence as well as external criteria.

To conclude, it may be pointed out that the above six major categories in the cognitive domain do not always appear in isolation from one another.

#### **Affective Domain**

This domain involves attitudes, interest, values and appreciation. The affective domain is concerned with 'feeling'. The objectives under affective domain are difficult to define and evaluate. The hierarchy of objectives in affective domain has been developed by Krathwohl, Bloom and Masia in 1964. The order of objectives is in such a way that each category is more abstract and complex than the previous one.

#### **Categories in the Affective Domain**

## 1. Receiving:

This is at the lowest point o the affective domain. Receiving may be defined as "sensitivity to the existence of certain phenomenon and stimuli, that is, the willingness to receive or attend to them".

## 2. Responding:

Responding refers to a behavior which goes beyond merely attending to the phenomenon; it implies active attending, doing something with or about the phenomenon, and not merely perceiving them.

## 3. Valuing:

Valuing implies "perceiving them as having worth or value. The three sub-categories of this objective are, acceptance of value, preference for a value and commitment.

## 4. Organizing:

This involves building up of organized system of values. The individual organizes a set of values such as truth, goodness and helping others, in determining their relationships and deciding their need and priority.

#### 5. Characterizing:

In this category the individual displays the integration of values and it becomes a lifestyle with him. He gets these values organized into some kind of internally consistent system, which has controlled the behavior of the individual for a sufficient time. This category is concerned with one's view of the universe and one's philosophy of life.

## Categories in the Psycho-motor Domain

Psychomotor domain concerns with the attainment of neuro-muscular coordination. Here the objectives which deal with manual or motor skills. As the level of coordination goes up, the action becomes more refined, speedy and automatic. Simpson, Kibler were working on this area for systematically classifying educational objectives. R.H. Dave has given the classification of educational objectives under this domain 1969. The order of objectives in such a way that coordination is to be brought about among different parts of a given act or different acts performed with required articulation.

#### 1. Perception

Skill of keen observation, skill of sensing a problem and skill of developing self-motivation are the specific objectives under this category.

## 2. Imitation

Skill of repeating actions and skill of reflective thinking are the specific objectives under this category.

## 3. Manipulation

Skill to operate upon with intelligence and manage cleverly are the specific activities that fall in this category.

#### 4. Precision

Skill of experimentation, skill of precise movements and neat execution of skills are the activities which fall under this objective.

#### 5. Articulation

Skill of logical thinking, reflective thinking, skill of mind and body and development of mathematical skill are specific objectives to attain this step.

#### 6. Naturalization

As we practice a skill, in due course it becomes our natural habit. Skill of attaining success and skill of multiple actions are the specific activities under this objective.

## TYPES OF TEST ITEMS

Achievement tests are conducted using different types of test items. Hence economics teacher should master the skills of constructing test items. A constructor should take the following precautions while framing the test items.

- The items should cover as far as possible, the whole range of topics prescribed in the syllabus.
- No item or part of the item should be set which is outside the syllabus.
- More items should be set to test higher objectives. For this purpose items should be in the context of new situations.
- Items should provide clear direction to the students regarding the scope and length of responses
- The language of the items should be simple and within the easy grasp of students

## A. Objective Type test item

An objective type test item is one in which the response will be objective. The responses are made fixed and hence the freedom of the respondent to deviate subjectively is restricted. Objective type test item can be broadly classified into two they are

- 1. Supply Type (Recall Type)
- 2. Selection Type (Recognition Type)

For supply type test items the respondents have to supply the response where as for the selection type they have to select the responses from among the given responses. Usually five different forms of objective type items are in vogue. They are true-false type, multiple choice types, matching type, simple recall type and completion type. Of these simple recall and completion type items are supply type and the other three belongs to the selection type.

## a) True – False Items (Alternate Response Type)

A true – false. The respondent is asked to read a statement and indicate in some specific manner suggested, whether it is true or false, right or wrong, correct or incorrect, agree or disagree, yes or no. it tests the ability to discriminate between misconceptions and scientific truth. It is suitable for young children who have poor vocabulary. Large sample of subject matter can be covered within a short period.

## b) Multiple choice Test Items (Changing Alternative type)

These are items presenting four or more responses in which one is either correct or definitely better than the others. The examinee has to find this out and record this in the manner required in the paper. Here the chances of guess work are minimized. Multiple choice items consist of two parts.

The fast part of the item is called stem presented in the form of a direct `question or incomplete statements. The second part of the item is called options or alternatives or responses, usually four or five in number among the options one is the keyed response and others are called distracters or misleads or foils. The stem gives data for the selection of the keyed response. The respondent has to read the stem and options and select the correct or best alternative. The different forms multiple choice test items in vogue are correct answer form, best answer form, multiple response form, etc.

#### Scoring Formula or Correction Formula for Multiple Choice Test Item

Scoring formula is used for reducing the chances of guessing. An item with four options has a chance of 25% guess work, which is rather very high. The formula based on statistical assumptions (Theory of Probability) is

$$S = R - \underline{W}$$

$$N-1$$

Where

S = resultant score that a respondent deserves

R= Number of right responses

W= Number of wrong responses

N= Number of alternatives in an item

## c) Matching Type Test Item

This is a modified version of the multiple choice test items. In fact matching type is an economized form of combining a number of multiple choice items in the same question- a condensation of several multiple choice items. It consists of two parallel columns, with each phrase, word or number or symbol in one column (Usually the first) being matched to a word, phrase or sentence in the other column. The items in the column for which a match is sought are called premises or stem and items in the column from which selection is made is called responses or options. The respondent is required to make some sort of association between each premise and each response in the two columns.

#### d) Simple Recall Type Test Items

This test requires the respondent to recall a response to a direct question. The typical response should be short preferably a word, a number or a small phrase. It eliminates the chance of guessing.

#### e) Completion Type Test Item

A completion type item consists of a series of sentences in which certain words are omitted and replaced by blanks. The respondents are expected to fill in the blanks with a word or a number or at the most a phrase. The probability of guess work is completely eliminated.

## **Advantages of Objective Type Item**

1. As a large number of question are set, a wide coverage of the syllabus is possible.

- 2. Questions can be set which are designed to assess one particular educational quality. For example ability to apply.
- 3. Marking of such tests is objective and can be done speedily
- 4. They are more valid and reliable, since the response/ answers are definite
- 5. There is greater administration use and control
- 6. They have higher diagnostic value
- 7. They are less time consuming

## **Disadvantages of Objective Type Items**

- 1. Such tests do not encourage verbal fluency or a student's ability to development argument
- 2. Chancing of guessing are high
- 3. An objective test is difficult and expensive to construct
- 4. Emphasis on testing superficial knowledge
- 5. Inefficiency in testing complicated skill.
- 6. Objective type items are often ambiguous, particularly for the better students.
- 7. Such tests when over used can have a negative effect on teaching, since they encourage the student to learn bits of knowledge rather than the whole.

## **B. Short Answer Type**

A question requiring value points at the most may be defined as a short answer question. The term value points indicates a point to be given credit in the expected answer. Thus the length of the answer expected from a short answer question becomes very short. This diminishes subjectivity. In this way it is an improvement upon essay type question. Such question are of great helping having wide coverage of content and each item can be set to a test a definite objective. Because of this reason, a fair proportion of such questions should be included in a test.

## **Advantages of Short Answer Type**

1. Questions of this form can be made stimulating

- 2. Students can be trained to select relevant information and present it in a few short, crisp sentences.
- 3. Short answers are easy to score
- 4. Reliability of scoring is high
- 5. Questions can cover a wider content area than easy type test items. It is possible to achieve a more expensive sampling in the short answer test than in the essay type test
- 6. The short answer test is especially useful in diagnosis. In part, this follows from the factor of extensive sampling

## **Disadvantages of Short Answer Type**

- 1. It is more subjective than the objective type of items
- 2. It's excessive use may encourage a student to memorize facts and develop poor study habits
- 3. Mechanical scoring is not possible because of the subjectivity involved

## C. Essay Type

According to dictionary by Good, essay test is a type test is a type of examination in which the subject or examinee is asked to discuss, enumerate, compare, state, evaluate, analyze, summarize or criticize and involves writing at specific length on a given topic involving the processed listed above.

The essay type questions get its name from the manner in which the examinee responds. The term essay implies a written response which may consists of many sentences to several pages. The student is allowed freedom with respect to what his answer will include its wording length and organization.

## **Advantages of Essay Type**

- 1. They are easy to construct
- 2. They can be used to test the student's language mastery, expression and organizational ability of a student
- 3. Chances of copying are minimal

- 4. A student's ability to use knowledge effectively can be assessed. It helps to develop a variety of skills. In addition to self-expression, students have to select pertinent material, organize this material into a coherent discussion and arrive at conclusions.
- 5. Guessing creates few problems
- 6. It encourages good study habits. A student preparing for an essay test is likely to highlight important units, look for relationships and exercise judgement in deciding points of emphasis.

## **Disadvantages of Essay Type**

- 1. Subjective bias could creep in as these test are based on the examiner's moods and whims
- 2. Essay type encourages rote memory. The higher levels of the cognitive domain cannot be completely assessed by this method.
- 3. Sampling is limited. Adequate sampling is essential in good testing. But time limitations make it impossible to achieve good sampling in an easy test, assuming that a large body of subject matter has been covered.
- 4. There is danger of bluffing. The "gift of gap" can be encountered in written as well as in oral communication. It requires a discerning teacher to realize that nothing much is been said.
- 5. Essay type test are difficult to score. Besides no two teachers agree on the score given to a particular paper, the hand writing, presentation and so on. Thus score rating cannot be generalized.

## CONSTRUCTION OF AN ACHIEVEMENT TEST (FORMATIVE EVALUATION)

#### **Formative Evaluation**

Formative evaluation is concerned with making decisions relating to forming or development of students as well as of the courses. It provides feedback at appropriate stages of the teaching learning process which helps in making changes in the curriculum, teaching strategies and the learning environment. Formative evaluation is done during the process of teaching learning with the following main purposes

- To monitor student learning for the purpose of providing individualized instruction
- To evaluate teaching effectiveness

- To evaluate courses and curricula with the purpose of modification, updating or replacement if necessary
- To evaluate curriculum materials
- To evaluate the learning environment with a view to improving it.

Since evaluation is an integral part of teaching and learning, students are observed in various situations continuously with a view to assess their level of achievement in terms of what have been expected of them. Written examination is one of the most commonly employed and widely acceptable techniques for measuring student's achievement. The construction of an achievement test has its importance in student evaluation.

## Steps involved in the Construction of an Achievement test

- 1. Planning of the test
- 2. Preparation of a design
- 3. Preparation of the Blue print
- 4. Writing of Items
- 5. Preparation of the Scoring key and Marking scheme
- 6. Preparation of Question wise Analysis

## Planning of an Achievement Test

A test is meant to serve many essential and important purposes. Therefore, it should be well planned and systematically developed. The first consideration which is of utmost importance is what the paper setter intends to find out through the achievement test. There are certain outcomes of learning which any teacher would like to realize by teaching every unit. The paper setter should aim at testing the achievement of these objectives. The next step is to determine the maximum time, maximum marks and the nature of the test. These should be decided in terms of the nature and scope of the sub units or units involved in the testing.

## Preparation of a design for the Test

After determining the board scope of the test, a design has to be developed in tune with it. The objectives, content, forms of questions, difficulty levels of items, scheme of options and the scheme of sections are the most important factors to be considered in such of a design.

## i. Weightage to objectives

This indicate what objectives are to be tested and what weightage has to be given to each objective. Suppose the teacher wants to make his pupil acquire knowledge of certain facts, develop understandings of certain concepts and principals, the ability to apply these in new situations and the skill to perform certain task, while teaching the specific subject matter for which the test is being designed. He should decide the relative importance of each of these objectives after carefully studying the prescribed curriculum and in tune with the nature of the content covered. This step will ensure objective basedness to the test, which is required for scientific evaluation.

## ii. Weightage to Content

The content refers to the topics where the achievement test is to be conducted. The content is taken for properly distributing marks in each unit by which proper coverage is made possible. This indicates the various aspects of the content to be tested and the weightage to be given to each of these aspects.

## iii. Weightage to Form of Questions

This indicates the forms of questions, objective type, short answer type and essay type to be included in the test and the weightage to each form of questions. The setter should select those forms of questions that are suitable to the objectives and content to be tested.

#### iv. Weightage to difficulty level

It is desirable to construct the test with some questions with some questions as easy, some difficult and the others of average difficulty. A good test will contain some question which even the dull pupils can answer. Some items which only the bight one's can answer and many items that most can answer. This would help us to discriminate between the bright, average and the dull students.

## v. Scheme of Options

Scheme of option means the option or choices given to the students to select certain questions. There may be external option as well as internal options. External option (overall option) means the choice is given to the students for selecting a given number of questions only from among the total number of questions provided. For example the students are asked to attend any eight questions out of the given ten. But in case of internal options the choice is given within a question for example write an essay on one of the following.

## vi. Scheme of sections

The test will be in three sections. Section A will contain only objective type items and Section B short answer and section C essay type items.

## **Design of Achievement Test in Economics**

Standard: XI Time: 1 1/2 hour

# 1. Weightage to Curricular Objectives

No.	Objectives	Marks	%
1	Knowledge	4	16
2	Understanding	6	24
3	Application	8	32
4	Skill	7	28
	Total	25	100

## 2. Weightage to Content

No.	Objectives	Marks	%
1	Course of prices	9	36
2	Causes of price rise in India	7	28
3	Consequence of price rise	9	36
	Total	25	100

# 3. Weightage to Form of Questions

No.	Objectives	No. of Question	Marks	%

1	Objective	10	5	16
2	Very Short Answer	8	8	24
3	Short Answer	5	7.5	32
4	Essay	1	4.5	28
	Total	24	25	100

## 4. Weightage to Difficulty Level

No.	Objectives	Marks	%
1	Easy	4	16
2	Average	17	68
3	Difficult	4	16
	Total	25	100

## **Questions for Discussion and Reflection**

- 1. State the criteria of a good lesson plan.
- 2. Choosing a topic from XI Std. Economics content develop a lesson plan, indicating the different steps involved.
- 3. What do you mean by 'unit plan'? Explain the steps involved in developing a unit plan.
- 4. Discuss Bloom's Taxonomy of Educational objectives and its importance.
- 5. Mention the various types of tests employed in assessing achievement in economics.
- 6. Discuss briefly the steps involved in the construction and standardization an achievement test in economics.

## **UNIT- III Practising the teaching skills in Economics**

# **Objectives:**

- To obtain knowledge on the meaning of Teaching.
- To understand the teaching skills.
- To analyse the major steps in teaching a mini-lesson.
- To explore, observe and feedback on integration of teaching steps in mini-teaching

## **INTRODUCTION**

An educational institution performs a significant function of providing learning experiences to lead their students from the darkness of ignorance to the light of knowledge.

The key personnel in the institutions who play an important role to bring about this transformation are teachers. As stated by NCTE (1998) in Quality Concerns in Secondary Teacher Education, –The teacher is the most important element in any educational program. It is the teacher who is mainly responsible for implementation of the educational process at any stage. This shows that it is imperative to invest in the preparation of teachers, so that the future of a nation is secure. The importance of competent teachers to the nation's school system can in no way be overemphasized. There is widespread consensus, however, that our education systems are failing to adequately prepare all students with the essential 21st century knowledge and skills necessary to succeed in life, career and citizenship.

## MEANING OF TEACHING

Teaching includes all the activities of providing education to other. The person who provides education is called teacher. The teacher uses different method for giving best knowledge to his students. He tries his best to make understand students. His duty is to encourage students to learn the subjects. Teaching means interaction of teacher and students. They participate for their mutual benefits. Both have their own objective and target is to achieve them. Teaching skill is a group of teaching acts/ behaviours intended to facilitate student's learning directly/ indirectly.

## UNDERSTANDING MAJOR TEACHING SKILLS

Teaching skills would include providing training and practice in the different techniques, approaches and strategies that would help the teachers to plan and impart instruction, provide appropriate reinforcement and conduct effective assessment. It includes effective classroom management skills, preparation and use of instructional materials and communication skills.

## 1. Introducing

This is an important skill required for a teacher. Well begun is half done is a saying which indicates the importance of introducing a lesson. It is the duty of a teacher to bring the students into the classroom mentally. The skill is intended for making effectiveness in introducing of the content. This is always done at the start of a class. Here teacher gives a brief introduction about the lesson in order to pre-dispose the pupil's mind to it.

There are many ways to present an introduction. Here are a few:

- Asking questions to get the students thinking about the topic of the lesson.
- o Showing pictures that relate to the lesson topic.
- o Telling a story to show the importance of the topic.
- Bringing in real objects related to the lesson.

## 2. Explaining

Teaching is not primarily telling. It's helping other people learn. That means the focus is on the learners, not the teacher. People learn best through experiencing something themselves, so when you are striving to teach something, you are constantly trying to Get into the shoes of the learners so that you can better understand where they are and what they need from you to learn the subject understudy.

Explaining can be defined as an activity to bring about an understanding of a concept, principle etc. it is an activity to fill the gap in someone's understanding.

In classroom the teacher explains ideas and concepts. It is the most commonly used skill and is the essence of instruction. Explanation is a key skill. Generally, the skill of explanation is complex Explanation is to explain or to give understanding to another person. It leads from the known to the unknown, it bridges the gap between a person's knowledge or experience and new phenomena, and it may also aim to show the interdependence of phenomena in a general sable manner. It assists the learner to assimilate and accommodate new data or experience.

In a classroom, an explanation is a set of interrelated statements made by the teacher related to a phenomenon, an idea, etc. in order to bring about or increase understanding in the pupils about it. The teacher should practice more and more of desirable behaviours like using explaining links using beginning and concluding statements and testing pupil understands behaviours like making irrelevant statements, lacking in continuity, using inappropriate vocabulary, lacking in fluency, and using vague words and phrases as far as possible.

A class in not homogeneous group. Some pupils are intelligent some have normal intelligence, some are mature and others are immature. But the teacher has to impart knowledge to all. To present the subject matter in the simplified form before the pupils and making it acquirable is called the skill of explanation. It is necessary in all the subjects. In its absence the presentation of the subject matter is not possible. In the skill of explanation, such words are used in the statements by which the statements exhibit the clarity of their meanings.

The explanation serves two purposes: (1) to introduce the subject by giving some background about its usefulness and application; and (2) to describe the subject in a simple, complete, and tantalizing way. The explanation should create a desire to become proficient in the subject under study

The components of skill of explaining involved

- Clarity
- Continuity
- Relevance to content using beginning and concluding statements
- Covering essential points
- Simple
- Relevant and interesting examples appropriate media
- Use of inducts, deductive approach, it can be functional, causal or sequential

## 3. Questioning

Successful teaching highly dependent on questioning technique employed in the teaching sessions. Questioning is an important teaching skill that a teacher must learn. The teacher should learn to ask suitable, appropriate and meaningful questions. Questioning is definitely a skill. We can very easily answer a question but it is too difficult to ask a question.

A question is any sentence which has an interrogative form or function. In classroom settings, teacher questions are defined as instructional cues or stimuli that convey to students the content elements to be learned and directions for what they are to do and how they are to do it. Questioning promotes involvement, initiates thinking, creates motivation and enhances learning.

Effective questioning is a real compliment to the instructional skills. It shows the ability to understand the student's real needs. It shows that for meaning that's deeper than the spoken message. Effective questioning is a powerful, learned skill.

For students, questioning strategies help to categorize and anticipate exam questions, allowing for more effective preparation. The strategies are also useful for study groups, focusing efforts and allowing members to test each other. They improve the student's ability to

clarify, reorganize, and accurately explain new information. Questioning also aids in self-assessment and self-monitoring.

#### 4. Skill of closure

This skill is useful for a teacher to close his teaching properly. The teacher is to summarise all the teaching during the period and provide opportunities for the students to correlate the learnt matter with the past and future knowledge. This is to be done by statements or by asking questions.

#### 5. Skill of Reinforcement

This skill is the most important one than other teaching skills. Reinforcement, the term implies the use of the technique for influencing behaviour of individuals in desired direction. The concept of reinforcement is based on the hedonistic principles, which envisages that all individuals tend to repeat the pleasant experiences and avoid unpleasant ones. The skill is being used to utilize good behaviours of the learners and to avoid the undesirable behaviours of the learners. The teacher would like the student's desirable behaviours and criterion responses to be retained and undesirable behaviours to be eliminated. For reinforcing student's desirable behaviours and criterion responses he uses positive verbal and non-verbal reinforcers. These reinforcers not only strengthen the student's desirable behaviours but also develop confidence in them. Besides, they enhance their positive self-concept. Absence of positive reinforcers for student's desirable behaviours may erode their confidence and lead to poor self-image. Positive reinforcements encourage students to participate actively in classroom interactions. It stimulates them to achieve more, thereby, creating a sense of achievement.

Skilled use of reinforcers helps a teacher to promote student's learning. The skill of reinforcement refers to the effective use of reinforcers. It, can therefore be defined as 'the effective use of reinforcers to modify student's behaviour in the desired direction'.

# 6. Skill of varying the stimulus

Varying the stimulus is described as a deliberate change in the behaviours of the teacher in order to sustain the attention of the learners throughout the lesson. The variation in the stimulus helps in avoiding monotony and in generating interest among the students which in turn makes learning effective.

Learning in the classroom depends, to a large extent, on the attention of the students on the learning task. It is therefore, essential for the teacher to secure and sustain student's attention for making his teaching effective. Continuous use of the same stimulus or activity for longer period induces inattention. The inattention is caused in two ways: one is continued focus of the students on the same stimulus for a long time restricts his postural mobility which leads to fatigue. Next is the continued use of the same stimulus for longer duration introduces the element of monotony, which brings in dullness. This will be further aggravated because of the short span of student's attention. Their attention tends to shift from one stimulus to another frequently. They find it difficult to attend to one stimulus for more than a few minutes. The problem of inattention is a challenge to t he teacher, unless he is in a position to secure and sustain student's attention. It is therefore, essential for the teacher to secure and sustain student's attention towards the topic of the lesson.

One of the significant ways to secure and sustain students' attention is to introduce the elements of variation in teaching. The variation can be introduced in several ways depending upon the teaching activity. Appropriate variation in different dimensions can help a teacher to secure and sustain students' attention. The set of teacher behaviours that tend to secure and sustain student's attention in teaching learning situation in the classroom constitutes the skill of varying the stimulus.

Some of the components of varying the stimulus are as follows:

- Movement
- Gestures
- Change in voice
- Focusing
- Change in interaction pattern
- Pausing
- Student's physical participation
- ❖ Aural visual switching

## 7. Non- verbal cues

Non-verbal communication has been defined as communication without words. They are usually made with the help of the movements of the eye, hand, head, body, and facial expressions. Facial expression will lead to encourage pupil to participate actively in learning situations. Positive non-verbal cues include smiling, nodding the head, a delighted laugh, patting on the shoulder, asking the students to clap. The students can be asked to clap their hands for correct answers given by a student.

Disapproval without suing words has the effect on negative reinforcement. Negative non-verbal cues include staring, looking angry, shaking the head, beating, caning, bruising, raising the eyebrows, tapping foot impatiently and walking around etc.

## 8. Fluency in communication

Communication in general is a process of sending and receiving messages that enables humans to share knowledge, attitude, and skills. Communication is a series of experiences of hearing, seeing, smelling, tasting, and touching / feeling. Although we usually identify communication with speech, communication is composed of two dimension: verbal and non-verbal. Both verbal and non-verbal plays a significant role in teaching learning process. Verbal communication is divided into Intra verbal: intonation of word and sound and extra verbal: implication of words and phrases, semantics.

The teacher uses knowledge of effective verbal and nonverbal communication techniques as well as instructional media and technology to foster active inquiry, collaboration, and supportive interaction in the classroom.

## **MINI-LESSON**

- It is a teaching training technique for learning teaching skills.
- It employs real teaching situation for developing skills and helps to get deeper knowledge regarding the art of teaching.
- A mini lesson is a basic precursor to a bigger or broader topic. It is a short lesson that can be taught in just a few minutes, but it can benefit the students in lessons to come.
- For instance, you may teach a basic topic like fact versus opinion by sharing a variety of statements and having students tell you if the statement is fact or opinion.

 This practice may take only 20 minutes, but teaches a valuable lesson to the students and sets the foundation for further discussion of writing styles or reading concepts.

## PRACTISING A MINI-LESSON WITH MULTIPLE TEACHING SKILLS

Name: xxxxx

**Subject:** Economics

**Topic:** Causes of Price Rise in India

Date:

Time:

# **Objectives:**

- Acquires knowledge on the Causes of Price Rise in India.
- Understands the factors on the Demand side.
- Examines the role of rise in population.
- Analyse the factors on the supply side.

#### **Materials**

- Charts showing the Price Rise in India.
- o Photographs and audio visual aids related to Price Rise in India.

#### **Content Outline**

India has been facing a critical problem of rising prices. Inflationary price rise hinders economic growth and development. Disparities in income and wealth further sharpen. So government has formulated a policy to check the price rise. Price rise in India is a cumulative effective of a number of factors. Black money is an important factor that has pushed the demands for goods. Slow increase in agriculture production is also a problem. Industrial production in India has been slow to pick up as compared to the requirements.

# Teaching skills

Important skills are as follows:

## 1. Introducing

Teacher introduces the lesson by explaining the effect of price rise on growth and inequalities and stress that in formulation of a policy to check this rise in price.

# 2. Explaining

The teacher explains the various factors of price rise, working on the demand side of the market causing price rise in India. The teacher explains that during last four decades the Government expenditure is increasing. Then the teacher explains that effect of increase in government expenditure on demand for goods and services. The teacher explains the meaning of deficit financing and how it causes an increase in demand for goods that increase in supply. The teacher explains meaning of foreign exchange remittances and how it has caused rise in prices in India. The teacher explains slow increase in agricultural production working on supply side as factor causing price rise. The teacher explains the industrial development as it is taking place in recent years.

# 3. Questioning

What happen to growth and development when price rise at a fast rate?

What do you mean by a welfare state?

What do you mean by deficit in general?

How the supply of money increases in an economy?

Which necessities of life do agricultural sector supplies?

#### 4. Varying the stimulus

There can be variation of teachers' position in the classroom while he is teaching. Variation in voice represents another dimension. Use of media like photographs, audio visuals and Chart showing causes of price rise in India provides yet another area of variation. There can also be variation in the classroom interaction pattern.

#### 5. Non verbal cues

Positive non-verbal cues include smiling, nodding the head, a delighted laugh, patting on the shoulder, asking the students to clap etc can be used while the class is going on. The students can be asked to clap their hands for correct answers given by a student.

6. Reinforcement

Positive verbal reinforcers like saying good, very good, excellent, fantastic, splendid, right, yes,

correct, fine etc can be used in the class for the desirable behavior of the students like being

calm, clarifying their doubts, answering the questions, drawing the graphs on the board etc.

7. Closure/Summing up

The topic will be summed up by various factors of price rise, working on the demand side of the

market causing price rise in India. What are the important cause of recent rise in prices?

8. Fluency in communication

The topic will be discussed by explaining and interacting with the students by asking questions

and making the students to observe the audio-visuals and charts. The teacher uses knowledge of

effective verbal and nonverbal communication techniques as well as instructional media and

technology to foster active inquiry, collaboration, and supportive interaction in the classroom.

OBSERVATION AND FEEDBACK ON THE PRACTICE OF INTEGRATION OF

TEACHING SKILLS

The complex teaching act can be split into component skills, each simple, well defined

and limited. These skills can be identified, practiced, evaluated, controlled and acquired through

training.

McIntyre et.al (1977) defined teaching skill as a set 'set of related teaching behaviours

which is specified the achievement of specified types of educational objectives'.

Passi (1976) defines teaching skill as 'a group of teaching acts or behaviours intended to

facilitate pupils learning directly or indirectly'.

The teaching skills developed through training are to be observed by the peers/ teacher

educators. Immediate feedback may be given to the student-teachers individually using the

feedback forms.

**Integration of teaching skills feedback form:** 

Name of the student teacher:

**Duration: 20 minutes** 

INTEGRATING SKILLS IN MINI TEACHING (Assessment by Peers/Teacher

**Educators**)

Teaching skills	AVERAGE	GOOD	VERY GOOD	TOTAL
	(SCORE 1)	(SCORE 2)	(SCORE 3)	
Introducing				
Explaining				
Questioning				
Varying the stimulus				
Non verbal cues				
Reinforcement				
Closure				
Fluency in Communication				
Total				

OVERALL ASSESSMENT OF MINI-TEA CHING					
AVERAGE	GOOI	O VERY	GOOD		
Interpretation of	of scores				
Average	: 8				

Range of scores:8-24

Good

Very Good

**Signature of the Observer** 

# UNDERSTANDING MAJOR STEPS IN TEACHING A MINI-LESSON

**Instructional Procedures and Activities:** Provide a detailed discussion of the mini lesson (15-20 min) using the following headings:

: 9-16

:17-24

#### Motivation

This step is considered to be the preparatory step, wherein the teacher is trying to prepare the minds of the students ready to receive the subject matter. Hence, this step identifies the mental readiness of the students. The teacher will be able to check the students' entering behavior before he starts teaching the lesson. Thus testing students' previous knowledge develops interest in the minds of students and helps to maintain curiosity of the students.

#### **Presentation**

It is the key step and only through which the actual process of teaching is going to take place. Here the aims of the lesson should be stated clearly and the heading shold be written on the blackboard. We have to provide situation for both the teacher and the students to participate in the process of teaching and learning. Our ultimate aim of the presentation is to make the concepts understandable to the students. Therefore, use of simple language is recommended. Appropriate and specific examples and illustrations of the concepts will make the understanding better. The interest of the students on the subject matter should be maintained continuously by the way of asking questions from time to time in this stage. Use of instructional aids like charts, audiovisuals, specimen etc in an appropriate manner is strongly recommended during presentation.

## Interaction

Interaction in the classroom will be done by speaking, sharing opinion, listening to others and establishing a mutual consent. Students in the learning process support when they are done by interacting directly with the object of learning and communicating in groups and also provide the ability of gaining mastery over the subject.

#### Reflection

Students will be given opportunity to express their ideas, experiences and opinions. Students will be cooperative, respect the opinions of others, responsible, honest on information receiving and able to give decisions.

#### **Summing-up**

This stage is meant for the teachers to know whether the students have grasped and understood the concepts taught or not. This can be achieved by reviewing the lesson and by giving assignments to the students. Only through this step achieving closure is possible.

## PRACTICING A MINI-LESSON WITH FIVE TEACHING STEPS

INSTRUCTIONAL PROCEDURES AND ACTIVITIES: Provide a detailed discussion of the mini lesson (15-20 min) using the following headings:

#### INTRODUCTORY ACTIVITIES

## 1. Motivation (Skill of Introduction – use of previous knowledge)

The pupil recalls and recognises the various groups into which the various factors which cause price rise can be put. The teacher asks the students questions related to their knowledge of causes of price rise in India, as follows:

- What happen to growth and development wen prices rise at fast rate?
- o How price rise affects disparities in income and wealth?
- o A market has two sides. What are they?

## **DEVELOPMENT ACTIVITIES (Presentation, Interaction, Reflection)**

#### 2. Presentation

o The teacher announces the topic as, "Causes of Price Rise in India" and writes it on the black board. India has been facing a critical problem of rising prices. Inflationary price rise hinders economic growth and development. Disparities in income and wealth further sharpen. So government has formulated a policy to check the price rise. Price rise in India is a cumulative effective of a number of factors. The teacher explains the various factors of price rise, working on the demand side of the market causing price rise in India. Teacher explains the various factors, working on demand side, causing price rise in India. The teacher explains that during last four decades the Government expenditure is increasing. Then the teacher explains that effect of increase in government expenditure on demand for goods and services. The teacher explains the meaning of deficit financing and how it causes an increase in demand for goods that increase in supply. The teacher explains meaning of foreign exchange remittances and how it has caused rise in prices in India. The pupil understands the effect of foreign exchange remittances on the domestic price level in the economy. Black money is an important factor that has pushed the demands for goods. The teacher explains slow increase in agricultural production working on supply side as factor causing price rise. The teacher

explains the industrial development as it is taking place in recent years (**Skill of Explaining – Cognitive link**).

 The teacher uses aids like chart and audio-visual aids to show the causes of price rise in India. (Skill of Explaining – uses of Illustrations)

# 1. Interaction: (Skill of Questioning –specificity)

- o How Government finance the deficit in its budget?
- O What do you mean by black money?
- o Explain the slow increase in agricultural production has caused price rise.
- o How stagnant industries has caused price rise in India?
- What are the important causes of recent rise in prices?

## 2. Reflection: (Skill of Stimulus Variation – Audio visuals)

The pupil explains the various factors of price rise working on the demand side of the market. The pupil examines how the increase in government expenditure affect the demand for goods and services in an economy. The pupil records and recognizes the meaning of welfare state. The pupil examines the stagnant situation of industrial sector as a factor responsible for price rise in India.

## Concluding Activities (summing Up/Closure)

India has been facing a critical problem of rising prices. Inflationary price rise hinders economic growth and development. Black money is an important factor that has pushed the demands for goods. Industrial production of India has been slow to pick up as compared to the requirement. During the last few years this situation has taken a serious turn. Industry has been faced with serious shortages of such important inputs as power, coal, railway wagons, raw materials etc. besides, frequent labour unrest has also caused a heavy loss of industrial production.

#### EVALUATION AND ASSESSMENT

List how the pre-service teachers (peers) will demonstrate their learning. That is, how will you know the mini-lesson has been successful?

Distribute a copy of both Assessment formats (skills & steps) to the pre-service teachers (peers)

# OBSERVATION AND FEEDBACK ON INTEGRATION OF TEACHING STEPS IN MINI-TEACHING

Name of the Student teacher: Duration: 20 minutes

INTEGRATING THE STEPS IN MINI TEACHING					
(Assessment by Peers/Teacher Education)					
TEACHING	AVERAGE	GOOD	VERY GOOD	TOTAL	
STEPS	(SCORE 1)	(SCORE 2)	(SCORE 3)		
Motivation					
Presentation					
Interaction					
Reflection					
Summing Up					

Range of scor	res: 5-15
OVERALL A	ASSESSMENT OF TEA CHING STEPS
AVERAGE _	GOOD VERY GOOD
Interpretation	of scores
Average	: 5
Good	: 6-10
Very Good	:11-15

Signature of the Observer

# **CONCLUSION**

Teaching means interaction of teacher and students. They participate for their mutual benefits. Both have their own objective and target is to achieve them. Teaching skills would include providing training and practice in the different techniques, approaches and

strategies that would help the teachers to plan and impart instruction, provide appropriate reinforcement and conduct effective assessment. Thus teaching skills can be identified, practiced, evaluated, controlled and acquired through training. A mini lesson is a basic precursor to a bigger or broader topic. It is a short lesson that can be taught in just a few minutes, but it can benefit the students in lessons to come. This practice may take only 20 minutes, but teaches a valuable lesson to the students and sets the foundation for further discussion of writing styles or reading concepts.

# **Questions for Discussion and Reflection**

- 1. Write the meaning of 'teaching'.
- 2. Give the Characteristics of Teaching Skill.
- 3. Explain any three teaching skill in detail.
- 4. Write a mini-lesson with five teaching skill for Class XI in the Economics subject.
- 5. Critically analyse the Skill of varying the stimulus.

#### UNIT IV METHODS OF TEACHING ECONOMICS

#### INTRODUCTION

Teaching is an art and there are some born teachers, but majority of the teachers that we have today are not successful in delivering their acquired knowledge to their learners, and those teachers who have no inherent flair for teaching are unable to arouse in their learners. The flair for teaching and the ability to get acquainted with the trends and developments in teaching learning pedagogy can be improved by knowledge of different methods of teaching. A teacher has got freedom to choose any of the method of teaching according to his knowledge, interest and experience. A single method is not preferred for all topics as the best one, but the combination of methods can be used as more effective.

#### **Methods of Teaching in Economics**

Teaching is a process of building a person's mind and character through methodology. Methodology is the systemic and logical study of the principles guiding scientific investigation. Methodology as a normative discipline differs sharply from the factual study of scientists at work as conducted e.g. by the sociology of knowledge history of science.

The term methodology in its original and proper usage refers to the systematic study of principles guiding scientific and philosophical investigation. The term method denotes any procedure which applies some rational order or systematic pattern to diverse objects. It is the technique used by the teachers for teaching a class, some subject or topic. It denotes the logical process used in discovering or in demonstrating the truth. It should be conceived as a dynamic function of education and not as static aspect of the process of teaching.

Methods of teaching Economics can be classified into two types

- 1. Teacher -centred
- 2. Pupil Centered

# 1. Teacher Centred Teaching

The teacher –centered teaching is mainly expository in type in which the focus is on telling, memorization and recalling information. The students are passive recipients of knowledge. The teaching environment is very much formalized and the teacher occupies a central position in the classroom.

## 2. Pupil-centered Teaching

In the pupil centred teaching the whole teaching learning process is geared to the needs, requirements, capabilities and interest of the pupils. The purpose is to develop the learner's skills and abilities in independent learning and problem solving.

#### TEACHER-CENTERED METHOD

#### I. LECTURE METHOD

This is a method generally followed in colleges and schools with big classes. In this method only the teacher talks: the students are passive listeners and they do not take any active part in the development of the lesson. Student listen, get bored, yawn and sometimes go to sleep as well. The teacher acts like a chatterbox, talking and talking all the time without ascertaining whether the students are following him or not. The students are spoon fed and their powers of observation and reasoning the exercise of which are not essential in learning process are not stimulated. Perhaps this method originated in very ancient times, when printing press was not invented and hand-written manuscripts were very few, hardly for the use of teacher. The lecture is one of the most basic pedagogic tool which is generally followed in schools and colleges, here the teacher talks and the pupil listens. The lecture is an exposition of knowledge, facts, principles or other information which a teacher wishes to present to her students. In short a lecture means one person addressing many students.

## When to use lecture method?

Although lecture method has more disadvantages than advantages yet we cannot reject it outright. This method may not be very helpful for teaching lower classes. However, it can prove very successful for higher classes when we want to:

- i. Cover the syllabus quickly.
- ii. Introduce some new and difficult topics.
- iii. Arrive at generalization from the facts students already possess.
- iv. Impart factual knowledge.
- v. Explain certain difficult points.
- vi. Revise and summarise the lessons already learn.
- vii. Give some background material for a topic.

So lecture method can be more useful in the above circumstances.

#### Phases of a lecture

There are three phases of a lecture. They are preparatory phase, development phase and consolidation phase.

## I. Preparatory Phase (Warm up Phase)

In this phase students are to be prepared to receive the contents of a lecture. Variety of formal and informal techniques can be used to prepare the students or to arouse their level of motivation or curiosity. In the classrooms normally teacher relates the contents of the lecture to the previous knowledge of the students.

## **II. Development Phase**

This is the most important phase of the lecture. The entire body of the lecture is delivered in this phase only. Some activities of this phase are using analogies, giving suitable examples, proper illustration, comparison and differentiation, use of proper aids and in recent time's proper use of audio visual technology in classrooms.

#### III. Consolidation Phase

This is the end part of the lecture. Here the lectures pin point the important aspects of the lecture once again by summarizing. Now proper reviewing can be done to check the level of understanding by asking questions. Provide assignments, feedback and can relate the topic to the future learning content.

# Skills associated with good lecture

- 1. Use of body language
- 2. Use of communication boosters
- 3. Varying the stimulus
- 4. Voice modulation
- 5. Use of proper language

## Area of application of Lecture method

- To introduce new and difficult topic
- To revise the topics already covered
- To give some background of a certain topic
- To present the life histories of great persons and their struggles and achievement in life
- To explain about certain procedures
- To impart factual knowledge
- To explain too deep theoretical factors

#### **Merits:**

- Attractive and concise: It is very attractive, concise and very easy to follow without
  much botheration on the part of the teacher and the taught. The teacher feels secure and
  satisfied.
- 2. **Economical**: It is economical because it can be applied easily at higher grade level where the size of the classes are very large in number.
- 3. **Speedy:** Lengthy syllabi can be covered in a short time by this method.
- 4. **Useful for Factual Information:** Factual information and historical anecdotes can be easily imparted by this method.
- 5. **Useful for Logical Sequence:** The logical sequence of the subject can be easily maintained. Since the teacher has to plan the lectures in advance, there cannot be gaps or over-lapping in the development of the lesson.
- 6. **Time Saving:** In this method there is no student activity, no project no demonstration, therefore there is hardly any wastage of time and lesson can go at top speed.
- 7. **Inspirational Value:** Good lectures have high inspirational value. Sometimes students pick up motivation, inspiration, instigation, zeal, ambitious ideas and do something creative in life.

## **Demerits**

- 1. **Memory based:** It lays too much stress on memory work, experimental work is neglected and the power of observation of a child is seldom exercised.
- 2. **Spoon feeding:** It does not encourage independent thinking, discovering, exploring and taking initiative. It is a type of spoon feeding and all the faculties of the child are not allowed to develop.
- 3. **Teacher centered:** When the teacher lectures, there is no guarantee whether the pupils are concentrating and understanding all what the teacher is teaching.
- 4. **Too rapid:** the rate of imparting knowledge and information may be too rapid and the students may not get necessary connections of thought.
- 5. **Unpsychological:** In this method the teacher is active participant while the students are passive listeners, which is opposed to the principles of psychology. The interests, aptitudes and capabilities of the pupils are ignored.
- 6. **Authoriatarian:** This method is undemocratic the pupils are encouraged to depend upon one authority i.e., the teacher. They cannot challenge or question his verdict.
- **7.** No critical Thinking: It fails to develop critical thinking and reasoning power, so essential for democratic living.
- 8. **Useful for higher classes:** This method may not be very helpful for teaching lower classes. However, it can prove very successful for higher classes i.e. tenth, eleventh, and twelfth classes when we want to ;-
  - Cover the syllabus quickly.
  - Introduce some new and difficult topics, such as evolution of man, discovery of natural magnet etc.
  - Arrive at generalizations form the facts, gathered by students.
  - Impart factual knowledge.
  - Explain a practical demonstration which is to be done or which has been done.
  - Revise and summarize the lessons already learnt.
  - Give some background material for a topic.
  - Give biographical sketch of a scientist or relate some of his anecdotes.
- 9. Any lecture has to be planned well in advance. Selecting the content, objectives of teaching the content, structuring the lecture, summarizing at every step and also at the end must all be planned.
- 10. **Notes-taking:** while making use of this method, it will be beneficial if the teachers give some training in the art of notes taking while the lecture is on.

11. **Student's Question:** At the end of the lecture, time should be given for the students to ask questions ad such questions be answered by the teacher without any hesitation. In this way the teacher can make sure whether the students have understood the lesson or not.

## Conclusion

Lecture technique is useful for communicating information to students. As there is little opportunity for getting feedback from students, it is a less effective method of teaching..

## II. LECTURE CUM DEMONSTRATION METHOD

"It is a physical display of the form, outline or a substance of object, or events for the purpose of increasing knowledge of such objects or events. Demonstration involves showing what or showing how". Demonstration is relatively uncomplicated process in that it does not require extensive verbal elaboration.

This method includes the merits of lecture method and demonstration method. The teacher performs the experiment in the class and goes on explaining what she does. It takes into account the active participation of the student and is thus not a lopsided process like the lecture method. The students see the actual apparatus and operations and help the teacher in demonstrating experiment and thereby they feel interested in learning.

This method follows maximum from concrete abstract wherein the students observe the demonstration critically and try to draw inferences. Thus with help of lecture cum demonstration method their power of observation and reasoning are also exercised.

## **B. LEARNER-CENTERED METHOD**

Learner-centered methods are those methods where the focus of attraction is learners than teachers. It is through the involvement of learners the method develops. The recent psychological approaches in the classrooms give more importance to learner centered methods than teacher centered methods.

#### I. HEURISTIC METHOD

The term 'Heuristic' refers to Armstrong who was the exponent of this strategy. Pollion and Dankar (1945) called it 'problem solving'. Logical imaginative thinking are prerequisites for this type of teaching strategy it is an economical and speedy strategy.

A problem is placed before the learners and they are asked to find the solution of the problem through various literacy means like library, laboratory, and workshops etc. teacher's role is to initiate the learning and pupils are active throughout the learning process. By using their creative thinking and imaginative power, they try to find out the relevant solutions on some logic. They learn by self-experience.

This teaching strategy is focused on:

- To develop problem solving attitude.
- To develop scientific attitude towards the problem.
- To develop power of self-expression.

Its basic principles are:

- o To teach as little as possible at one time
- o To encourage learner to learn himself as much as possible.

#### II. PROBLEM-SOLVING METHOD

It is a method in which a specific problem is given to the students and they are required to find out the solution through objective reasoning and thinking. This method is also highly suitable for teaching of economics. In this method, the teacher is going to act as a guide and will be in the background and the students should take active participation in finding out the solution to the problem in hand.

The students should know what he is doing and why he is doing. The problem should be of educational importance and should have educational value and must be selected from the real life situation. Also the problem chosen should be worthwhile and should have practical value. The problem should be chosen in such a way that it can be fitted well in the present curriculum organization in the school to avoid various administrative difficulties.

## Steps in problem-solving method

The following steps are involved in the problem solving method.

- A. Recognizing the problem
- B. Defining and interpreting the problem
- C. Collecting data related to the problem
- D. Organizing and evaluating the data of problem
- E. Arriving at final conclusion

## F. Verifying the result

## A. Recognizing the problem

In this step, the teacher should organize a discussion of a problem or problems with the students and based on the discussion, the teacher should create a problem in such a way that the students should feel that it is their own problem and they should solve it. The teacher should organize the problem in such a manner that it should arouse student's interest to study and solve it.

## B. Defining and interpreting the problem

The teacher should explain the problem given to the students in detail or may be interpreted by the students themselves through discussion. All the attributes constituting the problem must be made clear to the students and the problem must be defined in a systematic manner.

## C. Collection of data related to the problem

In this method, the teacher should suggest the available resources like books, journals, periodicals, etc. with respect to the problem given to the students. Also he must encourage the students to collect data from different sources.

#### D. Organizing and evaluating the data of problem

The data collected must be well organized by the students and all the unwanted superfluous matter should be deleted. In this stage, the teacher can help the students in arranging and classifying the materials collected in a scientific way.

#### E. Arriving at final conclusion

After analyzing all the important points with respect to the problem, a tentative solution may be discussed among the students and finally they will arrive at a conclusion collectively.

## F. Verification of the result

Finally the solution to the problem must be verified by applying this result in a new situation to detect the discrepancies if any, in the facts already discovered.

#### Merits

- The students will get training in the art of solving a problem in actual life situations
- Reflective thinking and the power of reasoning can be developed with this method
- Self-confidence among the students can be developed through this method.

- It helps the students in developing the power of critical judgement as they have to think a lot to arrive at correct solution to the problem through practice
- It inculcates the habit of open-mindedness and tolerance.

# **Demerits**

- It is difficult for the teachers to organize the content of economics according to the need of the students and therefore, he cannot always give real life problems.
- It is a time-consuming process
- Textbooks and other written materials are not available as per the guidelines of the problem-solving method.
- This method is useful only for the students studying higher classes and for those who have higher level of thinking.
- All the lesson or topics cannot be taught by his method.

### III INDUCTIVE AND DEDUCTIVE METHOD

#### A: The Inductive Method:

Induction "is the process of reasoning from a part to the whole, from particulars to generals or from the individual to the universal." Bacon described it as "an ascending process" in which facts are collected, arranged and then general conclusions are drawn.

The inductive method was employed in economics by the German Historical School which sought to develop economics wholly from historical research. The historical or inductive method expects the economist to be primarily an economic historian who should first collect material, draw gereralisations, and verify the conclusions by applying them to subsequent events. For this, it uses statistical methods. The Engel's Law of Family Expenditure and the Malthusian Theory of Population have been derived from inductive reasoning.

The inductive method involves the following steps:

#### 1. The Problem:

In order to arrive at a generalisation concerning an economic phenomenon, the problem should be properly selected and clearly stated.

#### 2. Data:

The second step is the collection, enumeration, classification and analysis of data by using appropriate statistical techniques.

## 3. Observation:

Data are used to make observation about particular facts concerning the problem.

#### 4. Generalisation:

On the basis of observation, generalisation is logically derived which establishes a general truth from particular facts.

Thus induction is the process in which we arrive at a generalisation on the basis of particular observed facts.

The best example of inductive reasoning in economics is the formulation of the generalisation of diminishing returns. When a Scottish farmer found that in the cultivation of his field an increase in the amount of labour and capital spent on it was bringing in less than proportionate returns year after year, an economist observed such instances in the case of a number of other farms, and then he arrived at the generalisation that is known as the Law of Diminishing Returns.

#### **Merits of Inductive Method:**

The chief merits of this method are as follows:

## (1) Realistic:

The inductive method is realistic because it is based on facts and explains them as they actually are. It is concrete and synthetic because it deals with the subject as a whole and does not divide it into component parts artificially

# (2) Future Enquiries:

Induction helps in future enquiries. By discovering and providing general principles, induction helps future investigations. Once a generalisation is established, it becomes the starting point of future enquiries.

## (3) Statistical Method:

The inductive method makes use of the statistical method. This has made significant improvements in the application of induction for analysing economic problems of wide range.

In particular, the collection of data by governmental and private agencies or macro variables, like national income, general prices, consumption, saving, total employment, etc., has increased the value of this method and helped governments to formulate economic policies pertaining to the removal of poverty, inequalities, underdevelopment, etc.

# (4) Dynamic:

The inductive method is dynamic. In this, changing economic phenomena can be analysed on the basis of experiences, conclusions can be drawn, and appropriate remedial measures can be taken. Thus, induction suggests new problems to pure theory for their solution from time to time.

## (5) Historic-Relative:

A generalisation drawn under the inductive method is often historic-relative in economics. Since it is drawn from a particular historical situation, it cannot be applied to all situations unless they are exactly similar. For instance, India and America differ in their factor endowments. Therefore, it would be wrong to apply the industrial policy which was followed in America in the late nineteenth century to present day India. Thus, the inductive method has the merit of applying generalisations only to related situations or phenomena.

# **Demerits of Inductive Method:**

However, the inductive method is not without its weaknesses which are discussed below.

## (1) Misinterpretation of Data:

Induction relies on statistical numbers for analysis that "can be misused and misinterpreted when the assumptions which are required for their use are forgotten."

#### (2) Uncertain Conclusions:

Boulding points out that "statistical information can only give us propositions whose truth is more or less probable it can never give us certainty."

## (3) Lacks Concreteness:

Definitions, sources and methods used in statistical analysis differ from investigator to investigator even for the same problem, as for instance in the case of national income accounts. Thus, statistical techniques lack concreteness.

## (4) Costly Method:

The inductive method is not only time-consuming but also costly. It involves detailed and painstaking processes of collection, classification, analyses and interpretation of data on the part of trained and expert investigators and analysts

## (5) Difficult to Prove Hypothesis:

Again the use of statistics in induction cannot prove a hypothesis. It can only show that the hypothesis is not inconsistent with the known facts. In reality, collection of data is not illuminating unless it is related to a hypothesis.

## (6) Controlled Experimentation not Possible in Economics:

Besides the statistical method, the other method used in induction is of controlled experimentation. This method is extremely useful in natural and physical sciences which deal with matter. But unlike the natural sciences, there is little scope for experimentation in economics because economics deals with human behaviour which differs from person to person and from place to place.

Further, economic phenomena are very complex as they relate to man who does not act rationally. Some of his actions are also bound by the legal and social institutions of the society in which he lives. Thus, the scope for controlled experiments in inductive economics is very little. As pointed Out by Friendman, "The absence of controlled experiments in economics renders the weeding out of unsuccessful hypo-these slow and difficult."

#### **B.** The Deductive Method:

Deduction Means reasoning or inference from the general to the particular or from the universal to the individual. The deductive method derives new conclusions from fundamental assumptions or from truth established by other methods. It involves the process of reasoning from certain laws or principles, which are assumed to be true, to the analysis of facts. Then inferences are drawn which are verified against observed facts. Bacon described deduction as a "descending process" in which we proceed from a general principle to its consequences. Mill characterised it as a priori method, while others called it abstract and analytical.

Deduction involves four steps: (1) Selecting the problem. (2) The formulation of assumptions on the basis of which the problem is to be explored. (3) The formulation of hypothesis through the process of logical reasoning whereby inferences are drawn. (4) Verifying the hypothesis.

#### **Merits of Deductive Method:**

The deductive method has many advantages.

## **(1) Real:**

It is the method of "intellectual experiment," according to Boulding. Since the actual world is very complicated, "what we do is to postulate in our own minds economic systems which are simpler than reality but more easy to grasp. We then work out the relationship in these simplified systems and by introducing more and more complete assumptions, finally work up to the consideration of reality itself." Thus, this method is nearer to reality.

## (2) Simple:

The deductive method is simple because it is analytical. It involves abstraction and simplifies a complex problem by dividing it into component parts. Further, the hypothetical conditions are so chosen as to make the problem very simple, and then inferences are deduced from them.

# (3) Powerful:

It is a powerful method of analysis for deducing conclusions from certain facts. As pointed out by Cairnes, The method of deduction is incomparably, when conducted under proper checks, the most powerful instrument of discovery ever wielded by human intelligence.

#### (4) Exact:

The use of statistics, mathematics and econometrics in deduction brings exactness and clarity in economic analysis. The mathematically trained economist is able to deduce inferences in a short time and make analogies with other generalisations and theories. Further, the use of the mathematical-deductive method helps in revealing inconsistencies in economic analysis.

#### (5) Indispensable:

The use of deductive method is indispensable in sciences like economics where experimentation is not possible. As pointed out by Gide and Rist, "In a science like political economy, where experiment is practically impossible, abstraction and analysis afford the only means of escape from those other influences which complicate the problem so much."

#### (6) Universal:

The deductive method helps in drawing inferences which are of universal validity because they are based on general principles, such as the law of diminishing returns.

## **Demerits of Deductive Method:**

Despite these merits, much criticism has been levelled against this method by the Historical School which flourished in Germany.

## 1 .Unrealistic Assumption:

Every hypothesis is based on a set of assumptions. When a hypothesis is tested, assumptions are indirectly tested by comparing their implications with facts. But when facts refute the theory based on the tested hypothesis, the assumptions are also indirectly refuted. So deduction depends upon the nature of assumptions. If they are unrealistic, in this method, economists use the ceteris paribus assumption. But other things seldom remain the same which tend to refute theories.

## 2. Not Universally Applicable:

Often the conclusions derived from deductive reasoning are not applicable universally because the premises from which they are deduced may not hold good at all time and places. For instance, the classicists assumed in their reasoning that particular conditions prevailing in England of their times were valid universally. This supposition was wrong. Prof. Lerner, therefore, points out that the deductive method is simply "armchair analysis" which cannot be regarded as universal.

## 3. Incorrect Verification:

The verification of theories, generalisations or laws in economics is based on observation. And right observation depends upon data which must be correct and adequate. If a hypothesis is deduced from wrong or inadequate data, the theory will not correspond with facts and will be refuted. For instance, the generalisations of the classicists were based on inadequate data and their theories were refuted. As pointed out by ircholson, "the great danger of the deductive method lies in the natural aversion to the labour of verification."

## 4. Abstract Method:

The deductive method is highly abstract and requires great skill in drawing inferences for various premises. Due to the complexity of certain economic problems, it becomes difficult to apply this method even at the hands of an expert researcher. More so, when he uses mathematics or econometrics.

## 5. Static Method:

This method of analysis is based on the assumption that economic conditions remain constant. But economic conditions are continuously changing. Thus this is a static method which fails to make correct analysis.

## 6. Intellectually:

The chief defect of the deductive method "lies in the fact that those who follow this method may be absorbed in the framing of intellectual toys and the real world may be forgotten in the intellectual gymnastics and mathematical treatment."

## RECENT TREND IN TEACHING ECONOMICS

## I PROJECT METHOD

Project is a scheme of something to be done. Project as a method of teaching is a natural, whole-hearted problem solving and purposeful activity carried to completion by students in a social environment under the guidance of their teacher. It is the outcome of pragmatic philosophy of education propounded by John Dewey.

The project method is generally associated with W.H. **Kilpatrick's** advocacy of purposeful acitivity, problem solving and the needs and interests of the individual child in action, learning and conduct. Its intellectual origins were associated with the child study and scientific movement and the educational progressives' stress on the development of the whole person, the relevance of the curriculum to social existence and the need for flexibility in schools.

This method is based on the following principles:

- Students learn better through association, co-operation and activity.
- Learning by doing
- Learning by living.

A project is a kind of life experience which is the outcome of a desire of the students and teaching by this method is therefore, based upon the use of this desire. "Learning by living" is the better meaning of project method, because life is actually full of projects and we try to carry out these projects every da.

Projects work out best with small groups or classes. Economics can be best taught through projects. Suitable planning and organization is essential for any investigation. Students should be classified into groups with a leader for each group. Every student should be assigned a

definite task the leader being responsible for collecting all the information together at the end. Students should take down notes as and when observations are made

# Steps in a project

# 1. Providing a situation

The teacher should always be on the look out to find out situations that arise and discuss them with their students to discover their interest s. situations may be provided by different methods. The teacher can talk to the students on the topics of common interests, for example about their hobby, how do they spend the leisure time and holidays. By talk and discussion with the students the teacher should provide situations for the students to tell about a project, which can be completed by project method.

## 2. Choosing and Proposing

The project should be chosen and proposed by the students. The teacher should not choose the project himself and compel the students directly or indirectly to accept the proposal. The teacher should tempt the students and the proposal should finally come from the students. The teacher should continue his discussion till the students propose the project. When a project has been proposed the teacher should see that the purpose of the teacher is clearly defined and understood. In case the students make an unwise choice the teacher should carefully guide them for a better project by providing some other situation.

#### 3.Planning

The success of a project depends on the planning. This planning is to be done by the students. All the details of the project are to be planned well in advance. The teacher should guide the students in planning by giving some suggestions. The teacher should not impose his plan on the students. Everything should be told by the students.

#### 4.Executing

It is the most important and longest step in the project method and therefore needs a great deal of patience on the part of the teacher and the students. The project must be executed by the students because they have chosen and planned parts among the students. The work of the project is to be assigned to the students according to their tasks, interests, aptitudes and capabilities. All the work of the project cannot be done by every member of the group. Every students should get a chance to do something. Those who are backward in one subject, may be excellent in others, and therefore can contribute their might towards the execution of the project.

The teacher is simply to keep a close watch, and encourage and guide the students wherever necessary.

# 5.Evaluating

It is very valuable to review the whole project, after the project has been completed and find out the mistakes, if any. Students should evaluate their own work and they should be able to look their own failures and findings.

## 6.Recording

The students should keep a complete record of the project. They should record the discussion, the proposal, the plan, allotment of duties, books referred, places visited, maps drawn, places surveyed, materials collected and lessons learnt.

## Criteria of a Good Project

- 1. The project selected should be purposeful it should be useful and practicable to the students in their daily life.
- 2. The experience gained should be fruitful. The students should learnt to cooperate and share their interests and should develop into a democratic individual.
- 3. The project should cater for the activities of the students.
- 4. Students should be given full freedom to work on their own accord.
- 5. The project should be selected by the active participation of both students and teacher.
- 6. The project should be economical and the purpose of the project should be achieved without any waste of time or money.
- 7. It should be timely and drawn in relationship with seasons of the year and the interest and needs of the community.
- 8. It should be challenging.
- 9. It should be feasible.
- 10. It should help individuals to see and understand life in its unity.

## Role of the Teacher in Project Method

- 1. The teacher is a friend, guide, and a working partner.
- 2. He should provide opportunities for shy students to contribute something for the success of the project.

- 3. He should try to learn more along with the students.
- 4. He should help the students in developing character and personality by allowing them to accept the responsibilities and discharge them efficiently.
- 5. He should move freely with the students so that democratic atmosphere prevails in the class.
- 6. He should be alert and active all the time to see that the project runs in the right line.
- 7. He should have a thorough knowledge of the students so as to allot them work according to their interest and ability.
- 8. He should be well experienced and should have initiative, tactics and taste for learning.

#### **Merits**

1. This method is based upon the laws of learning. They are as follows:

#### a. Law of readiness

The students are made ready to learn by creating interest, purpose and life situations.

#### b. Law of exercise

The student's carry out activities in the real life situations, the experiences gained thus are very useful in the later life of the students.

## c. Law of effect

The sense of success and satisfaction should follow the learning process. This law makes it essential for the teacher to make the student satisfy and feel happy in what he is learning.

- d. It promotes co-operation and group interaction.
- e. It is a democratic way of learning. The students choose, plan and execute the project themselves.
- f. It teaches dignity of labour.
- g. The correlation of subject is best sought. There is no division of subjects into watertight compartments.
- h. It gives opportunity to develop keenness and accuracy of observation and to experience the joy of discovery.
- i. It calls for wholehearted purposeful activity.
- j. It sets up a challenge to solve a problem and this stimulates constructive and creative thinking.

- k. It helps to widen the mental horizons of students.
- 1. Students learn the matter very easily because the subject is associated with activities.

#### **Demerits**

- 1. The project method absorbs a lot of time.
- 2. It gives the students superficial knowledge of so many things but leaves an insufficient basis of sound fundamental principles.
- 3. It requires much work on the part of teacher for planning and carrying out projects.
- 4. It presumes that the teacher is the master of all subjects and has an all-round knowledge of everything to impart correction.
- 5. The books written on these lines are not available.
- 6. It is more expensive because the students have to bear the expenses of excursions, outdoor activities, purchase of material and do experiments.
- 7. In this method, the teaching is not well organized, regularized and continuous. The timetable is almost upset.

# Suggestions

- 1. This method is suitable for teaching to primary and middle school students. This can also be used for secondary school students with some modifications.
- 2. There is no need for text books and materials. The red project can be carried out in its natural setting and so local material can be made use of.
- 3. The problem of expenditure can be easily solved by taking some such projects in which we can earn something. The time table may be so arranged that in the forenoons subjects may be taught and in afternoons project will be carried out.

## II ASSIGNMENT METHOD

The Assignment method is the most common method of teaching especially in teaching of Economics. It is a technique which can be usually used in teaching and learning process. It is an instructional technique comprises the guided information, self-learning, writing skills and report preparation among the learners. The Assignment method is an important step in teaching and learning process

#### **Objectives**

• It provides good training for information seeking and retrieval behaviour.

- It inculcates the self-learning attitude among the students.
- It provides information analysis and research attitude to the learners.
- It develops the learning experiences from various sources.

# **Steps / Stages in Assignment**

The assignment must be lesson concerned and related with the text books and curriculum.

- The topic / unit of the assignment must be explained with the availability of resources.
- The core of the subject or unit must be clarified.
- The hard and difficult portions of the assignment need to be explained well.
- The topics / units irrelevant to the assignments must be defined very well

## Features of Good Assignment

- Assignment must be relevant to the subject taught to the student.
- This should reflect the affinities with the subject contents in the text book concerned.
- Assignment must be simple and enable the students to complete it within the stipulated time.
- Assignment must avoid ambiguous, complex information and instructional structure.
- Objectives of the assignments must be clear and definite.

## **Types of Assignment**

> Traditional

This is generally completed with the help of textbooks and the teaching aids.

➤ Modern or Psychological

This is based on the interests, aptitudes and working and liking of the students.

## **Demerits**

- It results in wastage of time and creates lack of concentration.
- There is an acute dearth of material, in our country required for completion of assignment.

This technique is useful only secondary classes.

#### III DISCUSSION

Discussion is one of the most valuable methods of teaching economics and they say, "two heads are better than one" but, when a number of heads combine to solve a problem, wonderful results could be achieved.

A problem, an issue, a situation in which there is difference of opinion, is admirable fit for discussion method. Ideas are initiated, there is exchange of opinion accompanied by a search for its factual basis. Speech is free and responsible. Values are not quarrelled about; they are created. The participants are engaged in a process of competitive cooperation. Agreement is the declared purpose of discussion. Discussion, is in fact, an ordered process of collective decision making. It seeks agreement but if it is not reached, it has the value of clarifying and sharpening the nature of agreement.

Discussion as a method of teaching economics, may be used for the following purposes:

- Laying plans for new work;
- Making decision concerning future action;
- Sharing information;
- Obtaining and gaining respect for various points of view;
- Clarifying ideas;
- o Inspiring interest; and
- Evaluating progress.

#### The steps involved in using the discussion method are:

- To locate and define problems of common interest and significance;
- To work together to find ways of solving the problems;
- To allocate responsibilities for the solutions suggested; and
- To evaluate the effectiveness of the suggested solutions and their implementations.

# IV BRAINSTORMING METHOD

This technique calls for an activity in which a deliberate attempt is made to think and speak out freely creatively about all possible approaches and solutions to a given problem, the group participating in spontaneous and unrestrained discussion which usually involves evaluative feedback.

### Characteristics

- Problem-centered The participants are involved in a conscious effort to solve a perplexing problem.
- All possible solutions are exhausted the giving out of solutions goes on rotation, each participant will give one idea per turn. As soon as the last participant shares his own suggestion, the chance is given back to the first one. All ideas will be listed out and evaluated. This session stops only when everyone runs out of any solution to the problem.
- It is highly a creative undertaking Solutions are necessarily the result of originality, imagination and resources.

### V TEAM TEACHING

## Introduction

The present system of education demands too much from a teacher curtailing his freedom. He has to teach same subject-matter every year and he is forced to teach the same content to two or three section of the same class. It is very boring for him and stifles his interest in the subject. Sometimes he is assigned to teach the subject in which he has no interest to teach but he is forced to do so. More-over the present day classrooms are appropriate only for the average students. Team teaching is one of the most modern techniques in the field of educational technology. The concept of team teaching arose in 1957. Although begun in some secondary schools, the team teaching idea was given momentum by activities of the Commission on staff utilization of the national Association of Secondary School Principals (U.S.A). This is the result of numerous and successive January issues of the bulletin of the national association of secondary school principals beginning in 1958. Noall has defined team teaching as "a combination of two or more teachers who work with variable size group of students during an adjustable period which covers two or more regular section". The best-know

and commonly used plan is the trump plan of teaching, so named after Professor J. Lloyd trump, associate secretary of the national association of secondary school principals.

## **Origin of Team Teaching**

The concept of 'Team – Teaching' has it is origin from America during the mid-1950. It reached England in the 1960. J.Freedom's team teaching in Britain gives an account of its growth in the country. It has occupied a place for itself itself in schools and colleges.

Harvard University is the first institution which has initiated an internship plan in 1955. The second mile stone in team teaching is the project in Lexington (1957-64) which has been influenced by the Hardvard programme.

Francis Chase of the University of Chicago has developed the need of team teaching to use the best teachers more effectively.

J. Leyod Trump made valuable contribution for the success of team-teaching. Team-Teaching was not only confined to educational institutions but its use was extended to armed forces for teaching purpose during second world war.

It is difficult to trace the origin of team teaching because so many individuals and organizations have been conducting studies in their own areas for last two decades all over the world.

In India many educationists are aware of this system; but they are not confident to implement it even though it will best suit to our teaching learning situations.

### **Meaning of Team Teaching**

The term 'team teaching' has been defined by several persons because they have designed and conducted experiments to understand the nature of team teaching. Warwick has tried to define the term more comprehensively. According to him "Team-teaching is a form of organization in which individual teachers decides to pool resources, interests and expertise in order to devise and implement a scheme of work suitable for the needs of their pupils and the facilities of their schools."

According to J. Lloyd Trump, teaching is "an arrangement whereby two or more teachers with assistants plan, instruct and evaluate co- operatively two or more classes in order to take advantage of their respective special competencies as teachers".

According to **Harold S. Davis**, "Team Teaching may be considered to be any form of teaching in which two or more teachers regularly and purposefully share responsibilities for the planning and correlating of lessons to one or more classes of students".

## **Definition of Team-Teaching**

Carlo-Olson has defined team-teaching as:

"An instructional situation where two or more teachers possessing complementary teaching skills cooperatively plan and implement the instruction for a single group of students using flexible scheduling and grouping techniques to meet the particular instruction."

Another definition of term-teaching is:

"An arrangement whereby two or more teachers, with or without teaching-aids cooperatively plan, instruct and evaluate one or more class groups in an appropriate instructional space and given length of time so as to take advantage of the special competencies of the team members."

It may be inferred from the definitions of team-teaching that it has the following of the team members."

- It involves two or more teachers to teach a class.
- In this type of teaching, a group of teachers is responsible rather than an individual teacher.
- A team or group of teachers of the same subject work together to deal a significant content to same group of students jointly.
- It can be termed as co-operative teaching, in which individual teachers plan to pool
  resources, interests and their experts for teaching a content for the same group or class
  of students.
- Every individual teacher gets appropriate instruction space and length of time so as to use special competencies of teaching a content to a group of students.
- A group of teachers shares responsibilities of planning, organizing, teaching, controlling and evaluating the same class of students.
- In team-teaching the group of teachers has to consider the needs of their pupils and they should teach jointly to satisfy their needs and remove the difficulties of their students.

Chaplin has defined team teaching in the following lines:

"Team teaching is a type of instructional organization involving teaching teams and the students assigned to them, in which two or more teachers are given responsibility, working together, for all or a significant part of instruction of the same group of students".

We can generalize that "team teaching is any form of teaching in which two or more teachers purposefully share responsibility for the planning, organizing and evaluating the learning of a large group of students. It has shared responsibility with a purpose that teachers can accomplish more by working together with their different expertise".

# **Purpose of Team Teaching**

Team Teaching offers an opportunity for better education to a large group of students through a team of teachers. Some of the purpose are as follows:

- 1) The goal of team teaching is the improvement of teaching through a better utilization of a group of teachers.
- 2) It utilizes teacher's specialized expertise, interests, instruction skill, time and energy.
- 3) It ensures preparation of lessons, materials and other .ids to create motivation among the students and better learning situations.
- 4) The team concept itself increases the possibility of variety of instruction based on pooled talent to the teachers.

### **Characteristics of Team Teaching**

The theoretical design for team teaching is based on the co-operative planning but there are many other aspects of team teaching such as.

- 1. Role differentiation of team members.
- 2. Regrouping of students.
- 3. Rescheduling of time.
- 4. Redesign of teaching space.
- 5. Common time for planning.
- 6. Integration of learning in a meaningful way, and
- 7. Development of resource centres.

The teaching involves much different combination of teachers and other staff personnel, for example one team may consist of a subject matter specialist and a guidance and counselor. This large class would then be broken down periodically so that each specialist might meet small

class discussion groups with those students whose interests or course requirements call for problems more deeply in the various areas of specialization. Still other types of teams use a master-teacher, regular teacher combination with master teacher conducting the large group lesson and the regular teachers being the instructional leaders in the subdivided small group classes.

## **Types of Team-Teaching**

There are different styles of organizing team teaching in schools. One of the common methods adopted is that the teachers teaching the students of same standard and subject join together, collaborate and perform the task. The whole team can plan the lecture and discuss which teacher is best suited to lecture, for small group discussion, for guiding library work, for setting up demonstration and visual aids that can be used in presentation in large groups and for preparing evaluation materials. Each of the members in the team has a specific assignment.

All the students of four sections meet at the large hall for large group instruction. One teacher gives a lecture and another teacher demonstrates. This lecture is arranged after thorough preparation in consultation with the other teachers in the team. The purpose of the lecture is to motivate the students and initiate them in the learning activity.

Team teaching can be effective only when this lecture in a large group is immediately followed by small group discussions under the guidance of all the teachers in the team. The large group is split up into small groups of homogeneous abilities and the teachers pay individual attention and work as counsellor or consultant to these small groups. This homogeneous grouping can be accomplished on the basis of students abilities, interests, needs and achievements.

Another style of team teaching can be that the team members join together, discuss the topics, plan the work, prepare the teaching aids and then go to their respective classes and teach the subject matter.

In yet another approach, when a topic of common concern to different disciplines is to be discussed, teachers of these subjects after proper planning together, can go to the same class and teach the subject matter in coordinated manner. One teacher is followed by another teacher and the discussion is completed from each one's point of view. This may bring about the interrelatedness of knowledge through discussion by different subject teachers.

# **Objectives of Team-Teaching**

The teaching strategies have been designed to achieve certain objectives. The team-teaching has been evolved to realize the following objectives:

- 1. To make the best use of expertise of teachers under team-teaching.
- 2. To improve the quality of teaching. The services of the expert teachers are shared by a large number of students.
- 3. To develop the feelings of co-operation or group work in teaching-learning situation.
- 4. To help the students, to satisfy the needs and difficulties relating to the special content.

### **Principals of Team-Teaching**

The team-teaching is based upon certain general principals which are helpful in organizing team-teaching. The principals provide a guideline for planning and organizing team-teaching. The following are the important principals of this team-teaching.

- Principal of Size and Composition: The size of the group or class should vary
  according to the objective or purpose of team-teaching. For example, if the purpose
  of team-teaching is to remove the difficulties of the students in certain topic of a
  subject, obviously, the size of the group should be small involving the students who
  have similar type of difficulties.
- 2. Principal of Duties Assigning to Teachers of the Team: the team-teaching involves two types of tasks: lead lecture and group work cum follow-up work. Therefore, this task must be assigned to a competent person.
- 3. Principal of Learning Environment: Every subject requires its own learning situation or environment. Therefore, learning environment must be generated by employing appropriate teaching aids and equipments, e.g., laboratory, workshop, field work, good library and lecture room, etc.
- 4. Principal of Time Factor: The team-teaching is a well-organized teaching task, and therefore time schedule should be prepared by allotting appropriate time for lead lecture task and group-work or follow up task. In this type of teaching, time arrangement should be fairly fluid.
- 5. Principal of Supervision: The focus of team teaching is to develop the mastery over subject-matter by employing the expertise of teachers. The supervised-study is essential for assimilating the knowledge of a topic or concepts. The nature and duration of the supervision of the students activities depend upon the purpose of team teaching.

### **Procedure of Organizing Team-Teaching**

The team-teaching serves several purposes of teaching and it has different forms or types. Therefore, it is difficult to provide a general procedure for organizing team-teaching, but it involves the following steps:

Step 1 – Planning, Step 2 – organizing and Step 3 – Evaluating. The details of activities of these steps have been given in the following paragraphs:-

## **Step 1-Planning of Team-Teaching:**

This step involves the following activities which are decided by the team members.

- Deciding the topic to be taught.
- Writing the terminal objectives in behavior terms.
- Identify the entering or initial behavior of the learners of the group.
- Preparing a tentative schedule of teaching.
- Assigning duties to teachers, considering their interest and competencies during Lead lecture (2) follow-up work and (3) supervision.
- Fixing up the level of instruction.
- Selecting appropriate teaching aids and demonstration equipments for generating learning environment; deciding ways and means for evaluating the students performance: oral or written questions for practical work, etc.

These activities are finalized by the team of teachers who are taking part in the teamteaching expertise of every teacher must be fully utilized. There should not be imposition of activities on them.

# **Step 2-Organizing Team Teaching:**

The organization of team-teaching is decided by considering the purpose or needs of the learners of the groups. The following are the general activities which are usually performed by team of teachers:

- Determining the level of instruction: Some questions are asked to explore the background of the learners.
- Presentation of lead lecture by a competent teacher of the team: other teachers listen to
  the lecture and note down the elements of topic which are not easily understand able to
  the learners group or not appropriately presented.

- Follow up work, the other teachers have to supplement the lead lecture by explaining the elements of the topic in a more simple way so that learners can understand easily.
- Providing motivation or reinforcement by teachers to the learners in both the situations: lead lecture and follow up work.
- Supervision of students-activities which are assigned in lead lecture or group work or follow-up work. This stage is considered to be important for assimilation.

Every member of the team should be conscious about time schedule and about the duty assigned to him.

## **Step 3- Evaluating Team-Teaching:**

The evaluation is an important aspect of any type of teaching. It is a helpful to measure the performance of learners which determines the level of achievement of the objectives. It also provides the reinforcement to team members. Thus, it involves the following activities:

- Asking oral questions, writing questions and practical work. Each question should measure a particular objective of team-teaching.
- Taking decision about the level of performance and realization of the objectives.
- Diagnosing the difficulties of the learners and provide the remediation.
- Revising the planning and organizing phases of team-teaching on the basis of evaluation of students.

## **Team Organization**

This is based on hierarchy whose basic unit is a teacher. The teacher's experience, skill and speciality are the criteria of joining the team. There is joint responsibility for instruction but the teacher enjoys his status and prestige. Typically, from three to eight teachers take responsibility for the instruction of 75 to 240 students of similar age and class. The clerical and secretarial needs of the team are cared by the clerical staff.

Types of teams:

### 1) Single Subject Team

In single-subject teams, two or more teachers agree to teach the same subject at a particular class level to the same group in a common period. The strength of the students varies according to the number of teachers.

## 2) Interdisciplinary Teams

In these teams teachers of different subjects assume responsibility for the same large group and are given a block of time in which to work with them.

### 3) Hierarchical Teams

Some teams are hierarchical in nature consisting of teachers, clerks and assistants. Job descriptions give the difference of roles played by each member.

In these teams one professional teacher is taken as team leader and functions as administrator in-charge. The remaining teachers performs professional duties. Similarly, clerks perform secretarial work and prepare cyclostyled materials.

## 4) Synergetic Teams

These are some teams, which work together as a team, and there is a minimum of hierarchical approach.

### **Facilities Required**

Team Teaching necessitates flexibility. Time schedules must be organized in such a way that there are large blocks of time allotted by the combined large group-small group lesson. The school building itself must be flexible so that large rooms can be easily transformed by movable partitions into separate rooms for small class discussion. School organization must be flexible so that students get to know one another better. Such fine support is necessary for effective group discussion.

### Advantages

The team-teaching is a perspective and economical device of teaching to cater to the needs of the students. It is highly flexible. It has the following major advantages:

- The team-teaching utilizes the competencies of the teachers.
- It creates the learning environment for better comprehension and mastery over the subject among the learners.
- It provides an opportunity for free discussion in the small group work..
- It provides an opportunity to the teachers to develop the professional status and competency in teaching by mutual sharing of ideas..
- It develops the team spirit and the team members utilize the best use of multimedia...
  - Time and energy are saved by the team teaching. It maintains the discipline in the class and creates a conductive environment of learning.
- It is highly flexible method of teaching while traditional methods of teaching are rigid.
- It enables the students to become more aware of their own approach, knowledge of content and simultaneously to the other experts of the same area. It brings excellence of teaching in them.

#### Limitations

With all the advantages, the method has got some demerits.

- It is very difficult to seek co-operation among teachers to work jointly in teaching-learning situation. There is no mutual regard and respect among the teachers. Every teacher considers himself expert of the subject. Every teacher has his own style of teaching.
- The teachers do not like to deviate from the routine method of teaching and they do not prefer any change in system of education. Generally they are of the opinion that is can be used in Western countries not in Indian schools.

This type of attitude of teachers hampers in the progress and improvement of educational system.

## Suggestions regarding the Use of Team-Teaching

The team-teaching can be used effectively by incorporating the following suggestions:

- The research studies has established for its workability and effectiveness but its success will depend upon the way it works in practice. The meaning and understanding of teamteaching should be given to the school teachers and favourable attitude would be developed among them towards team-teaching
- The success of team-teaching rests upon the co-operation and devotion of the teachers.
   Only those teachers who are willing to work in a team must be invited for this method.
- The teachers should not be assigned the duties but they themselves should prefer the activities of teaching. They should be given full freedom to work at various stages of team-teaching. It is always better to have a leader for the team.
- In teacher education departments and institutions, pupils-teachers should be trained for this type of teaching.
- Anderson, Warwick and other experts and other experts in the fields of team-teaching consider hierarchical structure and composition as a very logical and attractive arrangement. The success of team-teaching plan largely depends upon a balanced team in which all the teachers feel their responsibility and co-operate willingly in organizing teaching.

## VI WORKSHOP

In education, workshop is a brief intensive course, seminar or a series of meetings emphasizing interactive and exchange of information among a usually small number of participants.

#### VII SYMPOSIUM

Here the participants present to the audience their views about various aspects of a selected problem or topic through speeches or proper reading. In the words of Struck, "we think of a symposium as a group of comments, either spoken or written, which portrays contrasting or at least different points of view", the chief purpose of the symposium is to clarify thought upon controversial questions.

#### VIII INDIVIDUALIZED INSTRUCTION

Any of a number of teaching manoeuvre's whereby teaching and learning are tailored to meet a learner's unique characteristics.

Individualized instruction focuses on the needs of the individual student. Teaching is specific and targets one need at a time. This teaching method can be used on its own, or it can be part of differentiated teaching. Some students who receive individualized instruction need teachers to help them understand and learn. Other students using the same teaching method can skip topics they already know and go on to advanced information.

## IX PROGRAMMED INSTRUCTION

Programmed instruction is a method of presenting new subject matter to students in carefully designed steps through a sequence of instructional "frames" (Miller, 2006). Students work through the programmed material by themselves at their own speed and after each step test their comprehension by answering questions. They are then immediately shown the correct answer or given additional information. Computers and other types of teaching machines are often used to present material, although textbooks have also been developed in programmed format (Columbia Electronic Library, 2007).

B. F. Skinner was inspired to develop a mechanical device after attending his daughter's fourth grade math class, where he analyzed the deficiencies of the group-based traditional instruction, and felt that the teacher was "violating almost everything we knew about the learning process" (Molenda, 2008). The instructional format used in his machines became known as programmed

instruction. This teaching method allowed the students the opportunity to work at their own pace and made it virtually impossible for students to make errors (Casas, 2002).

The components of Skinner's programmed instruction include:

- Behavioral objectives
- Small frames of instruction
- Self-pacing
- Active learner response to inserted question
- Immediate feedback (Skinner, 1958)

### **Benefits of Programmed Instruction**

Programmed Instruction, as discussed previously, was designed to enable students to work independently at their own pace with minimal repetition of errors while advancing through material only as they prove competency. Upon first introducing programmed instruction, proponents stated its benefits to be:

- 1. Instruction that was less labour-intensive, and therefore, less expensive. The technology of programmed instructive allowed more students to engage in the material without the need for hiring additional human instructors.
- 2. Programmed instruction enabled students to learn more extensively in a limited amount of time.
- 3. Programmed instruction utilized 'branching' which tailored instruction and feedback according to the needs and responses of each individual learner.
- 4. Programmed instruction adhered to Thorndike and Pressey's laws of recency, effect, and exercise by reinforcing the positive/correct responses of students and limiting the repetition of mistakes. In this manner, immediate feedback was given to address and correct student responses in order to support optimal, true learning. (Molenda, 2008)

Other benefits of benefits of programmed instruction included the idea that PI materials could meet fixative, manipulative, and distributive measures (Uhumuavbi, 2009). For example:

5. Programmed instruction materials could be recorded and used at a later date according to the flexibility needs of each student's schedule (fixative).

- 6. The focus of instruction and materials could be edited and arranged so that events/subject matter that might have been missed in live instruction could be made more observable and noticeable (manipulative).
- 7. Programmed instruction materials can be reproduced and displayed to a large group or to multiple individual as often and in as many various locations as are needed (distribution).
- 8. The technology of programmed instruction does not treat students any differently based on assumptions of gender or race. According the Uhumuavbi's article on student achievement and programmed instruction "research findings have shown that male and female students have different classroom experiences with regard to science, technology, and math courses because human teachers tend to treat them differently. Expectations for females in some subjects are usually lower as they are declared to be for certain sex, racial ethnic groups (Uhumuavbi, 2009)".

The benefits of programmed instruction additionally include:

- 9. Because programmed instruction steps outside of the traditional classroom, it tends to appeal to students and leads to an improved attitude toward studying.
- 10. Additionally programmed instruction increases student independence and student achievement.
- 11. When class size increases in a traditional classroom achievement tends to decrease, but with programmed instruction this is not an issue. Student achievement is not affected by an increase in class size. (Boden, 2000)

Based on the multitude of positive effects shared above, one cannot deny that programmed instruction can indeed be very beneficial to education for both students and teachers. Although it may not be the end-all answer to educational issues, it can be used as an effective tool for learning in several circumstances.

### X COMPUTER ASSISTED INSTRUCTION

Computer Assisted Instruction refers to instruction or remediation presented on a computer. Many educational computer programmes are available online and from computer stores and textbook companies. They enhance teacher instruction in several ways.

Computer programs are interactive and can illustrate a concept through attractive animation, sound, and demonstration. They allow students to progress at their own pace and work individually or in a group. Computers provide immediate feedback also. Programs provide differentiated lessons to challenge students who are at risk, average or gifted.

## **CONCLUSION**

One of the main aims of teaching is to achieve the maximum in the shortest possible time and for attainment of this aim various methods and techniques have been evolved. They present the subject matter in a different form. If a particular method is useful for one stage of education, another method of is suitable for another stage of education. Thus the above discuss explains the various methods and techniques which can be effectively used for teaching of Economics.

# **Questions for Discussion and Reflection**

- 1. What is 'lecture method' of teaching? When the lecture method can be effectively used?
- 2. What is team-teaching? How could it be organized in schools?
- 3. Define 'Project Method' of teaching. Explain briefly the various steps involved in it.
- 4. What are the different ways of organizing the problem-solving method of teaching?
- 5. How a seminar is conducted? Mention its advantages and limitations.

## **UNIT V Resources for Teaching Economics**

### **Objectives:**

- To obtain knowledge on the Print resources in teaching of Economics.
- To understand the audio resources in teaching of Economics.
- To analyse the visual resources in teaching of Economics.
- To explore the ICT resources in teaching of Economics

### **PRINT RESOURCES:**

**Newspaper:** A newspaper is a serial publication containing news, other informative articles (listed below), and advertising. A newspaper is usually but not exclusively printed on relatively inexpensive, low-grade paper such as newsprint. Newspapers are typically published daily or weekly.

Magazines: Magazines are publications; usually periodical publications that are printed or electronically published they are generally published on a regular schedule and contain a

variety of content. In the case of written publication, it is a collection of written articles. A "magazine" is a periodical with a popular focus, i.e. aimed at the general public, and containing news, personal narratives, and opinion. Articles are often written by professional writers with or without expertise in the subject; they contain "secondary" discussion of events, usually with little documentation.

**Journal:** A "journal" is a scholarly periodical aimed at specialists and researchers. Articles are generally written by experts in the subject, using more technical language. They contain original research, conclusions based on data, footnotes or endnotes, and often an abstract or bibliography. The Journal of Physical Chemistry, The Chaucer Review, The Milbank Quarterly, and Labor History are examples of journals.

**Economics Encyclopedias:** Economics Encyclopedias is, any system of knowledge that is concerned with the physical world and its phenomena and that entails unbiased observations and systematic experimentation. In general, a economics involves a pursuit of knowledge covering general truths or the operations of fundamental laws. An encyclopedia or encyclopedia is reference or compendium holding of type comprehensive summary of information from either all branches of knowledge or a particular branch of knowledge. Encyclopedias are divided into articles or entries, which are usually accessed alphabetically by article name. Encyclopedia entries are longer and more detailed than those in most dictionaries. Generally speaking, unlike dictionary entries, which focus on linguistic information about words, encyclopedia articles focus on factual information concerning the subject for which the article is named.

AUDIO RESOURCES: An audio tape recorder, tape deck or tape machine is an analog audio storage device that records and plays back sounds, including articulated voices, usually using magnetic tape, either wound on a reel or in a cassette, for storage. In its present-day form, it records a fluctuating signal by moving the tape across a tape head that polarizes the magnetic in the tape in proportion to the audio signal. Tape-recording devices include reel-to-reel tape deck and the cassette deck. Talk radio is a radio format containing discussion about topical issues. Most shows are regularly hosted by a single individual, and often feature interviews with a number of different guests. A talk show or chat show is a television programming or radio programming genre in which one person discusses various topics put forth by a talk show host.

**DVDs/CDs:** A compact disc (**CD**) is a small, portable, round medium made of molded polymer (close in size to the floppy disk) for electronically recording, storing, and playing back audio, video, text, and other information in digital form. Tape cartridges and CDs generally replaced the phonograph record for playing back music. At home, CDs have tended to replace the tape cartridge although the latter is still widely used in cars and portable playback devices.

**DVD** is an optical disc technology with a 4.7 gigabyte storage capacity on a single-sided, one-layered disk, which is enough for a 133-minute movie. DVDs can be single- or double-sided, and can have two layers on each side; a double-sided, two-layered DVD will hold up to 17 gigabytes of video, audio, or other information. This compares to 650 megabytes (.65 gigabyte) of storage for a CD-ROM disk.

## VISUAL RESOURCES

**Pictures:** Pictures are kinds of visual instruction materials might be used more effectively to develop and sustain motivation in producing positive attitudes towards English and to teach or reinforce language skills. Pictures attract children and motivate them like to learn English so pictures are unlikable things to teach and learn English. Picture is visual presentation of human, places, or things. The use pictures are more effective than the use words because they are easier to remember and retell. Children can see pictures, recall and retell or describe a human, a place, a thing or a specific situation that is shown in picture. It is much clearer than remembering boring words.

**Flashcard:** A flashcard or flash card is a set of cards bearing information, as words or numbers, on either or both sides, used in classroom drills or in private study. One writes a question on a card and an answer overleaf. Flashcards can bear vocabulary, historical dates, formulas or any subject matter that can be learned via a question-and-answer format. Flashcards are widely used as a learning drill to aid memorization by way of spaced repetition. Flashcards exercise the mental process of active recall: given a prompt, one produces the answer. Beyond the content of cards, which are collected index, there is the question of *use* – how does one use the cards, in particular, how frequently does one and how does one react to errors, either complete failures to recall or mistakes? Various systems have been developed, with the main principle being spaced repetition increasing the review interval whenever a card is recalled correctly.

Charts: A chart, also called a graph, is a graphical representation of data, in which "the data is represented by symbols, such as bars in a bar chart, lines in a line chart, or slices in a pie chart". A chart can represent tabular numeric data, functions or some kinds of qualitative structure and provides different info. The term "chart" as a graphical representation of data has multiple meanings. Charts are often used to ease understanding of large quantities of data and the relationships between parts of the data. Charts can usually be read more quickly than the raw data. They are used in a wide variety of fields, and can be created by hand or by computer using a charting application. Certain types of charts are more useful for presenting a given data set than others. For example, data that presents percentages in different groups are often displayed in a pie chart, but may be more easily understood when presented in a horizontal bar chart. On the other hand, data that represents numbers that change over a period of time might be best shown as a line chart.

Posters: There are many teaching aids available to help improve your student's learning. Educational posters are an excellent teaching aid that can help children with spelling & comprehension, mathematics, language, geography, science, history and many more subjects. Educational posters are an excellent source for students to read and learn from when focusing on a specific subject. It is proven that visual learning is one of the most popular methods of learning that people find most effective. At Teach Starter, we have used this knowledge and developed a number of educational posters that help children learn through the use of visual aids. Educational posters are eye catching and visually appealing. The use of bright colours and bold text is helpful for getting the attention of children and adults. There are many benefits of having educational posters in your classroom or at home. Posters can be interactive as laminating certain posters means that students can write on them and then reuse them in the future.

**Photograph:** A Photograph is worth a thousand words through which a complex idea can be conveyed with just a single still image. Pictures make it possible to absorb large amounts of data quickly. Using photographs for explaining complex phenomena is one of the teaching aids of modern education system all over the world. As the world is changing day by day so are the methods of instructions as the modern curriculum requires conceptual elaborations. Visual aids have the tendency to materialize the thoughts of students in the form of graphics to give thoughts a concrete frame of reference. Use of photographs is important for students because they are more likely to believe findings when the findings are paired with colored images

describing complex situations during learning as opposed to other representational data such as complex book text.

**Models:** Many researchers have tried to put together classroom- or school-based models that describe the teaching-learning process. A model is a visual aid or picture which highlights the main ideas and variables in a process or a system.

## **ICT RESOURCES:**

Radio: Radio is a powerful mass medium used in education for disseminating information, imparting instruction and giving entertainment. It serves with equal ease in both developed and developing countries. It spreads information to a greater group of population thereby saving time, energy, money and man-power in an effective way. Radio is a simple and cheap medium readily available as a small toy. Now small and handy transistors are available with even poorest of people. A small transistor can carry the message to any place onthe earth. It needs very little for maintenance and cheaper production can be taken up with more and more resources. Radio speaks to an individual so also to millions at a time. Hence, any listener can think the broadcast is meant for him whereas when listened in group all think the massage directed towards them. Each student takes the broadcast as very intimate to him. Due to its portability and easy accessibility radio could found its place everywhere whether it was a field, a school, a kitchen or a study room. Radio is a blind man's medium and is meant for ears only. It plays with sound and silence where the sound can be anything like voice or word, music and effect. When one hears radio, simultaneously one can imagine happenings in his/her mind. So it is called as theatre of blind or a stage for the mind. Radio can be listened to simultaneously along with another work like reading also.

Television: Television or Learning show is the use of television programs in the field of distance education. It may be in the form of individual television programs or dedicated specialty channels that is often associated with cable television in the United States as Public, educational, and government access (PEG) channel providers. There are also adult education programs for an older audience; many of these are instructional television or "tele course" services that can be taken for college credit Many children's television series are educational, ranging from dedicated learning programs to those that indirectly teach the viewers. Some series are written to have a specific moral behind every episode, often explained at the end by the character that learned the lesson. In the social aspects of television, several studies have found that educational television has many advantages.

Internet: Teachers whose lesson plans were discussed here engage students in meaningful learning activities that are of high relevance to students. The Internet is serving as a solution to engage students and teachers as equal partners in an educational journey in these electronic settings. Computers and the Internet are a great resource for classroom teachers! Teachers can find suggestions, lesson plans, practical support, information, and materials through the Internet. In fact, using a computer can make a teacher's life easier and more efficient. The LEADERS website provides an extensive list of Internet links designed to help teachers of reading and writing. This list of links covers most of the types of websites discussed below. Here are some of the many ways in which teachers can make computer and Internet technology work for them.

Multimedia: Multimedia is content that uses a combination of different content forms such as text, audio, images, animations, video and interactive content. Multimedia contrasts with media that use only rudimentary computer displays such as text-only or traditional forms of printed or hand-produced material. Multimedia can be recorded and played, displayed, interacted with or accessed by information content processing devices, such as computerized and electronic devices, but can also be part of a live performance. Multimedia devices are electronic media devices used to store and experience multimedia content. Multimedia is distinguished from mixed media in fine art; by including audio, for example, it has a broader scope. The term "rich media" is synonymous for multimedia. Hypermedia scales up the amount of media content in multimedia application.

Interactive whiteboard : An interactive whiteboard is a large interactive display in the form factor of a whiteboard. It can either be a standalone touch screen computer used independently to perform tasks and operations, or a connectable apparatus used as a touchpad to control computers from a projector. They are used in a variety of settings, including classrooms at all levels of education, in corporate board rooms and work groups, in training rooms for professional sports coaching, in broadcasting studios, and others. The first interactive whiteboards were designed and manufactured for use in the office. This board was used in small group meetings and round-tables.

## **COMMUNITY RESOURCES**

# **Economics Club**

To widen the knowledge of students a good economics teacher can involve his students in a number of co curricular activities such as economics club, industrial visits, class magazines etc. there is no limit to such extracurricular activities and the teacher is free to undertake one or more such activity at higher secondary school level for the benefit of his students. As in some other subjects so also in economics, the students be encouraged to organize themselves into economics clubs under the auspices of there organization, discussion and lectures etc. are arranged. Such functions are quite helpful in creating interest in economics. Under the auspices of such organization certain activities based on some concepts of economics. This is likely to help the students in having an idea of the practical utility of economics in addition to creating there interest in economics. The values of economics clubs may be summarized as under: I) It is useful in arousing and maintaining interest in economics. II) It stimulates the active participation of the students. III) It develops in the students the habit of selective study. This helps them to make a distinction between relevant and irrelevant material. IV) The knowledge gained by students in various functions of such economics clubs activities supplements the class teaching. V) It provides the students an opportunity of free discussion and they are benefited from one another's view. VI) Gifted students get an opportunity to satisfy their needs and interest by actively participating in the activities of economics clubs. VII) It gives the students basic training in organizing such programmes. VIII) It is helpful in maintaining proper utilization if leisure time. IX) Though participation in such clubs students get. Acquainted with the contribution of experts economist in their field.

Organization Of Economics Club: A economics club, if properly organized will be a great help in economics enlivening the teaching of economics such a club should be run by students under the guidance and supervision of his or the teacher. For proper running of a club the most important thing is preparation of a draft consultation of the club. This draft be prepared by the economics teacher in consultation with the head of the intuition. This draft constitution should provide all important details about the name of the club, aims and objectives of the club, details regarding membership and the fees etc. Suggested Activities For This Club 1) Organizing inter class; inter school competitions on some interesting topics of economics. 2) Arranging a lecture by some rewound economics teacher or scholar. 3) Celebrating days and events pertaining to the history of economics. 4) Organizing discussions about the practical application of economics. 5) Organizing recreational activities in economics such as catch problem, etc. 6) Making or collecting charts, models, pictures, graphs, etc. 7) Conducting related project activities 8) Preparing items for wall magazine 9) Organizing exhibition or fairs related to economics 10) Organizing paper reading contest about certain current topics of economics 11) Making arrangements to watch the television programs regarding to current

economics concepts 12) Organizing seminars and carrier courses related to economics Thus we can see that economics club can cover a wide variety of topics related to the subject. If the students participate in such activities wholeheartedly, then we derive great benefit. They will develop love for the subject

### **Exhibitions and Economics fairs**

The roots of the phenomenon "Fairs and Exhibitions" can be traced back to its language origin. "Fair" comes from Latin "feria", meaning "holiday" as well as "market fair". This in turn corresponds to the Latin "feriae", which came to mean religious festival.1) During the 12th century the importance of trade meetings increased; fairs were held close to churches, so that the concepts of religious festival and market fair was combined in the common language.2) The word "exhibition" was mentioned as early as 1649. It is a derivative of the Latin word "expositio", meaning "displaying" or "putting on a show".3) Exhibitions are not just collections of interesting objects brought together at a certain place and time. They are human activities, human enterprises, undertaken for definite reasons and in order to achieve certain specified results. They are a form of human exchange, whereby the promoters and exhibitors on the one hand communicate with the visitors on the other. Their results can only be told in terms of further human thought and activity.

Exhibitions differed from fairs in four major ways: First, exhibitions were usually one-time events. They did not enjoy a recurring life cycle. However, while fairs ran for a short period of time, many exhibitions ran for months, some for a year or longer. Second, exhibitions were housed in permanent facilities built specifically for them. Starting in the 18th century, the practice of building a facility for the express purpose of housing an exhibition was the precursor of the exposition/convention centre industry. Third, although fairs were held regularly, they were not highly organized events. Over time, religious and later civic leaders did take control of the grounds where fairs were held (usually public lands). Exhibitions, on the other hand, were highly organized events. They were initially created by government departments or committees for the purpose of promoting trade. Finally, exhibitions differed from fairs in the very way in which business was conducted. Goods were bought and sold at fairs. At exhibitions, commercial activity or selling of the displayed goods, was not usually involved. However, inherent in displaying the goods was the hope of stimulating future sales. Today this is how most exhibitions still operate.

**Fieldtrip:** A field trip or excursion is a journey by a group of people to a place away from their normal environment. The purpose of the trip is usually observation for education, non-experimental research or to provide students with experiences outside their everyday activities, such as going camping with teachers and their classmates. The aim of this research is to observe the subject in its natural state and possibly collect samples. Field trips are also used to produce civilized young men and women who appreciate culture and the arts. It is seen that more-advantaged children may have already experienced cultural institutions outside of school, and field trips provide a common ground with more-advantaged and less-advantaged children to have some of the same cultural experiences in the arts.

Qualities of a good economics textbook: Text books are the most widely used of all instructional materials. Now a day's text book has become a course of study. A set of unit plans and a learning guide as well. A text book should really design for the pupils rather than the teacher. Text book should stimulate reflective thinking and cultivate in students the scientific attitude. In the teaching-learning process, the text-book occupies an important place. There is a saying "As is the text-book, so is the teaching and learning". A good text-book can even replace class-room teaching. The Economics text-book should aim at aiding the pupils in the development of their personalities, in developing open mindedness, developing appreciation and understanding of nature and not merely stuffing their minds with facts.

The opportunity of this analysis has been offered to students, future teachers of economics, around the time when they will directly use the textbooks for preparing and teaching the lessons. The main objective of this coordinated exercise of exploring the quality of the alternative economics textbooks is the development of the students' abilities to critically analyze the textbooks which they will use in the near future and for which they will have to express alternative options. The interests of the authors are also focused on the role of the textbooks in the learning process, on the analysis of their contribution to the students' progress in the scientific knowledge but also to their personal development. The textbook, as a source of the basic knowledge of economics as a school subject, but also as a collector of methodological ideas, is a "territory" that is insufficiently explored by students in the initial teaching preparation.

**Qualities of an Economics teacher:** Economics teachers need characteristics that are common to all good teachers, but, in addition, they need additional qualities specific to their chosen subject area. General Characteristics. Good teachers are dynamic, patient, understanding and caring. Knowledge, Personality and Physical Attributes.

## **Teaching Style/Approach:**

An excellent Economics teacher:

- 1. Enthusiastic about teaching students the subject matter
- 2. Treats students with respect and designs curricula to meet the needs of all students, regardless of level of instruction
- 3. Ability to be discipline, to be firm and fair,
- 4. Sets an example of integrity inside and outside the classroom and teaches students responsibility and high standards
- 5. Plans lessons well in advance, gives adequate time for each topic, and integrates subjects
- 6. Teaches well organized concepts in a conceptually concise fashion
- 7. Stresses concept learning rather than rote memory
- 8. Continually reassesses approaches, lectures and tests to insure a fresh, relevant curriculum
- 9. Ability to inspire and motivate students,
- 10. Dedication to teaching profession.

## **Subject Expertise/Teaching Techniques**

An excellent teacher:

- ✓ Teaches students how to learn, analyze and think critically, emphasizing good scientific methodology and problem solving skills
- ✓ Prepares lessons that will enhance problem solving ability
- ✓ Develops hands-on activities to illustrate concepts and uses a variety of approaches to assist the learning processes lectures, discussions, demonstrations, field trips, guest speakers, student presentations, films and slide shows
- ✓ keeps up-to-date in the subject matter
- ✓ Ability to inspire and motivate students,
- ✓ Ability to be discipline, to be firm and fair,
- ✓ Dedication to teaching profession.

### **Teaching Environment**

An excellent teacher:

1. Creates an exciting classroom atmosphere with as many living things as possible to enhance learning.

- 2. Acquires up-to-date equipment for laboratory work
- 3. Joins committees to improve the school, department, himself/herself
- 4. Generates new and exciting ideas for students to think about
- 5. Encourages students to ask questions about the lesson
- 6. Knows how to administer first aid in case of accidents.

# **Community Involvement**

An excellent teacher:

- 1. Will use the community resources by inviting guest speakers from nearby institutions and conduct field trips to public and private sector industries, markets, museums, etc.
- 2. Develops and promotes advanced and/or continuing education courses in the school district, if possible
- 3. Attends other activities in which students are involved such as musicals, sports, art exhibits, etc.
- 4. Takes an interest in and gets involved in community activities
- 5. Solicits support from community businesses to improve facilities and programs in the schools.

# **Professional Development**

An excellent teacher:

- 1. Continually updates his/her knowledge by
  - \* Reading the literature
  - \* Attending conferences, conventions, workshops and seminars
  - ❖ Taking college or in-service courses
  - ❖ Visiting local market, bazaar, stock exchange etc.
- 2. Becomes active in a professional organization and encourages colleagues to join as well
- 3. Seeks grant support to purchase equipment, to organize or attend meetings or conferences, and to fund special educational projects.

#### **Ouestions for Discussion and Reflection**

- 1. Write short notes on the audio resources in teaching of Economics.
- 2. Give the need for professional development of an Economics teacher.
- 3. Write an essay on the ICT resources for teaching of Economics in detail.
- 4. Enumerate the qualities of good Economics textbook.
- 5. Critically analyse the community resources for teaching of Economics.

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