

Course 1.4.11 (Optional)

Work & Vocational Education

Unit-3

Approaches & Methods of Teaching Work & Vocational Education

Lecture Method -

Lecture method is the oldest method of teaching. The teacher clarifies the content matter of the students by using gestures, simple devices, by changing voice, change in position and facial expressions. Teachers are more active and students are passive but the teacher also asks questions to keep the students attentive.

Principles -

1. A student can learn better through listening.
2. Through lecture method, the teacher makes an attempt to impart perfect and complete knowledge of the subject or the topic students.
3. Subject matter can be correlated with other subjects.
4. New knowledge is given related to previous Knowledge.

When use lecture method-

1. It is used to give an overview of a large unit.
2. This method is an effective way for motivating pupils and developing their interest in the subject.

3. It is used for supplementing the pupils reading and for clarifying main concepts.
4. This method helps to save the time of students by providing important information in short time period.
5. This method is used to provide background.

Steps of lecture method

1. Appropriate language and manner of presentation according to the nature of students.
2. Selection of audio-visual aids and instructional materials.
3. Planning the motivational technique.
4. Anticipating certain difficulties and problem during the lecture.
5. Finding suitable solution and alternatives to these barriers to a successful lecture.

Advantage-

1. It is economical with regard to time.
2. It helps in developing the habit of concentration among the students.
3. It helps in achieving even high order cognitive objectives i.e. application, analysis, synthesis.
4. Lecture method presents the subject matter in a systematic way.
5. It develops good audience habits.

6. Through this method, new subject matter can easily be introduced.

7. It enables linkage between previous knowledge with a new one.

Disadvantage-

1. Since this is a teacher centred method so it provides very little scope for student activity.

2. Student plays a passive role in this method.

3. Individual differences are not taken in to consideration.

4. It cannot be used for achieving psychomotor objectives.

Demonstration Method-

A method demonstration is a teaching method used to communicate an idea with the aid of visuals such as flip charts, posters, power point etc. A demonstration is the process of teaching someone how to make or do something in a step- by- step process. Here three things are necessary-

1. The object being displayed during demonstration should not be so small.

2. During the demonstration, the clear language should be used so that pupils may understand concept easily.

3. The pupils should be able to question teachers in order to remove then difficulties.

Characteristics-

- 1.The demonstration should be done in a simple way.
- 2.In this strategy, attention is put to all students.
- 3.Goals and objectives of demonstration are very clear.
- 4.It is well- planned strategy.
- 5.Time is given for rehearsal before the demonstration.

Steps -

There are six steps of this process,

- 1.planning and preparation
2. Introducing the lesson
- 3.Presentation of subject matter.
- 4.Demonstration
5. Teaching aids
- 6.Evaluation

Merits-

- 1.It helps a student in having a deeper understanding of the topic.
- 2.It helps students remain active in teaching- learning process.
- 3.It leads to permanent learning.
- 4.It helps to create interest for topics among students.
- 5.It accounts for the principles of reflective thinking.

6. It helps in arousing the spirit of discovery among students.

7. It imparts maximum learning to students.

Demerits-

1. Students cannot benefit with direct and personal experiences as teacher carry out the demonstration.

2. It can be costly as it requires costly materials.

3. It can be a time – consuming method.

4. It is not based on learning by doing.

5. This method does not provide training for the scientific method.

6. There is a lack of experienced teachers to carry out the demonstration.

Laboratory Method- Laboratory teaching assumes that first- hand experience in observation and manipulation of the materials of science is superior to the other methods of developing understanding and appreciation. Laboratory training is also frequently used to develop skills necessary for more advanced study or research.

Characteristics-

1. This is an activity method and it leads the students to discover mathematics facts.

2. Method of learning by doing or observation.

3. Activity based method.

4. In it we proceed from concrete to abstract.

5. Extension of inductive method, demonstration method, experiential method.
6. Laboratory method is a procedure for stimulating the activities of the students and to encourage them to make discoveries.

Steps-

1. The teacher clearly states the aims of the practical
2. Provides material and instruments.
3. provide clear instruction.
4. carry out the experiment.
5. Record all the observation.
6. Draw conclusion.

Merits-

1. Students learn by doing and come in contact with the raw data or material object in teaching learning process.
2. Develop the power of observation and reasoning.
3. develop the scientific attitude.
4. develop team work.
5. Joyful and interesting.
6. Student becomes independent.
7. Clearly understand the subject.

Drawback-

- 1.It is expensive.
- 2.Time consuming.
- 3.It need proper planning; it is not applicable for large class.
- 4.Tendency of copying may develop.
5. Not much applicable in lower classes.

Heuristic Method -

In heuristic method the student be put in the place of an independent discover. Thus no help or guidance is provided by the teacher in this method. In this method the teacher sets a problem for the students and then stands aside while they discover the answer.

Objectives

1. To develop among students ability of self learning.
2. To develop among students ability of critical thinking.
3. To develop among students the attitude of logical thinking.
4. To develop among students the attitude of accepting the truth only after verification.
5. To develop among students the attitude of not accepting things based on blind faith.
6. To develop among students the scientific thinking.

Principles

1. Principle of activity.
2. The principle of logical thinking
3. The principle of proceeding from the known to the unknown .
4. The principle of purposeful experience.
5. The principle of self-thinking and self study.

Steps

1. Introduction and theoretical rationable.
2. Selection of the topic.

3. Statement of the topic .
4. The title.
5. Definitions of terminology.
6. Exploration of the purpose of learning the topic.
7. Formulating Hypothesis.
8. Prediction.
9. Propose appropriate procedures.
10. Determine methods.
11. Data collection .
12. Testing of hypothesis.
13. Drawing conclusion.

Merits

1. In this method pupils realize the problem ,think about it , observe it , test it and conclude about it. This creates scientific attitude in pupils. Hence, this method is a scientific method of teaching.
2. This is a psychological method as the student learns by self-practice. The maxim learning by doing is involved. Students learn by doing themselves.
3. In this method , the entire task is completed in school. This solves the problems of home work automatically.

Demerits

1. This method is useful only for the pupil of higher classes and not for lower class pupil.
2. The knowledge of all the subjects of a curricular cannot be imparted to the pupils for examinations by

heuristic method .Hence, this method is not appropriate.

3. The modern culture and civilization has become so much complicated that every pupil acquire knowledge by doing research himself . The teacher has to provide its knowledge directly.

Problem solving method

Problem solving methods are the steps we use to find solutions to problems and issues. Humans are naturally quite goods at problem solving , and we often use sophisticated methods that we did not even know that we are using to try to get the answer.

Objectives

1. Improve pupils self - concepts with respect to the abilities to solve problems.
2. Make pupils aware of the value of approaching problems in a systematic manner.
3. Make pupils aware of the solving strategies.
4. Improve pupils abilities to select appropriate solution strategies.
5. The appreciation of the existence of a problems and a desire to solve it.

Steps

1. Selection of the problem and presentation of the problems.
2. Problem analysis.

3. Data collection.
4. Data analysis.
5. Decision making.
6. Implant and follow up the solution

Limitations

1. Difficult to teach all topics of curriculum.
2. Can encourage dirty competition.
3. Possible lack of effective direction.
4. Time and resource constraints.

Merits

1. Knowledge retention.
2. Develops competencies.
3. Context specific.
4. Methods in scientific in nature.
5. Develops qualities of initiative and self-dependence in the students.
6. Reduced bias.
7. Better solutions.

Project Method

The project method is a teacher facilitated collaborative approach in which students acquire and apply knowledge and skills to solve and define realistic problems using a process of extended inquiry . Projects are student centered , following standards , parameters and milestones clearly identified by the instructor.

Principles

- 1.** Principle of purpose
- 2.** Principles of activity.
- 3.** Principle of reality.
- 4.** Principle of freedom.
- 5.** Principle of utility

Steps

- 1.** Objectives
- 2.** Work project selection
- 3.** Planning
- 4.** Execution
- 5.** Evaluation

Merits

- 1.** It promotes co-operative activity and group interaction.
- 2.** It gives training in a democratic way of learning and living.
- 3.** It gives teacher the dignity of labour and pupils develop respect and taste for all types and work.
- 4.** Co-relation of subjects is achieved.
- 5.** It makes learning natural, spontaneous and interesting.

Demerits

- 1.** Project absorb large amount of time and can be used as a part of science work only.
- 2.** Lack of trained teacher.

3.Text book written on these lines are not easily available.

4.It is difficult to teach all topic in this way.

