



Study Notes on Teaching Methodology

Teaching aptitude is an important topic for various teachings based examination such as NET/SET and CTET. Question-based on teaching methods are also asked in the various examination when you are applying for teacher/professor jobs. (Such as KVS, NVS, NCERT, University)

Objective:

As you know It is next to impossible for one post to cover the entire discipline of teaching methods. However, we believe that we are offering a foundation that will give UGC NET Aspirants to understand different TEACHING TECHNIQUES methods and they would be able to answer most of the Questions based on topic.

After reading this post –

- You will be able to describe various techniques and strategies for teaching
- Quickly differentiate the various teaching methods
- You will be able to answer MCQ Questions based on Teaching methods & techniques (Almost asked two Question every year in paper 1)

Introduction on Teaching Methodology

Teaching and learning are the two sides of a coin. The most accepted criterion for measuring good teaching is the amount of student learning that occurs. There are consistently high correlations between students' ratings of the "amount learned" in the course and their overall ratings of the teacher and the course.

Those who learned more gave their teachers higher ratings (Cohen, 1981; Theall and Franklin, 2001).

"Tell me, I forget. Show me, I remember. Involve me, I understand."

There are different types of teaching methods which can be categorized into four broad types.

1. ***Teacher-centred methods,***
2. ***Learner-centred methods,***
3. ***Content-focused methods; and***
4. ***Interactive/participative methods.***

#1 Instructor/Teacher Centred Methods

Here the teacher casts himself/herself in the role of being a master of the subject matter. The teacher is looked upon by the learners as an expert or an authority. Learners, on the other hand, are presumed to be passive and copious recipients of knowledge from the teacher.

Examples of such methods are expository or lecture methods – which require little or no involvement of learners in the teaching process. It is also for this lack of involvement of the learners in what they are taught, that such methods are called “closed-ended”.

#2 Learner-Centred Methods

In learner-centred methods, the teacher/instructor is both a teacher and a learner at the same time. In the words of Lawrence Stenhouse, the teacher plays a dual role as a learner as well “so that in his classroom extends rather than constricts his intellectual horizons”.

The teacher also learns new things every day which he/she didn't know in the process of teaching. The teacher “becomes a resource rather than an authority”. Examples of learner-centred methods are discussion method, discovery or inquiry-based approach and the Hill's model of learning through discussion (LTD).

#3 Content-Focused Methods

In this category of methods, both the teacher and the learners have to fit into the content that is taught. Generally, this means the information and skills to be taught are regarded as sacrosanct or very important.

A lot of emphases is laid on the clarity and careful analyses of content. Both the teacher and the learners cannot alter or become critical of anything to do with the content. An example of a method which subordinates the interests of the teacher and learners to the content is the programmed learning approach.

#4 Interactive/Participative Methods

This fourth category borrows a bit from the three other methods without necessarily laying emphasis unduly on either the learner, content or teacher. These methods are driven by the situational analysis of what is the most appropriate thing for us to learn/do now given the situation of learners and the teacher.

They require a participatory understanding of varied domains and factors.

Details of Various Methods with Advantages & Disadvantages

THE LECTURE METHOD

A formal or semi-formal discourse in which the instructor presents a series of events, facts, or principles, explores a problem or explains relationships

- It creates new ideas.
- It is good for a large class.
- The teacher is experienced and has mastery on the subject, explain all points and can answer all questions raised by students.
- Students can ask if they need any clarification.
- Learn through listening
- The teacher explains all the points.
- Students give their input
- Teacher discusses the whole topic in the class in easy language students can easily understand the topic.
- It is good for a large class.
- The teacher provides all knowledge related to the topic.
- Time-saving as a teacher is supposed to finish the lecture on time.

- Students give their views at the end of the lecture.
- Students can ask the question if they have any problem to understand the lecture.
- Students attentively listen to a lecture and take notes as the teacher ask questions at the end of the lecture.
- Students know and understand basic concepts.
- The teacher knows all the students so he/she can use suitable strategies for the class to make them understand.
- The teacher is experienced and has mastery on a subject and can answer all questions by students.
- Teacher share information with students so it creates interest in students.
- Students are more involved and participate when teacher ask the question.
- The teacher provides notes.
- Students easily understand every point.
- Students share knowledge with the teacher.
- The teacher is a role model for students.

USES

- To orient students.

- To introduce a subject.
- To give directions on procedures.
- To present basic material.
- To introduce a demonstration, discussion, or performance.
- To illustrate the application of rules, principles, or concepts.
- To review, clarify, emphasise or summarise.

ADVANTAGES

- Saves time.
- Permits flexibility.
- Requires less rigid space requirement.
- Permits adaptability.
- Permits versatility.
- Permits better contact over sequence.

DISADVANTAGES

- Involves one-way communication.
- Poses problems in skill teaching.
- Encourages student passiveness.
- Poses difficulty in gauging student reaction.
- Require highly skilled instructors.

THE DISCUSSION METHOD

A method in which group discussion techniques are used to reach instructional objectives.

- Students listen to other's opinion & express their opinion.
- Discuss with teachers the points that were missed during the discussion.
- Students learn on their own & find out key points.
- Students exchange their ideas.
- Students get point of view of all and not only those who always speak.
- After discussion when students give their presentation, the teacher corrects their mistakes.
- Students can make their own notes.
- The learning is more effective.
- They don't have to rely on rote learning.
- Develops creativity among students.
- It evokes thinking among students.
- Students have time for preparation of topic.
- Students should have material and knowledge before the discussion. Suggestion
- Only those students participate who have confidence rest do not participate.
- Concepts become clear after discussion.
- Every student gives his/ her opinion.

USES

- To develop imaginative solutions to problems.
- To stimulate thinking and interest and to secure student participation.
- To emphasise main teaching points.
- To supplement lectures, reading & laboratory exercises.
- To determine how well the student understands concepts and principles.
- To prepare students for application of the theory of procedure.
- To summarise, clarify points or review.

ADVANTAGES

- Increase students interest
- Increases students acceptance and commitments.
- Utilises student knowledge and experience.
- Results in more permanent learning because of the high degree of student participation.

DISADVANTAGES

- Require highly skilled instructor.
- Requires preparation by the student.
- Limits content.
- Consumes time.

- Restricts the size of groups.
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THE PROGRAMMED INSTRUCTION METHOD

A method of self-instruction

- To provide remedial instruction.
- To provide make-up instruction for late arrivals, absentees, or transients.
- To maintain previously learned skills which are not performed frequently enough.
- To provide retraining on equipment and procedures which have become obsolete.

- To upgrade production.
- To accelerate capable students.
- To provide enough common background among students.
- To provide the review and practice of knowledge and skills.

USES/ADVANTAGES

- Reduce failure rate.
- Improves end-of-course proficiency.
- Saves time.
- Provides for self-instruction.

DISADVANTAGES

- Require local or commercial preparation.
 - Requires lengthy programmer training.
 - Increases expenses.
 - Requires considerable lead time.
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THE STUDY ASSIGNMENT METHOD

A method in which the instructor assigns reading to books, periodicals, project or research papers or exercises for the practice.

- To orient students to a topic prior to classroom or Laboratory work.
- It enhances the ability of research on any topic as the student's search topic from different books, websites etc.
- Active learning
- To set the stage for a lecture demonstration or discussion.
- To provide for or capitalise on individual differences in ability, background, or experience through differentiated assignments.
- To provide for the review of material covered in class or to give practice.
- To provide enrichment material.

USES/ADVANTAGES

- Increase coverage of material.
- Reduce classroom time.
- Permits individual attention.

DISADVANTAGES

- Require careful planning and follow up.
 - Poses an evaluation problem.
 - Produce non-standard results.
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THE TUTORIAL METHOD

A method of instruction in which an instructor works directly with an individual student.

- To reach highly complicated skills operations or operations involving danger or expensive equipment.
- To provide individualized remedial assistance

USES/ADVANTAGES

- Permits adaptive instruction.
- Stimulates active participation.
- Promotes safety.

DISADVANTAGES

- Requires a highly competent instructor.
 - Demands time and money.
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THE SEMINAR METHOD

A tutorial arrangement involving the instructor and groups, rather than instructor and individual.

- To provide general guidance for a group working on an advanced study or research project.
- To exchange information on techniques and approaches being explored by members of a study or research group.

- To develop new and imaginative solutions to problems under study by the group.

USES/ADVANTAGES

- Provides motivation and report.
- Stimulates active participation.
- Permits adaptive instruction.

DISADVANTAGES

- Requires a highly competent instructor.
 - Poses evaluation problems.
 - Is more costly than most other methods.
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THE DEMONSTRATION METHOD

A method of instruction where the instructor by actually performing an operation or doing a job shows the students what to do, how to do it, and through explanations brings out why, where, and when it is done.

- To teach manipulative operations or procedures.
- To teach troubleshooting.
- To illustrate principles.
- To teach operation or functioning of equipment.
- To teach teamwork.
- To set standards of workmanship.
- To teach safety procedures.

USES/ADVANTAGES

- Minimise damage and waste
- Saves time
- Can be presented to large groups.
- Enable learning evaluation.

DISADVANTAGES

- Require careful preparation and rehearsal.
- Requires special classroom arrangements.
- Requires tools and equipment.
- Requires more instructors.

Details of Few Other Teaching Technique

Brainstorming

- More interesting
- More informative
- Gain knowledge
- Learning is effective
- More participation of students
- Students give their opinion
- Active learning
- Creative thinking is encouraged.
- Students think beyond their knowledge.
- Everyone gets the chance to express their thoughts.
- Simple topics can be learnt from different angles.

Roleplay

- Interesting method
- Creative thinking is encouraged.
- Students think beyond their knowledge.
- Students enjoy the situation
- Active learning
- Easy to learn

Case study

- Active learning
- Creative thinking is encouraged.
- Students think beyond their knowledge.

Off-line vs. On-line methods

Differences Between Online Learning and Offline Learning

- The main difference between online and offline learning is location. With offline learning, participants are required to travel to the training location, typically a lecture hall, college or classroom. With online learning, on the other hand, the training can be conducted from practically anywhere in the world. Participants simply need to log on to the internet from their home, work or even their local coffee shop.
- Another difference is the flexibility offered. Online learning usually has a more flexible timescale. As a trainer, you can offer your support via email or through an online chat system. With offline learning, it is typically carried out between office hours and doesn't offer as much flexibility to the learner or the trainer.

What are the benefits of online vs offline learning?

Although online learning has become the preferred method for the majority of learners, it's important not to dismiss the benefits of offline training too.

- With online training courses, you and the course attendees benefit from a more casual, flexible approach. Being unrestricted in regard to location and times means every learner can benefit from the courses.
- With offline learning, it's easier to ensure attendees are paying attention to the training. Some learners also find it easier to retain the knowledge and skills they've learnt through offline training than they do with online training.
- As there are benefits to both learning options, it makes sense to offer a combined online and offline learning approach as a trainer.

Swayam, Swayamprabha, MOOCs etc.

(Details on Digital Initiative in Higher Education Through NMEICT has been covered in another post)

Study Webs of Active Learning for Young Aspiring Minds(SWAYAM)

SWAYAM is an indigenous (Made in India) IT Massive Open Online Courses (MOOCs) Platform for providing best quality education that can be accessed by anyone, anytime and anywhere using the IT system.

The Concept of Massive Open Online Courses (MOOCs) involves online delivery of interactive learning content to large number of people simultaneously. It allows sharing of best quality education with everyone, thereby bringing in equity as far as the quality of education is concerned.

SWAYAM platform is developed by Ministry of Human Resource Development (MHRD) and All India Council for Technical Education (AICTE) with the help of Microsoft .

Its ultimately capable of hosting 2000 courses and 80000 hours of learning: covering school, under-graduate, post-graduate, engineering, law and other professional courses.

All the courses on this platform are interactive, prepared by the best teachers in the country and are available, free of cost to the students in India.

More than 1,000 specially chosen faculty and teachers from across the Country have participated in preparing these courses.

[Official Swayam website – <https://swayam.gov.in/>]

There are 4 quadrants in the MOOC pedagogy:

- Video tutorials covering a whole course – normally having about 20 hours of instruction in series of lectures, each lecture not exceeding 30 minutes.
- E-Content: reading material that could add to the learning imparted through the video tutorials.
- Self-Assessment: Quizzes/assignments that intersperse the course
- Discussion forum for posting queries

All the courses delivered through SWAYAM are available free of cost to the learners, however students wanting certifications shall be registered, shall be offered a certificate on successful completion of the course, with a little fee.

SWAYAM Prabha: the 32 Educational DTH Channels

The SWAYAM PRABHA is a group of 32 DTH channels devoted to telecasting of high-quality educational programmes on 24X7 basis using the GSAT-15 satellite. Every day, there will be new content for at least (4) hours which would be repeated 5 more times in a day, allowing the students to choose the time of their convenience. The channels are uplinked from BISAG, Gandhinagar.

The contents are provided by NPTEL, IITs, UGC, CEC, IGNOU, NCERT and NIOS. The INFLIBNET Centre maintains the web portal.

The DTH Channels cover: –

- Curriculum based course contents covering diverse disciplines such as arts, science, commerce, performing arts, social sciences and humanities subjects, engineering, technology, law, medicine, agriculture etc. in higher education domain (all courses would be certification-ready in their detailed offering).
- School education (9-12 levels) modules; for teacher training as well as teaching and learning aids to children of India to help them understand the subjects better and also help them in better preparedness for competitive examinations for admissions to professional degree programmes.
- Curricula and courses that can meet the needs of life-long learners or Indian citizens in India and abroad.
- IIT-PAL – to assist the students in the Classes 11 and 12 aspiring to join IITs by encouraging scientific thinking and conceptual understanding critical to answer the ‘tough’ questions of JEE Advanced, so that good quality students enter the portals of IITs. The four channels under this would be on Mathematics, Physics, Chemistry and Biology.

MHRD, is responsible for the overall development of the basic infrastructure of Higher Education sector, both in terms of policy and planning. You can read more about – [Digital Initiative in Higher Education Through NMEICT](#)

Web References :

1. https://catalogue.pearsoned.co.uk/assets/hip/gb/hip_gb_pearsonhighered/samplechapter/0135145724.pdf
2. <http://www2.tulane.edu/som/ome/upload/ComparisonOfTeachingMethodologies.pdf>
3. <https://ugcnetpaper1.com/digital-initiative-in-higher-education>