UNIT 9 – TEACHING METHODOLOGY IN YOGA – IV

UNIT STRUCTURE

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9.1 LEARNING OBJECTIVES

After going through this unit, you will be able to-

- Know different factors influencing teaching method.
- Explain how previous background and experience of students influences method of teaching.
- Understand 'the teacher' as a factor influencing method of teaching.
- Analyse the role of 'facilities' as a determining factor influencing method of teaching.
- Explain how 'scientific principles' influence teaching method.

9.2 INTRODUCTION

In the teaching learning process, method of teaching occupies a significant place.The teaching process can become meaningful if a teacher knows which method of teaching is appropriate for his/her class. A good teaching is that which facilitates maximum learning on the part of the students.

As such, students are able to learn effectivelyif the selection and utilisation of method of teaching is done appropriat ely. Method of teaching denotes to the strategies and techniques used by teachers in order to facilitate learning. The methods of teaching should generallyinspire active participation as well as promote critical thinking on the part of the learners. Selection of suitable method of teaching facilitates better engagement, comprehension and long-term retention of knowledge which helps to attain learning goals.

In the words of Herbart Ward and Frank Rose, “While it is true that good method is not merely a collection of artifices or mechanical devices and that every teacher must devise his own method, it is important to remember that good method can result only from the constant observation of certain broad principles. These include orderly procedure in teaching, an arrangement of subject matter which will avoid waste of time and energy and a redistribution of emphasis which will secure the greatest cooperation from the pupils and maintain their active interest”(Aggarwal, JC, 2006).A method is not merely a device adopted for communicating certain items of information to students. A method must link up the teacher and his pupils into a relationship with constant mutual interaction.

Methods of teaching are influenced by several factors. While using a particular method of teaching, the teacher needs to consider variousinfluentialfactors. Because; these factorsdecide how the teacher will deliver the learning content and engage students in teaching-learning process. The learning objectives and nature of subject matter play a crucial role as factor in determiningwhether a teacher should adopt a ‘lecture-based’, ‘interactive’ or ‘hands-on’method of teaching. On the other hand,some other factors like characteristics of students including their age, learning styles, previous knowledge and abilities also have impact on teaching method. Moreover, the class size and available resources, in terms of technology, textbooks and classroom infrastructure have impact onthe methods of teaching. Additionally, cultural and socio-economic backgroundsare essentialinfluential factors of methods of teaching. In order to ensure effective learning outcomes, institutional policies, curriculum requirements and advancements in educational

technology have alsoconstantly shape and improve teaching methods as significant factors.

Some of the classifications of methods are as follows-

- Assignment method
- Laboratory method
- Discussion method
- Lecture method
- Observation method
- Play-way method
- Project method
- Review method
- Socialised classroom recitation method
- Source method
- Story telling method
- Text book method

Let us know

Seven-fold division of methods

i. Inspirational method
ii. Expository method
iii. Natural learning method
iv. Individualised method
v. Encounter method
vi. Discovery method
vii. Group method

9.3 FACTORS INFLUENCING METHOD OF TEACHING

The method of teaching is influenced by a variety of factors, which can be broadly categorized into (i) ‘student-related factors’, (ii) ‘teacher-related factors’, (iii) ‘curriculum-related factors’ and (iv) ‘environmentalfactors.’ The student related factors include the characteristics of students. As for example,

teaching methods must be age-appropriate. The methods of teaching shouldalso align with the developmental aspects like cognitive development, emotional development and physical development of students. We all know that students have individual differences in terms of learning styles. As such, different learning preferences like visual, auditory and kinaesthetic are found among students.This indicates that selection of teaching method should give emphasis on the preferred learning styles of students for their maximum learning. Moreover, previous knowledge of students is considered utmost important for effective teaching. Therefore, the existing knowledge and skills of students are considered as significant determinantwhile selecting a teaching method.The level and amount of motivation and interest of students for learning also have effect on the selection of methods of teaching. As for example, application of interactive method of teaching and student-centred methods are found to be suitable for engaged students as they respond better to these methods of teaching. Likewise,students with disabilities or learning challenges may require some other tailored teaching approaches. On the other hand, a teacher's beliefs about education outline their choice of methods whether he/she will adopt constructivist method and traditional method of teaching. Again,in case of some of the science and arts subjects, it is required for hands-on or experiential learning, while other subjects likemathematics needs more structured teaching approaches. Environmental factors like class size, physical environmental conditions also influence selection of teaching method. For effective teaching, a balance of these factors is very important. Therefore, understanding of the knowledge of different influential factors is very important for a teacher in order to have an impactful learning experience among learners.

Below detailed discussion on 'previous background and experience of the students', 'the teacher', 'facilities' and 'scientific principles' are done as essential factors influencing method of teaching.

9.3.1 Previous background and experience of the students

One of the significant factors of method of teaching is theprevious background and experience of the students. The choice of teaching method is significantly influenced by the previous background and experience of the student due to the following reasons-

- The previous background and experience of the students helps a teacher to know the amount of prior knowledge and skillsthat students have.Students with a strong background in a subject help them to grasp advanced concepts more quickly which allows the teacher to useinteractive teaching methods during the teaching learning process. Likewise, students who have prior experience in certain skills like laboratory techniques, programmingor artistic abilities generally require less introductory instruction which enables the teacher to focus only on refining and expanding the skills.
- Students from different backgroundsare found to have influences ontheir learning styles, learning expectations and comfort levels with certain teaching methods like group work, individual study etc. Students habituatedwith specific educational practices like rote learning, inquiry-based learning etc.also need to adapt to new teaching approaches. Therefore, while selecting teaching methods, these should be given proper consideration.
- Students with previous experience in certain learning styles better respond to certain teaching methods that align with their learning preferences like ‘Visual’, ‘Auditory’ and ‘Kinaesthetic’. If the students have experience in self-directed learning, then theyare likely tosucceed in environments that encourage independent study. As such, choice of teaching method should be done accordingly.
- Students who have had satisfactory previous learning experiences with a subject are often inspired forlearning with motivation and engagement. This allows the teacher to use more new methods of teaching.Connection with new learning to previous experiences of studentsalso influences the choice of teaching methods.
- Students’ background also helps to know the language proficiency of students. If the students have limited proficiency in the language of instruction, then method of teaching with more visual aids, simplified language and additional supportshould be selected.
- Students from different socioeconomic backgrounds have different levels of access to educational resources liketechnology, books etc. which also

influence the use of teaching methods in classroom.Diverse life experiences of students have the influence in theselection of teaching methods that incorporate real-world applications and discussions.

- Students' background in terms of age is also considered as an influential determinant in the choice of a method. As such, younger students require more structured and concrete teaching methods. Further, older or more experienced students may benefit from teaching methods which involve abstract and analytical approaches.It is evident that older students with more life experience are better equipped to handle methods like self-directed learning or collaborative projects.
- Students who are diagnosed with learning disabilities generally require tailored teaching methodscomprise of differentiated instruction or assistive technologies.
- On the other hand, gifted students need such teaching methods that allow for deeper exploration of learning topics.
- If the students have previous learning experience using technology, then they adapt more easily to technology-based teaching methods like online learning platforms, multimedia resources etc. Thus, the previous learning experience using technology is an influential determinant to make a choice of a teaching method.

Thus, it is very important to have understanding of previous background and experience of students for selecting effective teaching methods. Further, a teacher should consider these influential factors in order to select method of teaching to create an inclusive, engaging as well as effective learning environment for students.

9.3.2 The teacher

The teacher plays a significant influential role in the choice of teaching method for a learning process of students. Teachers' expertise as well as preferencesinfluences the selection of teaching method. The teacher can influence the choice of teaching method in the following ways-

- The selection of teaching method is influenced by familiarity and specialization of a teacher. Teachers often prefer to use such method of teaching they are familiar with or specialized in.
- A teacher's preferred teaching style like‘hands-on’, ‘theoretical’, ‘collaborative’ etc. influence the choice of teaching methods for students’ learning. For instance, a teacher who emphasizes to have practical learning on the part of the students may encourage experimental or project-based teaching methods.
- How far a teacher understands about the student's goals, resources and constraintsinfluences in selecting appropriate teaching methods.The teachers may use those methods that align with best learning practices that have proven successful in the past.
- Teachers often set specific learning goals.These learning goalsinfluence the choice of teaching methodto be used in teaching learning process. Some teachers are inspired to explore innovative or unconventional methods, fostering creativity and critical thinking on the part of the students. Accordingly,the teacher should select suitable method of teaching.
- If emphasis is given on interdisciplinary learning by teachers, then, the teachers may utilise methods from different fields for students’ holistic learning. On the other hand, teachers who emphasise on teamwork may choose collaborative teaching methods and group projects.
- Skilled teachers modify their method of teachingaccording to the individual needs, strengths and weaknesses of their students that suits their abilities and goals.

Thus, the teacher with their expertise, guidance, resources and feedback is considered as a key influencer in the choice of teaching method. Their role is crucial in selectingteaching methods that are appropriate, effective and aligned with their goals and capabilities.

9.3.3 Facilities

The facilities available can significantly influence the choice of teaching method. Facilities arean umbrella concept which encompassesdifferent resources like physical resources, technological resources etc. that enable the application of specific teaching methods. How facilities can shape and influence the choice of teaching method are mentioned below-

- Availability of specialized laboratoryfacilities in terms of equipment enables the teacher to undertake experimental or demonstration teaching methods.Lack of such equipment may limit the choice of teaching methods.
- Accessibility of workshops or studios also influences the selection of hands-on practical methods.Absence of such facilities may shift the focus to theoretical methods of teaching.
- Access to transportation, fieldwork equipment such as sensors, camera etc.helps in using field-based methods like surveys, observations etc.Lack of such facilities may limit the scope to use traditional teaching method.
- Adequate workspace in laboratories, classrooms or collaborative areas influence in adopting group work, experiments or large-scale projects as method of teaching.
- Availability of financial resources determines whether certain methods are feasible to be used by a teacher while teaching.Facilities often require funding for its maintenance.
- Some other facilities like reliable internet access, online collaboration toolsand digital platforms support virtual teaching methods.On the contrary, poor digital infrastructure limits the use of online mode of teaching.

In this way,facilities play a critical role in determining the feasibility and appropriateness of different teaching methods to be used in teaching learning process. The availability of resources can enable innovative methodof teaching whereas lack of facilities limits to simpler or more accessible methods. Teachers

and institutions can support students by ensuring equitable access to necessary facilities and helping them to adapt methods to the available resources.

9.4 SCIENTIFIC PRINCIPLES

Scientific principles are also considered as significant factors which playan important role in determining the most effective teaching methods. The scientific principles influence on choice of methods of teaching in the following way-

- Different cognitive science and learningtheories have its own rational for selecting methods to teach students. Behaviourism supports reinforcement-based methods like rewards, drills as well as rote memorization.Interactive, student-centred approaches like ‘inquiry-based learning’ and ‘project-based learning’ are encouraged by Constructivism. On the other hand,scaffolding as well as using concept maps to enhance skill, memory and understanding are suggested byCognitivism.
- The knowledge about how the brain processes information helps the teacher in choosing methods like spaced repetition, active recall etc. on the part of the students.
- The psychology of motivation andengagement also decides the selection of methods. Self-determination theorysupportsstudent-led learning and collaborative activities in teaching.
- Evidence-based pedagogical strategies also enable in the selection of teaching method. For enhancing foundational knowledge, direct instruction can be used. In order to promote higher order thinking, problem-based learning can be used by a teacher.
- On the other hand, if a teacher wants to allow the students to process basic content before engaging in active learning, flipped classroom is to be used in the teaching-learning process.
- Technology andscientific innovations have brought new prospects in teaching method. As for example, if personalised education is to be promoted, then Artificial Intelligence (AI) driven adaptive learning

systems can assist in this regard.Likewiseexperiential learning in sciencesis encouraged byvirtual laboratories and simulations. Furthermore,motivation and engagement can be enhancedamong students by gamification techniques.

In this way, scientific principles also influence choosing teaching methods in order to provide the students the best learning experience. Scientific principlescan be integrated cognitive science, psychology and technological advancements so that an effective student-centred learning environment can be created by a teacher.

CHECK YOUR PROGRESS

Q1. What are the broad categories of factors influencing teaching method?

Q2. Why selection of suitable method of teaching is important?

Q3. Can we consider previous knowledge of students as a determining factor of method teaching?

Q4. What kind of teaching method is essential if students are diagnosed with learning disabilities?

Q5. Write briefly about any one of the influences of teachers on teaching method.

Q6. Mention any one influence of facility as a factor of method.

Q7. Mentionany one example of the influence of cognitive science and learning theories in the selection of teaching methods.

9.5 LET US SUM UP

- In the teaching learning process, method of teaching occupies a significant place.

- Method of teaching denotes to the strategies and techniques used by teachers in order to facilitate learning.
- The methods of teaching should generally inspire active participation as well as promote critical thinking on the part of the learners.
- Selection of suitable method of teaching facilitates better engagement, comprehension and long-term retention of knowledge which helps to attain learning goals.
- Methods of teaching are influenced by several factors.
- While using a particular method of teaching, the teacher needs to consider different factors influencing teaching methods.
- The method of teaching is influenced by a variety of factors, which are categorized broadly into 'student-related factors', 'teacher-related factors', 'curriculum-related factors', and 'environmental factors.'
- The student related factors include the characteristics of students. As for example, teaching methods must be age-appropriate. The methods of teaching should also align with the developmental aspects like cognitive development, emotional development and physical development of students.
- Different learning preferences like visual, auditory and kinaesthetic are found among students.
- This indicates that selection of teaching method should give emphasis on the preferred learning styles of students for their maximum learning.
- Application of interactive method of teaching and student-centred methods are found to be suitable for engaged students as they respond better to these methods of teaching.
- Students with disabilities or learning challenges may require some other tailored teaching approaches.
- In case of some of the science and arts subjects, hands-on or experiential learning is required, while other subjects like mathematics needs more structured teaching approaches.
- Environmental factors like class size, physical environmental conditions also influence selection of teaching method.

- For effective teaching, a balance of these factors is very important. Therefore, understanding of the knowledge of different influential factors is very important for a teacher in order to have an impactful learning experience among learners.
- One of the significant factors of method of teaching is the previous background and experience of the students.
- The previous background and experience of the students helps a teacher to know prior knowledge and skills of students.
- Students with a strong background in a subject help them to grasp advanced concepts more quickly which allows the teacher to use interactive teaching methods during the teaching learning process.
- Students who have prior experience in certain skills like laboratory techniques, programming or artistic abilities generally require less introductory instruction which enables the teacher to focus only on refining and expanding the skills.
- Students' background in terms of age is also considered as an influential determinant in the choice of a method.
- As such, younger students require more structured and concrete teaching methods. Further, older or more experienced students may benefit from teaching methods which involve abstract and analytical approaches.
- It is evident that older students with more life experience are better equipped to handle self-directed learning or collaborative projects.
- Students who are diagnosed with learning disabilities generally require tailored teaching methods comprise of differentiated instruction or assistive technologies.
- The gifted students need such teaching methods that allow for deeper exploration of learning topics.
- It is very important to have understanding of previous background and experience of students for selecting effective teaching methods.
- The teacher also plays a significant influential role in the choice of teaching method for a learning process of students.

- Teachers' expertise as well as preferences influences the selection of teaching method.
- The selection of teaching method is influenced by familiarity and specialization of a teacher.
- Teachers often prefer to use such method of teaching they are familiar with or specialize in.
- A teacher's preferred teaching style like 'hands-on', 'theoretical', 'collaborative' etc. influence the choice of teaching methods for students' learning.
- The understanding level of a teacher about the student's goals, resources and constraints also influences in selecting appropriate teaching methods.
- Specific learning goals of teachers also influence the choice of teaching method to be used in teaching learning process.
- If the teachers emphasise on interdisciplinary learning, then, the teachers may utilise methods from different fields for students' holistic learning.
- Teachers who emphasise on teamwork may chose collaborative teaching methods and group projects.
- Thus, the teacher is considered as a key influencer in the choice of teaching method with their expertise, guidance, resources and feedback.
- Again, the facilities available can significantly influence the choice of teaching method.
- Facilities are an umbrella concept which encompass different resources like physical resources, technological resources etc. that enable the application of specific teaching methods.
- Availability of specialized laboratory facilities in terms of equipment enables the teacher to undertake experimental or demonstration teaching methods. Lack of such equipment may limit the choice of teaching methods.

- Accessibility of workshops or studios also influence the selection of hands-on practical methods. Absence of such facilities may shift the focus to theoretical methods of teaching.
- Access to transportation, fieldwork equipment such as sensors, camera etc.helps in using field-based methods like surveys, observations etc. Lack of such facilities may limit the scope to use traditional teaching method.
- Adequate workspace in laboratories, classrooms or collaborative areas influence in adopting group work, experiments or large-scale projects as method of teaching.
- Facilities often require funding for its maintenance. Availability of financial resources determines whether certain methods are feasible to be used by a teacher while teaching.
- Some other facilities like reliable internet access, online collaboration toolsand digital platforms support virtual teaching methods while poor digital infrastructure limits the use of online mode of teaching.
- Scientific principles are also considered as significant factor which play an important role in determining the most effective teaching methods.

- Different Cognitive Science and Learning Theories have its own rational for selecting methods to teach students.
- As for example, behaviourism supports reinforcement-based methods like rewards, drills as well as rote memorization.
- Interactive and student-centred approaches like ‘inquiry-based learning’ and ‘project-based learning’ are encouraged by Constructivism.
  - On the other hand, scaffolding as well as using concept maps to enhance skill, memory and understanding have been suggested by Cognitivism.
  - The knowledge about how the brain processes information helps the teacher in choosing methods like spaced repetition, active recall etc. on the part of the students.

- The psychology of motivation and engagement also decides the selection of methods. Self-Determination Theory supports student-led learning and collaborative activities in teaching.
- In order to promote higher order thinking, problem-based learning can be used by a teacher.
- If a teacher wants to allow the students to process basic content before engaging in active learning, flipped classroom is to be used in the teaching-learning process.
- Technology andscientific innovations have brought new prospects in teaching method.
- If personalised education is to be promoted, then Artificial Intelligence (AI) driven adaptive learning systems can assist in this regard.Likewise, experiential learning in sciencesis encouraged byvirtual laboratories and simulations.
- Furthermore, gamification techniques can enhance motivation and engagement among students for learning.
- In this way, scientific principles also influence choosing teaching methods in order to provide the students the best learning experience.
- Scientific principles can be integrated cognitive science, psychology and technological advancements so that an effective student-centred learning environment can be created by a teacher.

✓ 9.6 ANSWERS TO CHECK YOUR PROGRESS

- **Answer to Q1:** The method of teaching is influenced by a variety of factors, which are broadly categorized into ‘student-related factors’, ‘teacher-related factors’, ‘curriculum-related factors’ and ‘environmental factors.’
- **Answer to Q2:** The selection of suitable method of teaching is important, because, teaching process can become meaningful if a teacher knows which method of teaching is appropriate or suitable for his/her class.
- **Answer to Q3:** Yes,previous knowledge of students is a determining factor of method of teaching which helps in selection of appropriate teaching method by a teacher.

- **Answer to Q4:** Students who are diagnosed with learning disabilities generally require tailored teaching methods comprise of differentiated instruction or assistive technologies.
- **Answer to Q5:** Teachers often set specific learning goals which also influence the choice of teaching method to be used in teaching learning process. As for example, teachers intend to explore innovative or unconventional methods in order to foster creativity and critical thinking on the part of the students.
- **Answer to Q6:** Availability of specialized laboratory facilities in terms of equipment enables the teacher to undertake experimental or demonstration teaching methods. Lack of such equipment may limit the choice of teaching methods.
- **Answer to Q7:** Behaviourism supports reinforcement-based methods like rewards, drills as well as rote memorization.

9.7 FURTHER READING

- Aggarwal, JC (2006). Principles, Methods & Techniques of Teaching. Vikash Publishing House Pvt. Ltd.
- Chaplot, A, Varshney, R & Agarwal, R (2023). Learning and Teaching. Himalaya Publishing House.
- Kochar, SK (2018). Methods and Techniques of Teaching. Visionias.
- Sharma, M & Gupta Sharad (2024). Innovative Pedagogy A Beginner's Guide to Modern Teaching Strategies. Notion Press.

9.8 MODEL QUESTIONS

Short questions

1. Give a brief overview on different factors influencing method of teaching.
2. Mention in short, the classifications of methods of teaching.
3. Why understanding of different factors of teaching is considered important for teachers?

4. Explain briefly how technology andscientific innovations have brought new prospects in teaching method.

Long questions

1. How choice of a teaching method is influenced by previous knowledge of students? Justify.
2. “Students’ background in terms of their age can influence a method of teaching”- Explain.
3. “Teachers are the influential factor of selection of teaching methods” – How do you respond to this statement? Discuss.
4. Discuss the influences of facilities in selection of teaching method.
5. Scientific principles play crucial role in terms of selecting methods of teaching. Explain.

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