

REV-00

SELF-LEARNING MATERIAL



MA EDUCATION

MAE 102: METHODS AND TECHNIQUES OF TEACHING

w.e.f Academic Session: 2024-25



CENTRE FOR DISTANCE AND ONLINE EDUCATION
UNIVERSITY OF SCIENCE & TECHNOLOGY MEGHALAYA

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Accredited 'A' Grade by NAAC

Techno City, 9th Mile, Baridua, Ri-Bhoi, Meghalaya, 793101

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Center for Distance and Online Education
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This book is a distance education module comprising of collection of learning material for students of Center for Distance and Online Education, University of Science and Technology Meghalaya, 9th Mile G S Rd, Ri Bhoi, Meghalaya 793101.

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Course Information

Introduction: This course, part of the MA in Education program, is designed to explore the foundational principles and practical approaches to effective teaching. Through an in-depth study of the teaching-learning process, educational objectives, and diverse instructional methods, students will develop the skills necessary to create engaging and impactful learning experiences. Emphasis is placed on understanding and applying various teaching techniques, crafting comprehensive lesson plans, and aligning educational practices with specific learning goals.

Unit 1: Teaching Learning Process

In this unit, we delve into the dynamics of the teaching-learning process, focusing on the interaction between teachers and students. We will explore key theories and models that underpin effective instruction, including constructivist and behaviorist approaches. Students will gain insights into how learning occurs and how educators can create environments that facilitate active engagement and knowledge construction.

Unit 2: Taxonomy of Educational Objectives

This unit introduces the taxonomy of educational objectives, a framework for defining and categorizing learning goals. We will examine Bloom's Taxonomy and other classification systems to understand how to set clear, measurable objectives that guide instructional planning and assessment. Students will learn to articulate objectives that address cognitive, affective, and psychomotor domains, ensuring a holistic approach to education.

Unit 3: Teaching Techniques and Methods

Focusing on the diversity of instructional strategies, this unit covers a range of teaching techniques and methods suited to various learning contexts. From direct instruction and collaborative learning to inquiry-based and differentiated instruction, students will explore methods that cater to diverse learner needs and preferences. Practical applications and examples will be provided to illustrate the effective use of these techniques in real-world classrooms.

Unit 4: Lesson Plan

The final unit emphasizes the importance of comprehensive lesson planning as a tool for successful teaching. Students will learn how to design detailed lesson plans that incorporate educational objectives, teaching methods, and assessment strategies. This unit will equip future

educators with the skills to structure lessons that are coherent, engaging, and aligned with curriculum standards, ultimately enhancing student learning outcomes.

Unit 1

Fundamental Basis of Teaching

Unit Structure

- 1.0 Learning Objectives
- 1.1 Introduction
- 1.2 Concept and nature of teaching-learning process
- 1.3 Maxims of teaching
- 1.4 Marks of good teaching and learning
- 1.5 Let us sum up
- 1.6 Further Reading
- 1.7 Answer to check your progress
- 1.8 Model Questions

1.0 Learning objectives

- ✓ To understand the concept and nature of the teaching-learning process.
- ✓ To identify and apply the maxims of teaching effectively.
- ✓ To recognize the characteristics of good teaching and learning practices.
- ✓ To analyze the relationship between teaching methods and student outcomes.
- ✓ To develop skills for evaluating and improving teaching strategies.

1.1 Introduction

“Education is the natural, harmonious and progressive development of man’s innate power” – Pestalozzi, J.H (1746-1827)

Education hinges on the teaching-learning process, where educators facilitate dynamic exchanges empowering learners to acquire, understand, and apply knowledge. This interaction, though seemingly straightforward, is shaped by diverse

factors like pedagogical methods, cognitive development, socio-emotional dynamics, and evolving technologies. Teaching is an essential part of Education. This chapter delves into these intricacies, exploring fundamental principles, theoretical underpinnings, and practical applications of teaching learning process. It examines educator's role as learning facilitators and the cognitive processes influencing student comprehension. In today's rapidly evolving educational landscape, understanding these dynamics is crucial for fostering engagement, inclusivity, and equity. By navigating these complexities, educators and learners gain insights that enhance their adaptability and innovation in education, revealing the transformative potential of effective pedagogy for individuals and societies at large.

1.2 Concept and nature of teaching-learning process

- **Meaning of Teaching Learning process** - Teaching is a familiar term to all of us. Teaching is when one person (the teacher) helps another person (the student) learn new things like knowledge, skills, values, and attitudes. The term teaching is generally associated with the schooling process, but one can find the act of teaching in many places. In school or any educational institution it's about making organized lessons that fit different students' needs and so they understand, think critically, and use what they have learned. Good teaching isn't just giving information but also about keeping students interested, checking how well they're doing, and changing how they teach to help students learn better. Teaching is important because it helps people grow smarter, get ready to contribute to society, and handle challenges in today's changing world.

So the teaching-learning process is when a teacher interacts with students to share knowledge, skills, values, and attitudes. It includes planned activities by the teacher to help students learn based on their needs. This involves preparing lessons, teaching, involving students in activities, checking how well they understand, giving feedback, and adjusting teaching methods when needed. It's all about creating a dynamic exchange that encourages for understand and using what they've learned in real life situation.

As a teacher, you may teach, train or instruct others. All these refer to the processes meant for bringing about changes in the cognitive structure (structure of knowledge in one's mind) in those who are being taught. However, they differ significantly in their meanings. Training involves preparing someone to do a job. It describes learning that takes many years to complete. Training involves a relatively systematic attempt to transfer knowledge and skills from one who knows to someone who does not know. Instruction, on the other hand, although often used synonymously with teaching, it has

more to do with the development of skills rather than education in a broader sense. Unlike training and instruction, teaching refers to the actions of someone who is trying to assist others to reach their fullest potential in all aspects of development. It involves physical, mental, emotional, social, moral, and spiritual development of learners. Teaching is a process of attempting to promote changes in the learners. Although training, instruction and teaching differ in their meanings but the central process that runs through all of them is learning. However, when we think of teaching, we generally have in mind the teacher-student interaction in the classroom.

Definitions

- "Teaching is the highest form of understanding." – Aristotle
- "The mediocre teacher tells. The good teacher explains. The superior teacher demonstrates. The great teacher inspires." – William Arthur Ward
- "Teaching and learning should bring joy and excitement, not fear and boredom." – Larry Rosenstock
- "Teaching is not just about knowing your topic, but about knowing how to transfer that knowledge." – T.H. White
- "Teaching is not merely the imparting of knowledge, but a transformative process that shapes the character and intellect of individuals" -
- "True teaching is one that not teaches knowledge but stimulates children to gain it." - Edward Gibbon

Check your progress

1. Who described teaching as "the highest form of understanding"?
2. According to William Arthur Ward, what distinguishes a great teacher from a superior one?
3. What is emphasized by T.H. White about the nature of teaching?

- **Nature of Teaching**

As we have already seen, teaching is a process that involves a series of actions leading to certain outcomes. Teaching, like any other concept, involves certain characteristics. We highlight some of the important characteristics of teaching in the forthcoming subsections:

I. Teaching is both Science and Art - Teaching, as a process, has characteristics of both art and science. It is a practical art and not a fine art aimed at creating beauty for its own

sake. It requires improvisation, spontaneity, handling of hosts of considerations of form, style, pace, rhythm, and appropriateness that even computers fall behind. Effective teachers have natural instincts for teaching. Good teaching, apart from being a creative art, is also a science that requires a good understanding of principles of teaching and a deep knowledge of the subject matter. It also offers specific methods and skills that are attainable.

II. Teaching is Complex - Teaching uses all sorts of techniques, methods, and media. Teaching makes use of various techniques or skills such as questioning, probing, exemplifying, etc. It also makes use of various methods or models of teaching depending upon the nature of the content being taught, objectives to be accomplished, and readiness of the learners to learn. Teaching also makes use of such media as audio-visual media, human interaction media, print media, electronic media, etc. Success in teaching, to a great extent, depends upon selection and use of appropriate techniques, methods, and media.

III. Adaptation to Learner Needs - Effective teaching adjusts to the diverse learning styles, abilities, and interests of students, ensuring inclusivity and personalized learning experiences. This inclusivity ensures that all learners have equitable opportunities to succeed and thrive academically.

IV. Goal-Driven and Purposeful - Teaching is purposeful, with clear educational goals and objectives guiding instructional strategies. Whether aiming for conceptual understanding, skill development, or critical thinking, every lesson is designed to move students closer to these outcomes.

V. Interaction and Communication - Effective teaching hinges on meaningful interactions and clear communication between teachers and students. This interaction fosters a collaborative environment where ideas are exchanged, questions are encouraged, and learning becomes a shared endeavor.

VI. Change in behavior - Teaching as change in behavior means educators aim to profoundly impact how students think and act, beyond just imparting knowledge. It involves guiding students to develop new skills, attitudes, and habits through interactive learning experiences. Ultimately, effective teaching empowers students to apply their learning in real-life situations, fostering critical thinking and adaptive behaviors essential for personal and professional success.

VII. Assessment and Feedback - Assessment in teaching involves continuously monitoring student progress and understanding. Feedback provided by teachers helps students identify areas for improvement, reinforces learning achievements, and guides them towards mastery of concepts and skills.

Check your progress

4. What is the main goal of teaching?
5. How does teaching differ from training and instruction?
6. What aspects make teaching both art and science?

1.3 Maxims of teaching:

The maxims of teaching are the fundamental guidelines which help the teachers or the educators to obtain the active involvement of the learner in the teaching learning process. It creates the way of interest and motivates the learners to learn. It makes the learning effective, inspirational and purposeful. Now we proceed to discuss the maxims in detail –

1. Proceed from known to unknown

The most natural way to teach someone is to proceed from known to unknown. When learners can relate their previous knowledge to the present topic, learning becomes easier for them. What is already known to the students is of great use to the students. When a child starts school, they already possess some knowledge, and it is the teacher's responsibility to build upon this existing knowledge. Whatever he possesses should be linked with the new knowledge. If we link new knowledge with the old knowledge our teaching becomes clearer and more definite. For example a lesson on the topic of civic on the powers of President can be start from explaining the classroom monitor system. This way the teaching becomes definite, clearer and more fruitful.

2. Proceed from simple to complex

The main objective of teaching is to teach and the learner's objective is to learn something. In this process of teaching and learning, simple or easy things should be first presented to the students and gradually he should proceed towards complex or difficult things. Presenting simple materials makes learning more interesting and encouraging. As they will show interest towards the simple material, they become receptive to the complex matter. On the other hand, presenting complex material first can leave learners feeling upset, bored, and overwhelmed by the challenge. For example in mathematics we first present the idea of +, -, x and then division. When the child gets admitted to 9th and 10th class we introduce algebra, surds, trigonometry, geometry etc. As he proceeds further he becomes familiar with the complex material like matrices, integration, differentiation etc. In this way a learner shows interest by proceeding from simple mathematics to complex

one. But if we reverse the situation, he will find himself in a challenging situation and will leave his studies due to complexity of matter. Simplicity or complexity of the subject matter should be determined according to the view point of the learners. It makes learning convenient and interesting for the students.

3. Proceed From concrete to abstract

Concrete things are solid things and they can be visualized but abstract things are only imaginative things. The child understands more easily when taught through their senses and never forget that material. On the other hand if abstract things or ideas are presented, they forget it soon. As Froebel said, "Our lessons ought to start in the concrete and end in the abstract". For example when we teach the solar system, we first visualize the sun through our senses and give the concept of eight planets, galaxies, meteorites etc. Through this process, the learners understand the materials more easily. Some power of imagination also develops in them. But if we reverse the situation, it will become difficult for learners to understand anything. Another example, when we teach counting to the students we should first take help of concrete objects like beads, stones etc. and then proceed to digits and numbers.

4. Proceed from analysis to synthesis

When we divide a thing into easy parts or separate elements in order to understand it easily is called analysis. It is the process which helps in understanding the hidden elements of a thing or the cause of some incident or behavior. For instance, in order to tell about the structure or functions of heart, the parts of the heart are shown separately and knowledge of every part is given. After that the students are made to understand the structure or system of working of the heart. In this way, even a very difficult thing can be easily understood. Synthesis is just opposite of analysis. All parts are shown as a whole. The process of analysis is easier than synthesis for understanding a thing. This process develops the analytical power of the students. It is the best method of starting the teaching process. For example while teaching digestive system, we should first analyse the different parts of digestive system one by one and then give the synthetic view of it. Hence a good teacher always proceeds from analysis to synthesis.

5. Proceed from particular to general

A teacher should always proceed from particular to general statements. General facts, principles and ideas are difficult to understand and hence the teacher should always first present particular things and then lead to general things. Suppose the teacher is teaching

continuous tense while teaching English, he should first of all give few examples and then on the basis of those make them generalize that this tense is used to denote an action that

is going on at the time of speaking. Hence a teacher should proceed from particular to general.

6. Proceed from empirical to rational

Empirical knowledge is that which is based on observation and first experience about which no reasoning is needed at all. It is concrete, particular and simple. We can feel and experience it. On the other hand rational knowledge is based upon arguments and explanations. For example suppose the students are to be taught that water boils on heating. They should first be made to heat the water and see it boiling. Then the teacher should explain that when water is heated, the molecules gain kinetic energy and there is thermal agitation of the molecules which make the water boil. This maxim is an extension of some of the previous maxims, namely proceed from simple to complex proceed from concrete to abstract and from particular to general.

7. Proceed from induction to deduction

The process of induction involves deriving general laws, rules, or principles from specific examples. When a statement holds true in specific cases, we infer that it will also be true in similar situations. This method allows us to draw conclusions based on a set of examples. For instance, when hydrogen reacts with boron to form boron hydride, and with potassium to form potassium hydride, we generalize that all elements form hydrides when they react with hydrogen. When using induction in teaching, a teacher starts by presenting specific examples or experiences and highlights their common attributes. Deduction, on the other hand, reverses this process. It involves deriving specific conclusions from general principles or laws. For example, in language teaching, before defining what a noun is, students are shown examples like "man," "chair," or "Delhi." From these examples, they are led to understand the general definition of a noun. A proficient teacher often begins with induction—presenting specific examples and drawing out general principles—and then proceeds to deduction—applying general principles to specific cases. A skilled teacher used both methods to facilitate effective learning and understanding among students.

8. Proceed from psychological to logical

Modern education gives more emphases on psychology of the child. The child's psychological development is of utmost important than any other thing. A teacher while teaching should follow this maxim via from psychological to logical. Psychological approach takes into consideration the pupil his interests, abilities, aptitudes, development level, needs and reactions. The teacher should keep in mind the psychological selection of the subject matter to be presented before the pupils. Logical approach considers the arrangement of the chosen content into logical order and steps. It is child centered maxim. For example, when students show disinterest in reading, a teacher can engage them by first

narrating the story behind a poem, thus guiding them from a psychological to a logical sequence.

9. Proceed from Actual to Representative

Firsthand experiences make learning more vivid and effective compared to using representative ones. When selecting content for teaching, a teacher should prioritize using actual, natural, or real objects over improvised representations like pictures or models. For instance, to teach about the 'Golden Temple Amritsar', it's ideal for a teacher to visit the actual site. This approach ensures that learning is more memorable and students retain the information longer, rather than relying solely on sketches, models, or pictures. Representative forms are more suitable for higher classes rather than lower ones.

10. Proceed from Whole to Parts

This maxim stems from the gestalt theory of learning, which emphasizes seeing things or objects as complete wholes rather than fragmented parts. Understanding something as a whole is more comprehensible, motivating, and effective than focusing on its individual components. In teaching, it's beneficial for a teacher to first present an overview or summary of the lesson before breaking it down into its various parts. For example, when teaching about plant pollination, the teacher can begin by discussing the flower as a whole and then delve into detailed explanations of its parts such as sepals, petals, and reproductive organs like androecium and gynoecium. This approach ensures maximum learning as students grasp the big picture first before diving into specifics. It contrasts with the maxim of "*analysis to synthesis*," where understanding starts from dissecting details and then combining them into a unified whole.

11. Proceed from definite to indefinite

A teacher should always begin with definite concepts because they have clear boundaries and are well-understood. We typically have more confidence in things that are definite and proven. When teaching any subject, a teacher should first introduce clear and specific ideas. This lays a solid foundation for understanding and makes it easier to grasp more complex or indefinite concepts later on. For example, starting with definite grammar rules helps learners develop a strong understanding. As students become more confident with definite concepts, they can then progress to learning about more uncertain or less clearly defined ideas.

In conclusion, it's important to recognize that the maxims of teaching should serve us rather than dictate our approach. They are all interconnected and should be seen in relation to each other. Additionally, children vary greatly in their abilities, interests, and physical and mental makeup. What works well for one student may not be as effective for

another. Therefore, it's crucial to use each teaching maxim wisely and adapt them appropriately to meet the needs of different students.

Check your progress

7. What is the meaning of 'maxims'?
8. What does "proceed from known to unknown" mean?
9. With which one "whole to part" maxim is contrast?

1.4 Qualities of a Good teacher

I. **knowledge of subject matter** - Good teachers are not only familiar with the content they teach but possess a deep, nuanced understanding of their subject matter. They stay abreast of the latest research, trends, and developments within their field, ensuring that their knowledge is current and relevant. This expertise allows them to explain complex concepts clearly and accurately, making the subject matter accessible to students of varying levels of proficiency. Having a solid grasp of the subject matter enables teachers to provide context, draw connections between concepts, and answer students' questions comprehensively. They are also better equipped to adapt their teaching strategies to meet the diverse learning needs and interests of their students.

II. **Good Teachers Are Strong Communicators** - Good teaching relies heavily on effective communication, which helps teachers explain concepts clearly and involve students actively in learning. When teachers communicate well, they ensure that students understand instructions and feel comfortable asking questions in a supportive environment. By listening carefully to students and showing empathy in their responses, teachers build strong relationships and trust, which boosts students' motivation to learn and improves their academic results. Moreover, clear communication enables teachers to give helpful feedback that enhances students' understanding and skills. Ultimately, strong communication skills enable teachers to make all students feel welcome and appreciated in the classroom, fostering an inclusive learning environment.

III. **Knowledge of Child psychology** - Understanding child psychology is an important skill for teachers because it helps them connect better with their students and adapt their teaching methods accordingly. When teachers know about child psychology, they understand that each student learns differently based on their age, stage of development, and unique personality. This knowledge allows teachers to create a supportive classroom environment that meets students' emotional, social, and academic needs. For instance, they

can change how they teach to fit different learning styles or give extra help to students who need it. By using child psychology principal, teachers can make sure students feel valued and motivated to do well in school. Overall, this understanding helps teachers build strong relationships with students and supports their overall growth and success.

IV. Knowledge of individual difference - Understanding that students have different ways of learning, abilities, and backgrounds is really important for teachers. It helps them adjust how they teach and what they teach to better fit each student's needs. By doing this, teachers can create a classroom where everyone feels included and supported. When teachers know about these differences, they can make learning more interesting and help students do their best. This makes the classroom a positive place where each student feels valued and can learn well.

V. Passion for Teaching and Learning - Passion for teaching and learning is a key quality of great teachers who inspire students by loving what they teach. When teachers are excited about their subjects, it sparks curiosity and makes learning fun. Their enthusiasm rubs off on students, encouraging them to join in, think deeply about topics, and explore beyond the classroom. Passionate teachers care deeply about their students' growth, creating a safe space where students feel supported to take on challenges. This excitement not only helps students understand the material better but also encourages them to enjoy learning throughout their lives. Ultimately, Teachers who bring passion into their classrooms cultivate an energetic environment that motivates students to do their best.

VI. Adaptability and Flexibility - Being adaptable and flexible is really important for teachers because it helps them change how they teach to fit different ways students learn and what they need. When teachers are adaptable, they can adjust their teaching methods, strategies, and materials to match the preferences and abilities of their students. This flexibility makes classrooms more inclusive, so all students can do well. Teachers who are adaptable also listen to feedback from students and use it to give each student the right support and guidance. This kind of flexibility also encourages teachers to find new and better ways to teach, keeping students engaged and improving how they learn. Overall, teachers who can adapt and are flexible not only help students do better in school but also make classrooms more dynamic and supportive, where everyone can grow and succeed together.

VII. Patience and empathy – this two are very important qualities for good teachers. Patience helps teachers support students as they face challenges and learn things at their own speed. It means being ready to explain things over and over until students understand. Empathy lets teachers understand their students' different backgrounds, feelings, and ways of learning. When teachers show empathy, they create a caring environment where students feel respected and encouraged to share their thoughts. This helps build trust and

makes the relationship between teacher and student stronger. It also makes it easier for teachers to meet each student's needs and change how they teach if necessary. Overall, teachers who are patient and empathetic not only help students overcome difficulties but also help them succeed in school and feel good about themselves.

VIII. Classroom management - Effective classroom management is really important for good teaching. Teachers set clear rules and expectations right from the start, explaining how students should behave and what they need to achieve academically. They handle discipline fairly and consistently, making sure everyone follows the rules equally. Creating a positive atmosphere in the classroom is key too, where students feel safe, respected, and eager to participate. This means building a community where every student feels valued and their ideas are listened to. When teachers manage the classroom well, they can concentrate on teaching, and students can focus on learning, making school a better place for everyone.

IX. Critical thinking and Problem solving ability - Good teachers inspire students to think deeply and ask important questions that help them solve problems independently. By creating a classroom where curiosity is encouraged, teacher help students learn to analyze information, make logical decisions, and find creative solutions. They don't just give students the answers; instead, they teach them how to explore different ideas, think for themselves, and use what they learn in real-life situations. This way, teachers prepare their students not only for school but also for life beyond the classroom, where critical thinking and problem-solving skills are complex.

X. Commitment to continuous improvement - Commitment to continuous improvement is a hallmark of effective teachers who are constantly striving to enhance their teaching practices. "Ducote said it's important for teachers to never feel as though they've learned it all and to remain open to new experiences." By always learning and growing, they show their students the importance of trying new things and getting better. This dedication helps create a classroom where everyone is excited about learning and students feel encouraged to do their best. Teachers who are committed to continuous improvement not only improve their teaching but also help their students succeed.

XI. Give importance to the real world experience - Good teachers believe that learning should relate to real-life situations. They understand that when students can use what they learn in the classroom to solve problems or understand things in the real world, it makes learning more interesting and useful. By focusing on real-world learning, teachers help students see why their lessons are important and how they can be used outside of school. This approach also helps students develop skills they'll need for their future lives and careers. Overall, by connecting lessons to real-life experiences, teachers make learning

more engaging and help students think more deeply about how what they learn applies to their everyday lives.

XII. Good teaching is Democratic - Being democratic means everyone in the class gets a chance to share their thoughts and ideas. Teacher should create a friendly atmosphere so that students feel comfortable speaking up and working together. This helps students learn how to think critically, solve problems, and respect each other's opinions. By encouraging open discussions and treating everyone equally, teachers help students grow into responsible and active members of their community.

Check your progress

10. What is a key quality that involves staying updated with the latest research in a subject?
11. Why is adaptability important in teaching?
12. What is the benefit of relating lessons to real-life situations?

2.5 Let us sum up

In this lesson, "Fundamental Basis of Teaching-Learning," we learn about important ideas in education. We start with what teaching means and its purpose in helping students learn. We also look at the maxims of teaching, where important rules like being clear and engaging. Lastly, we explore the qualities that make a good teacher, such as being passionate, patient, creative, and understanding. This lesson gives us a solid foundation to understand how teaching works and what makes a teacher effective.

2.6 Further reading

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- ❖ Davis Gross Barbara, Tools for Teaching, Bass Jossey 1993, (Original Publishing Year) 2009, (Revised Edition)
- ❖ <https://www.edutopia.org/>
- ❖ <https://www.teachthought.com/>
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1.7 Answer to check your progress

1. Aristotle
2. A great teacher inspires.
3. Knowing how to transfer knowledge
4. To facilitate knowledge skills, and value development.
5. Teaching focuses on holistic development, while training is job-specific and instruction develops specific skills.
6. Because teaching involves creativity (art) and principles (science).
7. Maxims are fundamental guidelines that help educators engage and motivate learners effectively in the teaching-learning process.
8. Start with familiar concepts and introduce new ones.
9. Analysis to synthesis.
10. It helps teachers connect with students and adapt teaching methods.
11. It makes learning more engaging and applicable to real life.

1.8 Model Questions

1. Discuss the meaning of the teaching-learning process and its importance in educational development. How does this process differ in various educational contexts?
2. Explain the differences between teaching, training, and instruction. Provide examples of how each can be applied in an educational setting.
3. Analyze the dual nature of teaching as both a science and an art. How do these aspects contribute to effective teaching?
4. Describe the maxims of teaching and their role in enhancing the learning experience. How can these principles be applied to ensure effective teaching outcomes?
5. Discuss the significance of the maxim "proceed from known to unknown" in teaching. Provide an example to illustrate its application in the classroom.
6. Evaluate the importance of understanding child psychology for effective teaching. How can this knowledge impact student engagement and success?
7. Identify the key qualities of a good teacher. How do these qualities contribute to creating a positive and inclusive learning environment?
8. Examine the role of classroom management in effective teaching. What strategies can teachers use to foster a productive learning atmosphere?

9. Analyze the quote by William Arthur Ward, "The mediocre teacher tells. The good teacher explains. The superior teacher demonstrates. The great teacher inspires." How can teachers inspire students in the classroom?
10. Analyze the concept of democratic teaching. How does fostering a democratic classroom environment benefit students' learning and personal growth?

Unit 2

Taxonomy of Educational objectives

Unit structure

2.0 Learning objectives

2.1 Introduction

2.2 Concept of Educational objectives (Meaning, functions and Advantages)

2.3 Taxonomy of Educational Objectives - Bloom's Taxonomy

2.4 Implication of Cognitive, Affective and Psychomotor Domain in Educational process

2.5 Let us sum up

2.6 Further Reading

2.7 Answer to check your progress

2.8 Model Questions

2.0 Learning Objectives

- ✓ To understand the Taxonomy of Educational Objectives, the purpose and significance of the Taxonomy of Educational Objectives in the educational process.
- ✓ To understand Bloom's Taxonomy including examples
- ✓ To know the differentiate Between Cognitive, Affective, and Psychomotor Domains
- ✓ To analyze the Implications of Learning Domains in Education

2.1 Introduction

Teaching without clear objectives is like navigating a journey without knowing the root. Clear objectives in a lesson not only set expectations for student learning outcomes but also provide a structured pathway for the teacher to follow. In this chapter, we will explore the importance of setting learning objectives, their role in guiding both instruction and assessment, and how they contribute to an effective educational process. Understanding these objectives is important for both teachers and students to achieve meaningful and measurable educational outcomes.

2.2 Concept of Educational Objective

- **Meaning**

Learning or Educational objectives are essential components of the teaching and learning process. They are clear, specific statements that define the goals toward which instruction is directed. These objectives guide the selection of subject matter, the organization of topics, and the allocation of teaching time. They also help in choosing appropriate materials and teaching methods. Additionally, learning objectives serve as benchmarks for evaluating the quality and effectiveness of educational activities.

According to **Robert Mager**, *"an objective is a collection of words which describe a desired outcome of a course."* Educational objectives reflect the changes we aim to produce in learners, specifying intended learning outcomes that are measurable and observable. They help measure and control learner behavior. For instance, a science teacher might state that the objectives of teaching science include developing scientific temper, creating interest in the subject, and raising awareness about various facts. These statements are considered objectives as they suggest desired changes in behavior.

Objectives stem from the broader aims of education. While aims are general and overarching, objectives are precise and clearly defined. Consequently, educational objectives are specific components derived from these broader aims. Objectives are specific, definite, and clear, while aims are broad and general. This relationship can be illustrated as follows:

Aim: To promote environmental awareness.

Objectives:

- To identify different types of pollution.
- To explain the impact of pollution on health and the environment.
- To participate in a community cleanup activity.
- To create posters that promote recycling and conservation.

B.S. Bloom states, *"Educational objectives are not only the goals towards which the curriculum is shaped and towards which instruction is guided, but they are also the goals that provide detailed specifications for the construction and use of evaluative techniques."* Often, some objectives are stated in vague terms, making them neither observable nor measurable. For effective teaching and learning, objectives should be articulated behaviorally. Behavioral objectives are statements of educational outcomes that can be observed or measured in the learner. Observable outcomes are referred to as behavioral. According to Mager (1997), behaviors are overt actions. He asserts that while learning or

thinking cannot be seen directly, their manifestations can be observed. Learning that cannot be measured is not considered true learning. Therefore, a complete behavioral objective must include three characteristics:

- a) Behavior,
- b) Condition, and
- c) Criteria for acceptable performance.

Educational objectives, often called learning outcomes, refer to the specific behavioral changes expected from students after they receive education. These objectives are clear, precise, and functional, outlining what students should be able to do after instruction. Classroom teaching-learning objectives, also known as instructional objectives, are specific statements describing these expected behaviors. These objectives are immediate, specific, and attainable within a short period of classroom teaching. Teachers must select and formulate these educational objectives, which are often specific to different subjects or content areas.

- **Functions of learning objectives:**

- a) Guide the planning and delivery of instruction.
- b) Define clear standards for assessing student achievement.
- c) Establish criteria for evaluating the effectiveness of the instruction.
- d) Help in the selection of appropriate instructional materials and resources.
- e) Facilitate communication of expectations between teachers and students.

- **Advantages of learning objectives**

- a) They provide clear direction and guidance for educational activities. Objectives outline what needs to be achieved, guiding teachers in planning and executing effective teaching strategies and activities.
- b) Objectives suggest both general strategies and specific activities necessary to achieve them. Different sets of objectives lead to different teaching approaches tailored to meet specific learning outcomes.
- c) Objectives provide direction not only for teachers but also for students. They clarify expectations and help students understand what they need to accomplish.

- d) They serve a diagnostic and prescriptive function by allowing educators to assess progress and determine areas needing improvement based on the stated objectives.
- e) Objectives influence the collection of data about student progress and performance. They shape the methods and criteria used to gather information about how well students are achieving the desired outcomes.
- f) Educational efforts cannot be evaluated effectively without clear objectives. Objectives provide the target against which the success of educational initiatives can be measured.
- g) Objectives also serve a communication function, conveying not only what educational activities are being undertaken but also the intended outcomes or purposes of those activities. This clarity fosters understanding and alignment among all stakeholders involved in the educational process.

Check your progress

1. Define educational objective?
2. Mention the characteristics of behavioral objective?

2.3 Taxonomy of Educational Objectives

- **Meaning of taxonomy** - Taxonomy refers to the systematic organization and classification of items, typically based on their relationships or characteristics. In the context of education, it entails structuring and categorizing educational objectives or goals in a hierarchical way. This approach aims to enhance comprehension, organization, and evaluation of learning outcomes.

According to **Webster's Dictionary**, '*taxonomy*' refers to the systematic classification, especially of animals and plants based on their relationships. The term originates from Greek words: 'taxis' meaning arrangement and 'nomos' meaning laws, implying a lawful or orderly arrangement. In education, the taxonomy of educational objectives involves the systematic and orderly categorization of different educational goals.

The primary value of taxonomy lies in two key aspects:

- It encourages educators to help students develop skills at various levels, ensuring a strong foundation at lower levels before progressing to higher ones.
- It provides a framework for developing assessment strategies that can measure student performance across all levels of learning (Bloom, 1956).

Benjamin Bloom, in his 1956 book "Taxonomy of Educational Objectives: The Classification of Educational Goals," introduced a widely used framework for understanding learning, teaching, and assessment. He categorized educational objectives into three domains:

Cognitive Domain: This domain includes objectives related to intellectual abilities and skills.

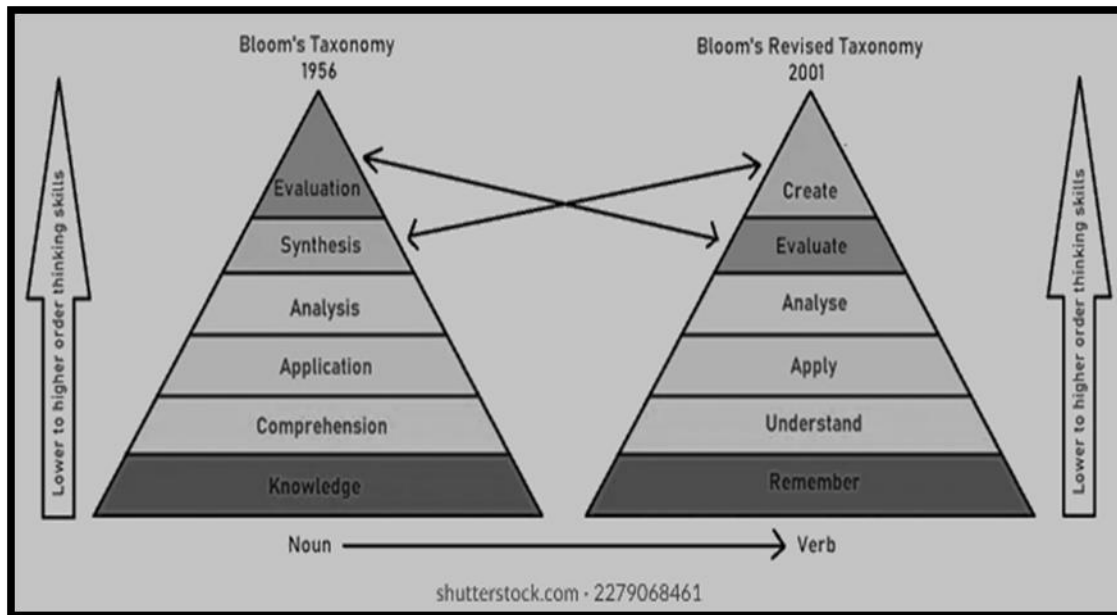
Affective Domain: The affective domain encompasses objectives involving emotions, attitudes, values, and personal and social adjustments.

Psychomotor Domain: Also known as the conative domain, this includes objectives related to physical manipulation and motor skills.

Each domain is further subdivided into hierarchical categories, where higher-level objectives build upon the achievement of lower-level ones. Progression through these categories is likened to climbing a ladder, where each step represents increasingly complex behaviors. This hierarchical structure ensures that foundational skills are mastered before advancing to more advanced levels of learning within each domain.

Let us discuss about these domains :

1) **Cognitive Domain** - Bloom structured the cognitive domain by organizing mental activities according to their complexity. This domain focuses primarily on enhancing learners' intellectual abilities and skills. It encompasses various levels of learning, starting from basic knowledge and recall to more advanced processes. These categories are arranged systematically, progressing from simpler to more complex tasks, each representing distinct types of cognitive development. This hierarchical approach ensures a progressive and comprehensive framework for educational objectives in intellectual learning. It includes the following six categories:



1.1 Picture of Bloom's taxonomy and Revised Bloom's Taxonomy

i. **Knowledge** - The first category in the cognitive domain is knowledge. This level involves the ability to recall and recognize factual information. It focuses on remembering previously learned material, which is important for all higher-level mental processes. Memory plays a central role here, serving as the foundation for understanding, applying, analyzing, synthesizing, and evaluating information. Without a solid grasp of specific facts, universals, or contexts, one cannot effectively engage in higher-order thinking tasks. Knowledge encompasses the recall of dates, names, events, processes, and other factual details, as well as understanding terminologies, classifications, principles, theories, and overarching concepts within a particular field of study. It essentially fuels the cognitive processes necessary for learning and problem-solving.

ii. **Comprehension** – The second step of Cognitive domain is comprehension which means the knowledge a person has gain is understood by him. It actually refers that to convert the material meaning into different forms. For example numbers to words. It is mainly depend upon the previously learned material. Without any learned material there is no place for comprehension. This is a mode of understanding by which a person can simplify the ideas. Knowledge is the pre requisite for comprehension. This comprehension takes three forms which are -

(a) Translation (b) Interpretation (c)Extrapolation

iii. **Application** – It is the third stage of Cognitive development, requires applying abstract concepts to real world situations, leveraging a foundation of understanding and comprehension. Mastery of this stage is essential for students to effectively utilize their learning. In the school stage all the students should be able to catch this level of application. This category includes three steps:

- **Make generalization** - This involves deriving broad principles or rules from specific instances or examples. It requires students to recognize patterns and trends in data or information, allowing them to generalize concepts beyond specific cases.
- **Diagnose the weak part from the content** - Beyond understanding content, students should be able to identify shortcomings or areas of improvement within the material. This involves critical evaluation and assessment of the information learned, enabling them to pinpoint where additional focus or clarification may be needed.
- **Apply the contents by the pupils** - Application goes beyond theoretical understanding; it requires students to implement their knowledge and skills to solve problems or achieve specific outcomes in real-world contexts. This step emphasizes practicality and the ability to adapt learned concepts to diverse situations.

iv. **Analysis** - Moving to analysis, which represents a more advanced intellectual level, it involves dissecting complex information into simpler components and discerning their interrelationship. It aims to analyze every communication into different parts so it can be understood well and clearly. This help to strengthen reasoning abilities by organizing content and recognizing connection between its elements. It include following three category :

- **Analysis of Elements:** This involves identifying and examining the fundamental parts or components within a given piece of information or data. By dissecting the content into its elemental parts, learners gain a deeper understanding of its structure and composition.
- **Analysis of Relationships:** Beyond identifying elements, learners analyze how these parts interact and relate to each other. This step explores the connections, dependencies, or causal relationships between different elements, helping to uncover patterns or dependencies that may not be immediately apparent.
- **Analysis of Organizational Principles:** This category involves understanding the underlying frameworks or structures that organize the information. It includes examining the principles, rules, or systems that govern the arrangement and presentations of content, which can provide insights into how information is structured and communicated effectively.

v. **Synthesis** - The fifth step in the cognitive domain revolves around the process of integrating various elements and parts to construct a cohesive and meaningful whole that did not exist in its entirety before. Unlike analysis, which breaks down complex entities into simpler components, synthesis focuses on the creative act of combining these components to form new patterns or structures. This ability enables individuals to perceive and establish interrelationships between different parts, fostering a deeper understanding and insight into the subject matter.

Synthesis entails more than just assembling parts—it involves generating unique forms of communication, crafting plans or proposed sequences of operations, and deriving abstract connections or relationships among ideas. This cognitive process not only requires creativity but also demands a strategic approach to organizing and synthesizing information to create innovative solutions or interpretations. By engaging in synthesis, learners enhance their capacity for critical thinking and problem-solving, enabling them to formulate original ideas and perspectives that contribute to deeper comprehension and broader intellectual development.

vi. **Evaluation** - In Bloom's taxonomy evaluation represents the highest cognitive level, where individuals assess something qualitatively and quantitatively for specific purposes. It involves making informed judgments about the value or significance of information, situations, or outcomes using both internal evidence and external criteria.

It has two distinct levels: firstly, assessing based on internal evidence, and secondly, assessing based on external criteria. These levels develop the ability to judge both qualitative and quantitative aspects of material or situations. At this pinnacle of cognitive development, evaluation integrates all prior cognitive categories—knowledge, comprehension, application, analysis, and synthesis. It requires applying standards of assessment in a complex process that draws on elements from each of these areas.

So, the taxonomy of cognitive objectives has significantly increased educator's understanding of the diverse range of cognitive abilities involved in learning. It's important to note that these six major classes of educational objectives—knowledge, comprehension, application, analysis, synthesis, and evaluation—often overlap and interact rather than existing in isolation from each other. This holistic approach underscores the interconnected nature of cognitive development and learning outcomes.

Check your progress

3. Write the meaning of taxonomy.
4. What are the three domains of educational objectives?

2) **Affective Domain** - The affective domain focuses on non-cognitive aspects such as attitudes, interests, emotions, mental tendencies, and values of students. Objectives within this domain aim to cultivate and develop feelings, emotions, and values. Krathwohl and his colleagues proposed a progression in the acquisition of values, starting from a basic awareness level and progressing towards the highest level of internalization. At the lowest end of the affective taxonomy is "receiving," while at the highest level is "characterization." This progression reflects a movement from simple acknowledgment or awareness of values to their deeply ingrained integration into one's personality and behavior. Bloom, Krathwohl, and Masia (1964) categorize learning objectives into five stages, each focusing on non-cognitive aspects such as attitudes, values, emotions, and mental tendencies.

- **Receiving (Attending):** This stage involves becoming aware of and being sensitive to stimuli in the environment. It begins with awareness of various phenomena, followed by a willingness to receive those stimuli, and finally, consciously directing attention towards preferred stimuli.

- **Responding:** After receiving stimuli, learners respond actively by engaging with the material in various ways. This includes behaviors like obeying instructions, answering questions, participating in discussions, and expressing reactions to the content.

- **Valuing:** Valuing refers to the process of assessing the worth of things, activities, or behaviors. It involves accepting certain values based on beliefs, preferring specific values over others, and ultimately committing to these values as guiding principles in one's life. It includes the following categories:-

- a) **Accept the value** - Recognizing and acknowledging the importance or worth of a particular value.

- b) **Preference for a value** - Choosing certain values over others based on personal beliefs or cultural influences.

- c) **Commitment (devotion) to a value** - Internalizing and integrating values into one's belief system, guiding decisions and behaviors consistently.

- **Organization:** Building on the previous stages, organization involves conceptualizing values and arranging them into a cohesive system. This structured value system guides decision-making, problem-solving, and life planning, helping individuals understand their strengths, limitations, and personal beliefs. Organization has two step -

- a) **Conceptualization of a Value:** Understanding the meaning and significance of values within a broader context.

b) **Organization of a Value System:** Structuring and arranging values into a cohesive framework, identifying relationships and hierarchies among them.

- **Characterization:** The highest level in the affective domain, characterization, involves internalizing values to the extent that they shape one's character and behavior consistently. Individuals at this stage exhibit a balanced personality, acting in accordance with their deeply held values and being open to revising judgments based on evidence. This process has also two step -

a) **Generalized Set:** Acting consistently in accordance with internalized values across various situations.

b) **Characterization:** Demonstrating a stable and balanced personality characterized by ethical consistency and integrity.

These stages in the affective domain illustrate a progression from basic awareness and responsiveness to the internalization and consistent application of values, ultimately contributing to the development of a holistic and principled individual. The relationship between cognitive and affective domains highlights how both cognitive understanding and emotional engagement are integral to comprehensive learning and personal development.

3) **Psychomotor domain** - It refers to one of the three learning domains, alongside cognitive and affective domains, which focuses on the development of physical skills and abilities. It encompasses the acquisition and refinement of motor skills, coordination, and physical dexterity through structured learning objectives and practical experiences. This domain emphasizes hands-on learning, active engagement in physical tasks, and the progressive development of skills from basic manipulation to advanced proficiency. It is important for practical applications, such as learning sports, crafts, performing arts, and other activities that require physical movement and coordination.

This domain encompasses several sequential stages that guide the acquisition of these skills:

- **Impulsion:** This initial stage emphasizes the importance of developing a genuine interest and motivation towards a specific activity or object. It involves sparking a natural inclination or attraction that encourages individuals to engage actively in learning and mastering new physical skills.

- **Manipulation:** Following impulsion, manipulation involves actively handling and experimenting with different components of objects, instruments, or tools. By manipulating these elements in various ways, learners gain practical knowledge and insight into the functionalities and operations of the objects they are interacting with.

- **Coordination:** As manipulation progresses, learners refine their ability to coordinate their limbs, muscles, and physical movements effectively. This stage focuses on achieving smooth and efficient coordination, which is essential for executing complex tasks and activities with precision.
- **Precision:** Through repeated practice and focused effort, individuals improve their ability to perform tasks with accuracy and control. Precision in movement is cultivated through deliberate practice and attention to detail, leading to enhanced motor skills and refined performance outcomes.
- **Naturalization:** The final stage in this progression is naturalization, where consistent and precise performance of activities over an extended period results in the skill becoming almost instinctual or second nature. At this stage, individuals demonstrate a high level of proficiency and ease in performing the skill, as it integrates seamlessly into their habitual repertoire.

Hence, the psychomotor domain focuses on learning physical skills through hands-on experiences. It's about gradually getting better at activities, starting with being interested and learning how to use tools or objects. As you practice more, you improve your coordination and learn to do things more precisely. Over time, with lots of practice, these skills become second nature. Mastering the psychomotor domain not only improves your physical abilities but also boosts your confidence, teaches you to keep trying even when it's tough, and helps you use these skills in everyday situations.

Check your progress

5. When was the bloom's taxonomy revised?
6. How many categories are there in cognitive domain?
7. What is the main nature of psychomotor domain?
8. What are the stages of affective domain?

2.4 Implication of Cognitive, Affective and Psychomotor Domain in Educational process

Understanding the taxonomy of educational objectives is very much important for Teachers and students alike. Originally, educational goals were mainly focused on intellectual development. However, today's educational landscape is broader and more

complex. Schools often outline objectives that are more like general policy statements than specific behaviors they expect students to achieve.

Systematically classifying educational objectives is important for several reasons. It helps in designing better curricula and instructional plans. It also aids in creating more effective tools for measuring and evaluating student progress. For example, many assessments heavily emphasize recalling facts while overlooking other important skills and abilities. By categorizing objectives into different types of behaviors, educators can ensure a more balanced approach to education. To fully benefit from an educational program, we have to thoroughly understand and classify these objectives. Neglecting objectives, especially in areas like personal development (affective) and practical skills (conative) can result in producing students who are not fully prepared for the challenges of today's world. Teachers should strive to integrate all aspects—

Thinking skills, personal development, practical skills into their teaching and assessment practices to nurture well-rounded and capable learners.

Check your progress

9. Why is it important to classify educational objectives systematically?
10. What do assessments often overlook according to the passage?

2.4 Let us sum up

In this chapter we have studied about the meaning, functions, advantages and types of educational objectives. By integrating these domains into educational practices, educators support comprehensive student growth, preparing learners to thrive academically and personally in diverse contexts. Clear educational objectives not only enhance the effectiveness of teaching but also facilitate systematic evaluation of student progress and promote collaboration among educators, students, and stakeholders. Embracing a holistic approach to education ensures that learners acquire the skills and competencies needed to succeed in an evolving global society.

2.5 Further Reading

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- ❖ https://archive.org/details/newtaxonomyofedu0000marz_p7a6
- ❖ <https://www.abebooks.com/book-search/title/taxonomy-educational-objectives/first-edition/>

2.6 Answer to check your progress

1. Robert Mager, "an objective is a collection of words which describe a desired outcome of a course."
2. Complete behavioral objective must include three characteristics which are - Behavior, Condition and Criteria for acceptable performance.
3. Taxonomy refers to the systematic organization and classification of items, typically based on their relationships or characteristics.
4. The three domain of educational objectives are - Cognitive, affective and psychomotor domain
5. The bloom's taxonomy was revised in 2001.
6. There are total six categories in Cognitive domain.
7. The psychomotor domain of educational objectives focuses on developing physical movement, coordination, and motor skills needed to perform specific tasks.
8. The stages of affective domain are – Receiving, Responding, Valuing, Organizing and Characterization.
9. It helps in designing better curricula and instructional plans.
10. Skills and abilities beyond recalling facts.

2.7 Model Questions

1. Discuss the significance of having clear educational objectives in the teaching and learning process. How do these objectives benefit both teachers and students, and what are their primary functions?

2. Define educational objectives and explain their role in the educational process. How do they differ from broader educational aims, and what are their key characteristics according to Robert Mager and B.S. Bloom?
3. Outline and explain the main functions and advantages of learning objectives in education. How do these objectives contribute to effective teaching and learning?
4. What is the taxonomy of educational objectives, and why is it important in the educational context?
5. Describe the cognitive domain of Bloom's taxonomy and its six categories. Provide detailed explanations and examples for each category, highlighting their role in cognitive development.
6. Describe the affective domain in educational objectives as proposed by Krathwohl and his colleagues. Explain the five stages within this domain and discuss their significance in the development of students' values and attitudes.
7. Discuss the psychomotor domain of educational objectives and its role in developing physical skills. Describe the stages of skill acquisition within this domain and explain how they contribute to mastering physical tasks.
8. Explain the primary functions and advantages of educational objectives in the teaching and learning process.
9. Discuss the relationship between the cognitive and affective domains in education.
10. How does the Educational taxonomy prepare students to meet the challenges of today's world?

Unit 3

Methods, Devices and Techniques of Teaching

Unit Structure

- 3.0 Learning objectives
- 3.1 Introduction
- 3.2 Concept of Teaching
- 3.3 Teaching methods – Meaning & significance
- 3.4 Teaching devices & Technique
- 3.5 Styles of Teaching
- 3.6 Micro Teaching
- 3.7 Let us sum up
- 3.8 Answer to check your progress
- 3.9 Further reading
- 3.10 Model Questions

3.0 Learning Objectives

- ✓ To understand the distinction & relation between methods, devices, techniques and styles in the context of teaching
- ✓ To identify and classify various types of teaching methods, devices, and techniques used in educational settings.
- ✓ To evaluate the significance of different teaching methods in facilitating effective learning outcomes.
- ✓ To analyze the role of teaching devices in enhancing classroom engagement and instructional effectiveness.
- ✓ Apply knowledge of teaching techniques to create innovative instructional strategies tailored to diverse learning needs and contexts.

3.1 Introduction

In the sphere of education, the effectiveness of teaching focuses not only on what is taught but also on how it is delivered. The art and science of teaching encompass a diverse area of methods, devices, and techniques aimed at fostering learning experiences that are engaging, effective, and meaningful. Methods refer to the overarching strategies and approaches employed by teachers, such as traditional lecture-based methods, cooperative learning, and experiential learning. Devices in teaching encompass the tools and resources used to support instructional delivery, including visual aids, multimedia presentations, educational software, and interactive learning platforms. Techniques, on the other hand, denote the specific practices and procedures employed within teaching methods and with the aid of teaching devices to achieve instructional goals effectively. These could range from classroom management strategies and questioning techniques to differentiated instruction methods and assessment strategies tailored to gauge student learning. Understanding these elements—methods, devices, and techniques—is necessary for educators attempting to create dynamic and impactful learning environments tailored to meet the diverse needs of learners.

3.2 Concept of Teaching

Teaching in simple terms, is referred to as either an occupation or profession of a group known as teachers or an activity. Teaching is one of the instruments of education and its special function is to impart understanding and skill. The main function of teaching is to make learning effective. The learning process would get completed as a result of teaching. So, teaching and learning are very closely related.

In simple way teaching is the concerted sharing of knowledge and experience, which is usually organized within a discipline and, more generally, the provision of stimulus to the psychological and intellectual growth of a person by another person or artifact.

Teaching is a process in which one individual teaches or instruct another individual. Teaching is considered as the act of imparting instructions to the learners in the classroom situation. It is an activity that causes the child to learn, acquire the desired knowledge and also desired way of living. It is a disciplined social process in which teacher influences the behaviour of less experienced pupil and helps him/her develop according to the needs and ideas of the society. John Dewey considered teaching as a manipulation of the situation, where the learner will acquire skills and insight with his own initiation.

- **DEFINITION OF TEACHING**

Some of the definitions of teaching are as follows

1. According to H.C. Morrison (1934), "Teaching is an intimate contact between a more mature and personality and a less mature one which is designed to further the education of the later".
2. According to John Brubacher (1939), "Teaching is an arrangement and manipulation of a situation in which there are gaps and obstructions which an individual will seek to overcome and from which he will learn in course of doing so".
3. According to B.O Smith (1960), "Teaching is system of actions intended to produce learning".
4. According to N.L. Gage (1962), "Teaching is form of interpersonal influence aimed at changing the behavior potential of another person".
5. According to J. B Hough and James K. Duncan, "Teaching is an activity with four phases, a curriculum planning phase, an instructing phase, and an evaluating phase".

3.3 Teaching Methods

Meaning - A teaching method is how teachers help students learn. It includes the ways teachers present information, organize activities, and manage interactions in class. Good teaching methods engage students, help them understand and remember what they learn, and cater to different learning styles. Methods can vary widely, like lectures, discussions, hands-on activities, group work, and using videos or other media. Teachers choose methods based on what they are teaching, what they want students to learn, and what works best for both them and their students. Teaching methods are akin to brushes in the hands of a skilled artist, each stroke defining the contours of knowledge and shaping the minds of learners. Beyond mere dissemination of facts, these methods orchestrate a symphony of engagement, comprehension, and transformation.

- **Significance of Teaching Methods**

1. **Enhancing Multimodal Literacy:** Effective teaching methods transcend traditional boundaries by integrating multimodal approaches that cater to diverse learning preferences. By incorporating visual, auditory, kinesthetic, and digital elements harmoniously, educators cultivate a richer tapestry of understanding and expression.
2. **Fostering Metacognitive Reflection:** Introducing methods that encourage metacognitive reflection empowers students to delve into the intricacies of their learning processes. By guiding them to analyze their own thinking, educators nurture self-regulation and deeper insights into their academic journey.
3. **Cultivating Ethical Decision-Making:**

Teaching methods serve as a crucible for ethical inquiry, guiding students through complex moral dilemmas and promoting thoughtful decision-making. By embedding ethical considerations within curricular frameworks, educators nurture responsible citizens equipped to navigate the complexities of a global society.

3. **Harnessing Cognitive Flexibility:** Embracing innovative teaching methods that foster cognitive flexibility empowers students to adapt seamlessly to evolving academic challenges. By cultivating openness to diverse perspectives and methodologies, educators prepare learners to thrive in dynamic, knowledge-driven landscapes.

4. **Enabling Transdisciplinary Exploration:** Beyond disciplinary confines, teaching methods facilitate transdisciplinary exploration, encouraging students to synthesize knowledge across domains. By fostering interdisciplinary connections, educators inspire holistic understanding and innovative solutions to multifaceted problems.

5. **Promoting Dialogic Discourse:** Implementing dialogic teaching methods fosters vibrant intellectual exchanges, cultivating a community of inquiry where every voice resonates. By nurturing respectful dialogue and critical engagement, educators ignite a passion for lifelong learning and collaborative problem-solving.

6. **Integrating Ecological Awareness:** Incorporating teaching methods that underscore ecological awareness instills a sense of stewardship for our planet among students. By weaving environmental perspectives into the curriculum, educators empower future generations to advocate for sustainability and environmental justice.

7. **Nurturing Intrinsic Motivation:** Tailoring teaching methods to harness intrinsic motivation encourages students to embark on a journey of self-discovery and personal growth. By aligning learning experiences with students' passions and aspirations, educators cultivate a profound sense of purpose and resilience.

8. **Embracing Neurodiversity:** Embracing teaching methods that celebrate neurodiversity honors the unique cognitive profiles of all learners. By adapting pedagogical strategies to accommodate diverse neurological needs, educators foster an inclusive learning environment where every individual can thrive.

9. **Championing Intergenerational Wisdom:** Incorporating teaching methods that celebrate intergenerational wisdom honors the collective knowledge amassed across generations. By bridging past insights with contemporary discourse, educators cultivate a deep appreciation for cultural heritage and a profound sense of interconnectedness.

Check your progress

1. What are the three main components of teaching effectiveness in education?

2. Define teaching in simple terms.
3. What is a teaching method?

With all of the information available, it's hard to decide which teaching strategies are right for your classroom. Sometimes, the old tried-and-true ones that you have been using in your classroom just happen to work the best, and that's okay. Teaching strategies that are considered "new" may just not fit into your teaching style. Here are a few teaching techniques and strategies that are a staple in most classrooms –

1. Differentiated Instruction: Learning Stations

Differentiated instruction strategies allow teachers to engage each student by accommodating to their specific learning style. According to Howard Gardner's Multiple Intelligences Theory, every person has a different mind, and therefore each person learns and understands information differently. Differentiating instruction offers a way to meet all students' needs. One helpful strategy to differentiate instruction is learning stations. Learning stations can easily be designed to enable students with diverse learning needs to learn at their pace and readiness level. Teachers can set up each station where students will be able to complete the same task, but at the level and style that is specifically designed for them.

2. Cooperative Learning: The Jigsaw Method

Cooperative learning gives students the opportunity to work with others and see different points of view. Students learn more effectively when working together rather than apart, and it is also known to improve self-confidence in students. The jigsaw method is especially effective because each student is responsible for one another's learning, and students find out quickly that each group member has something equally important to contribute to the group in order to make the task a successful one. Students are exposed to and use many skills throughout this strategy: communication, problem-solving skills, cognition, and critical thinking—all of which are essential for a successful academic career.

3. Utilizing Technology in the Classroom

Integrating technology into the classroom is a great way to empower students to stay connected in this technological era. Technology-rich lessons have been found to keep students motivated and engaged longer. Some examples of utilizing technology in the classroom are to create web-based lessons or multimedia presentations such as a video, animation, or some type of graphic, utilizing a tablet or taking your class on a virtual field

trip, participating in an online research project, or even creating a class website. Any of these technology integration strategies will have a positive impact on student learning.

4. Inquiry-Based Instruction

Inquiry-based learning implies involving students in the learning process so they will have a deeper understanding of what they are learning. We are born with the instinct to inquire—as babies we use our senses to make connections to our surroundings. Inquiry-based learning strategies are used to engage students to learn by asking questions, investigating, exploring, and reporting what they see. This process leads students to a deeper understanding of the content that they are learning, which helps them be able to apply these concepts in new situations. In order for our students to be able to be successful in the 21st century, they need to be able to answer complex questions and develop solutions for these problems. The inquiry-based learning strategy is a great tool to do just that.

5. Graphic Organizers

Graphic organizers are a simple and effective tool to help students brainstorm and organize their thoughts and ideas in a visual presentation. Simply put, they help students organize information so it is easier for them to comprehend. Graphic organizers can be used for any lesson, to structure writing, brainstorming, planning, problem solving, or decision making. The most popular organizers are the Venn diagram, concept map, KWL chart, and T Chart.

An experienced teacher knows that not every teaching strategy that you use will be an effective one. There will be some hits and misses, and depending upon your teaching style and the ways your students learn, you will figure out which strategies work and which do not. It may take some trial and error, but it does not hurt to try them all.

Check your progress

4. What are some examples of utilizing technology in the classroom?
5. What is the primary goal of inquiry-based learning?

3.4 Teaching Technique & devices

- **Meaning**

A teaching technique is a way teachers help students learn. It's like a method or approach teachers use to teach lessons effectively. Techniques can include things like group activities, discussions, using videos or pictures, and doing experiments. The goal is to make

learning interesting and easier for students, so they understand and remember what they're taught. Teaching techniques also aim to cater to different ways students learn best, whether it's through listening, doing things with their hands, or working with others. By using various techniques, teachers can keep students engaged and help them develop critical thinking skills. The ultimate goal is for students to not just memorize information but to understand it deeply and apply it to real-life situations.

Accordingly, Teaching devices are tools and aids that teachers use to enhance their teaching methods & technique and improve how students learn. These devices range from traditional resources like chalkboards, textbooks, and visual aids such as diagrams and charts, to modern technologies such as computers, projectors, and educational software. Each device serves a unique purpose in the classroom: they clarify difficult concepts, visually reinforce important ideas, and promote interactive learning. For example, diagrams and charts simplify abstract concepts, making them easier for students to understand, while educational software and simulations engage students in hands-on activities that deepen their comprehension.

These devices also help to diverse learning styles, accommodating students who learn best through visual, auditory, or hands-on approaches. They empower teachers to adapt their lessons to suit the needs of all students, fostering inclusivity and ensuring everyone has opportunities to succeed. By integrating these devices into their teaching techniques, educators create dynamic learning environments where students actively participate and collaborate with their peers. Ultimately, teaching devices enrich traditional teaching methods by creating more engaging and meaningful learning experiences, preparing students to thrive in a complex and interconnected world.

- **TEACHING DEVICE : EXPLANATION, QUESTIONING, ILLUSTRATION AND TEACHING AIDS**

- Explanation**

- What is Explanation?

- An explanation is a statement or set of statements that clarifies the reasons, causes, context, or principles that underpin a particular phenomenon. The word derives from the Latin term 'Explicatus' which means to provide reasoning for. Explanations are central to the discipline of science as one of the goals of the discipline is to provide explanations that lead to a deeper understanding of various phenomena. In plain English, explanations elucidate why things work, what something is, or how things happen. They often provide cause and effect relations, include a time sequence, and use action verbs. An explanation usually has five parts:

- I. Naming or specifying the concept
- II. Describing elements or components of the concept in an appropriate order,
- III. Explaining how the elements relate or connect to each other,
- IV. Providing an example and
- V. Summarized with a concluding statement.

Types of Explanation:

Types of explanations vary widely, encompassing deductive-nomological, functional, historical, psychological, reasoning, rationalization, consequential, causal, and argumentative approaches. According to the deductive-nomological model, a scientific explanation consists of two parts: the explanandum, which is the phenomenon to be explained, and the explanans, which comprises the evidence or reasoning supporting the explanation. Hempel (1965) asserts that the explanans must logically follow from the explanandum and all statements within it must be true (p. 248).

For instance, when explaining a weather phenomenon like a tornado, the explanandum would be "what is a tornado?" The explanans could then be "an intense low pressure system with rapidly rotating air resembling a spout."

Another type of explanation involves argumentation, as outlined by Toulmin (1969), which includes four components: a claim (the assertion about a phenomenon), evidence (supporting data), warrant (the credibility of the evidence), and reasoning (the logical connection between claim and evidence).

Understanding how the world functions and why events occur is crucial. Students in both universities and schools should practice explaining concepts in their own words to enhance their understanding. When preparing explanations, students should consider the purpose, audience, context, and medium to ensure clarity and comprehension for others.

Check your progress

6. What is the main goal of teaching techniques?
7. What are the two parts of a deductive-nomological explanation?

Questioning

- What is questioning ?

Questioning is an important activity in teaching. Questioning can be used to test the knowledge of the past, with questions requiring factual answers by asking who, what, where, and when. Designing is also aimed at stimulating student thinking. These kinds of questions need to be carefully considered as they relate to more serious matters such as consequences and to use questions of how and reason.

Questioning Techniques is one of the key components to creating effective teaching and learning processes is the method of questioning or questioning techniques used by teachers. Questioning by teachers in the teaching and learning process is one of the many interactions that occur in the classroom. Questioning techniques are one of the tools for achieving goals and stimulating students' mental activity. Questioning techniques is important because it can stimulate learning, develop the potential of students to think, drive to clear ideas, stir the imagination, and incentive to act. It is also one of the ways to help students to develop their knowledge more effectively. Teachers need to be aware that the quality of questions and the quality of the questioning when conducting teaching and learning sessions in the classroom are one of the key elements in determining the effectiveness and quality of their teaching sessions. To help students stimulate a high level of thinking, teachers must play a key role in applying the right techniques and skills to question students. Teachers should be aware of any changes that occur in the classroom, and those changes should be aligned with the objectives they want to achieve in the teaching and learning process. Teachers, therefore, need to plan carefully and take into account some of the following factors:

(i) Attention:

Questioning is one of the most effective ways to make the students pay attention in the classroom. About this, the question must be addressed to the whole classroom before a student is asked to answer. Sometimes, some students who are not paying attention will ask the teacher to repeat the question. In this case, the teacher should not repeat the question posed when asked by the student to repeat it. If the teacher repeats the question, then, of course, the student will not pay attention, so to attract the students; the teacher should mention the question only once.

(ii) Voice:

One of the most important communication tools for a teacher is voice. When asking questions, teachers should ensure their voices are clear and their tone is audible. The questions should be presented well and clear to the students and look forward to receiving answers. This is important to attract students to answer a question.

(iii) Pause:

Pause After submitting a question, the teacher should be the one to pause talking for a moment and look at the whole class. Note the verbal cues that indicate that the student is ready to respond. After asking questions, students should be given time to think about the answers. The time given should not be too long because if it is too long, the interest in it will fade.

(iv) Content of questions :

In asking a question, a teacher should plan the types of questions that will be asked in the classroom. In this case, it may not be necessary for these questions to be prepared in advance, but the 'axis question' needs to be designed. The axis questions should be arranged in a logical order to obtain continuity in the lesson. In a given lesson, the teacher should provide some questions like this to determine the desired direction. These questions should not be too long.

Levels of Questions

Questions that will be posed in the teaching and learning activity should be diversified by the levels of questioning. Benjamin S. Bloom, in his book, "Taxonomy of Education Objective (1956), divides the six levels of questions into the cognitive domain. It starts with the questions of recalling facts, which are the lowest levels through the most complex and abstract levels to the highest level, which is classified into six levels. The six levels of questions are as follows -

(i) Knowledge:

Knowledge-based questions are questions that can easily digest students' memory. These types of questions should be chosen by teachers, especially when presenting new topics or ideas for students.

(ii) Understanding: After being exposed to a concept and knowledge, teachers should ask questions that are comprehensible. This means that teaching and learning activities will take place in the dimension of understanding or understanding activities.

(iii) Application:

The following features of the questions involve the use of information provided to students. The application questions are intended to help students apply their knowledge through the information provided during the teaching and learning activities.

(iv) Analysis:

The feature of the analysis question is that this form of question works to separate ideas. At a higher level, students will be presented with analytical questions, and teachers need to be

Careful so that students can follow the content of the subject and apply all the skills to them.

(v) Synthesis:

Synthesis questions are questions that can help students to come up with a new idea through the initial information they are exposed to. These skills also require high skills in which teachers need to guide students until they can synthesize information.

(vi) Evaluation:

At the highest level, evaluation based questions will be given to students. Evaluation means students should be able to make and maintain their justifications.

Thus, Questioning in teaching and learning sessions is one of the most important aspects of mastering knowledge. Teachers should focus on questioning techniques in the teaching and learning process to nurture students' interest and interest in learning. Questioning techniques will increase motivation and promote students' ability to think critically and creatively.

Check your progress

8. Why is voice important in questioning?
9. What is the highest level of Bloom's taxonomy in questioning?

ILLUSTRATION

- What is Illustration?

Illustration refers to the visual representation, decoration, or interpretation of a text, concept, or process. It is designed for integration into both print and digital media such as posters, flyers, magazines, books, educational materials, animations, video games, and films. Illustrations are typically created by professional illustrators. In academic writing, illustration involves making ideas clearer by providing examples, diagrams, or pictures. For instance, Mercury can serve as an example of an element within a larger class or set. This method of exemplification is widely used in academic contexts to enhance understanding.

Functions of Illustrations:

Illustrations serve several important functions in education. Following are some of the functions of illustration –

Attention: Illustrations are crucial for capturing students' attention effectively, which is a prerequisite for any learning process.

Retention: Retaining information in both working memory and long-term memory is vital for learning and performance. Well-designed illustrations can aid in memory retention by making concepts more memorable.

Understanding: Illustrations play a key role in enhancing understanding. For example, in literature, sequential illustrations can help students grasp the storyline more easily.

According to cognitive theory, the initial image that captures attention has a greater chance of being retained in long-term memory. Therefore, strategically using illustrations can significantly impact learning outcomes by enhancing attention, retention, and understanding.

Check your progress

10. What is the purpose of illustration in academic writing?
11. According to cognitive theory, why is the initial image important?

TEACHING AIDS:

- What is Teaching Aids?

A teaching aid is a tool used by the teacher as a facilitator to the process of teaching and learning inside the classroom. It is one of the means by which we, as teachers bring life into the theoretical texts by bringing environment inside the classroom indirectly. Also, it is a means of personification to the concrete texts in the students' books. The final purpose remains as a means of relating teaching with the environment that students live in and communicate with.

A teaching aid is a means of bringing environment into class to give life to theoretical learning. It is a means to involve learners physically, mentally, emotionally and environmentally. A teaching aid can involve the learners physically through using his senses and acting, mentally through using his mind and thinking, emotionally through his excitement and environmentally through looking at pictures that express the daily life we live. Have you wondered what a teacher is? He is an audio-visual aid of teaching.

- **Types of Teaching Aids**

Teaching aids are diverse tools and resources that enhance the learning experience. They include: Visuals: Cards, charts, grids, pictures, drawings, photos, magazines, worksheets, and mind maps.

Technology: Videos, digital materials, data projectors, CDs, electronic programs, and interactive whiteboards.

Online Resources: Websites, e-books, online dictionaries, and virtual tours.

Devices: Computers and internet access.

Experiential Learning: Realia (real-life objects), actual field trips, and real-life situations.

Organizers: Graphic organizers.

Types of Active Teaching Aids:

- Visual Aids: These aids utilize the sense of vision. Examples include actual objects, models, pictures, charts, maps, flashcards, flannel boards, bulletin boards, chalkboards, overhead projectors, and slides.
- Audio Aids: These aids involve the sense of hearing. Examples include radio, tape recorders, and gramophones.
- Audio-Visual Aids: These aids engage both vision and hearing. Examples include television, film projectors, and film strips.
- Using appropriate teaching aids effectively can significantly enhance the teaching and learning process, making concepts more accessible and engaging for students.

Check your progress

12. What is a teaching aid?
13. What are some types of active teaching aids?

3.5 STYLES OF TEACHING - AUTOCRATIC STYLE: LECTURE, DEMONSTRATION, TUTORIAL AND TEAM TEACHING

- **What Is Autocratic Style of Teaching?**

The autocratic style of teaching is characterized by centralized authority where the teacher holds complete control. In this approach, the teacher makes all decisions and establishes the rules. Subordinates, in this case the students, are expected to follow instructions without question. The teacher sets the work tasks and expects students to carry them out as directed. Responsibility for the learning process rests entirely with the teacher.

Autocratic teaching is a traditional and teacher-centered approach where the teacher is highly active while learners play a passive role as listeners. This style typically neglects individual learner abilities, interests, and personalities. Methods associated with autocratic teaching include lecture-based instruction, demonstrations, team teaching, and tutorials. In an autocratic teaching environment, the teacher acts similarly to an autocrat in a socio-political context, imposing knowledge on students without considering their individual needs, interests, or capabilities. The teacher may view themselves as the sole authority and treats students as malleable entities needing guidance and direction.

This style of teaching contrasts with more student-centered approaches that prioritize active students participation, individualized learning paths, and collaborative decision-making.

LECTURE:

➤ What is Lecture?

A lecture is an oral presentation designed to convey information or educate people on a specific subject. According to the Oxford Dictionary, the lecture method involves giving a specified talk to a class over a long duration. The lecture method is one of the oldest teaching methods, rooted in the philosophy of Idealism. It primarily focuses on explaining topics to students, emphasizing the presentation of content. This method is straightforward for teachers and does not require elaborate arrangements.

In a lecture, teachers present information in a clear and understandable manner. It is commonly used in secondary education and beyond to motivate students, clarify concepts, review material, and delve deeper into content. The lecture method aims to provide authentic, systematic, and comprehensive information about events and trends. It also trains students in active listening and fosters good audience habits. Additionally, lectures help students connect previous knowledge with new information, thereby promoting a deeper understanding of subjects. Overall, while the lecture method is effective for delivering structured information, modern education often combines it with

interactive and participatory approaches to cater to diverse learning styles and enhance student engagement.

DEMONSTRATION:

The term "demonstration" refers to the act of giving a demonstration or performing a specific activity or concept. In the demonstration method, the teaching-learning process is conducted systematically. Demonstrations are particularly useful when students struggle to connect theoretical knowledge with practical applications or when they find it challenging to understand how theories are applied.

To successfully implement the demonstration method, three key elements are essential:

- (a) The object or subject being demonstrated should be visible and sufficiently large.
- (b) Clear language should be used during the demonstration to ensure students can easily grasp the concepts.
- (c) Students should be encouraged to ask questions during the demonstration to clarify any doubts or difficulties they may have.

Characteristics of the demonstration method include:

- Demonstrations should be conducted in a straightforward manner.
- This method ensures that attention is given to all students.
- The goals and objectives of the demonstration are clearly defined.
- It is a well-planned instructional strategy.
- Adequate time should be allotted for rehearsal before the actual demonstration.

○ Steps involved in the demonstration method:

- **Planning and Preparation** - Thorough preparation is crucial for a successful demonstration. This includes preparing the subject matter, planning the lesson, gathering necessary materials, and rehearsing the demonstration meticulously.
- **Introducing the Lesson** - The teacher should motivate and prepare students mentally for the upcoming demonstration, considering their individual differences, the learning environment, and their prior experiences. This preparation helps create a conducive atmosphere for learning and ensures that students are engaged and

ready to actively participate in the demonstration. It also establishes a context where students can effectively connect new concepts with their existing knowledge.

- **Presentation of Subject Matter** - Clear presentation of the subject matter is vital during the demonstration. The teacher should engage reflective thinking and help students connect their existing knowledge with new concepts.
- **Conducting the Demonstration** - The demonstration itself should be performed ideally and neatly to ensure students can follow and understand the process.
- **Use of Teaching Aids** - Various teaching aids such as models, blackboards, and graphs can be employed to enhance understanding during the demonstration.
- **Evaluation**- Finally, the entire demonstration should be evaluated to identify areas for improvement and to enhance its effectiveness in future sessions.

By following these steps and ensuring effective preparation, presentation, and interaction, the demonstration method can significantly aid in bridging the gap between theory and practice in education.

- **TUTORIAL**

- **What is tutorial method of Teaching?**

Tutorial teaching is a method, which delivered following the usual lecture. This is remedial teaching that is individualized or given to a specific group of students. The aim of the tutorial or remedial teaching is to help the students to improve their cognitive and other academic abilities.

TYPES OF TUTORIAL:

The tutorial classes can be classified into three following types:

Supervision Tutorials: In this type of teaching, the teacher assigns problems or assignment to the student of above-average academic skills. Then the teacher asks the student to present the answer sheet to the teacher and his classmates. The audience can ask question-related to the paper presentation. If the student is unable to answer the queries of the students, then the teacher may intervene and answer the queries.

Group Tutorials: This type of teaching is delivered to the students, who have low intelligence or more difficulty in understanding the content in the classroom lecture. Here, the teacher tries to provide remedial teaching, which helps the students to understand the lecture more easily.

Practical Tutorials: This is a type of remedial teaching, which tries to make practical work easier for the students. This type of tutorials can be conducted after giving the lectures.

ADVANTAGES AND DISADVANTAGES OF TUTORIALS METHOD

Advantages of Tutorials Method -

1. As individual differences are taken into consideration, it is supposed to be an effective and efficient way of teaching.
2. Teacher is like a doctor to diagnose the weaknesses of the learners and on the basis of these weaknesses, he provides specific treatment of teaching.
3. Teacher is helping and cooperative to the learners, thus, he gains the confidence of the learners in revealing their problems.

Disadvantages of Tutorials Method -

1. Due to over-crowded classes, it is very difficult for the tutor to solve the problems of each student and in each and every subject.
2. The schedule allotted for teaching is so tight that remedial teaching is not possible at teach and every step.
3. Feeling of jealousy inculcates in the tutorial groups
4. Even in tutorial groups, equal opportunities are not provided to all the students. There are some students who dominate the tutorial group.
5. Teachers, sometimes becomes biased and does not show equal interest towards all the group members.

Check your progress

14. What defines the autocratic style of teaching?
15. Name one method used in autocratic teaching.
16. What type of tutorial is aimed at students with high academic skills?

TEAM TEACHING: Team teaching involves a group of instructors working purposefully, regularly, and cooperatively to facilitate the learning of a group of students of any age.

Together, teachers establish course objectives, design syllabi, create lesson plans, deliver instruction, and assess outcomes. They collaborate, debate, and sometimes challenge each other to refine their approaches.

Teams may consist of educators from the same discipline, multiple disciplines, or even encompass an entire school unit, engaging with the same group of students over an extended period. Pairings often include both novice and experienced teachers, fostering innovation and flexibility in class size, location, and scheduling. Diverse personalities and teaching styles stimulate student interest and prevent monotony. This approach enhances interaction between teachers and students, with faculty evaluating student progress against learning goals while students assess teaching effectiveness. It emphasizes mutual growth, shared responsibilities, specialized knowledge, and broadened perspectives. Teaching methods aim to engage students cognitively, emotionally, and behaviorally, applicable across all educational levels from kindergarten through graduate studies.

Team teaching models respect for diversity, encourages collaborative problem-solving, and promotes conflict resolution skills among educators. Collaboratively, team members determine course objectives, select materials, and design assessments. They may teach side by side or consecutively, utilize different instructional formats, or employ technology to connect across different locations. Departing from traditional single-teacher, single-subject paradigms, team teaching supports educational innovations such as tailored remedial programs or advanced honors sections to cater to diverse student needs and interests. It also enriches cultural perspectives by integrating educators from varied backgrounds, benefiting both faculty and students alike.

Advantages of team teaching

- Team teaching include recognizing that students learn at varying paces and that uniform class periods may not suit all learning needs. Traditional teaching, where knowledge is solely imparted from experienced teachers to young students in single-subject classrooms, is evolving. Schools now emphasize lateral learning, where discoveries, inventions, creations, and market developments are shared across society. Here, educators with diverse expertise play a complex role.
- However, team teaching isn't a panacea for all educational challenges faced by teachers, students, and administrators. Its success hinges on meticulous planning, effective management, readiness to embrace change and learn from setbacks, as well as qualities like humility, open-mindedness, imagination, and creativity. Despite these demands, the benefits justify the effort.

- Teamwork enhances the quality of teaching by leveraging diverse expertise to approach topics from multiple perspectives: blending theory with practice, historical with contemporary, and incorporating various gender and ethnic backgrounds. Strengths of each teacher are combined while weaknesses are addressed, allowing for mutual observation, constructive feedback, and improvement in a supportive environment. Evaluations conducted by a team of teachers tend to offer more insightful and balanced perspectives compared to individual self-assessment.
- Working in teams distributes responsibilities, fosters creativity, cultivates camaraderie among teachers, and strengthens the sense of community. Teachers complement each other by sharing insights, proposing innovative approaches, and challenging assumptions. They gain new perspectives, techniques, and values through mutual observation. Students benefit from engaging in lively discussions, debating ideas, questioning premises, and exploring consequences facilitated by contrasting viewpoints. Balanced team compositions regarding gender, race, culture, and age encourage active class participation and independent thinking, particularly beneficial for older or less prepared students who benefit from lessons that resonate with their life experiences.
- Team teaching alleviates individual teaching burdens and boosts morale. The presence of multiple teachers mitigates potential student-teacher conflicts, ensuring continuity in classroom management even during emergencies. Collective decision-making enhances self-confidence among educators, who witness improvements in teaching effectiveness and student learning outcomes, thereby elevating their own sense of fulfillment and satisfaction. This positive environment aids in faculty recruitment and retention efforts.

Disadvantages of team teaching

- Disadvantages of team teaching include the potential for unsuccessful collaborations. Some teachers may possess rigid personalities or strongly prefer a single teaching method. Personal conflicts among team members or a reluctance to risk failure or humiliation can hinder effective teamwork. Additionally, concerns about increased workload without corresponding compensation, or resistance to sharing control and ideas, may undermine collaboration efforts.
- Team teaching imposes greater demands on time and energy as members must coordinate schedules for planning and evaluation, which can be time-consuming. Discussions among team members may be draining, and reaching consensus on decisions can be slower compared to individual decision-making processes.

Adapting courses to accommodate team-teaching methods may also disrupt established teaching practices, adding inconvenience.

- Resistance to team teaching may also arise from students, parents, and administrators who prefer traditional teaching methods or fear the disruption of established routines. Some students thrive in structured environments with consistent approaches, while conflicting opinions within teams may confuse others, hindering learning consistency and habit formation.
- Addressing these challenges may require adjustments in salary structures to reflect additional responsibilities of team members, including potential bonuses for team leaders. Financial considerations might involve reallocating resources or adjusting class sizes. Effective communication and support are crucial to overcoming these disadvantages and ensuring successful implementation of team teaching.

Check your progress

17. What is team teaching?

18. What is a key characteristic of team teaching in terms of teacher roles?

- **PERMISSIVE STYLE: BRAIN STORMING, GROUP DISCUSSION, PANEL DISCUSSION, PROJECT, SEMINAR, WORKSHOP AND SYMPOSIUM**

➤ WHAT IS PERMISSIVE STYLE OF TEACHING?

The permissive teaching style is a student-centered approach where students are empowered to take charge of their learning process, with guidance and support from the teacher. Unlike traditional methods that may involve lectures or prescribed reading materials, permissive teaching allows students to determine what and how they learn.

For example, imagine Don teaching his class about the Battle of Gettysburg. Instead of delivering a lecture or assigning readings, Don might provide various articles about the battle and encourage students to generate their own questions. Students then choose which articles to read based on their questions, fostering a more personalized and engaging learning experience.

However, permissive teaching is not without its challenges. Some critics argue that permissive teachers may be perceived as overly lenient, prioritizing warmth and support over discipline. This can lead to classroom environments

where disruptive behavior is tolerated or not effectively managed, potentially hindering constructive learning. Without clear structure and expectations, students may struggle to understand their responsibilities and the objectives of assignments. This lack of guidance can result in misunderstandings and deviations from the intended learning outcomes. Additionally, students generally value discipline. Contrary to popular belief, discipline can provide students with a sense of security, indicating that the teacher cares and certain behaviors are not acceptable. As mentioned earlier, freedom in the classroom can foster student growth and leadership, but it can also lead to unintended consequences. In a permissive classroom, students might take control away from the teacher and veer in a direction contrary to the teacher's intentions. Without clear rules and objectives set by the teacher, students may misunderstand assignments or projects, assuming they are correct in their approach. Therefore, excessive freedom in decision-making can be detrimental to both individual students and the overall class dynamic.

In conclusion, while permissive teaching promotes student autonomy and can enhance engagement, it requires careful balance. Effective implementation involves providing sufficient support and structure to ensure students thrive academically while also fostering a sense of responsibility and ownership in their learning journey.

BRAIN STORMING

Brainstorming is a group technique used to generate a multitude of ideas for solving a problem or addressing a challenge. It involves a structured process of creativity aimed at selecting the most effective tools and behaviors from various possibilities to achieve a specific goal. This method incorporates elements of the scientific method, critical thinking, decision-making, analysis, and reflection. By encouraging open discussion and idea synthesis, brainstorming enables participants to confront problems confidently and approach them in a systematic manner.

According to the Oxford Dictionary, "Brainstorming is a spontaneous group discussion to produce ideas and ways of solving problems".

According to Alex Faickney Osborn, Brainstorming is most effective in group than individual working alone in generating ideas. That means Brainstorming is a spontaneous group discussion designed to produce ideas and solutions. A pioneer of brainstorming, emphasized its effectiveness in groups over individual efforts for generating innovative ideas. The process is characterized by its informal and relaxed atmosphere, promoting lateral thinking and creativity. Participants are encouraged to freely explore new avenues of thought without fear of criticism, fostering the creation of diverse ideas and potential solutions.

Types of Brainstorming:

1. **Individual Brainstorming:** This involves generating ideas independently, allowing individuals to explore thoughts and solutions without external influence or group dynamics. It's effective for personal reflection and initial idea generation.

2. **Group Brainstorming:** Group brainstorming encourages collaborative idea generation within a team or community. It leverages collective creativity and diverse perspectives to generate a wide range of ideas and solutions.

- **Uses of Brainstorming:**

- **Advertising campaigns:** Brainstorming is essential for developing creative concepts and strategies to effectively market products or services to target audiences.
- **Market strategy and methods:** Brainstorming helps organizations devise innovative approaches to enter new markets, enhance existing strategies, or respond to market challenges.
- **Research technique:** Brainstorming aids researchers in exploring new hypotheses, methodologies, and interpretations, fostering breakthroughs in various fields of study.
- **Writing documents and articles:** Writers use brainstorming to generate ideas, organize content, and enhance the clarity and impact of their written work.
- **Management methods:** Brainstorming supports the development of managerial strategies, problem-solving techniques, and decision-making processes within organizations to achieve goals efficiently.

GROUP DISCUSSION:

A Group Discussion typically involves 10 to 15 participants. It begins with the announcement of a topic followed by a preparation period of 3 to 5 minutes. In case of a case-study discussion with a lengthy case statement, preparation time may exceed 5 minutes. After preparation, the panel signals the start of the discussion and assumes a non-participatory role as observers. There is no moderation or anchoring by the panelists, allowing participants to discuss the topic freely. There is no prescribed order or duration for individual speakers.

Most GDs last approximately 15 minutes, excluding preparation time, but exceptional cases can extend up to 45 minutes. The panel, typically comprising 3 or 4 members, evaluates

participants' content and delivery. They may conclude or extend the GD at their discretion. Participants should not assume a fixed end time like after 15 minutes.

The GD concludes in two ways: abruptly by the panel or by requesting one or more participants to summarize. A summary must objectively recapitulate points discussed during the GD without adding new viewpoints. Participants who were less vocal during the discussion are often asked to summarize, emphasizing the need for an impartial summary that reflects the discussion's conclusion and key points. (*GD – Group discussion)

There are typically three types of Group Discussions:

A) Topical Group Discussions, which focus on current affairs or more enduring topics. For instance, discussing the recent demonetization of Rs 500 and Rs 1000 notes represents a current affair, while debating whether India should adopt a presidential model of democracy pertains to enduring topics without a specific timeframe.

B) Case Studies, which present complex business scenarios requiring decision-making. Such cases often involve multiple embedded problems, necessitating analysis from both individual participants and the group.

C) Abstract Group Discussions, where topics lack a defined framework or direction, encouraging participants to interpret and demonstrate innovative thinking. Topics could be as concise as a single word like 'Blue,' a cryptic sentence, or even an image.

Contrary to common belief, no type of GD is inherently easier or more challenging than others. Success in any format depends largely on individual preparation and thought process.

➤ **What is the evaluation criterion in a Group Discussion?**

The evaluation of participants happens in two broad perspective: Individual qualities and group skills.

Individual qualities refer to the competencies that you may demonstrate in or outside the context of a group. They include the following:

A) Content: What you say during the discussion is looked into from two perspectives – relevance and comprehensiveness. It is possible that a participant has talked a great deal in a GD, but he or she may have deviated from the topic significantly, in which case the content is deemed largely irrelevant without the possibility of further evaluation. If the

content has been relevant to the topic, the panel examines whether your treatment of the topic is superficial or in-depth, distinction we shall discuss in detail in the next few posts.

B) Analytical skills: The panel is of course interested in your facts, but they also like to see whether or not you can explore the ‘why’ and the ‘how’ of the subject matter. This is put to the sternest test in a case-study topic.

C) Reasoning skills: The panel looks at how you support your standpoints, and how you respond to those of the others, how effectively you can ‘strengthen or weaken’ an argument, how logical you are in your overall approach to the topic.

D) Organisation skills: You may have the facts, the supports, the explanations, but are you able to present them in the right order so as to maximize the impact of your good content? The panel wants to examine this.

E) Communication skills: You may have exhibited all the skills stated above, but can you get your point across to someone in a simple (not simplistic) language they understand, with relevant illustrations they can identify with?

F) Creativity: Are you able to bring to the table a novel perspective on the topic? Can you look at a problem differently from ten other participants and suggest a path-breaking solution? Can you interpret an abstract topic in ways the others cannot? If yes, the panel looks at you as someone with one of the rarest of human qualities.

You may have observed that the above skills and qualities can also be directly applied in the evaluation of the response.

On the other hand, the group skills refer to those skills which can only be evaluated in the context of a group. They include the following:

A) Listening skill: The panel constantly observes whether or not every participant is listening to the discussion. In my experience, most participants are concerned only with speaking, and feel that they are done with the job as soon as they have spoken, which is contrary to the spirit of a discussion. There are many ways a panel may infer that a participant is a poor listener, such as a lack of eye contact with the group, or a poor summary at the end. It is one of the rarest skills, and a must for a would-be manager.

B) Leadership quality: In highly-charged discussions, one or two participants usually play the role of the anchor, in that they define the topic appropriately, offer the initial analysis of the keywords of the topic, and also try to hold the group together in pursuit of a common goal. Such individuals could demonstrate effective leadership, and score some extra points. However, one cannot score anything extra simply because one spoke first in the group, or was the loudest.

C) Body language: While assessing the body language, the panel primarily looks at eye contact and hand movements. The speaker must maintain a consistent eye contact with the entire group as he or she speaks, and the listeners must reciprocate. If either doesn't happen, you allow the panel to infer whatever they wish to – from a lack of confidence to a lack of interest in the GD to the lack of concern for others. Hand movements are to your speech what punctuation is to your writing. If used wisely they beautifully enhance the effect of your words; if used unwisely they attract unnecessary attention and distract the listener from your words. I recommend that you simply 'free' your hands. Do not engage them with something pointless such as playing with the pen, or tapping on the desk, or running through your hair (common among female participants). The body has an intelligence of its own. Just leave your hands alone and focus on the topic. The hands will start moving naturally. Please remember that body language cannot be faked. A skilled observer will quickly see through such deception. Just focus on the task at hand and the body will obediently follow. The panel may also pay attention to your voice modulation. A monotonous pitch may reduce the impact of even the most powerful words unless you are a Tommy Lee Jones! Vary the pitch of your voice in order to create emphasis wherever needed.

D) Group Behaviour: This is usually assessed in a broad distinction – assertive or aggressive. Avoid the latter no matter what. Assertiveness is a rational display of conviction of one's thoughts, while aggressiveness is a display of domination through subtle intimidation. Assertiveness allows room for flexibility – which is a desired trait – while aggressiveness leads to irrational rigidity of viewpoint. Please remember that B-schools are looking for sensitive individuals, not skinhead bouncers.

Now that you know how you will be evaluated, focus on specific areas of improvement during your practice GD's. Identify with the help of your trainer the strengths and weaknesses. Set clear goals for yourselves, and do not lose the sight of them during your practice.

PANEL DISCUSSION:

➤ **What is Panel Discussion?**

The panel discussion for the first time was used by Henry Adber Street in 1929. He organized a discussion for small group to definite period for the audience. At the end of the discussion audience also participated. The important questions were put from the topic and then the expert from the panel answer the questions and certain points are clarified which are not included in the discussion. Several other persons had used this technique. Generally these types of panel discussion are organized on television and radio.

Objectives of Panel Discussion:

- To provide information and new facts.
- To analyse the current problem different angle.
- To identify the values.
- To organize for mental recreation.

Advantage of Panel Discussion:

- This technique encourages social learning.
- Through this technique higher cognitive and effective objectives are achieved.
- It is used to develop the ability of problem solving and logical thinking.
- It develops the interests and right type of attitude towards the problem.
- It develops the capacity to respect others ideas and feelings and ability of tolerances.

PROJECT:➤ **What is Project?**

The project method is a modern contribution to educational theory and practice. It is a result at John Dewey's Philosophy of education and is a natural extension of the problem solving method. But the credit for initiating this method goes to Prof. William H. Kilpatrick who has defined it as a whole-hearted purposeful activity, proceeding in a social environment". Dr. J.A. Stevenson who perfected it as a method of teaching says, "A project is a problematic act carried to completion in its natural setting." Ballard gives another definition when he says, "A project is a bit of real life that has been important into the school". According to C.V. Good, "A project is a significant unit activity, having educational value and aimed at one or more definite goals of understanding. It involves investigation and solution of problems. It is planned and carried to completion by the pupils and the teacher in a natural life-like manner".

If we analyse the above definitions, we shall find that project method lays great emphasis on actual activity of the students. In this method, the curriculum, content and techniques of teaching are considered from the student's point of view.

Basic principles or features of project Method:

1) The principle of purpose: No aimless activity can be taken up in Project method. Activity should be purposeful and interesting.

- 2) The principle of activity: A child is active by nature. The Project Method provides ample opportunities to people to think and plan things independently and then carry out the project in cooperation with others,
3. The principle of experience: The project method enables the child to work in groups. He thus learns to cooperate with others and to share his interest and purposes,
- 4) The principle of reality: In this method, students are provided with opportunities to exercise their power in real life situation.
- 5) The principle of freedom: In project method, the choice of activity should be spontaneous and no forced imposition is desired, it should be left to the students in an atmosphere on freedom. Students choose their activity according to his capacity and a felt purpose.
6. The principle of utility: The knowledge gained through activity must be useful and practical. Experiences gained through projects ensure utility because they are carried out under natural settings.

Students can feel that their effort does not go waste and the activity must end in something concrete from the educational point of view.

Steps involved in the project Method:

1. Providing a situation: A project is never to be forced upon pupils. The teacher's job is to provide a situation according to the interest and aptitude of the pupils which may give them a spontaneous urge to carry it out.
2. Selecting a project: After a situation has been provided, the next step is the selection of a good project. Only such a project should be selected as may satisfy some real need of the pupils. The project must be chosen according to the capacities of the pupils.
3. Planning: Once a suitable project has been selected, the next step is to prepare a plan for its execution. Entire planning is to be done by the pupils under the guidance of the teacher, after a good deal of discussion. Each student should be encouraged to participate in the discussion, and offer his suggestion.
4. Execution: When the plan is ready, the teacher should encourage the pupils to go ahead and put the plan into practice. He should ask the pupils to assign duties and distribute work among themselves according to their individual capacity and interest. Pupils should work in co-operation with one another till the project is complete.

5. Judging and evaluating: After the project is executed, students should be asked to review their work, they should identify their mistakes if any, and find out whether they proceeded in the right direction according to plan.

6. Recording: Students should be asked to maintain a project book in which they should put down a complete record of all the activities related with the project. This record will include the selection of the project, its planning, discussions held, duties assigned, references and books consulted, information gathered, difficulties felt, experiences gained, guidance sought etc. Important points for future reference and guidance are also to be noted down.

ADVANTAGES OF THE PROJECT METHOD:

- 1) It is based on the laws of learning: It is in accordance with the psychological laws of learning i.e., the law of readiness, the law of exercise and the law of effect. The law of readiness requires the pupil's mind ready for acquiring knowledge. The planning and selection of the project, prepares the child's mind for the work.

The law of exercise requires the child to practice whatever he has learnt. This method is not only meant for learning by doing but for learning by living. The actual execution of the project gives effective experience. The law of effect requires that learning should be accompanied by satisfaction and purpose. By actually being involved in the project execution, the student gets pleasure and satisfaction.

- 2) This method is economical: The students select their own project according to their interest and capacity. So it gives the best results in the shortest possible time and least wastage of money and energy.

- 3) It provides training for democratic way of life: Pupils work with each other under this method for a common purpose. Thus they acquire foresight, power of judgment independence of thought and action, initiative, responsibility, resourcefulness, tolerance, self-respect, etc. All these are useful social habits leading to good training in citizenship and democratic way of life.

- 4) Dignity of labour: Since the pupils are required to do all types of work by themselves, it upholds dignity of labour.

- 5) Correlation Knowledge: Correlation Knowledge is gained through this method in a correlated manner in a natural setting and not in water-tight compartments.

- 6) No cramming or rote memory: Children learn by doing themselves. No finished product is supplied to them. A problem solving attitude develops within the students and they don't have to memorize matters forcefully in an abstract form.

7) It imparts education in real life situation: Projects are related to everyday needs and experiences of the child and so knowledge is gained in real, practical situations.

8) Individual skill and interests are aroused: Students having wide varieties of skills and interests can select projects of their own choice. Very rarely is any student who finds no challenge in any project whatsoever.

9) Incidental learning: In order to attain fair accuracy and success in the project, pupils seek answers and solutions to many questions and problems and thus come across a lot of incidental learning.

LIMITATIONS OF PROJECT METHOD:

1) Knowledge comes in a haphazard way in project Method: Systematic arrangement of subject matter is not possible because students proceed initially with a problem related to the subject matter and in the course of solving the problem, knowledge results in a natural, practical setting.

2) It sometimes creates heavy load on the teacher: The teacher has to act as a guide of the project and take leadership in conducting all stages of actions involved in the project like selecting a project, planning, guiding execution, evaluating, recording etc.

3) It may result in disorganization of School schedule: It is not possible to follow any fixed schedule while implementing the project work. Students sometimes may have to work outside school campus. Thus frequent deviation from normal school time-table takes place.

4) It may involve a lot of expenditure: For successful completion of a project, a lot of materials and fund is required which may not be affordable by all schools.

5) Balanced learning for all students may not be possible: A few bright students may be inclined to take all the responsibility upon them as they are more capable than others while weaker students may remain.

6) Comparatively inactive in a mixed group: Even after having a few limitations, the project method gives ample opportunity to all students to come out of the monotonous classroom lectures, become active and work in a team to solve academic problems in a natural atmosphere.

SEMINAR:

➤ **What is Seminar?**

A seminar as an instructional technique involves generating situation for a group to have guided interaction among themselves on a theme which is generally presented to the group

by one or more members. The person presents the theme thoroughly before hand. This would mean selection of relevant materials at its organization. The collected material is put in the form of paper which is circulated among the participants in advance or before paper reading. It provides the structure of the theme to facilitate its communication.

Thus seminar is an instructional technique of higher learning which involves paper reading on a theme and followed by the group discussion to clarify the complex aspects of the theme.

OBJECTIVES OF SEMINAR:

- To develop the higher cognitive abilities.
- To develop the ability of responding in this manner would involve higher cognitive abilities.
- To develop the ability of keen observation experiences, feeling and to present the theme effectively.
- To develop the ability to seek clarification and defend the ideas of others efficiently.

TYPES OF SEMINAR

1. Mini Seminar: A seminar organized to discuss a topic in class is known as mini seminar. The purpose of mini seminar is to train the students for organizing the seminar and play different roles.
2. Main Seminar: Such seminar is organized at departmental level or institutional level on a major theme.
3. National Seminar: A national seminar is organized by an association or organization.
4. International Seminar: International Seminar is organized by UNESCO and other international organizations.

ADVANTAGES OF SEMINAR:

1. Due to the process of stimulation of thinking brought about through interaction, seminar developed different higher cognitive abilities.
2. The effect of seminar attributes the norms of behavior for the group in the seminar situations.
3. The natural way of learning through seminar establishes an important place for this technique at all level of instruction.

4. Seminar has great instructional value as it makes the instruction learner centred and provides for learning through enquiry which is based on a very natural characteristic of inquisitiveness in human.

WORKSHOP:

➤ **What's a workshop?**

Workshop is defined as an assembled group of people of 10 to 25 persons who share a common interest or problem. They meet together to improve their skill of a subject through intensive study, research, practice and discussion.

In workshop there must be complete and active involvement by the participants. The whole point of attention is to work and learn from practical experience. Workshop offers each member an opportunity to make his or her own contribution. Participants are expected to work as a reporter or a leader.

Workshops are also sometimes more diverse in terms of attendees than other events. You'll find people from different departments and fields attending workshops together, and you may find non-academics such as journalists or people in business will attend too. The best workshops have a specific, action-oriented purpose, and aim to generate some concrete answers to current problems in the field. Workshops are a good opportunity to learn new skills and to familiarize yourself with a topic you don't know well.

Objective of Workshop:

- To achieve a higher cognitive objectives and develop psychomotor skills.
- To learn the new innovations and practice of education.
- To solve problems in the area of teaching education.
- To develop the proficiency for planning and organizing teaching and instructional activities.
- To provide a broader understanding of a topic and theme.

SYMPOSIUM:

➤ **What's a symposium?**

Symposium is defined as a teaching technique that serves as an excellent method for informing the audience, crystallizing their opinion and preparing them for arriving at decision regarding a particular issue or a topic. Symposium is a discussion method in which different viewpoints on a single aspect of a topic is discussed.

Symposium is a series of speeches on single aspect of a topic.

Objectives of Symposium:

1. To identify and understand various aspects of a theme.
2. To develop the ability arrive a decision and provide judgment for a problem.
3. To develop values and feelings regarding a problem.
4. To provide understanding to the students or listeners on a theme or problem to specifically develop certain values and feelings.
5. To enable listeners from policies regarding a theme or a problem.
6. To investigate a problem from several point of view.
7. To boost student abilities to speak in the group.
8. To encourage the students to study independently.

Advantages of Symposium:

- Symposium can be used to address a large group or class.
- This method can be frequently used to present broad topics for discussion at conventions and organization of meetings.
- In symposium, the principle of organization is high as the speeches are prepared beforehand.
- It gives a deeper insight into a topic.
- It directs the student's t continuous independent study.
- This method is can be used in political meeting.

Disadvantages of Symposium:

- Symposium does not provide adequate opportunity for all the students to participate actively. It has limited audience participation.
- The speech is limited to 10 to 20 minutes.
- Question and answer session is limited to 3 to 4 minutes.
- It has possibility of overlapping of subjects.

Check your progress

19. What is a key characteristic of the permissive teaching style?

20. What is the main goal of brainstorming?
21. Who typically presents the topic in a panel discussion?
22. What does the principle of "reality" in the project method emphasize?
23. Name one advantage of using the project method in education.
24. How many participants typically attend a workshop?
25. When did Henry Adber Street first use the panel discussion technique?
26. What is a "mini seminar"?
27. What is one advantage of using a symposium in education?

3.6 MICRO TEACHING

Micro Teaching is a procedure in which a student-teacher or trainee teacher practices teaching with a reduced number of students in a reduced period of time with an emphasis on a narrow and specific teaching skill.

Definition of Micro Teaching

There are many definitions of microteaching given by scholars. Some of the micro-teaching definitions are:

D.W Allen (1996): Microteaching is a scaled-down teaching encounter in class size and time".

R.N Bush (1968): "Micro Teaching is a teacher education technique which allows the teachers to apply clearly defined teaching skills to carefully prepared lessons in a planned series of five to ten minutes to encounter with real students, often with an opportunity to observe the result on Video Tape."

L.C Singh (1977): Microteaching is a scaled-down teaching encounter in which a teacher, a small unit to a group of 5 students for a small period of 5 to 20 minutes. Such a situation offers a helpful setting for an experienced or unexperienced teacher to acquire new teaching skills and to refine old ones.

N.K. Jangira and Azit Singh (1982): "Micro teaching is a training set for the student-teacher where complexities of the normal classroom teaching are reduced by:"

- Practicing one component skill at a time.

- Reducing the size of 5 to 10 pupils.
- Limiting the content to a single concept.
- Reducing the duration of the lesson to 5 - 10 minutes.

B.K. Passi and M.S Lalita (1976): "Microteaching is a training technique that requires student teachers to teach a single concept using specified teaching skills to a small number of students in a short duration of time".

M.C. Alleese and Unwin (1970): "The term micro-teaching is most often applied to the use of closed-circuit television to give immediate feedback to a trainee teacher's performance in a simplified environment."

OBJECTIVES OF MICRO TEACHING

- To enable teacher trainees to learn and assimilate new teaching skills under controlled conditions.
- The second objective is to enable teacher trainees to master a number of teaching skills.
- The last one is to enable teacher trainees to gain confidence in teaching.

CHARACTERISTICS AND FEATURES OF MICRO TEACHING

The main characteristics of microteaching are:

1. It is a highly individualized training device and an experiment in the field of teacher education which has been incorporated in the practice of teaching schedule.
2. The students are providing immediate feedback in terms of peer group feedback, tape recorder, or CCTV.
3. Micro teaching is a student teaching skill training technique and not a teaching technique or method.
4. Practice one skill at a time.
5. Reducing the class size to 5 to 10 pupils or students.
6. Limiting the content to a single concept.
7. Microteaching is micro in the sense that it scales down the complexities of real teaching.
8. Micro teaching advocates the choice and practice of one skill at a time.

Steps of Micro Teaching

The microteaching program involves the following 9 Steps:

- Step 1: Orientation
- Step 2: Discussion of Teaching Skill
- Step 3: Selection of a particular teaching skill
- Step 4: The practice of the Skill
- Step 5: Proving the feedback
- Step 6: Re-Planning
- Step 7: Re-teaching
- Step 8: Re-feedback
- Step 9: Repetition of the micro-teaching cycle

Step 1: Orientation

In this step particular skill to be practiced is explained to the teacher trainees in terms of the purpose and components of the skill with suitable examples. At the beginning the student teachers should be given the necessary theoretical background about micro teaching by having a free and fair discussion of aspects like those given below:

- Concept of micro-teaching
- Significance of using microteaching
- The procedure of micro teaching
- Requirements and Strategies for adopting micro-teaching techniques.

Step 2: Discussion of Teaching Skill

In this step, the teacher trainee gives the demonstration of the skill of micro teaching in simulated conditions to the teacher trainees. In this step, the knowledge and understanding of the following aspects are to be developed.

- Analysis of teaching into component teaching skills.
- The discussion of the rationale and role of these teaching skills in teaching.

- Discussion about the component teaching behaviors comprising various teaching skills.

Step 3: Selection of a particular teaching skill

In this step, the teacher trainee plans a short lesson plan on the basis of the demonstrated skill for his or her practice. They are also provided with necessary orientation and processing material for the practice of that skill.

Step 4: The practice of the Skill

In this step, the trainee teachers teach the lesson to a small group of students. His / Her Lesson is supervised by the supervisor and peers where possible. The student-teacher may also have his lesson taped on a video or audiotape.

Step 5: Proving the feedback

On the basis of the observation of a lesson, the supervisor gives feedback to a teacher trainee. The supervisor reinforces the instances of effective use of the skill and draws the attention of the teacher trainee to the various points where he could not do well. Whenever possible the help may also be taken from the various gadgets like audiotapes, videotapes, and closed-circuit televisions.

Step 6: Re-Planning

After getting the feedback given by the supervisor the teacher trainee re-plans the lesson plan in order to use the skill in a more effective manner in the second trail.

Step 7: Re-teaching

In this step, the revised lesson is taught to another comparable group of students. In this session of 6 minutes, the student-teacher re-teaches his micro lesson on the basis of his prepared plan or rearranged setting.

Step 8: Re-feedback

In this, the supervisor observes the re-teach lesson and gives re-feedback to the teacher trainee with convincing arguments and reasons.

Step 9: Repetition of the microteaching cycle

This is the last step of micro-teaching in which the "teach-re-teach" cycle may be repeated several times till adequate mastery level is achieved by the trainee.

Micro Teaching Cycle

There are 6 steps that are generally involved in the micro-teaching cycle. These Six Steps are:

1. Plan
2. Teach
3. Feedback
4. Re-plan
5. Re-teach
6. Re-feedback

Plan : It is the first step in the micro-teaching cycle. The plan involves the selection of the topic and related content of such a nature in which the use of components of the skill under practice may be made easily and conveniently. The topic is analyzed into different activities of the teacher and students. These activities are planned in such a logical sequence where the maximum application of the components of skill is possible.

Teach : Teaching involves the attempts of the teacher trainee to use the components of the skills in suitable situations of teaching-learning as per his / her planning of activities. If the situation is different and it is not as visualized as per the demand of the situation in the class, he / she should have the courage and confidence to handle the situation arising in the class effectively.

Feedback : The term feedback refers to giving information to the teacher trainee about his performance. The information includes the points of strength as well as weaknesses relating to his/her performance. This helps the teacher trainee to improve his / her performance in the desired direction.

Re-Plan : The teacher trainee re-plans his lesson, incorporation the points of strength and removing the points which are not skillfully handled during a teaching in the last attempt either on the same topic suiting to the teacher trainee for improvement.

Re-Teach : Re-Teaching involves teaching to the same group of students if the topic is changed or to a different group of students if the topic is the same. This is done to remove boredom or monotony of the pupil. The teacher trainee teaches the class with renewed courage and confidence to perform better than the last attempt.

Re-Feedback : It is the most important component of micro-teaching which is used for behavior modification of teacher trainees in the desired direction in each and every skill practice.

➤ **What is the time duration for the micro teaching?**

- Teaching Time Duration - 6 Minutes
- Feedback Duration - 6 Minutes
- Re-planning - 12 minutes
- Re-teaching - 6 minutes
- Re feedback - 6 minutes

Principles of Micro Teaching

The principles underlie the concept of microteaching are:

- Capabilities
- Intrinsic Motivation
- Goals are to be realistically set
- Goals are to be realistically set
- One element in one time
- Active Participation
- Information and Knowledge
- Immediate Feedback
- Experience in various skills

Capabilities - The first principle of microteaching is that the capabilities of the learner must be considered when a decision of what to teach is made. In this principle, the trainee is given the opportunity to select a lesson content in an area of his greatest competence so that he may feel at ease with the subject matter.

Intrinsic Motivation - The learner must be motivated, intrinsically. Intrinsic motivation in the context of micro-teaching is created through the cognitive and effective discrepancy between his ideas, self-concept a teacher, and his real teaching.

Goals are to be realistically set - In this principle of micro teaching an attempt is made to modify only modifiable behavior which trainee wants to change.

One Element in One Time - Only one element of modifiable behavior is to be worked on at a time. In pursuance of this principle, in any micro teaching session, a trainee practice one skill at a time and moves to the next only after he has achieved mastery over it.

Active Participation - In microteaching, active participation by the students is necessary in order to modify his behavior substantially. According to this principle, in any micro-teaching situation, a trainee teacher engages actively in practicing a skill in which he wants to be perfect.

Information and Knowledge - Knowledge and information about one's performance help the learner. According to this principle, if any micro teaching session, a trainee teacher is provided knowledge and information about his / her own performance by the supervisor with or without the help of audio and videotapes. The transfer of learning will become better if the learner gets the feedback related to his performance.

Immediate Feedback - Immediate feedback informs the trainee teacher of their effective practice. So according to this principle, in any microteaching setting, a trainee teacher is provided immediate feedback regarding his performance, thereby eliminating any chance of wrong practice.

Experience in various skills - In micro teaching, students are provided experience in various skills over a considerable length of time.

Advantages of Micro Teaching

1. Microteaching helps us in developing and mastering important teaching skills.
2. It is very effective in modifying the behavior of the teacher.
3. Another advantage is that it employs real teaching situations for developing skills.
4. As micro teaching is scaled-down teaching, it reduces the complexity of the teaching process.
5. It helps us in getting deeper knowledge regarding the art and science of teaching.
6. It is an individualized teacher training technique.
7. It helps us in accomplishing specific teacher competencies.

Disadvantages of Micro Teaching

1. First Demerit of microteaching is that it is skill-oriented; contents are not emphasized.
2. There is a special classroom setting required for micro teaching.
3. Only a few specific skills are covered.
4. It deviates from the normal classroom teaching.
5. The number of opportunities for re-teaching and re-planning for a large number of trainee teachers is not possible.
6. It is a time-consuming teaching technique.
7. Many administrative problems arise while arranging micro lessons.

Check your progress

28. Who defined micro-teaching as a "scaled-down teaching encounter in class size and time"?
29. What is the typical duration of a micro-teaching lesson?
30. What is the first step in the micro-teaching cycle?
31. Who introduced the concept of using closed-circuit television for immediate feedback in micro-teaching?
32. What is a disadvantage of micro-teaching?

3.7 Let us sum up

In this chapter we explored the essentials of effective teaching. It starts with learning objectives that help teachers plan lessons and evaluate student progress. The chapter then explains different teaching methods and how they help achieve educational goals. It also discusses teaching tools and techniques that improve classroom engagement and communication. Different teaching styles are covered, emphasizing the need to match them with what students need. Lastly, it introduces micro-teaching, a method for teachers to practice and get feedback to improve their teaching skills. Overall, this chapter gives a thorough overview of teaching basics, including objectives, methods, techniques, styles, and practical tips for better teaching.

3.8 Further Reading

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3.9 Answer to check your progress

1. Methods, devices, and techniques.
2. Teaching is the sharing of knowledge and experiences to promote intellectual and psychological growth.
3. A strategy used by teachers to facilitate student learning.
4. Creating web-based lessons, multimedia presentations, virtual field trips, and class websites.
5. To engage students in asking questions and exploring, leading to a deeper understanding and the ability to apply concepts in new situations.
6. To make learning interesting and easier, helping students understand deeply and apply knowledge to real-life situations.
7. The explanandum (phenomenon to be explained) and the explanans (evidence or reasoning).
8. A clear and audible voice helps attract students' attention and encourages them to answer questions.

9. Evaluation, where students justify and defend their reasoning.
10. To make ideas clearer by providing examples, diagrams, or pictures.
11. It has a greater chance of being retained in long-term memory.
12. A teaching aid is a tool used by teachers to enhance the learning process by bringing theoretical concepts to life and connecting them to the environment students live in.
13. Types of active teaching aids include visual aids (e.g., charts, models), audio aids (e.g., radio, tape recorders), and audio-visual aids (e.g., television, film projectors).
14. The teacher has complete control and makes all decisions.
15. Lecture-based instruction.
16. Supervision tutorials.
17. Team teaching involves multiple instructors working cooperatively to facilitate student learning.
18. Teachers collaborate to establish objectives, design lessons, and assess outcomes.
19. It is a student-centered approach where students have significant control over their learning process.
20. To generate a wide range of ideas and solutions for a problem through group discussion.
21. The topic is presented by one or more members of the panel before the discussion begins.
22. Providing students with opportunities to exercise their skills in real-life situations.
23. It promotes active learning by engaging students in real-life problem-solving activities.
24. 10 to 25 participants.
25. In 1929.
26. A seminar organized within a class to discuss a topic and train students in seminar organization and role-playing.
27. It provides a deeper insight into a topic through organized speeches and discussions.

28. D.W. Allen (1996).
29. 5 to 10 minutes.
30. Plan
31. M.C. Alleese and Unwin (1970).
32. It is time-consuming.

3.10 Model questions

1. Explain the significance of teaching methods such as differentiated instruction, cooperative learning, and inquiry-based instruction. How do these methods enhance student engagement and learning outcomes?
2. Describe how teaching techniques like explanation, questioning, and illustration support student comprehension. Provide examples of their application in the classroom.
3. Analyze the role of teaching aids in enhancing the learning experience. What are some types of teaching aids, and how do they benefit student learning?
4. Evaluate the role of questioning in teaching. How can teachers use Bloom's taxonomy to effectively question students and stimulate critical thinking?
5. Discuss the role of illustrations in academic writing. How do illustrations aid in attention, retention, and understanding, according to cognitive theory?
6. Describe the autocratic style of teaching and discuss how it contrasts with student-centered approaches. What are the implications of this style on student engagement and learning?
7. Explain the lecture method as part of the autocratic teaching style. How does it function as an educational tool, and what are its strengths and limitations in modern education?
8. Discuss the demonstration method of teaching. What are its key characteristics, and how can it be effectively implemented in the classroom? Include steps and essential elements for a successful demonstration.
9. Evaluate the tutorial method of teaching, including its various types such as supervision, group, and practical tutorials. What are the advantages and disadvantages of using tutorials in education?

10. Analyze the concept of team teaching. What are the benefits and challenges associated with this approach? How does team teaching enhance or complicate the teaching-learning process compared to traditional methods?
11. Discuss the permissive style of teaching, highlighting its key characteristics, advantages, and potential challenges. Provide examples to illustrate your points.
12. Explain the brainstorming technique, detailing its various types and uses. How does brainstorming facilitate creativity and problem-solving in different contexts?
13. Analyze the different types of group discussions, including topical, case study, and abstract discussions. What are the key evaluation criteria used in assessing participants in a group discussion?
14. Describe the project method of teaching, including its basic principles, steps involved, and the advantages and limitations. How does the project method align with John Dewey's philosophy of education?
15. Compare and contrast seminars, workshops, and symposiums as instructional techniques. Discuss their objectives, advantages, and potential drawbacks in the context of enhancing learning and development.
16. Discuss the concept of micro teaching, including its definition, objectives, and main characteristics. How does micro teaching differ from traditional teaching methods?
17. Explain the nine steps involved in the micro teaching process. How does each step contribute to the development and refinement of teaching skills for trainee teachers?
18. Evaluate the principles underlying micro teaching, such as intrinsic motivation and immediate feedback. How do these principles impact the effectiveness of the micro teaching approach in teacher training?

Unit 4

Lesson Planning and Types of lesson

Unit structure

4.0 Learning objectives

4.1 Introduction

4.2 Developing lesson plan – Concept, need & importance, characteristics

4.3 Knowledge lesson and Herbartian steps of lesson planning

4.4 Skill lesson

4.5 Appreciation lesson

4.6 Teaching competencies for an effective lesson plan

4.7 Let us sum up

4.8 Further Reading

4.9 Answer to check your progress

4.10 Model questions

4.0 Learning Objectives

- ✓ To understand the concept and importance of learning objectives in educational planning.
- ✓ To explain the significance of developing a lesson plan in effective teaching.
- ✓ To describe the Herbartian steps of lesson planning and their application in modern education.
- ✓ To demonstrate the ability to create effective teaching aids to enhance learning experiences.
- ✓ To compare and contrast the methods of teaching various subjects such as Social Science, Mathematics, Science, and Language.
- ✓ To analyze how different teaching methods can be tailored to suit the specific requirements of each subject area.
- ✓ To apply theoretical knowledge of unit structure to practical classroom settings through lesson planning and teaching aid development.

4.1 Introduction

Concept of Developing Lesson Planning

A lesson plan serves as the instructor's roadmap for guiding students towards what they need to learn and how it will be effectively accomplished during class time. Before planning a lesson, it's essential to identify the learning objectives for the class meeting. From there, appropriate learning activities can be designed, and strategies can be developed to assess student learning.

Every teacher is required to prepare a lesson plan because it acts as a guide for daily lessons. Lesson planning is important because it provides teachers with a clear direction for the day's objectives. Research indicates that student learning is positively correlated with effective teacher planning. Having a prepared plan allows teachers to focus on implementation rather than on what comes next, enabling them to enhance other aspects of the lesson. Also, lesson planning ensures that the day-to-day activities in classrooms contribute effectively to students' long-term progress towards the goals outlined in their curriculum and individual education plans where applicable.

An effective lesson plan includes several key elements: clear learning objectives, thought-provoking questions, necessary supplies, and engaging activities. Learning objectives are critical as they drive the development and implementation of all classroom activities. Quality questions challenge students to think beyond mere memorization and comprehension, fostering deeper understanding. Assessment planning is essential to gauge whether the class has achieved its objectives. Lesson planning is a dynamic process that evolves with teachers' experience, becoming more effective over time.

A successful lesson plan integrates these three key components:

- Objectives for student learning
- Teaching/learning activities
- Strategies to assess student understanding

Clearly defining learning objectives helps determine appropriate teaching and learning activities, while these activities, in turn, determine how to assess whether the objectives have been met.

Organized planning plays a major role in effectively executing any task in life. It ensures efficient use of time, energy, and resources. This principle holds true for teaching and learning. Teachers who plan their work diligently are more efficient and effective in their teaching. Subject teachers should prioritize careful planning of their instructional activities throughout the academic session. This planning typically includes:

- a. Yearly lesson planning
- b. Unit lesson planning
- c. Daily lesson planning

4.2 DEFINITION LESSON PLAN

1. According to Bossing, “Lesson plan is the title given to a statement of the achievement to be realized and the specific means by which these are to be attained as a result of the activities engaged in during the period”.
2. According to Binging and Binging “Daily lesson planning involves defining the objectives, selecting and arranging the subject matter and determining the method and procedure”.
3. According to Stands – A lesson is “A plan of action”

NEED AND IMPORTANCE OF LESSON PLANNING

- I. Organization of content: Lesson planning organizes the subject matter effectively, ensuring a structured approach to teaching. This helps teachers to present information in a logical sequence.
- II. Prevention of Thoughtless Teaching: It prevents the pitfalls of unplanned teaching, allowing teachers to deliver content thoughtfully and purposefully.
- III. Creating an Optimal Learning Environment: By preparing in advance, lesson planning fosters a conducive atmosphere for learning. This preparation includes setting objectives and selecting appropriate teaching strategies and materials.
- IV. Timing and Transition: Teachers gain clarity on when to start evaluations and when to progress to the next lesson, ensuring smooth transitions and maximizing instructional time.
- V. Organized Teaching and Time Management: Lesson plans facilitate organized teaching and save instructional time by outlining clear objectives, activities, and timeframes.
- VI. Strategic Application of Teaching Strategies: They enable teachers to apply suitable instructional strategies tailored to student needs, enhancing engagement and comprehension.

- VII. **Preparedness and Confidence:** By planning ahead, teachers feel more prepared and confident, leading to effective classroom management and delivery of content.
- VIII. **Optimizing Learning Based on Prior Knowledge:** Lesson planning incorporates students' prior knowledge, building new concepts on a solid foundation and enhancing learning effectiveness.
- IX. **Psychologically Informed Teaching:** Teachers can adapt teaching strategies and techniques to match students' interests, aptitudes, and abilities, fostering a more psychologically informed approach to teaching.
- X. **Focus on Essential Content:** Lesson plans help teachers prioritize essential content, ensuring focused and efficient delivery of curriculum objectives.
- XI. **Structured Learning Activities:** They determine both teacher-led and student activities, making classroom interactions purposeful and meaningful.
- XII. **Effective Use of Teaching Aids:** Lesson planning involves preparing and utilizing teaching aids effectively, enhancing instructional clarity and student understanding.
- XIII. **Development of Teaching Skills:** It serves as a tool for developing teaching skills, helping teachers refine their instructional methods and approaches over time.
- XIV. **Enhancement of Confidence and Enthusiasm:** Through meticulous planning, teachers develop confidence in their subject matter and teaching abilities, leading to enthusiastic and engaging classroom instruction.
- XV. **Promotion of Classroom Discipline:** Clear lesson plans contribute to better classroom management and discipline by establishing clear expectations and routines.
- XVI. **Time Management:** Lesson plans allocate time effectively, ensuring that all instructional objectives are met within the allotted class periods.
- XVII. **Encouraging Critical Thinking:** Ideal lesson plans include thought-provoking questions and activities that stimulate students' thinking from basic memorization to reflective understanding.

CHARACTERISTICS OF GOOD LESSON PLANNING

Learning to plan is a skill that improves with practice. While lesson planning may initially seem time-consuming, creating detailed plans as a beginner teacher establishes routines that become more efficient over time.

- I. **Objective-Based:** A good lesson plan must be centered around with clear objectives. Objectives should be precisely defined to ensure the lesson aims to achieve specific goals.
- II. **Appropriate Use of Teaching Aids:** The selection of teaching aids such as charts, graphs, pictures, diagrams, and maps should be carefully decided in advance and strategically integrated into the lesson plan.
- III. **Building on Prior Knowledge:** An effective lesson plan builds upon students' previous knowledge, facilitating easier assimilation of new information.
- IV. **Division into Units:** Lessons should be categorized into knowledge-based, skill-based, and appreciation-based categories. Each lesson should be divided into manageable units to aid gradual understanding.
- V. **Simplicity and Clarity:** Activities in the lesson plan should be straightforward and aligned with the cognitive abilities of the students.
- VI. **Pre-determined Activities:** Both teacher-led and student activities should be clearly defined beforehand in the lesson plan.
- VII. **Inclusion of Homework:** An ideal lesson plan includes provisions for homework assignments, reinforcing students' understanding and application of acquired knowledge.
- VIII. **Self-Evaluation:** Effective lesson planning incorporates mechanisms for self-assessment. Teachers should pose reflective questions to evaluate the success of the lesson.
- IX. **Use of Relevant Examples:** Examples used in the lesson plan should resonate with students' daily lives, enhancing relevance and comprehension.
- X. **Effective Use of Blackboard:** A summary of each unit should be written clearly on the blackboard to reinforce key concepts and aid visual learners.

Features of Effective Lesson Planning

Mastering lesson planning is a skill that enhances with practice. Although crafting detailed plans might initially feel time-intensive for new teachers, it helps establish routines that become more streamlined over time.

- **Goal-oriented:** An effective lesson plan must be centered around with clear goals or objectives. This should be precisely defined to ensure the lesson aims to achieve specific goals.

- **Effective Use of Teaching Materials:** The choice of teaching resources like charts, graphs, images, diagrams, and maps should be thoughtfully planned in advance and purposefully incorporated into the lesson plans.
- **Building on Prior Knowledge:** An effective lesson plan builds upon students' previous knowledge, facilitating easier assimilation of new information.
- **Division into Units:** Lessons should be categorized into knowledge-based, skill-based, and appreciation-based categories. Each lesson should be divided into manageable units to aid gradual understanding.
- **Simplicity and Clarity:** Activities in the lesson plan should be straightforward and aligned with the cognitive abilities of the students.
- **Pre-determined Activities:** Both teacher-led and student activities should be clearly defined beforehand in the lesson plan.
- **Inclusion of Homework:** An ideal lesson plan includes provisions for homework assignments, reinforcing students' understanding and application of acquired knowledge.
- **Self-Evaluation:** Effective lesson planning incorporates mechanisms for self-assessment. Teachers should pose reflective questions to evaluate the success of the lesson.
- **Use of Relevant Examples:** Examples used in the lesson plan should resonate with students' daily lives, enhancing relevance and comprehension.
- **Efficient Use of the Blackboard:** Key concepts from each unit should be clearly summarized on the blackboard to reinforce learning and support visual learners.

❖ **Check your progress**

1. What is lesson plan?
2. Mention the types of lesson Planning.
3. Write the three key components of lesson plan.

4.3 Herbartian Stages of Lesson Planning:

The Herbartian method of lesson planning, rooted in the educational philosophy of Johann Friedrich Herbart (1776-1841), a German philosopher and educator, has significantly shaped teaching practices, especially during the 19th and early 20th centuries. Herbart proposed four main steps:

- a) Clarity
- b) Connection
- c) Structure
- d) Application

His followers later modified these terms to:

Clarity to Preparation

Connection to Presentation

Structure to Generalization (Comparison and synthesis)

Application to Utilization

These stages are further elaborated as follows:

Preparation: This phase focuses on priming students' minds to absorb new knowledge. Before introducing a new lesson, the teacher reviews what students already know, linking new information to their existing knowledge. This approach helps students see the relevance of the new lesson in relation to what they already understand, making learning more coherent. This preparatory step, also known as the introduction, involves assessing students' prior knowledge through questioning. This approach not only sparks curiosity but also builds on their previous experiences, creating a strong foundation for new learning.

In the preparation phase, consider the following:

- It should not introduce new content.
- It should stimulate interest.
- It should be concise.

This phase includes two parts:

Statement of the Aim: Here, the teacher clearly defines the lesson's main objective. This statement acts as a guide for both the instructor and students, outlining the specific knowledge or skills to be gained by the end of the lesson. A well-articulated aim provides focus and direction for the session.

Presentation of Development: This part covers the core content of the lesson, where the topic is systematically explored and expanded. It involves presenting concepts in a logical order, breaking down the material into subtopics or key points. The presentation should be well-organized, with each section building on the previous one, and may include explanations, examples, and interactive elements to enhance comprehension.

Connection and Comparison: In this step, the teacher relates facts, events, and applications to each other through comparison, helping students understand the material more deeply. Establishing connection between different subjects or within the same subject aids in reinforcing and clarifying new information, making the learning process more integrated and meaningful.

Generalization: During this stage, students extrapolate from specific examples to broader principles or rules. They learn to identify patterns and formulate general statements based on their learning. Effective generalization involves students reflecting on their own thinking and experiences to truly grasp the material, rather than just memorizing facts. This ability to generalize helps students apply their knowledge to various situations, demonstrating a deeper understanding of the content.

Application: In the final step, students use their acquired knowledge to address problems or navigate new scenarios. This practical application showcases their mastery of the material. Application involves demonstrating the ability to use learned concepts in real-world contexts, which is the ultimate goal of education. Forms of application may include:

- a. Solving problems
- b. Creating maps, charts, or models
- c. Composing essays
- d. Performing practical tasks
- e. Designing new types of assessments

Herbartian Lesson Plan Framework

Date.....

Class.....

Period.....

Subject.....

Topic.....

General Aims

These aims are established by the teacher based on the subject matter and the students' initial knowledge. For instance: to enhance students' understanding of grammar.

Specific Objectives: These objectives derive from the general aims and are tailored to the topic and student level. They are detailed in terms of knowledge, skills, or appreciation, and expressed in behavioral terms. For example:

- (i) Students will be able to recall the definition of a noun.
- (ii) Students will be able to list examples of nouns.

Introduction: In this phase, the teacher uses their experience and insight to connect new knowledge with the students' existing knowledge. The topic is not introduced directly but emerges through students' responses to preliminary questions.

Teaching Resources: Visual and auditory aids are chosen based on the topic to support the lesson.

Prior Knowledge: This section notes what students already know. For instance: Students are acquainted with figures of speech and understand that nouns are naming words.

Objective Statement: The teacher articulates the lesson's goal, incorporating students' input. For example: "Today, we will explore nouns and their types."

Development: The teacher formulates questions to guide the development of the topic. These questions are organized logically, progressing from simple to complex, in line with the topic's structure.

Explanation: The teacher provides detailed explanations in response to the development questions. The content is delivered in a question-and-answer format.

Blackboard Summary: A summary of key points and explanations is prepared on the blackboard by the teacher.

Review Questions: These questions are designed to reinforce student learning and assess their understanding of the lesson. They are posed after the blackboard summary has been erased. For example:

- a. How would you define a noun?
- b. Can you list several examples of nouns?

Homework Assignments

At the end of the lesson plan, students are given assignments related to the topic. The goal of these assignments is to reinforce, organize, and deepen their understanding of the lesson for better retention.

Benefits of the Herbartian Approach

Structured Teaching: Each step in the Herbartian model is arranged in a logical sequence, helping new teachers recognize potential mistakes in advance. This systematic approach ensures that teaching remains well-organized without compromising originality.

Conceptual Integration: Herbart proposed that presenting new ideas in connection with students' existing, albeit unconscious, thoughts brings those thoughts to the forefront of their minds. This interaction between new and prior knowledge, termed apperception by Herbart, helps integrate new information effectively.

Application of Inductive and Deductive Methods: The approach employs both inductive and deductive reasoning. New concepts are introduced through examples and generalizations, which is an inductive method. Subsequently, these generalizations are applied in practice, reflecting the deductive method. This blend of reasoning techniques is a core feature of the Herbartian model.

Review and Reinforcement: During the review phase, questions are designed to consolidate and apply the knowledge acquired, ensuring that students can use what they have learned in new contexts.

Integration of Knowledge: Herbart viewed knowledge as an interconnected whole. This perspective allows for linking prior and new knowledge, as well as connecting various subjects within the curriculum, fostering a cohesive learning experience.

Drawbacks of the Herbartian Method

Rigid Teaching Method: The prescribed steps in the Herbartian approach restrict the teacher's flexibility, limiting their ability to introduce personal insights into the lesson. This rigidity can detract from the teacher's originality, making the method appear mechanical.

Ignoring Individual Differences: In the Herbartian method, uniform questions are posed to the entire class, which does not account for individual student differences and needs.

Limited to Knowledge-Based Lessons: The Herbartian approach is primarily applicable to lessons focused on knowledge acquisition and is less effective for lessons aimed at developing appreciation or skills.

Teacher-Centric Activity: The method requires the teacher to be highly active, which can result in less student engagement. Ideally, students should be more active participants, but this method does not encourage such student-centered activity.

Unnecessary Generalization: Generalization is not always relevant for subjects like language, geography, history, music, and arts. Therefore, the full five-step process may not be needed for these areas.

Lack of Interest: The Herbartian approach applies a uniform sequence to teaching all subjects, potentially ignoring students' interests, attitudes, and developmental stages. This can make the teaching process monotonous and reduce student enthusiasm.

❖ Check your progress

4. What is Herbartian lesson Plan?

5. What are the main steps of Herbartian lesson Plan?

4.4 Skill lesson

A skill lesson focuses on building and enhancing specific abilities, whether manual or otherwise. Examples of such skills include reading, writing, speaking in different languages, singing, modeling, handling and using equipment, and performing gymnastics. The importance of skill subject in education is very important because it helps the students for holistic development. According to L.P. Jacks "Short of skill, the perfect health, even of body is impossible"

Steps in skill lesson

1. **Preparation:** It is the first step as the mind of the child should be motivated for the learning the preparation phase have to be made with proper instruction. The preparation steps may take different forms. Such as exposure to Art and Craft, Take students to art galleries, museums, and similar places. Show them examples of craftwork and models of high-quality projects. Introduce them to the tools and environment required for the activity to foster a positive attitude toward learning.
2. **Setting the Aim:** Clearly explain the learning objectives to the students to ensure they understand the goal and are fully engaged.
3. **Presentation and Rule Explanation:** Demonstrate the new skill while providing a brief set of guidelines for students to follow. Allow students to handle and closely observe the model. Focus on listening, observing, and understanding during this phase, keeping the instructions concise to maintain creativity.
4. **Practice:** Students will practice the demonstrated skill, mimicking the teacher's actions. The teacher actively supervises and guides each student, offering individualized support. This step is crucial and often the most time-consuming.
5. **Correction:** Provide feedback on students' practice, pointing out mistakes and demonstrating the correct technique. Reiterate the rules if necessary.
6. **Consolidation and Refinement:** Students continue to practice, incorporating corrections and striving for improvement. The cycle of practice and correction may be repeated multiple times.

Key Considerations:

- **Motivation:** Ensure students are eager to learn the skill by providing proper motivation.
- **Appropriate Skill Level:** Choose skills that are challenging yet achievable for the students.
- **Time Management:** Ensure the activity duration is manageable.
- **Creativity:** Encourage self-expression and creativity. Avoid imposing too many rigid rules and techniques, as true art is spontaneous and free from strict conventions.

Fostering Creativity in Skill Lessons

To nurture the creative aspect of skill lessons, it is essential to provide students with the freedom to create without imposing unnecessary restrictions. This approach allows them to express beauty through their work, facilitating the development of their highest

potential. The teacher's role in this process is to guide and support students in independent creation, emphasizing the importance of creativity over rigid adherence to rules and techniques.

4.5 Appreciation lesson

- **Concept of an Appreciation Lesson**

According to Mursell, aesthetic appreciation is a fundamental aspect of human mental life and behavior. He emphasizes that it is the responsibility of general education to cultivate this appreciation in all individuals, not just a select few. An appreciation lesson focuses on the emotional development of children, aiming to help them recognize and enjoy beauty through various forms, colors, or sounds. Unlike lessons that prioritize the acquisition of knowledge or skills, appreciation lessons emphasize the emotional and aesthetic experiences of students.

The popularity of appreciation lessons has surged in recent years, with educators demonstrating a strong commitment to nurturing their students' love for beauty in literature, music, visual arts, and craftsmanship. Modern technological advancements have provided teachers with an array of tools that allow them to bring the performances of top-tier artists into the classroom affordably, thereby addressing the limitations previously faced by schools.

In the words of Panton “its aim is to discern and enjoy beauty in specific works of art, literature and music,” which means the objective of appreciation lessons as the ability to discern and enjoy beauty in specific works of art, literature, and music. Similarly, Smith and Harrison describe the appreciation lesson as an invitation to observe or listen to something beautiful, allowing students the leisure to enjoy it in a supportive atmosphere. The teacher's role is to use suggestion to enhance the appeal of the experience, with the outcomes allowed to develop naturally.

- **The main features of an appreciation lesson typically include:**

- a. Engagement and Enjoyment
- b. Immersive Experience
- c. Holistic Approach
- d. Personal Reflection.
- e. Creative Expression

- f. Teacher as Facilitator
- g. Sensitivity to Environment
- h. Adaptability
- i. Respect for Individual Responses
- j. Long-term Impact

- **Technique of an Appreciation Lesson**

According to Ryburn, an appreciation lesson should be conducted with a playful spirit, making it less structured than other types of lessons. Smith and Harrison emphasize that for young children, preparation and expectation are enough. The lesson should awaken anticipation and pleasure, using various techniques to make the experience vivid.

Preparation: Creating the right physical environment is essential for setting a suitable atmosphere. The space should be free from disturbances. Hayward suggests that students should not have any negative associations with the lesson. This means avoiding harsh voices, unsympathetic expressions, gloomy weather, crowded classrooms, or frequent interruptions. The teacher should ensure proper temperature, ventilation, and pleasant decor. Difficult words or phrases should be addressed in a prior lesson. Explanations should be kept separate from the appreciation aspect. For instance, a lesson on rain might be more impactful on a rainy day, and a nature poem could be more appreciated outdoors. Also, pictures can be used as introduction.

Presentation: During the presentation, the teacher should consider themselves as the true author, utilizing various methods to stimulate the students' imagination. Poems can be recited, pictures shown, and music played. The lesson should be presented as a cohesive whole without interruptions. Wilkes cautions against over-analyzing literature, as it can diminish appreciation. The teacher should guide students on how to appreciate the poem, share their own insights, and encourage students to express their opinions and engage in discussions freely. Pinsent notes that enjoyment can't be commanded and that teachers should avoid using artificial methods to elicit appreciation. Students may not always express their feelings openly, but this doesn't mean they lack appreciation. Like a tender plant, appreciation requires careful nurturing, not forcing.

Practice and Creation: Students should be encouraged to re-read poems, play music, or sing together. They should also be motivated to create their own plays, poems, dialogues, drawings, or paintings. Ryburn believes that students can learn to appreciate good poetry,

prose, or art by attempting to create it themselves. Even if their initial efforts are crude, these activities have significant educational value and help them appreciate similar lessons more effectively.

- **General Principles for an Appreciation Lesson**

- I. The teacher must have genuine enthusiasm and appreciation for the lesson.
- II. The environment should be peaceful and quiet.
- III. The material should be appropriate for the students' age, abilities, and interests.
- IV. Difficult phrases and words should be explained before the lesson.
- V. The teacher should adopt the role of the author.
- VI. The teacher should have strong suggestive abilities.
- VII. Appreciation should not be forced on the students.
- VIII. Students should be encouraged to explore similar subjects.
- IX. Encouraging students to write their own poems can enhance their appreciation skills.

By following these principles, teachers can create effective appreciation lessons that foster a genuine love for literature, art, and music in their student.

The main aim of appreciation lessons is enable children to appreciate and enjoy the beauty through the form, colour or sound.

❖ **Check your progress**

6. What is the primary focus of a skill lesson in education?
7. List the first step in the process of a skill lesson.
8. According to Mursell, what fundamental aspect of human mental life does an appreciation lesson aim to cultivate?
9. Name one key feature of an appreciation lesson.

4.6 Teaching competencies for an effective lesson plan

The Education Commission of 1964-66 emphasized the pivotal role of teacher competence, character, and quality in shaping educational outcomes and national development. Similarly, the National Policy on Education in 1968 underscored that the teacher's personal qualities, educational qualifications, and professional competence are paramount for educational success. The National Commission on Teachers II in 1983-85 highlighted the community's recognition of professional competency and improved benefits as crucial factors in enhancing the status of teachers. Teacher competence, as defined by the Commonwealth Report of 1974, encompasses knowledge of child development, subject matter, and effective teaching methods, coupled with positive attitudes and moral values transmission. David G. Rayns categorized teacher competencies into skills derived from educational principles and subject expertise, and personal traits influencing relationships and behavior. Teaching skills encompass various stages like planning, introduction, presentation, and closure, focusing on objectives setting, content organization, questioning techniques, and the use of instructional aids. Technical skills in teaching involve specific behaviors such as effective lesson initiation, stimulating student engagement, using non-verbal cues, and reinforcing student participation through praise and questioning techniques.

- **Essential technical Skills for teaching**

- i. **Variety in Engagement:** Utilizing diverse materials, movements, gestures, and interaction techniques to maintain student interest and engagement.
- ii. **Introduction Preparation:** Clarifying lesson goals, connecting with prior student knowledge through analogies or demonstrations, and posing stimulating questions to prepare students for learning.
- iii. **Lesson Recapitulation:** Helping students consolidate new knowledge by reviewing key concepts, relating them to previous learning and apply them to different contexts.
- iv. **Effective Non-Verbal Communication:** Using pauses effectively and employing facial expressions, body language, and gestures to enhance communication and classroom management.
- v. **Encouraging Participation:** Encouraging and acknowledging student responses through verbal praise, acceptance, and non-verbal cues like nodding and smiling.
- vi. **Skillful Questioning:** Avoiding unnecessary repetitions and structuring questions effectively to promote student engagement and higher-order thinking.
- vii. **Understanding Non-Verbal Cues:** Sensing and addressing students' non-verbal cues and responses to ensure understanding and participation.

- viii. Visual and Media Utilization: Employing visual aids such as diagrams, charts, and multimedia presentations to illustrate concepts and enhance student comprehension.
- ix. Clear and Engaging Communication: Delivering clear and engaging explanations of subject matter while maintaining student interest through effective verbal communication.
- x. Strategic Repetition: Emphasizing key points and concepts through strategic repetition to reinforce learning and retention.

❖ Check your progress

- 10. What role did the Education Commission of 1964-66 emphasize in shaping educational outcomes?
- 11. Name one essential technical skill for teaching related to non-verbal communication.

4.7 Let us sum up

In this chapter we studied about the meaning and three types of lesson plan. This chapter discussed how the different types of learning covers essential strategies for effective teaching learning process. Also we explore about different types of skill regarding teaching competencies. So, this chapter undergoes the significance of flexibility and adaptation in teaching methods to support optimal learning outcomes for all types of students.

4.8 Further reading

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- ❖ Mangal K.S and Mangal Uma, (2009), Principles, Methods and Techniques of Teaching, PHI Learning Pvt. Ltd., Rimjhim House, 111, Patparganj Industrial Estate, Delhi - 110092, India
- ❖ Dash. N. B, (2011), The Teacher and Education in Emerging Indian Society Neelkamal Publications Pvt. Ltd. Sultan Bazar, Hyderabad - 500095, Telangana, India

4.9 Answer to check your progress

1. Lesson planning is a blue print of steps of teaching which is dynamic in nature and it evolves with teachers' experience, becoming more effective over time.
2. This planning typically includes: Yearly lesson planning ,Unit lesson planning,
3. Daily lesson planning
4. Objectives for student learning, Teaching/learning activities , Strategies to assess student understanding
5. Johann Friedrich Herbart (1776-1841), is a German philosopher and educator. Herbart's ideas have greatly influenced educational practices, particularly in the 19th and early 20th centuries.
6. Clearness, Association, System, Method.
7. The primary focus of a skill lesson is to build and enhance specific abilities, such as reading, writing, speaking, singing, and using equipment.
8. The first step in the process of a skill lesson is Preparation.
9. According to Mursell, an appreciation lesson aims to cultivate aesthetic appreciation.
10. One key feature of an appreciation lesson is Engagement and Enjoyment.
11. The Education Commission of 1964-66 emphasized the pivotal role of teacher competence, character, and quality.
12. Effective Non-Verbal Communication.

4.10 Model questions

- 1) Explain the concept of lesson planning and its significance in the teaching-learning process. Discuss the key components of an effective lesson plan and how they contribute to student learning.
- 2) Discuss the need and importance of lesson planning for teachers.
- 3) Compare and contrast the advantages and disadvantages of the Herbartian lesson plan model. In your opinion, how can teachers adapt this model to address its limitations while retaining its benefits?
- 4) Define the characteristics of good lesson planning and explain why these characteristics are essential for effective teaching. Provide examples of how a teacher might implement these characteristics in a classroom setting.
- 5) Explain the significance of skill lessons in education and detail the steps involved in conducting an effective skill lesson.

- 6) Discuss the concept and main features of an appreciation lesson, including the techniques used to foster appreciation among students.
- 7) Analyze the teaching competencies required for an effective lesson plan as highlighted by various educational commissions and reports.
- 8) Examine the general principles for conducting an effective appreciation lesson and how these principles contribute to fostering a genuine love for literature, art, and music among students.
