

UNIT – III

APPROACHES OF TEACHING

Introduction

Every work requires a plan of action for its perfect completion. In the same way teaching process also requires a systematic plan. A lesson plan represents a single teaching unit for a class period. The teacher should know the objectives of teaching. Designing test is very important part of assessing students understanding of course content and their level of competency in applying what they are learning.

Approaches of Lesson Planning

A Lesson Plan as a teaching outline of the important points of a lesson arranged in the order in which they are to be presented; it may include objectives, questions to be asked, references to materials, evaluation, assignments, etc. Lesson planning is a product of short term or micro level planning involving:

1. Identification of definite objectives
2. Selection of appropriate content and activities
3. Selection of procedures and methods for presentation of the content
4. Selection of evaluation exercises and
5. Selection of follow up activities etc.

Generally various approaches are used to make a lesson plan.

A brief description is provided:

1. Herbartian approach:

John Fredrik Herbat, a German philosopher and educationist (1776 -1841) advocated pedagogy – based lesson planning. It is based on apperceptive mass theory of learning. All

the knowledge and information is to be given from outside by the teacher because the student is considered similar to a clean slate. For the students, if an old knowledge makes a base for new knowledge (his previous knowledge or experiences), it may be acquired easily and retained for a longer period. Herbart has given five steps: Introduction, Presentation, Organization, Comparison and evaluation. The main focus is on content presentation.

2. Unit Approach of Morrison:

It is based on unit transaction and planning. The Morrison's lesson plan of teaching is cyclic; Morrison has given five steps for his 'cyclephase' of teaching: Exploration, Presentation, Assimilation, Organization, and Recitation.

Exploration:

The teacher explores various methods and possibilities to motivate the students, to arouse the curiosity and to maintain the interest of the students. This is the preparation step where the teacher could plan for the success of the lesson.

Presentation:

This step is basically common to all the approaches of lesson planning which involves the selection and use of different methods to present the subject matter to the students.

Assimilation:

The third step involves intensive learning, and deep understanding of the subject matter that facilitate effective communication of the concepts.

Organization :

This is important step in unit approach to lesson planning as it determines the extent to which students are able to reproduce the material of the unit in writing without may external help. The ability of the teacher to enable his students to reproduce the knowledge reflects the efficiency of the teacher.

Recitation:

Recitation in unit lesson planning means that an individual student is able to reproduce the same text orally on the completion of the lesson by a teacher.

3. Evaluation Approach of B.S. Bloom:

It is objective centered not content centered. The focus in this approach is an objective based teaching and testing. It takes into consideration the learning objectives and teaching methods on the basis of the objectives and to assess learning outcomes. Then, a decision can be taken about objectives of learning are achieved or need to provide the revision.

The approach involves the following steps.

Formulating educational objectives

Creating learning experiences

Evaluating the changes of behavior

Formulating educational objectives

In this approach to lesson planning the first step is to formulate objectives and state them in clear and specific behavioural terms. This requires the teacher to assess the entry behavior of the students so that he / she will be able to lead them towards the terminal behaviours which are otherwise the learning outcomes.

Creating Learning Experiences

After selecting and stating the specific outcomes of learning, the teacher has to plan and provide the most appropriate learning experiences that would result in the desirable changes in behavior. This is the step where the teaching and learning takes place. These learning experiences may be varied and different depending on the nature of the content, the learner and the type of learning outcome. This type of lesson planning forces the teacher to consider a variety of activities that are meaningful and goal – oriented. Such activities ensure greater student involvement in learning at every step and keep the students active

and alert.

Evaluating the changes of behavior

At this step the teacher selects suitable evaluation tools and techniques to assess the changes in behavior. Thus evaluation becomes an integral part of teaching. As and when a learning experience is provided, its effectiveness in attaining the objective is immediately evaluated. If the outcome is not favourable, the teacher can plan an alternative learning experience to achieve the objective.

According to evaluation approach the format of the lesson plan may be as follows—

Teaching Point	Objectives & Expected Behavioural Changes	Teaching – Learning Situations		Teaching Method & Technique	Evaluation
		Teacher’s Activities	Student’s Activities		

4. The Indian Approach (RCEM Approach) :

RCEM approach is advocated by the Regional College of Education, Mysore and hence the name. The rationale behind this approach is a system approach in education. A system approach demands the presentation of information in a systematic manner.

There are three stages or aspects in RCEM approach – They are:

- The input, otherwise known as Expected Behavior outcomes (EBOS)

- Process, otherwise known as communication strategy and
- Output, otherwise known as Real Learning Outcomes (RLOS)

Input (EBOS)

The first stage in RCEM approach is concerned with the identification of the behavioral objectives pertaining to a particular lesson or content.

Process

This aspect of the lesson planning involves presentation and integration of knowledge and skills. The emphasis is on how well the knowledge and skills are communicated to the learners.

The Output or RLOS

The output indicates the terminal behavior or change in behavior of the students after learning. The output stage in lesson planning represents the following phase in the lesson.

Input	Process		Output
(EBO's)	Learning Experiences		(RLO's)
	Teacher's Activities	Student's Activities	

5. Project approach originated by Dewey and W.H. Kilpatrick:

It stresses on group activity, social activity, self activity, and related to real life experiences. It is a pre – planned work completed by a person or group in social condition. Due to many reasons, it is not necessary that a lesson plan made by a teacher will be successful at every place and time. Many factors influence lesson planning such as

- Availability of teaching aids

- Strength of students in the class
- Composition of the class (Age wise)
- School location (Area wise)
- The nature of the topic (Medium wise) etc.

a. Steps in writing Lesson Plan:

Major steps involved in a lesson planning are as follows:

- i. **General Entries:** Subject, Class, date, period, duration of the period, Name of the school and topic of the lesson.
- ii. General Objectives
- iii. **Specific Objectives and expected change in behavior**
- iv. Teaching / Audio – visual aids
- v. **Method and Techniques of Teaching**
- vi. Previous knowledge of the child
- vii. **Introduction** – Testing Previous knowledge and experiences related with the new knowledge or topic of the lesson.
- viii. **Statement of Aim** – Statement of teacher related to the topic e.g. today we will study
..... (the name of the topic)
- ix. **After Teacher’s statement** – The topic is written on the black – board
- x. **Presentation of lesson** – The following may be followed.

Content	Specification of behavioral objectives	Learning Experiences (Teacher / Learner Activities)	Evaluation

This format is a specimen, not a universal format of lesson planning. It may differ from teacher to teacher as well as college / University to other college. The format is different from the point of view of organization of contents, the steps remain the same.

Content:

The subject matter to be taught in the class by the teacher. The content of the lesson is divided into small parts. Then each part is treated as teaching point. Generally a lesson should contain at least two or three teaching points.

Specification of Behavioural Objectives:

The expected learning outcomes of the students are mentioned in the form of action verb is called Specification. It denotes the expected overt behavior of the student that can be observable and measurable. Example: Recognizes, Defines, Identifies, etc.

Learning Experience:

Teacher's Statements, developmental questions, demonstrations, experiments and other activities performed by the teacher in the classroom. Student's listening, writing, watching, giving responses and other activities performed in the classroom.

Evaluation:

After completing the lesson, the teacher evaluates the performance of the class that to what extent students have achieved the objectives of the lesson taught in the classroom. Evaluation may be written or oral. Short answer questions should be asked objective type of questions, are best for evaluation of the lesson.

Home work:

It should be based on the application of acquired knowledge.

LESSON PLAN

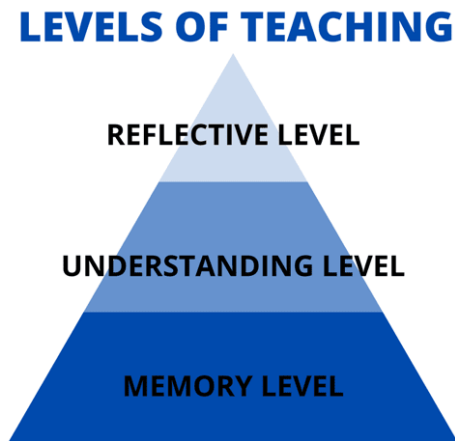
A lesson plan is **the teacher's guide for running a particular lesson**, and it includes the goal (what the students are supposed to learn), how the goal will be reached (the method, procedure) and a way of measuring how well the goal was reached (test, worksheet, homework etc.).

Levels of teaching

We all know that teaching is a purposeful activity. Through teaching the teacher brings a desirable change in the learner. Both the concepts teaching and learning are interrelated to each other. Development of all-round personality of the learner is the final goal of teaching and learning. During teaching an interaction takes place between an experienced person (teacher) and an inexperienced person (student). Here the main aim is to bring change in the behavior of the student.

Teachers teach students at three levels. They have to keep in mind about the developmental stage of the learners so that desired educational objectives can be achieved. These three levels are

1. Memory level: Thoughtless teaching
2. Understanding level: Thoughtful teaching
3. Reflective level: Upper thoughtful level



Memory level of teaching

It is the first and thoughtless level of teaching. The objective of teaching at this level is just to impart information to students . The learner is required to memorize the subject matter and get the information stored in long term memory .It is concerned with memory or mental ability that exists in all living beings. Teaching at memory level is considered to be the lowest level of teaching. At this level,

- the thinking ability does not play any role.
- students only cram the facts, information, formulas and laws that are taught to them.
- the teaching is nothing but learning the subject matter by rote. [Bigge, Morris L(1967)]

- The role of the teacher is prominent and that of the student is secondary.
- The study material is organized and pre-planned. The teacher presents the study material in a sequential order.

Memory level teaching lacks insight. Psychologically, it is cognitive level teaching.

Methods used

Teacher dominated methods are used like drill ,review and revision and asking questions

Drill means repetition or practice for the purpose of attaining proficiency in memorizing the material

A review and revision is revising the elements to related them with new experience and to form a new association for the development of new skills or learning to solve new problems

Asking the question is to examine whether or not the knowledge level objectives of teaching have been achieved.

Role of teacher

- Dominating ,active and authoritarian role
- He is the authority to instruct deliver direct control and evaluate the performances
- Take initiatives, present the subject matter ,directs the learner to do the activity in desired manner, plan exercises
- Right from the selection of subject matter to its evaluation, the key process of teaching learning remains with the teacher

Role Of Learner

- There is a passive role of the learner in the memory level .
- Passive learner or listener is desired to do as directed by the teacher .
- Instructional material delivered by the teacher has to be memorized in a mechanical manner.

Evaluation system

Oral and written tests are used to test the memory of the students

In evaluation

- Written test
- Short type test
- Recall type
- Recognition type
- Multiple choice
- Alternative type and matching type of test is employed

Merits of memory level teaching

1. Useful for children at lower classes. This is because of their intellect is under development and they have a rote memory.
2. The role of the teacher is important in this level of teaching and he is free to make choices of subject matter, plan it and can present it at will.
3. The knowledge acquired at memory level teaching forms a basis for the future i.e. when student's intelligence and thinking is required.

4. Memory level teaching acts as the first step for understanding and reflective levels of teaching. It is pre-requisite for understanding level teaching.

Demerits of memory level teaching

1. This does not contribute to the development of the student's capabilities.
2. Since at this level student learns by rote, the knowledge gained does not prove helpful in real life situations as it does not develop the talents of students.
3. The pupils are kept in strict discipline and cramming is insisted on this teaching.
4. Intelligence does not carry any importance in this type of teaching and it lacks motivation.
5. Not suitable for higher classes
6. No room for initiation and self learning for students
7. Loss of retention and recall

Model of MLT

This model was presented by **Herbart**. Like other two models this model is also based on the following four points:

- I. Focus (Objectives)
- II. Syntax (Methods and Strategies)
- III. Social System (learning environment)
- IV. Support system (Evaluation)

1. Focus: This level of teaching focuses on the following points

- I. Cramming facts and principles by students and their proper retention.

II. Presenting the crammed materials when needed in written or oral form.

III. Presenting subject-matter to students like an autocrat.

2. Syntax: Herbart has divided the memory level of teaching into **five** categories. A teacher adopts these five steps one by one in order to create proper learning environment.

I. Preparation and statement of objectives: In the preparation stage, the teacher asks few questions in the class in order to check previous knowledge of students and arouse their curiosity. The teacher brings the students to the main topic gradually and when topic is clear to students, teacher repeats the topic orally and writes it on the blackboard.

II. Presentation: At this stage, the teacher presents new knowledge before his students on the basis of their previous knowledge in such a manner that a bond is established between new and old knowledge. The teacher keeps the following four points into his mind:

- (a) The teacher does not deviate from the subject matter slightly.
- (b) The type of knowledge which is to be given to students, is prepared by the teacher in advance, i.e., advance lesson planning is made
- (c) The teacher gives such knowledge to his students that can be evaluated.
- (d) At this stage the teacher tries to gather maximum information from his students.

III. Comparison and Association: At this stage the teacher associates different facts, events and subjects in such a manner that they can be easily compared

with each other, e.g. giving the knowledge of antonyms and synonyms, comparing the similarities and dissimilarities of the life incidents and characters of gentlemen-real or created ones. This makes the knowledge fixed into the minds of learners.

- IV. Generalization:** At this stage the teacher teaches how to develop new rules and principles on the basis of given facts and information, i.e., obtained knowledge is generalized in similar situations.
- V. Application:** In the last stage the learnt knowledge is applied in real life situations, i.e., use of words in sentences or making stories with the help of sentences etc.

The above stages given in the syntax show that memory level of teaching also needs abundant use of intellect and creativity. Mere cramming of facts or principles without understanding is not enough.

- 3. Social system:** The social system of MLT is that teacher's behavior dominates over students' one. He enjoys full commands over his students. Almost no freedom is given to students to express themselves. Teacher gives them chance to take part in the lesson through the use of motivation techniques only, i.e., the freedom of student's lies of the teacher.
- 4. Support system:** In MLT, whatever students have gained is tested using written or oral tests. Tests may be objective and essay type both. Exactness of the response from the side of students is important. Full marks are given to students only when he reproduces exactly what he is taught by his teacher.

Suggestion for Improving MLT

A teacher must heed to the following suggestions in order to make this level of teaching a

success.

- Presented material should be meaningful and interesting for students only then it will be retained by them.
- Subject matter should be presented to students systematically in a logical sequence only then proper relationship can be established between new and old knowledge.
- When students are tired physically or mentally, they should never be taught.
- Feedback and reinforcement must be given to students regularly for motivating them.
- Recall and rehearsal of the learnt knowledge should be done at short intervals. Delay leads to decay.
- Students should not only cram the subject matter but they should also rehearse it in writing and these should be done by using part memory method.

Understanding level

Understanding implies knowing the meanings of things and concepts, grasping ideas, interpreting some relationship, comprehending the facts and inferring one thing from some other

Understanding something is to perceive the meaning, grasp the idea and comprehend the meaning. In the field of Education and Psychology, the meaning of ‘*understanding*’ can be classified as

- seeing the total use of facts
- seeing relationship
- a generalized insight

The teaching at the understanding level is of a higher quality than the one at the memory level. It is more useful and thoughtful from the point of view of mental capabilities. At this level of teaching, the teacher explains the student about the relationship between principles and facts and teach them how these principles can be applied. Memory level teaching barrier is essential to be crossed for this level of teaching.

As compared to memory level teaching, the understanding level teaching has greater merit. This enables students to have complete command over subject material. In the understanding level role of the teacher is more active. The students at this level are second any. At this level, no cramming is encouraged. The new knowledge acquired at this level is related to the earlier knowledge gained. A generalization is made on the basis of facts and the facts are used in the new situations.

At this level the learners are required to comprehend factual information to know the meaning of different concepts and their relationships and to apply facts concepts and principles.

- It is supported by the herbartian theory of appreciation which states that this is level of teaching which seeks the learner to acquaint himself with the relationship between the facts and principles
- Here the mental development of the learner is at a higher level than memory level
- His cognitive abilities are well developed
- He can think ,reason out, imagine ,can present things logically ,can analyze and synthesize and can evaluate the relationship between the principles and the facts

John Piaget stated that, learner at this stage needs to

- Comprehend a large number of concepts, elements, facts principles, to know the relationship between the facts and principles and to make a generalization .

Methods used

- Lecture method
- Lecture demonstration method
- Discussion method
- Inductive and deductive method
- Exemplification and explanation

Evaluation

The teacher has to evaluate the ability to

- Comprehend
- Grasp
- Synthesize
- Generalize
- The insight to apply the generalized principles further so
- Besides asking questions for oral testing ,written testing should be conducted

Role of teacher

The teacher is a prominent figure not so authoritarian and dominating.

Role of the learner

The role of learner in understanding the level of teaching is not so passive, he may put questions to clarify his doubts.

Merits of the understanding level of teaching

1. At this level of teaching students to make use of their thinking abilities.
2. Knowledge acquired at this level forms the basis of the reflective level of teaching.
3. Here the teacher presents subject matter before the students in an organized and sequential form. The new knowledge acquired is related to the previously acquired knowledge.
4. Here the students do not learn by rote. Here they learn by understanding the facts and information and their use and purpose.

Demerits of the understanding level of teaching

1. It ignores higher cognitive abilities
2. Less emphasize on intrinsic motivation
3. No individualized learning.
4. Teacher centered

Model of ULT

ULT model prepared by **Morrison** is given below. This model is basically based on unit approach of lesson planning.

1.Focus: Getting complete mastery over the subject-matter by the students is the focus of teaching here. The learning of students should be so perfect that students are not less than the teacher at least for the subject matter taught to them. Students clearly understand what

they are being taught in the class.

2.Syntax: Syntax of the model is divided into five sub stages of teaching:

Exploration: Three activities are performed by the teacher here:

- He finds out the entering behavior of students by asking questions from them. The teacher especially sees whether memory level of teaching is complete or not.
- He analyses the content and divides it into different units. Then he arranges all these units in a logical sequence so that lesson can be understood easily.
- He selects different teaching strategies suitable to the presentation of each unit so that different units of the content may be presented by different strategies and techniques.

Presentation:

The teacher does the following three activities here:

- He presents the subject matter unit by unit and maintains the logical sequence in between these units.
- While presenting the units of the subject matter, he receives the feedback from his students whether each unit has been clearly understood or not.
- He recapitulates the subject matter till it is clearly understood by almost all the students of the class.

Assimilation:

This is the third stage of teaching. After presenting the subject-matter to students the teacher provides them opportunities for the assimilation of the acquired knowledge. It requires the following activities on the part of the teacher

- The teacher provides the opportunities of generalization to his students through the process of assimilation. For example, after teaching a model problem to the students, he gives another problem of the same difficulty level to his students and asks questions from it.
- He takes the students to the depth of the subject matter by the process of assimilation, e.g., different methods of an extract are given for the purpose.
- He provides opportunities to each of his students to understand the content according to their respective leaning capacities.
- When students do self-study during the activity of assimilation, the teacher supervises them.
- After self-study, the teacher tests the students whether they have got mastery over the subject matter or not. If students have acquired the capacity of generalization, the assimilation process is said to be completed.

Organization: After assimilation, the students either enter organization stage or recitation as the nature of the subject-matter demands. In the organization stage, the students are expected to reproduce the subject-matter in his own language in written form without taking help from anybody. If students are able to do so, the understanding level of teaching is said to be accomplished.

Recitation: If after assimilation subject-matter is to reproduce orally by the students instead of written form, it is called recitation. The teacher must be very careful in organizing the activities of recitation or organization; otherwise the students will reproduce the learnt material by cramming. The material reproduced in organization or recitation should be in the learner's own language not in the language of the text - book.

3.Social System: The teacher is more active in the class than the students at the time of exploration and presentation. This is necessary to control the behavior of students. During

the process of assimilation both of them are equally active. After that learners are required to be more active than the teacher. Teacher motivates his students also during all these five stages of teaching. Thus, we see a fully democratic environment in the class.

4.Support System: Examination system constantly changes at this level of teaching. Sometimes written and sometimes oral tests are conducted and the tests may be objective and essay type

both. Organizational ability of students and their expression is much emphasized here as compared to mere recognition or recall, hence, objective type tests are least applied.

Suggestions for improving ULT

- Following suggestions are given for the benefit of the teacher to improve understanding level of teaching:
- Students should not be brought to the understanding level without passing the memory level of teaching. If they do not know the fundamentals of a concept, teaching at this level will only be a waste of time.
- Children should be brought to different stages of teaching from exploration to recitation in a sequential order. It means that once the teacher has not accomplished the presentation stage, he should not take his students to the assimilation stage.
- Teacher should motivate his students the stages of teaching. Reinforcement techniques should be regularly applied to motivate the students.
- The teacher should take initiative himself to solve the individual problems of his students. It is because all learners cannot learn at equal speed. It requires that teacher should test his students at short intervals and change his accordingly.

- The teacher should have full command over the subject only then he can enable his students to comprehend the subject-matter to the desired extent.
- The teacher should raise the aspiration level of his students to develop as high as possible.
- The teacher should be able comprehensive questions from the textual matter. These questions will open new avenues learning.
- While evaluating the understanding power of his students, the teacher must be very careful so that answers are not supplied on the basis of memory.

Reflective level of teaching

This level is also known as introspective level. This level of teaching is the highest level of teaching learning activity . Reflecting on something means giving careful thought to something over a period of time. It also means thinking deeply about something.

Reflective level of teaching is considered to be the highest level at which teaching is carried out.

- It is highly thoughtful and useful.
- A student can attain this level only after going through memory level and understanding level.
- Teaching at the reflective level enables the students to solve the real problems of life.
- At this level, the student is made to face a real problematic situation. The student by understanding the situation and using his critical abilities succeeds in solving the problem.

- At this level emphasis is laid on identifying the problem, defining it and finding a solution to it. The student's original thinking and creative-abilities develop at this level.
- The role of the teacher in this level of teaching is democratic. He does not force knowledge on the students but develops in their talents and capabilities.
- The role of the students is quite active.
- reflective level of teaching is that which is problem-centered and the student is busy in original imagination.

Morris L. Bigge defines reflection as, " careful, critical examination of an idea or supposed article of knowledge in the light of testing evidence which supports it and the further conclusions towards which it points.

Reflective level teaching does not depend upon the memorization ,understanding of concepts and their application only; it demands the use of higher mental processes such as

- Reasoning
- Thinking
- Analyzing concepts
- Imagination
- Ideas and thoughts
- Other bodies of knowledge critically, finding out the facts.
- Solve problems

Role of teacher

Role of teacher is not so dominating and authoritarian. He is responsible for the creation and maintenance of the democratic, dynamic atmosphere where the teaching learning activities can be carried out smoothly.

Methods used

- Problem solving method
- Investigating projects
- heuristic method
- Experimental method
- Inquiry oriented method
- Analytic method

Evaluation system

The evaluation system at the reflective level of teaching should test the higher order cognitive abilities like

- reasoning
- creativity
- original thinking
- problem solving
- critical thinking etc.,

Merits of reflective level teaching

1. The teaching at this level is not teacher-centered or subject-centered, it is learner-centered.
2. There is an interaction between the teacher and the taught at the reflective level teaching.
3. At this level, teaching is appropriate for the higher class.
4. At this level, teaching is highly thoughtful and useful than the teaching at the memory or understanding level.
5. Provides maximum flexibility and self motivation.

Demerits of reflective level teaching

1. not suitable for small children at the lower level of teaching. It is suitable only for mentally matured children
2. At this level, the study material is neither organized nor pre-planned. Therefore students cannot acquire systematic and organized knowledge of their study courses.
3. There is excess burden to the teacher.

Model of RLT

This model was prepared by Hunt. The summary of the model is given below.

- 1. Focus:** The focus of the reflective level of teaching is to develop following abilities among learners.
 - I. To develop the ability of problem solving among students.

II. To develop creative and critical abilities among students.

III. To develop original and free thinking power of students.

2. Syntax: Syntax of the model is comprised of four stages of teaching.

(a) In the first step the teacher presents the problematic situation before his students.

(b) Students formulate the hypothesis after pondering over the problem seriously. In the example given above, they formulate one or two hypothesis on the basis of the consequences

(c) In the third step students apply reflective thinking and collect relevant data for testing the hypothesis.

(d) Hypothesis is tested in the last stage of teaching and conclusions are drawn. If reflective data do not support the hypotheses, they are rejected.

In medieval period greatly emphasized in the madrassa of Arabia, Turkey and Central Asia and Logic and philosophy were especially taught to students to develop reflective power.

RLT is different from problem solving method in the sense that in reflective level of teaching only imaginary problems are taken while problem solving method takes real problems of life to solve. The second difference is that former is a mental approach while later is a practical approach of teaching.

3. Social system: The learning environment is fully laissez faire at this level of teaching.

The atmosphere of the class is so open and free that students can express themselves

fully in the manner they like. Seminars and group discussions are also organized in the class for reaching the solution of the problem. Thus, we see that students are always more active in the class than the teacher. The task of the teacher is only to guide them.

- 4. Support System:** Objective type questions are not asked at all for evaluating the achievement of learners at reflective level of teaching. Evaluation is done either through essay type tests or through discussion, seminars and speech competitions. The more the views of a student are logical and convincing, the more he is given marks.

Suggestions for improving RLT

A teacher should keep the following suggestive points in view in order to make this level of teaching a success:

1. After creating the problem to be solved, the teacher should not interfere the thinking process of students at all. Students should reach the results themselves.
2. A teacher should raise the aspiration level of students as high as possible. High aspiration level can only lead to high level of reflection.
3. The teacher himself should be creative and highly intelligent.
4. The teacher should extract only such problems for reflective thinking which have direct relevance to the career of students. It means that problems must be useful for students.
5. Hypothesis which is the tentative solution of the problem should be formulated by students with the help of the teacher. Such hypothesis should never be formulated whose testing is not possible by the collected data.

6. In the evaluation process, if the teacher involves the students also, it is far better. It will help the teacher to critically examine the views. It means that the achievement of a student is evaluated not by his teacher only but his class fellows also evaluate him and criticize his views. Then final marks are allotted by the teacher on the basis of the total assessment.

Morrison Approach

Introduction

The Morrison Approach is a revolutionary approach to teaching that allows for personalized learning, critical thinking, and active participation in the learning process. The "Active Learning" system is based on the belief that people learn best when actively involved in the material being taught. It eliminates the traditional format of teaching from lectures to tests. In its place, the Morrison Approach has an approach of relating all topics to each other, carefully considering why teachers want their students to do something and holding their attention with colorful visuals, movement, and different interactive experiences.

According to the Morrison Approach, individuals construct their knowledge and meanings as they acquire experience. Understanding and reflecting on activities can help students reconcile previous ideas with new knowledge. Educators must integrate inquiry, exploration, and assessment to implement constructivism in the classroom. Students learn new concepts through the guidance of their teachers, who serve as facilitators.

The Morrison Approach Explained

The Morrison approach is a process that helps you to work out what kind of person you want to be, what your core values are, and how to achieve them in your life. The Morrison

Approach is a handy tool for helping people looking at changing careers or starting up new businesses, whether they're looking at changing jobs or starting their own businesses. The Morrison Approach is summarised in the following five phases.

Engage

The teacher begins by identifying knowledge gaps and understanding students' prior knowledge. To be ready to learn, students need to develop an interest in upcoming concepts.

It may be helpful for teachers to ask students what they already know about the topic or assign them the task of writing down what they already know. Additionally, students are introduced to the concept for the first time at this time. Teachmint's Digital Content offering helps introduce such topics by using multimedia, hence reducing time on the part of both the student and the teacher.

Explore

As students explore the new concept through concrete experiences during the exploration phase, they actively explore the new concept. As part of the scientific method, students may be required to communicate with their peers and make observations. The hands-on learning phase allows students to be engaged in the learning process.

Explain

If students need clarification on their understanding, their teachers will help them ask questions. Teachers need to get students to share the information they learned during the Explore phase before offering technical information directly during the Explain phase. In

addition, teachers may use video, computer software, or other aids to help students grasp the information.

Elaborate

The Morrison approach elaboration phase allows students to apply what they've learned. Their understanding will be deeper as a result of this. To reinforce new skills, teachers may request students to prepare presentations or conduct further investigations. During this phase, students can solidify their knowledge before being evaluated.

Evaluate

Both formal and informal assessments are possible with the 5E Model. Students can be observed during this phase so that teachers can ensure that they are grasping the core concepts. The way students approach problems is also useful to note if they approach them differently after learning something new. The evaluation also consists of self-assessments, peer assessments, writing assignments, and exams.

Application and Effectiveness

Students can experience a complete learning cycle when confronting new concepts for the first time using Morrison's Approach. Each phase of the Morrison Approach should be the basis for at least one lesson within two to three weeks. Overfocusing on each phase reduces the effectiveness of the structure, and students may forget what they learned.

The Role of the Teacher in the Morrison Approach

This teaching method is based on the idea that children learn best when they are allowed to participate actively in the learning process. The teacher and Morrison approach in teaching works by allowing children to follow their interests. The teacher will help them

with tasks that may seem difficult or confusing at first, but once they have mastered them, the child will be able to take over and complete the task independently. The teacher also helps children connect what they are learning and real-life situations, which helps them remember what they have learned better.

There is a strong belief that good teachers are the ones who can get the most out of their students. The Morrison approach is based on two main principles. The first principle is that teachers should be able to use all of the resources at their disposal to help students achieve success.

The second principle is that teachers should make an effort to understand their students' needs, interests, and abilities so they can better tailor instruction to meet those needs.

Morrison approach stress that effective teaching involves more than just delivering content (or information). It also involves helping students develop skills, attitudes, and knowledge that are important for them in life after school.

Finally, both approaches stress that it's important for teachers to be genuinely concerned about students' well-being—to understand what motivates them and how they learn best—to help students reach their potential as individuals and learners.

Learning with the Morrison Approach

Learning is a continuous process that occurs throughout life. It starts at birth and continues until death. The process of learning involves a variety of activities such as observing or listening to others; reading books and articles; watching, taking part in, and discussing various activities; making observations about one's immediate environment;

talking about what one has observed; thinking about what one has observed; deciding on conclusions based on those observations; analyzing information related to the conclusions.

For learners to learn effectively, they need the right motivation, an effective learning situation (environment), appropriate materials and methods, opportunities for practice and reflection, persistence in trying new things, and appropriate feedback from teachers or peers to help them improve their performance.

Conclusion

One of Morrison's most important aspects is that it focuses on reader response and not simply or exclusively on New Criticism. Instead, Morrison fully recognizes its value as a great reader and does not denigrate the power of that reader's response as central to the success of any novel. Its emphasis on reading for personal growth and an ethical life seeks to enlarge our vision beyond interpretive limits and toward a broader, more human perspective.

Steps in planning a lesson

Herbartian steps in Lesson Planning

Six formula involved in developing a lesson plan have been suggested by Herbart, J.F and thus, named after him as Herbartian steps in planning and are given below.

Preparation/ Introduction

As the name implies, this is a preparatory stage where students are prepared before actually presenting the topic before them. This is to spark interest among the students in

the topic. The teacher can use the blackboard to write the topic in order to introduce the topic to the students. With the help of this step, students will be able to prepare themselves for the lessons that follow. This stage of the Herbartian approach would make the students' minds ready for the lesson. Teachers can make use of charts, images, or maps to pique the interest of the new topic. Teachers can share a story or provide an experiment to pique students' interests in the new information.

Presentation

In this step of the Herbartian approach, new ideas are presented to the learners with the help of concrete objects or actual experiences. Students would be encouraged to relate their past experiences to this new topic in order to develop an interest in it. Teachers would ask a number of questions to students to understand more about their past experiences so that they can relate them to the new topic. In this way, learners become active participants in the learning process. Moreover, teachers can use charts, images, graphs, and other teaching aids to facilitate the learning process. Teachers would also summarize the topic of discussion to their students. The main objective of this step is to present the ideas in the most effective way to the students.

Association and Comparison

During this stage, the new knowledge is compared with the student's past experiences as isolated information can easily escape their minds. When they associate one information with another, knowledge retention would increase. By comparing this information, they would be able to devise their own definition of the learning concept. Students are urged to make comparisons and contrasts between the experiences. This is a useful method in the process of learning.

Generalization

Here, students are encouraged to draw conclusions from the comparisons. In the generalization stage, the teacher takes on the role of a facilitator and becomes a passive observer of the learning process. It is a practice that is crucial for the education of adolescents. This stage is intended to expand the capacity of the mind beyond perception and tangible thoughts. Students get an in-depth understanding of the ideas as students are actively engaged in the comprehension of the concept. This step of the Herbartian approach also fosters the critical thinking capabilities of students.

Application

This is a vital step in the Herbartian approach, because, in this step, the students try to apply the learned knowledge in real-life situations. If the student is unable to use the knowledge in different situations, the knowledge he/she gained would be laid to waste. With the help of this method, the topic would get etched into the minds of students and it will stay with them for a long period of time. Also, the concept becomes a part of their mind on a functional level and would enable them to meaningfully interpret life.

Recapitulation

In the final step of the Herbartian approach, teachers give students a summary of the entire subject. The teacher would ask the students many questions to determine how well they understood the subject. The teachers can also give assignments or other activities to evaluate the students' understanding. In this way, teachers can identify whether or not their students have a grasp of the subject. The effectiveness of the teaching is assessed with the help of this step.

Structure of a four-fold lesson plan

Name of the school :

Name of the pre-service teacher :

Subject :

Date :

Class /Section and Section :

Unit :

Topic :

Instructional Objectives: The student

1. acquires knowledge of
2. understands.....
3. applies the scientific knowledge.....
4. develops skills.....
5. develops interest.....
6. develops attitude.....
7. appreciates.....

Instructional Resources Required

**Required : Chart, Model,
Rotating disk.**

**Previous Knowledge of
Learners:**

Content/Concept	Specification of Behavioural	Learning Experiences (Teacher/Learner	Evaluation

Follow up Activities (if any):

Signature of the Guide

Signature of the pre-service-Teacher

LESSON PLAN MODEL

Name of the Student- teacher:

Name of the School :

Class/Section :

Subject : Computer Science

Unit :

Topic :

Number of Students :

Instructional Objectives : The Students

- ❖ recall the types of users.
- ❖ define about list command.
- ❖ discuss 18 commands and options in linux.
- ❖ list the types of path names.
- ❖ explain cd directory and pwd command.
- ❖ explain the concept of cd command and pwd command with example.

Instructional resources required:

- ❖ Chart, flashcard

Previous Knowledge of learners

The Teacher asks questions to the students to test previous knowledge.

Mention the types of users. What is the role of file owner?

Content/Concept	Specifications of Behavioural objectives	Learning Experiences (Teacher/learner activities)	Evaluation
ls Command	define	The teacher explains, what list command (ls) is. The students understand the purpose of ls command and take notes.	Define ls command. Write an example for ls command.

Command, and argument in ls command:

discuss

The teacher explains the command and various options in ls command.

The teacher asks the students to write an example for command and argument in ls command.

The students discuss among themselves and write the ls command and argument in ls command in their note book.

What is the ls command?

What is argument in ls command?

Path and types

List

The teacher explains path name, and the types of path name, with a chart. The teacher asks the students to write absolute and relative path with two examples.

The students immediately write about absolute and

List the path name.

Define Absolute path.

cd directory
pwdcommand:

explain

The teacher explains the cd directory and pwd command.

The teacher asks the students to form small groups and write examples for pwd command.

Explain the use of cd directory.

Expand pwd.

The students form small groups and write examples for pwd command.

Concept of cd command and pwd command.

explain

The teacher explains the concept of cd and pwd command.

Teacher asks questions and clarifies the doubts of students.

The teacher divided the students to small groups and asked them to write cd and pwd command concept with examples.

The students write example for cd and pwd command.

Explain cd command.

Why we use cd command?

Follow up activities:

- 1. Write an example for ls command?**
- 2. What is cd directory?**
- 3. Explain concept of cd command.**

Signature of the Guide

Signature of the Student-teacher

(This model Lesson plan is an example for 20 minutes and this can be continued & written for 45 minutes.)

Designing a unit plan

Unit Planning

A large segment of the subject matter with lessons possessing common features related to that area of study or with lessons under a common heading. For example optics is a unit in physics and under this unit, we have different topics like lens, mirrors, laws of reflection, refraction, Refractive index, etc. Therefore a unit consists of many lessons and a lesson consists of many topics. Also one should not think that a unit is a large block of subject matter alone. It is otherwise, consisting of both subject matter and method. According to Preston, a unit is as large a block of related subject matter as can be over-viewed by the learner. Sam ford defines a unit is an outline of carefully selected subject matter which has been isolated because of its relationship to pupils

needs and interests. According to bossing a unit consists of a comprehensive series of

related and meaningful activities so as to achieve pupil's purpose provide significant educational experience, and results in appropriate behavioral changes.

In general a unit consists of well organized subject matter, appropriate learning experiences and method with enough provision for evaluation and follow up activities.

Important characteristics of a unit

- A unit must be flexible in such a way to cater to the needs of individual differences.
- A unit should contain subject matter and methods with respect to the students interest and abilities.
- The subject matter must be segmented and arranged according to the instructional objectives in a unit.
- It should contain the interrelated content.
- Proper evaluation and follow-up activities must find a place in a unit.

Factors of unit planning

A unit plan should contain the following factors.

- Content analysis
 - Objectives & specifications
 - Teaching learning activities
 - Teaching learning resources
 - Evaluation tools
-

Content Analysis

It refers to the actual subject matter segmented based on the objectives of teaching. Here the concepts with major importance should alone be written and not all the minute details, as the subject matter is voluminous. Then this content should be arranged in a sequential manner throughout the unit.

Objective and specifications

Objectives are the expired behavioral change of the students. The entire unit should have arrangement of the content based on the objectives. The objectives must be stated in terms of students behavioural outcomes and they are termed as specifications. Specifications are the behavioural verbs of the respective objectives.

Teaching and learning Activities

This factor suggests appropriate methods for appropriate content. For example preparation of hydrogen may be taught by using demonstration method than mere lecture method alone. On some occasions, the discussion method with help of small groups formed within the class may be used by the teacher as a suitable method. A lot of varieties of activities to student must be provided.

Teaching and learning Resources

A proper scheme of the available material for practical activities must be planned in order to ensure their availability at the time they are needed. Similarly, the required reference books useful for teaching and also for learning must be identified and a list needs to be prepared.

Evaluation Tools

Proper evaluation technique must be included throughout the study of the unit as a continuous process. Quiz assignments, unit tests and so on may be used as evaluation tools in the unit evaluation should be based on the objectives of the unit

Preparation of unit plan

A unit plan may be designed in the following steps:

- A. Steps for the entire unit (Entire unit consists of several sub-units)
 - Subject: here one should mention the subject as physics , chemistry, biology or science.
 - Name of the unit: it should be the heading of the unit chosen
 - Class: to whom the unit is going to be taught.
 - Time: total number of class hours or periods
 - Instructional software: it is the list of teaching aids going to be used throughout the unit
 - Content: it is the segmented subject matter of the syllabus to be covered
 - Sub-units: it indicates the number of lessons and their names
 - Objectives: these have to be achieved after completing the unit

 - B. Steps for each sub-unit
 - Sub-unit no. and name: it should contain the exact number of the sub-unit and its name.
 - Time: it indicates number of class period or hours
 - Teacher's Activities
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- Students Activities
- Joint Activities (teacher and student)
- Assignment
- Follow-up Activities
- Evaluation
- References

With the help of the steps mentioned above, one can prepare a unit plan for any subject in an easier manner.

User/Advantages of unit planning

- It makes the students work better, as the whole unit consists of small sub-units of content.
- It is very useful for the teachers to identify the general objectives and specifications, as they are clearly stated and differentiated in a unit.
- It gives an overall view of the subject matter well in advance and thus makes the teaching process systematic and smooth
- It requires efficient, hard working and trained teachers
- If the sub-units are not properly arranged, the students may get confused.
- If the format is not followed systematically while preparing a unit plan, then it will be not useful in preparing a lesson plan
- Thus a unit plan is very useful for both teaching and learning process and has lot of advantages for teacher and students and if it is designed as per the format in a systematic way, then it will certainly bridge the gap, if any, between the teacher and the learner.
