
UNIT 2 APPROACHES TO LEARNING AND TEACHING



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2.0 INTRODUCTION

In the first unit of this course, you have studied the concepts, processes and factors associated with learning and teaching. From your experience as a teacher, as well as what you have learnt in the earlier unit you will agree that every child is different from another child and has his/her own ways of learning. Depending on the place and time, the child may adopt different methods of learning. Hence, to teach a group of children in a classroom taking into consideration their diverse ways of learning, is a very challenging task which you might have experienced. No single method of teaching can equally facilitate learning of each and every child in a group. To overcome this challenge, you need to know how to combine different methods and make suitable variations for fulfilling the learning needs of every child in your class. In other words there are various approaches of learning and teaching like Teacher-Centered Approach, Subject-Centered Approach, Competency-Based Approach and Constructivist Approach. In this unit these approaches will be explained so that you can adopt appropriate methods



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and approaches in your classroom transactions for effective learning of your students by addressing to their learning needs.

For understanding the concepts dealt in this Unit, you may need approximately *14 (fourteen) study hours*.

2.1 LEARNING OBJECTIVES

After completing this unit you will be able to:

- Explain the characteristics of Teacher-Centered, Subject-Centered and Learner-Centered Approaches respectively.
- State their respective uses in teaching-learning situations.
- Explain Activity Based Learning with an example.
- Differentiate between skill and competency.
- State the characteristics and usefulness of Competency-Based Approach in learning and teaching.
- Explain the characteristics and usefulness of Constructivist Approach in teaching and learning.
- Compare the different approaches of learning and teaching in terms of their characteristics, usefulness for learning, strengths and weaknesses.

2.2 APPROACHES TO LEARNING AND TEACHING

As a student and also as a teacher you have various experiences of classroom activities. Let us think for a while about the structure of a classroom and what goes on in the classroom. A class is a group of students, nearly of same age, controlled by a teacher, and accommodated within a specified place - may be a room or an open space. Usually, the teacher in a classroom teaches a particular topic from a subject within a specified period of time. Thus there are three key aspects of a classroom: students, teacher and a subject matter. The ultimate aim is to enable the students acquire the knowledge and understanding of the concepts taught in the class. You will agree that this is the simplest description of all types of classroom activities. Again, let us relook into a teacher's ways of teaching.

Think of the ways in which you were taught by your teachers or the ways you teach in a class and answer the following questions:

- Does a teacher always teach following a single method while teaching different topics or in different periods/classes?



- How does a teacher select a method or combination of methods to make his teaching effective?

Now read the following Situation 1:

Situation 1: *Ms. Sushmita who teaches mathematics in primary classes uses several methods and techniques of teaching like explaining through demonstrating pictures and models, asking students to solve problems, telling a story in a class while teaching a mathematical concept within a period. When asked why she combines all these methods, her reply invariably is “to keep up the interest level of all students on the topic taught”. But how does she select a method or combination of methods? “Depending on the situation,” she tells. She further says “ Looking into whether the students are ready to learn, whether they understand the concepts as expected, whether they retain their interest when the lesson progresses. I decide the method(s) to be employed and sometimes I have to change the method on the spot also”.*

You might have similar experience like Ms.Sushmita that although you plan your daily lesson to teach a particular topic using one definite method of teaching, sometimes you change it depending on the situation prevailing in the classroom during that period.

Considering the three major aspects of classroom activities, there are broadly three major categories of approaches: Teacher-centered, Subject-centered and Learner-centered approaches. Apart from these there are two other approaches i.e. Competency-based approach, and Constructivist approach which are increasingly been used in recent times particularly in primary schools.

Try to visualize the following three classroom situations 2, 3, and 4:

Situation 2: *The students of grade 4 are sitting in rows according to their height. Boys and girls are sitting separately. They are listening to the teacher Ms.Reba who is showing a picture of human digestive system and explaining the function of different organs. The students are listening silently and taking down notes when Ms.Reba is dictating. In case Reba notices anybody to be unmindful or talking to another student, she shouts at them. She reminds them, “Sit silently and listen to me”. If any student asks a question in course of teaching, he/she is asked to wait till the teaching is over. After the explanation and dictation of notes are over Ms.Reba spends sometime in question and answer activity. She corrects the mistakes of the students and praises those who give correct responses.*



Situation 3: Mr. Amir is teaching language in class V. His only source is the language text book prescribed for the class. He is holding the text book in one hand and a piece of chalk in the other. He is reading out loudly a portion from the topic he intends to cover in that period. He made the students to repeat reading loudly exactly the way in which he was reading. . He explained the main points of the topic and then asked questions given at the end of the chapter. When any student asked any question, Mr. Amir advised them to refer to the related paragraphs to find the answer. At the end of the class he gave assignments from the exercises given in the textbook. He never went beyond the prescribed text.

Situation 4: Ms. Seema is engaged with children of class III in planning activities in the class for observing Independence Day. She planned the arrangements encouraging ideas from the children. The children divided themselves into groups and assigned different tasks. One group was for decorating the classroom; one group chose to sing different patriotic songs, while another for collecting pictures of great leaders and the like. Ms. Seema was all the time helping the groups and the total class to proceed properly completing different tasks in time.

Reflect on these **situations**, and try to answer the following questions:

E1. Which of the above three situations is/are more controlled by the teacher?

E2. In which situation the students feel free to act with a purpose?

In the first **situation**, the teacher is in full control of the class. Literally, she is either conducting the activities or directing students to perform the activities. Everything in this class depends on the teacher and the students have little say in any matter. This is an example of a classroom where *teacher-centered approach* is adopted.

In the second **situation** both the teacher and the students perform activities strictly confined to the prescribed contents/ textbooks in the subject being taught demonstrating a *subject-centric approach*.

The last situation demonstrates a situation where the children were driven by a purpose and willingly associated themselves in choosing to perform different activities from which they could learn several things. This is an example of child-centered or *learner-centered approach*.

Let us discuss each of these three approaches in detail.



2.2.1 Teacher-centered Approach

From our experience as students and otherwise most of us believe that the teacher is the dominant factor in all classroom activities. Everything that is done in the class, beginning from the sitting arrangements, fixing what and when to teach, maintaining discipline, asking questions, and the time and type of student evaluation is to be determined by the teacher.

The major belief on which this approach rests is that the *teacher knows all that a learner is required to know*. Therefore, the teacher can transmit bits of knowledge and skills to the children. A so called ‘good’ student stores most of these bits of knowledge in his/her memory and reproduces whenever it is demanded. On the other hand a ‘poor’ student lacks the capability in storing and reproducing. In other words, the processes of memorizing and recalling from memory are the two key processes of this approach. Paulo Friere, the great educational thinker designated this process as “*Banking Education*”



Activity 2.1:

Observe at least five classes when the teacher is teaching and list the characteristics of these classes in terms of what the teacher and students are doing. List the advantages of this type of teaching by asking the teacher teaching in the class following this approach.

If you have completed your activity compare your observations with the list given below.

Characteristics of Teacher Centered Approach:

Some of the important characteristics of the teacher-centered approach of teaching-learning are:



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- Knowledge is transmitted from the teacher to the students.
- The focus is on teaching/instructing/directing rather than on learning.
- The content and methods of teaching are decided by the teacher targeting the average students. The needs and interests of the individual students are rarely taken into account while teaching.
- Emphasis is given on passive listening, reading and writing and reproducing things taught by or as directed by the teacher.
- Students' participation in classroom activities is dictated by the teacher. In most of the cases, the teacher gives little scope for debate and discussion and sharing of ideas.
- Teacher is mostly concerned with completion of the course contents.
- The teacher concentrates on the right answer.
- The classroom management is entirely dependent on teachers, on his/her experience capability and sometimes on his/her whims and caprices.
- The principles of classroom discipline and their enforcement in the class are entirely controlled by the teacher.
- The hallmark of classroom/school discipline is students' absolute obedience to teachers.
- Extrinsic modes of motivation like praise and rebuff, reward and punishment are generally used by the teachers.

If you analyze the characteristics of the teacher-centered approach, you can list more such characteristics of this approach. Now answer the following question:

E3. Which of the following is NOT a characteristic of a teacher-centered approach?

- A. The students are writing down the dictation given by the teacher.
 - B. The students are developing different models using clay and paper in groups.
 - C. The students are doing mass drill in the field. Give at least one reason for your answer.
-

Usefulness of Teacher-Centred Approach:

This approach is entirely dependent on the teacher. If a teacher has a positive mind he can keep up the spirit of learning new things and help his/her students with a vast range of experiences.



- Transferring knowledge, information and skills from the matured and experienced persons (teachers) to the younger generation (students) is very often argued to be beneficial for students as many successful students who have come out of traditional settings, have also proved their talents.
- There are quite a large number of new, unfamiliar or abstract concepts for the learner which cannot be learnt easily when left to the students themselves. Direct explanation of these concepts by the teacher is a better way to facilitate understanding of the students.
- There are materials, instruments and situations which might be harmful or dangerous for the young students to handle. In such cases, it is always advisable that the teacher demonstrate the experiments or activities using such materials or instruments.
- In a large size classroom where there is large number of students, teaching in mass becomes the only feasible method.

Limitation of Teacher Centred Approach: This approach has large number of limitations. Some of them are:

- Since the teaching is very often imposing facts and ideas by the teacher, children do not like and tend to loose interest.
- If the knowledge of the teacher is limited, then he/she cannot meet the needs of individual children.
- There is no scope for debate and discussion among the students.
- Individual attention is hardly taken into account in large sized classes and in multi-grade situations.
- The teacher never gives room for developing the thinking skill of the students. Thus it retards the creativity of the children.
- Evaluation is mostly summative in nature. There is no scope for continuous and comprehensive evaluation which is the call of the present times.
- The teacher is confined to completion of the course. It matters little if the children do not understand the concepts.

Now check your progress and answer the following:

E4. Which of the following statements is/are TRUE for the teacher-centered approach?

- A. Courses prescribed for a class can be completed in time.
- B. Students can develop proper reading ability.



C. Students taught in this approach are better disciplined.

Give at least one reason for your response to each statement.

2.2.2 Subject-centered Approach

In the subject-centered approach, the focus is on the delivery of the subject contents by the teacher for students to acquire i.e. importance is laid on topics/concepts included in the subject, around which all the teaching and learning activities revolve. It is a common practice in most of the schools to strictly follow the syllabus and textbooks both for teaching and learning. The textbook in the subject is considered as the storehouse of all the required concepts, examples and exercises that are required for the teaching- learning process. The means and methods of acquisition of the prescribed concepts may be anything.

“The text book becomes an embodiment of syllabus; all that is in it has to be taught. It becomes a methodical guide which has to be read and substantial portions memorized through repeated reading. It also becomes the evaluation systems. Questions at end of each chapter which have to be answered orally and in writing reproducing the text itself”.

Let us consider the comments made in the National Curricular Framework, (2005):

This highlights the following in the context of subject-centred approach :

- Text book is the only source and main source for the teacher.
- Word by word, phrase by phrase the matters are presented before the students.
- The content/subject matter of the text book is itself a guide to the teachers to decide his/her methodology.
- Insistence on the students to memorize the facts by repeated reading.
- Questions given at the end of the chapter are to be asked to the students for assessment of learning.
- The students answer the questions both orally and in written form by copying from the book.
- They may produce their answers orally or in written form by reproducing the exact content.



Characteristics of Subject-Centered Approach:

The major characteristics of this approach are:

- The focus is on the content / subject matter and hence transaction of the textbooks in the class is ‘be all and end all’ of the classroom activities.
- The teacher projects himself as a model for the students as he has the mastery over the subject matter.
- The learning needs of these students are supposed to be fulfilled through the text book.
- Real life situations are rarely taken into account while presenting the subject matters in the classroom.
- All classroom interactions are textbook centered.
- There is stress on quantity oriented output rather than quality.
- Textual questions are used for evaluation which lacks variety.

This approach however, provides the learner an exposure to a plenty of content matter within a limited time. As the course is completed within the prescribed time, the learner can plan their practice exercises elaborately and can learn the subject matter thoroughly.

On the flip side, the knowledge acquired by the students is bookish. There is no novelty in the teaching-learning process. Time is mostly utilized for memorizing and reproducing and not for meaningful learning. So there is little scope for developing questioning skill on the part of the teacher and the students as they are expected to confine to the textual question given at the end of each chapter. Continuous and comprehensive evaluation is limited to assess the acquisition of all the concepts in the textbook rather than assessing all the aspects of personality growth as a result of learning.

Before proceeding further, check your progress.

E5. Some statements are given below. Indicate which is/are appropriate for the Subject Centered Approach:

- a) Teacher rarely uses the textbook in the class.
 - b) Questions given at the end of the chapter are answered by the students.
 - c) Emphasis is given on the real life experiences.
 - d) Students always try to memorize the content.
 - e) Textbook is considered as the main source of learning.
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2.2.3 Learner Centered Approach

In the preceding sections you have studied the teacher centered and subject centered approaches. Both the approaches are traditional and more or less similar to each other to a large extent. There is a saying, ‘the teacher teaches John Latin’. Here neither the teacher nor Latin is important. But John is important. John is the learner and he is at the center of the teaching-learning activities. Hence the approach directed towards the learner often known as learner centered approach is important which will be discussed in this section.

Read the following situations. You will find how learner centered approach is very different from the two approaches discussed in the previous sections.

Situation 5: *Mr. Salil, the language teacher used the Language textbook as his primary teaching materials in class V. He held the text book in one hand and a piece of chalk in the other. He read out the topic. He used the black board as and when required. He explained the main points of the topic and asked questions given at the end of the chapter. When any student asked any question, he advised them to read the related paragraphs to find the answer. He never cited any example for easy understanding of the students beyond the text book. In the examination most of the students could not answer the comprehension question as they were not directly from the text.*

Situation 6: *Ms. Mishra, the science teacher, entered class V with some teaching learning materials (TLMs). She held the science book in her hand but she wrote some concepts on the black board, cited examples from her own mind. In case, the learner did not understand she cited other examples. She used teaching learning materials and allowed the students to use them also. She asked questions from her mind. She gave some group activities to the students. She guided the students when they asked for her help. She rarely asked questions given in the text. She also presented some content outside the text book for comprehension. In the examination the students attempted all the comprehension questions and answered correctly.*

If you compare the above two situations, you will be able to tell which one refers to learner-centred approach. Now read the characteristics to have a clear idea about the learner centred approach.

Characteristics of learner-centred approach:

- The needs of individual students form the basis of all learning methods and strategies under this approach.



- The teacher tries to motivate the learner before he/she starts teaching-learning process.
- Teacher is a facilitator in the teaching-learning process and not an instructor.
- Situation is created for facilitating learning process.
- Students work both individually and in groups.
- Students learn from interaction with their peers.
- Opportunities are provided to the students for questioning, exploration and experimentation.
- Seating arrangement is guided according to the activities of the students in the class room.
- Assessment is a part of teaching-learning process and children are assessed in course of doing the activities. So learning process and assessment go together.
- A variety of teaching-learning materials are used which are manipulated by the teacher and the students.
- The learning climate is democratic.
- Students often ask questions to the teachers for clarity of the concepts

You can add more points to the list given above.

Doing activities with students in the class is considered very essential for learning. As such **Activity- Based Learning (ABL)** is now being increasingly adopted in primary schools across the country particularly in lower grades.

Activity- based Learning

Activity-Based Learning (ABL) is essentially a form of learner-centered approach. Activity or a learning activity is one in which the learner willingly and spontaneously participates with delight and acquires the desired learning outcomes. Both the process of learning and learning outcomes are taken care of in this approach.

For detailed discussion please see Unit 4 of this course.

Let us consider an **example of an Activity in a Learner Centered Approach:**

**Activity – Map reading Class-V**

Two students are going on a journey to Agra to visit Taj. After reaching Agra, a tourist offered them a map to locate different spots of Agra. Now think yourself to be there and the children asked you to help them read the map. Instead of showing them the places and telling the things directly you have to do the following.

- Give them the map
- Acquaint them with the symbol that shows the railway line.
- Help them to get an idea about relative distance.

Ask them to find the following from the map.

1. Which is farthest from Agra Cant.:
Railway Station; The Taj Mahal or Fatepur Sikri?
2. Which is nearer to the railway line:
 - Babarpur forest or Taj forest ?
 - Agra forest or Taj Mahal ?
3. Which is closer to the river Yamuna
 - The Taj Mahal or the Railway station?

(Source: Book on Assessment in Environmental Studies, P- by NCERT, New Delhi)

Do you think, that the activity is different from that of a teacher centered class?. Whose involvement is more: the teachers or the students?

On the basis of the above discussion let us discuss the usefulness of learner centered approach.

Usefulness of the Learner Centered Approach:

- It places students at the centre of teaching-learning process.
- The process of planning and transaction is organized minutely and systematically by the teacher for the students to learn in a meaningful way.
- It nurtures the creativity of the students.
- Students get scope for enhancing their level of achievement due to prevailing climate for competition among the students.
- Students performance is given due recognition.



But, the learner centred approach is not free from criticism. Even if this approach is used, it is difficult to increase the achievement level of all the students on average within a limited period of time. Without competent and committed teachers the approach will not work. It requires teachers who are very sensitive to the needs of the students. Unless proper learning climate is created in the schools, use of learner- centred approach is not possible.

A brief comparison between the two major approaches to teaching and learning is given in the following table.

Table 2.1 Comparison between Teacher Centered Approach and Learner Centered Approach

Indicators	Teacher Centered Approach	Learner Centered Approach
<i>Course objectives</i>	<ul style="list-style-type: none"> Teachers cover topics as per the syllabus. 	<ul style="list-style-type: none"> Students achieve learning objectives as fixed by the teacher.
<i>How students learn</i>	<ul style="list-style-type: none"> Students learn passively by listening and reading. They take to independent learning, for securing good scores. 	<ul style="list-style-type: none"> Students learn by integrating new learning into what they already learnt before. Learning by doing is the base.
<i>Pedagogy</i>	<ul style="list-style-type: none"> Based on delivery of information. 	<ul style="list-style-type: none"> Learning by doing based on engagement of students through different activities.
<i>Course delivery</i>	<ul style="list-style-type: none"> Lecture method is applied. Assignments and exams are based for summative purpose. No unit planning and unit test. 	<ul style="list-style-type: none"> Active learning Cooperative learning and Problem based learning is in practice.
<i>Role of the teacher</i>	<ul style="list-style-type: none"> Sage on the stage and what is dictated must be followed. 	<ul style="list-style-type: none"> Assignment is given for practice. Unit test is administered.
<i>Effectiveness of teaching</i>	<ul style="list-style-type: none"> Teacher pass information and students learn by rote memorization. As students learn by rote, effectiveness of methodology cannot be judged rationally. 	<ul style="list-style-type: none"> Teacher is a facilitator and he/she works with the students. Teacher engages students through learning activities. Teacher helps all students achieve learning objectives. Performance indicates mastery of learning objectives. Assessment is done to improve standard of the students.



Now answer the following questions:

E6. Why most of the teachers do not follow the learner centred approach? Which of the following is/are the answer(s) to the above question?

- i) They lack required knowledge and skill competencies to plan for classroom transaction following the approach.
- ii) They are not willing to give up the habit of traditional approach.
- iii) Learner centred approach is difficult to follow.

2.2.4 Competency Based Approach

When you are transacting any topic in the classroom, you may ask yourself, “Have the students acquired the knowledge, understanding and the skills that are expected from learning the concepts from the topic?” Well if the expected learning outcomes are spelled out in concrete terms, then we can not only plan how to teach or facilitate students’ learning in order to attain the goal but also assess and find the answer to the above question.. Such outcome based approach to education is often called ‘*competency based education*’.

But what is ‘**competency**’?

- There is no unique definition of the term. Given below are some statements. Read them carefully.
- Competency is the essential skill, knowledge, attitude, and behavior required for effective performance of a real-world task or activity.
- Competencies are essential skills that one needs to be a successful learner.
- Competency is a skill performed to a specific standard under specific conditions.
- A “competency” in its most generic form is any underlying characteristic an individual possesses and uses which leads to successful performance.
- A ‘competency’ is a clearly defined and measurable activity (cluster of related knowledge and skills) accomplished by an individual.

From these statements what can be concluded regarding the nature of competency?

- Competency refers to some specific essential skill, knowledge, attitude and behaviour which one can achieve. It is some characteristic or ability an individual can possess for successful performance (*achievability*).
- It is clearly defined and hence, can be measured (*measurability*).



- The wording of the statement of competency is such that it can be clearly understood by everyone concerned including the teacher and the learner (*communicability*).
- It can have different standard or level depending on the characteristic levels of the learner (*appropriateness*).

Here are some examples of the competencies at the primary school level:

Language competencies:

- ‘Speak with correct pronunciation.’ (CI.III)
- ‘Read print and handwriting freely.’ (CI.V)
- ‘Take dictation with all punctuation marks.’ (CI.V)
- ‘After reading a text, be able to answer questions using ‘because’ and/or ‘since’.’ (CI.IV)

Mathematics competencies:

- ‘Counts from 1-20 using objects and pictures.’ (CI.I)
- ‘Uses unitary method to solve simple daily life problems.’ (CI.V)
- ‘Finds average height from the given data.’ (CI.V)
- ‘Draws angles of different measures with the help of a protractor.’ (CI.IV)

Environmental Studies competencies:

- ‘Shows due courtesy to elders, peers, etc. in the family and among the relatives and neighbours.’ (CI.I)
- ‘Lists the occupations engaged in producing various articles of daily need.’ (CI.III)
- ‘Identifies distribution of main physical features on map and describes them.’ (CI.V)
- ‘Conducts simple experiments to purify drinking water.’ (CI.IV)

Are you confused by the two key terms used in competency-based education namely ‘*skill*’ and ‘*competency*’?.

Well, *skill* refers to a task or group of tasks performed to a specific level of proficiency which often use motor functions and typically require the manipulation of instruments and equipment. Some skills, however, such as ‘*adding correctly and quickly*’ and ‘*appreciating the need for orderly behaviour at home, school, and public places*’ are knowledge- and attitude-based.

For attaining *competency*, mere acquisition of skill is not sufficient, one has to perform at a prescribed level of efficiency. In other words one has to attain mastery (high



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standard of performance) in the skill in order to acquire competency in the respective skill. For example, we may fix a standard for attaining mastery in adding two 2-digit numbers for class III students like “*can accurately add two 2-digit numbers without carrying over in at least 80 percent of tasks within a stipulated period of time.*” If a test of such addition with 20 items (each carrying 1 mark) is given to the students of that class, then students answering more than 16 items (or acquiring 16 marks) shall be deemed to have attained mastery level (or competency) in the particular skill.

Unlike the traditional teacher-centered approach where coverage of course within the stipulated time is given importance, in a competency-based approach, the unit of progression is mastery of specific knowledge and skills. It is nearer to the learner-centered approach since it aims at attainment of mastery by nearly all individual students in a particular class.

If you decide to adopt competency based approach, you need to take care of the following:

- Prepare the list of statements of competencies to be achieved (for a specific class and in a particular subject) much before you start any lesson. The statements are to be carefully constructed so as to make the teaching-learning procedures and the assessment more definite.
- Arrange these competencies which are interrelated in order of increasing difficulty. Learning is seen as a continuum in which the learning units are sequenced hierarchically and a student has to progress step by step and cover the cluster of competencies. Unless a student achieves one competency he/she cannot move to the next competency.
- Decide the criteria to be used in assessing achievement and the conditions under which achievement will be assessed along with the levels of mastery.
- Use a variety of instructional techniques and group activities that would facilitate the students to attain the competencies. Such an instructional program provides for the individual development and evaluation of each of the competencies specified. Here the target is the attainment of competency. Therefore, multiple methods or materials suitable for the students to attain the mastery are to be employed.
- Use texts, media, other sources and real life materials geared to targeted competencies.
- Always take into account the participant’s knowledge and attitudes while you are assessing any competency but remember that actual performance of the learner on the competency is the primary source of evidence for assessment.
- Allow the students to progress through the instructional program at their own pace by demonstrating the attainment of the specified competencies.



- Provide students with immediate feedback on assessment performance thus enabling them to take corrective measures or additional efforts to attain the competencies at the mastery level based on the feedback.
- Have student demonstrate mastery of specified competency statements and allow the student to continue in the program until he/she demonstrates mastery.

Minimum Levels of Learning

*As a follow up of the recommendation of the National Policy on Education 1986, **Minimum Levels of Learning (MLLs)** were laid down for primary school level in three school subjects i.e. Language, Mathematics and Environmental Studies for the grades I to V. The MLLs were spelled out in terms of competencies arranged in a hierarchical manner linking the subject areas across the grades. The mastery on each competency was required from each student before moving to the next competency in the hierarchy. Therefore, mastery learning strategies employing various methods were recommended with the aim of attaining the minimum level as defined by the competencies. For attainment of each competency, the cyclical method of 'Plan-Teach-Test-Reteach-Retest' is followed till the child attains the competency at the mastery level.*

The MLL programme continued in 1990s and subsequently lost its importance for several reasons. But, the use of competencies in classroom learning and competency based assessment still continues (NCERT, 1991).

On the basis of what you have read so far answer the following:

E7. State at least three differences between teacher centred approach and Competency Based Approach?

E8. Which of the following is NOT a characteristic of Competency Based Approach?

- A) The students are practicing the multiplication table chart.
- B) Individual students are learning at their own pace.
- C) They are taking peer assistance in the group.

Give at least one reason in support of your answer.

Usefulness of Competency Based Approach

- The competency based approach keeps the learner away from rote memorization.



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- What the students learn today cannot be forgotten tomorrow as competencies are achieved by the students at the level of mastery under your guidance.
- The assessments of competencies are directly linked with the objectives of learning experience and are expected to be continuous and competence based.
- The assessment results can be used for further improvement of the students. Remedial coaching is helpful for the low achievers and enrichment programme for the high achievers. Since, it aims at mastery of skills by each individual it caters to the learning needs of all categories of students.
- Suitable activities like storytelling, role playing, dialogue, practice riddle, word play, magic, quiz and puzzle help the students to achieve the competencies in a learner friendly ways.
- Teaching-learning process is joyful and interesting in this approach.

Limitations

- The content knowledge of the teacher is very important to help the students achieve the competencies. If the teacher is not proficient the approach may not work.
- The learning climates in all schools are not equally conducive for optimizing learning and as such not equally effective for attainment of competencies within the stipulated time.
- As pace of learning varies from student to student, it is very difficult on the part of the teacher to help the students to achieve the competencies within the stipulated time.
- All teachers are not equally competent enough to provide remedial treatment to the low achieving students. Achieving competencies at the level of mastery is a crucial task for the students and especially for the first generation students.
- As competencies are broken into detailed sub-competencies, it is observed that all the details do not find places in the assessment.
- Designing activities and test items for the detailed list of competencies/sub-competencies may not be always practicable.

Now check your progress before moving ahead:

E8. Indicate which of the following statements are correct and which are wrong:

- Competency is a learning objective.
- All the competencies are not achievable.



- c. Competencies can be evaluated.
 - d. In Competency Based Teaching the teacher uses varieties of TLMs and conduct activities.
 - e. There is no need of remedial teaching in competency based approach to learning.
 - f. Competencies are achieved at the level of mastery.
 - g. Activities are key to achieving competencies.
- E9. Give four examples of competency statements on any subject in primary classes.

2.2.5 Constructivist Approach

Do you think children start learning only in the school? If you believe that learning starts in the school, then do the following activity.



ACTIVITY – 2

Prepare a list of activities a child of 6 years of age usually does just before coming to school.

How does he/she learn all these activities? Does anyone teach him/her to learn all these things or he/she learns by himself/herself? How could he/she learn without anybody's help?

Let us consider a situation:

***Situation7:** Once Mr.Rabin, the english teacher told a story in the class and then he repeated it for the second time. When he asked the students to reproduce it, seventy five percent of the total students could do that. Is there any newness? Does it encourage thinking?*

But when he asked the students if they can tell a story, hardly two or three students raised their hands. Then he showed them a picture and hung it on the wall so that all could see it very clearly. He then asked them to write a story using the picture. After 15 minutes some students could write stories. But no two stories were alike. All the stories were different

Then he gave some key words and asked the students to write a story using the words.

Again the students wrote different stories by themselves.



Notes

How was it possible to write different stories based on the same elements (picture or key words)? The students have heard stories from their grandparents, parents and uncle. When they started to write a story, they recalled their previous experience. They made a link of the prior knowledge, with the new knowledge, tried to make sense of it to reformulate new ideas.

In a teacher centered class room the students are passive listeners. But it does not happen in a constructivist class room. Constructivist learning and teaching considers student as an active learner and teacher facilitates the process of knowledge construction by the students.

As the constructivist class room is learner-centred, maximum freedom is given to the students.

On the basis of the above discussions answer the following questions.

E10. Which one of the following is not based on the constructivist approach?

- i) Learner's previous knowledge plays an important role in the construction of knowledge.
- ii) Learning is an active meaning making process.
- iii) A learner's strong memory power is the basis of his construction of knowledge.

As a teacher you use your own style and methodology in your class. You also tell stories to the students. Have you ever tried to develop a story with the help of your students?

Here is an example to illustrate how students can also develop stories.

Once in the class room the teacher wrote some words on the black board. His purpose was to build a story with the help of students. He wanted the students to tell a story using the words. He asked if any one of them can start the first sentence. When the first sentence was stated by a student, the teacher asked individual students to speak out a sentence which links to the previous sentence. Within a very short time twenty sentences were written on the black board. Then the teacher changed the direction of the story and added two sentences of his own. Again he asked the students to continue. After five sentences were added to the story he asked the students if they wanted to conclude the story. When the students agreed to stop there, then he asked the individual students to give a title to the story. Interestingly there was not a single title, but the students came out with a number of titles.

Now answer the questions on the basis of above example.

Who started the story?

What did he do to extend the story?

How was the story built?



- When twenty sentences were written, what the teacher did ?
- Who mostly contributed in the story development exercise?
- Who gave support to the students?
- Did the teacher assist the students from beginning to the end?
- Have you any experience like this?
- Is this exercise interesting?

Doesn't it differ from telling a story from memory or reading a story from a book?



ACTIVITY -3

Here is a story. Use it in your classroom and discuss in the following manner.

Lalita was a little girl. She was studying in class V. She was not very clever, but she was sweet and good. Everyone loved her. One day Lalita's school teacher said. "I am going to give a special prize this year". "What is the prize for" asked all the pupils? "I am not going to tell you" said the teacher; "you must try to do your best at everything. At the end of the year I shall tell you what the prize is for".

Then the story will be extended in form of conversation among the students. At last the teacher declares the reason for giving the special prize. (Last sentence of the story)

After the story is told the following questions will be asked and further activities will be taken up.

1. Which characters do you like and why?
2. Identify yourself with the character you like and prepare dialogue taking another characters.
3. Let the student deliver the dialogue in the class.
4. Alternate dialogues in the group.

From the above activity, you will observe that it is a class room where students work in groups, interact among themselves and the role of the teacher is a facilitator. The students connect their past experiences with the new experiences. Since they worked in groups, there is exchange of ideas. The students under this situation pass through the following stages:

- I. Relate their previous experiences to the new situation.
- II. Make sense of the story.
- III. Contribute their own ideas.(new)
- IV. Ask questions to one another.(inquire)
- V. Think why they liked the character.(judgment).



All these processes are aimed at construction of knowledge and hence the approach adopted is known as *Constructivist Approach*.

Constructivist Approach to teaching and learning is based on a theory called *constructivist learning theory*. According to this knowledge is built upon the prior knowledge of the learner. *Students actively construct their own knowledge by connecting new ideas to the existing ideas* on the basis of materials or activities presented to the students.

Constructivism

Constructivism is a school of philosophy whose genesis is traced to Giambattista Vico an Italian philosopher of early eighteenth century. In recent times it has emerged as a philosophy of education largely due to the contributions by the Swiss psychologist Jean Piaget (1896-1980) and the Russian psychologist Lev Vygotsky (1896-1934).

Radical Constructivism based on Piaget's Theory of Cognitive Development stresses that knowledge is actively constructed by the learner, not passively received from the environment. 'Coming to know' is a process of adaptation based on and constantly modified by the learner's experience of the world.

Vygotsky's work on cognitive development inspired the Social Constructivism which emphasizes on the construction of knowledge through individual adaptation of environment supported by the social interaction. This social interaction may be in the form of peer activity, interaction with teachers, parents, and other adults.

Here are some activities encouraged in constructivist classrooms:

- *Experimentation*: Students individually perform an experiment and then come together to discuss the results in the group.
- *Project Work*: Students choose a topic as a project and complete the project and present their findings to the class.
- *Field Trips*: This allows students to put the concepts and ideas discussed in class in a real-world context. Field trips are followed by classroom discussions.
- *Visuals*: These provide visual context and thus bring another sense into the learning experience.
- *Class Discussion*: This technique is used in all of the methods described above. It is one of the most important aspects of constructivist teaching methods.

On the basis of the above characteristics answer the following question:



Notes

E11. Which of the following does not come under constructivist approach?

- a. Students make meaning from their own experiences.
- b. Assessment of outcome of learning is more important than the learning process.
- c. Teacher facilitates learning rather than instructing children to learn.

Give reasons for your answer

In the constructive class room, students work primarily in groups where learning and knowledge are interactive and dynamic. One cannot find it in a traditional class room in which students work alone. In that situation learning takes place through repeated practice and the students mostly depend on the text book. But in constructivist class room students conduct experiments and do some projects work. They start the work individually but come together in a group to discuss the results. They also go outside the class room to observe something in the school garden or in a museum. After recording observation they come with their individual observations which they discuss in the group. Group discussions play a very important role. The activities are based on debate, intellectual participation and drawing conclusion.

Another example of learning task:

Language: English, Class: IV

Problem: Take a passage from the text book or supplementary reading materials. Ask the students to extend the paragraph by connecting meaningful sentences to it.

Method: the problem is to be solved by each individual. The students would then present their completed passage in the class. It will be discussed. The composition skill of the students will be evaluated.

Paragraph

Once there was a lion who was the king of the forest. He was a very powerful animal. All the animals were afraid of him. They sent a new animal to him for his daily food. One morning the lion decided to hold a royal court. So he asked the jackal to be his minister. He selected the old leopard as his body guard. In the meeting the lion agreed to behave with all the animals like friend.

.....
.....
.....

(Ask the students, one after another, go on adding one sentence each extending the story.



Notes

After the completion of the story, ask the students to enact the story and continue discussion among the student on the role play according to the characters. Teacher may help the students to prepare dialogue cards. At the end ask some open ended questions.

Observe the performance of the students. Among the students whose performance is satisfactory praise them.

Do you notice the ways through which students construct knowledge?

Characteristics of Constructivist Approach:

If one observes a constructivist class room she/he shall see the following things.

- The students are actively involved in learning.
 - The environment is democratic.
 - The activities are interactive and student centred.
 - The teacher facilitates a process of learning in which the students are encouraged to do the task actively as responsible members.
 - Opinion, ideas given by the students are accepted and honoured.
 - Students make meaning from their own experience.
 - Process is as important as product
 - Focus is on learning, not teaching.

Constructivist Assessment: In a traditional class room after completing the teaching and learning, the teacher presents some questions to answer and he/she always expect correct answers. In a constructivist learning situation the process is as important as product. The assessment is not only based on tests but also observation of students work, how they interact, how they draw conclusions on a subject. Some of the assessment strategies include the following:

- *Oral discussion:* The teacher writes a focus question on the black board for open discussion on the topic. When the students take part in the discussion he/ she observes the performance of individual students.
- *Mind mapping:* In this activity the students list out and categorize the concepts and ideas relating to a topic.
- *Through hands on activities* the students are encouraged to interact with the environment or manipulate a material. Teacher records the students' performance using a check list or an observation schedule.
- *Pre-testing* is done by the teacher to know where the student is in respect of learning lessons before he is exposed to new-learning.

Relevance: Children learn more and enjoy learning more as they are actively engaged in the teaching-learning process. They are not passive listeners in the class room. Stress is given on thinking and understanding instead of allowing them to learn by role. In a constructivist class room each learner thinks to be a part and parcel of the learning



activity. It is because each one contributes his/her idea to the learning activity. So, students have ownership what they learn. Now think do such things take place in a traditional class room?

Limitations: The teachers are not competent enough to structure a class room based on constructivist principles. In absence of proper guidance it will not work. If the teacher is not proficient, it will not work and if the teacher is proficient but students are at a lower level, the purpose of the constructivist class room may be defeated.

2.3 COMPARISON OF APPROACHES

A brief comparison has been made on the three major approaches to learning and teaching in the table given below:

Indicators	Teacher Centered Approach	Learner Centered Approach	Constructivist Approach
Purpose	The teacher's approach is to complete the course in time.	Each and every child should learn by doing a task.	Student empowerment is the central point. Constructivist class rooms help the students to construct knowledge on their own.
Style of learning and teaching	Only one style of learning prevails. The teacher passes the information and students cram the same.	Teacher provides learning situations that give children an opportunity to learn through observation, exploration and question.	Learning task is completed by their own ways. Collaborative learning works there.
Practice work	The textual questions are answered and learnt by rote.	Children participate in different activities.	The class is fully interactive. Interaction takes place among teacher and student, students and teacher, students and students.
Transactional modality	One-way transmission is done; students passively sit and listen to the teacher.	Children interact with the teacher and with the peers in course of learning and teaching process.	The students perform tasks in groups and the teacher acts as facilitator.
Sharing	There is no sharing of ideas among the students. The students rotate round the ideas given by the teacher. Group work is rarely done.	Children work both individually and also in groups through discussing, sharing and co-operation.	The students do learning tasks individually and present in the group through sharing of ideas they construct knowledge.
Classroom environment	There is little freedom to raise advice and the students are suppressed.	The class room environment is democratic.	The class room environment is democratic.
Questioning	They never ask question as they are not allowed to do.	The students are free to ask questions.	Students are encouraged to ask questions and they are given a paragraph to frame questions.
Project work	The students are not acquainted with project work.	The students are given project work to perform with help of the teacher.	Individually the students do project work given by the teacher.



2.4 LET US SUM UP

In a classroom situation, the total learning and teaching processes involving students, teachers and subject matters constitutes an approach to teaching and learning. Each approach has its usefulness and limitations and is dependent on how we think the approach fit best to our requirements. In this unit four such approaches viz., Teacher-Centered Approach, Subject-Centered Approach, Learner-Centred approach, Activity Based Approach, Competency Based Approach and Constructivist Approach to learning and teaching have been discussed.

- The traditional teacher-centered approach is entirely dominated by the teacher who has a decisive role in framing curriculum, transacting in the class and determining every aspect of the teaching learning process.
- The completion of the subject, especially those prescribed and included in the text books are paramount in the subject-centered approach. This approach very often encourages rote learning in order to complete the course in time neglecting all other learning outcomes.
- All round development of students especially learning is the ultimate goal of the learner centered approaches. Activity based learning is one example of this approach which is now being adopted in large number of schools.
- Attainment of competencies or the learning outcomes is targeted through multiple modes and methods through competency based approaches.
- Constructivist approach is based on the belief that the student as a learner can construct his/her own knowledge with the help of his/her previous experiences and through interaction with the social environment around him/her. The teacher has the important role as the facilitator of learning.
- All the approaches have relative strengths and limitations. The teacher has to judge the appropriateness of the approach to be adopted considering the requirements of the students and the prevailing climate of learning.

2.5 MODEL ANSWERS TO CHECK YOUR PROGRESS

- E1. Situations 1 and 2.
E2. Situation 3.
E3. B
E4. A and C



- E5. b and e
E6. i and iii.
E8. A
E9. a,c, d,f,and g are correct and b,e are wrong.
E10. iii
E11. B

2.6 SUGGESTED READINGS AND REFERENCES

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2.7 UNIT-END EXERCISES

1. Compare the Subject-Centered Approach and Competency-Based Approach.
3. Compare the Teacher-Centered Approach and Constructivist Approach.
4. What are the advantages of the Learner-Centered approach? What are its limitations?
5. What are the major types of assessment in the constructive approach?