
UNIT 4 LEARNER AND LEARNING-CENTRED APPROACHES



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4.0 INTRODUCTION

In the earlier two units, different methods and approaches for learning and teaching process were discussed. You might have observed that in all classroom interactions more emphasis is given on learning than on teaching. As a teacher you are to facilitate the child to learn. In other words, learner and his/her learning would be the centre of your entire endeavour as a teacher.

In order to focus on learner, this unit elaborates on learner-centred approaches like collaborative and cooperative learning methods which provide better opportunities and more scope for learner's involvement and facility in the teaching-learning process.



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Further activity-based approach which you may be acquainted with will also be discussed to strengthen your knowledge of the nature of learning activity its elements and characteristics along with the principles of practicing activity-based methods in your classes.

For completing this unit you may need 20 hours of study time.

4.1 LEARNING OBJECTIVES

After completing this unit, you will be able to:

- distinguish between the learner and learning-centered approaches.
- explain and use cooperative and collaborative methods.
- identify the elements of a learning activity.
- design learning activities for classroom use.
- organize the activity-based approach in classroom situation.

4.2 APPROACHES TO LEARNING

Let us consider the following situation.

Situation 1: *When Mr. Binaya takes a class, he narrates, explains different concepts and ideas, and asks questions to selected few students. All his efforts are focused on finishing the course in time. Therefore, he finds very little time to take care of the needs and interests of the students; rather he is worried about his teaching. The students are observed to be passive listener to the teacher and sometimes some of them ask a few questions. Mr. Binaya tries to maintain discipline in the class so that he could go on uninterrupted in his teaching. His efforts for making the class interesting to the students are limited as he is constrained by time. At the end of teaching the lesson, he asks two to three questions for evaluating students' learning.*

In such a teacher-centred classroom situation, the students are less interested in what the teacher is doing in the classroom.

E1. Give any three characteristics of a teacher-centered classroom.



Let us, analyse another situation.

Situation 2 : *Ms.Samita is taking a Science class at the elementary level. She is:*

- *not reading the text,*
- *dividing the whole class into 5-6 groups,*
- *asking students to bring a plant and observe it in each group,*
- *encouraging them to discuss about the plant in detail in their group,*
- *facilitating group discussion and ensuring participation of each student,*
- *giving opportunity to each student to explore and utilize his/her rich experience,*
- *asking each student to draw and label a picture of a plant in their note book,*
- *asking each student to share their work and promoting discussions among the students.*

In this situation Ms.Samita is a facilitator than a traditional teacher and demonstrated different roles to play.

E2. Given below are few statements. In which, the need of the learner(s) is given more importance? Put (?) mark.

- a) Teacher explains difficult words to the students by using dictionary.
- b) Students ask questions to the teacher to clarify their doubts.
- c) Teacher asks the students to come in front of the class individually and point out different places on the map hung on the wall.
- d) Teacher conducts an experiment in the laboratory and asks the students to watch.
- e) Students are allowed to go outside the classroom for some time, observe the nature and narrate any three things they have observed in their own language.

4.2.1 Learner-centred Approach

Learner is at the centre of all activities in learner- centred approach. The teacher plays the role of a facilitator of the learning process and an organizer of the learning situation to “*stimulate curiosity and independent thinking, develop problem-solving skills, promote planning and execution of projects and develop self- learning involving acquisition of knowledge through observation of phenomena, creative thinking*”



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and activities.” (National Curriculum for Elementary and Secondary Education-A Framework ,1987,p-6). As you know that the learner brings with him/her previous knowledge and experiences which influence classroom learning process. In the learner-centred approach, focus is given on developmental stages, maturity, learning strategies, prior-knowledge and experiences, interests, social context and culture of the learner. As a teacher, for implementation of the learner-centred approaches, you must understand the learner and their learning styles. It is essential that you know in details the characteristics of each and every learner in our classroom.

Understanding the Learner: In order to adopt the learner-centred approaches you have to understand various aspects of a student, the learner in your class, such as:

- | | |
|------------------------------------|---------------------------------|
| a) Health and Physical Development | b) Mental abilities |
| c) Personality | d) Learning Styles |
| e) Motivation | f) Home and cultural background |

a) **Health and Physical Development:** Learner’s ability to learn depends upon their health and stage of physical development. You must take into consideration differential rates of development of learners while selecting the learning experiences. Regular medical check-up may provide some feedback to teachers about learners’ health and physical development.

b) **Mental Abilities:** You can meet the specific needs of learners by knowing their specific mental abilities i.e. their qualities of being able to perform facilitating achievement or accomplishment. In general mental abilities are considered with intelligence of a person. A picture of mental abilities of the learner can be drawn following the seven types of intelligence elaborated by Gardener (1985) which are:

- *Linguistic* - enables individuals to communicate and make sense of the world through language.
- *Logic Mathematics*- allows individuals to use abstract mathematical relations.
- *Visual Spatial* - makes it possible for individuals to visualize, transform and use spatial information.
- *Bodily Kinaesthetic* - enables individuals to use high levels of physical movement, control and expression.
- *Musical* - allows individuals to create, communicate and understand meanings made from sound.
- *Intra-personal* - helps individuals to recognize and make distinction about others feelings, intentions and respond accordingly.
- *Inter-personal* - enables individuals the capacity for reflective understanding of others and oneself.



Gardener's analysis of specific mental abilities suggests that learners have different kind of abilities and potentials and accordingly you have to select diverse learning tasks to develop these abilities. You can influence the quality of learning of learners and can enhance the intellectual capacities of learners. Read the following situation:

Situation 3: *When Gutty was two years old, she used to call all kites as birds. Her total perception and understanding (schema) of kite was essentially influenced by her previous experience (assimilation) 'a small thing that flies in the air.' Later on, she gradually observed that the shape of a kite is more regular than that of a bird; a kite flies in a different way from a bird; sometimes she could hear a rustling sound when it flies and make out a string attached to it, which seems to control it. Her schema, which so far had only the feature "small things that fly", now added these new features which helped her distinguish between kites and birds. With this change, she now had two different objects in her schema of small flying things: 'birds' and 'kites'. In short, she was accommodating a new concept by modifying her earlier schema.*

Now Gutty is about eight years old and you can imagine how much more complex her schema for flying objects has become. She knows about all kinds of planes, parachutes, rockets, satellites, flying lizards and bats. She also knows that there are birds that don't fly.



ACTIVITY -1

Considering the above situation, try mapping all that in a schema! You will need a very large piece of paper and coloured pencils.

- c) **Personality:** Understanding the personality of the learners will help you in recognizing patterns of individual differences and in selecting the teaching strategies according to the individual's personality and learning style.
- d) **Learning Style:** The way one learns is always unique to himself/herself. The learning styles, depending on the learner may have wide ranging variations. There are different models of learning styles. One most accepted model is that of David Kolb's which is based on experiential learning.

According to this **Kolb's model**, there are four major types of learning styles depending on the two approaches toward grasping experience viz. *Concrete Experience(CE)* and *Abstract Conceptualization(AC)*, as well as two related approaches toward



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transforming experience viz. *Reflective Observation(RO)* and *Active Experimentation(AO)*. These four learning styles are:

- *Diverging (feeling and watching - CE/RO)* - Learners with the diverging style are sensitive and are able to look at things from different (divergent) perspectives. They prefer to watch rather than do, tending to gather information and use imagination to solve problems. They choose to work in groups, to listen with an open mind and to receive personal feedback.
- *Assimilating (watching and thinking - AC/RO)* - Learners with an assimilating learning style are less focused on people and more interested in ideas and abstract concepts. They are more attracted to logically sound theories than approaches based on practical value. They prefer readings, lectures, exploring analytical models, and having time to think things through.
- *Converging (doing and thinking - AC/AE)* - Learners with a converging learning style can solve problems and will use their learning to find solutions to practical issues. They prefer technical tasks, and are less concerned with people and interpersonal aspects. They can solve problems and make decisions by finding solutions to questions and problems. They like to experiment with new ideas, to simulate, and to work with practical applications.
- *Accommodating (doing and feeling - CE/AE)* - The accommodating learning style is ‘hands-on’, and relies on intuition rather than logic. These learners use other people’s analysis, and prefer to take a practical, experiential approach. They are attracted to new challenges and experiences, and to carrying out plans. They prefer to work in teams to complete tasks. They set targets and actively work in the field trying different ways to achieve an objective.

Learning style is influenced by learning situation, experiences and motivation and may be regarded as a link between the personality and cognitive behaviour of the learner.

E3. Give any two reasons why understanding the learner is considered important in the learner-centred approach.

E4. State any two differences between the divergent and convergent learning styles.

- e) **Motivation:** It is related to whether the learning experiences provided to the learners match with their personality and learning styles or not. If learners are provided with learning tasks that challenge the existing skills, knowledge and understanding, then learners may feel motivated to do the task. But if the learning task provides too little or too great a challenge to the existing skills, knowledge and understanding, then the learner is likely to be little interested in performing



the task. Therefore, teachers require understanding of each learner's capabilities, capacities, interest and also considerable skill and knowledge of the subject in order to provide effective learning experiences to motivate the students.

- f) **Home and Cultural Background:** The culture of school, home, peer and social environment as a whole influence how children learn. The cultural influences on learning can be due to *cultural experiences, the mediation of language and learning dispositions*.

Cultural Experience: The previous experiences of the learner are strongly influenced by the culture, knowledge, values and ideas of the social group in which the learner is situated. These provide the initial framework for understanding the new concept and thus influence the new learning

Language: The medium of thinking and learning is language. Language also embodies the cultural tools through which new experiences are interpreted and mediated when learners interact in their communities and societies. Language as a 'cultural tool' and medium of learning influences the new learning, i.e. the process of making sense.

Learning dispositions: are acquired from and affected by interactive experiences with the environment, significant adults and peers. It is noticed that when a child understand the purpose of an activity, he/she takes active participation in it and the rules and the logic of the activity begin to make sense to him/her. This helps him/her to learn the concepts involved. For example, for Shakeel, calculating profit, loss and the prices of newspapers is not just a 'mental' exercise which comes out of a textbook. He is in the street, participating in the buying of the newspapers from the agent and then trying to ensure that he can sell as many as possible because the money is needed for his family. On the contrary when Neetu, a 12-year-old child, studying in Class 5, was asked by her teacher to solve the following problem from a school textbook:

"A shopkeeper buys ten pencils for 1 rupee and 50 paise each. What will be his profit if he sells them for 2 rupees each?", her response after a lot of thinking was, "Do I add or multiply? If you tell me then I can solve."

It is evident that Shakeel and Neetu have different cultural circumstances affecting their learning disposition. The characteristic of children's dispositions is that they are environmentally sensitive—meaning they are acquired, supported, or weakened by interactive experiences in an environment with significant adults and peers. Influence of family in terms of 'emotional capital' is the most significant factor in influencing learning. The learner's cultural circumstances due to the family structure and support vary widely.

Peers: In designing learning experience it is most important to consider the influence of peers in school settings. Peer group culture is important to learners as a way of



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learning, enjoying and adopting to school life. All secondary stage boys and girls tend to form separate social groups. Within a school or even a class, sub-cultural groups based on language, region, religion, caste, social class and educational achievements are also formed. Such peer group influence achievement and self-esteem of students. Some peer cultures favour school attainment and are likely to reinforce teacher efforts towards a positive approach to learning. Other peer cultures derive meaning from alternative values and students influence by such cultures approach school with minimum expectations. These students still construct understanding and make sense of learning material but it may not be of the type the teacher would have aimed at.

The School: Each school has its own distinctive culture but a closer inspection of school culture would reveal that there are many sub-cultures in the school. These cultural groupings among teacher and students may be based on region, language, religion, caste, socio-economic status which influences the classroom practices and learning achievement of learners.

E5. What are the two dimensions of Kolb's model of learning styles?

E6. State the importance of peer groups in acquiring new experiences.

Role of the Teacher in Learner-Centred Approach:

In the learner-centred approach, we consider the following assumptions:

- Pupils have different learning styles (that instruction should accommodate)
- Children's innate curiosity and self-perpetuating exploratory behaviour should form the basis of their learning in school. That means they should have the opportunity to pursue their interests as deeply and as long as they find the pursuit satisfying.
- Individual child often learn in unpredictable ways (and instruction should accommodate such eventualities)
- Children are capable of making intelligent decisions in significant areas of their own learning.
- The function of school is to help children develop learning to learn in order to become lifelong learners.
- Learning is facilitated by relationship of openness, trust and mutual respect; and school should provide an accepting and warm emotional climate.

Therefore in learner-centred approach, as a teacher, you have the following three critical roles to play.



Observer and diagnostician of learner: You must constantly watch the behaviour and activities of learners in and out of the classroom so as to estimate and diagnose strengths, weaknesses, learning needs, and learning dispositions. This would help you in shaping and providing appropriate learning environments and learning activities for the learners.

Provider of the environment for learning: Once you diagnose the various learning needs of the learners, it becomes your primary duty to plan a learning environment that is conducive so that each learner would find enough scope and opportunity to fulfil his/her needs.

Facilitator of learning: You always need to look out for occasions to help the learners while they are engaged in learning. This is more challenging than directly teaching. As we know that each learner has a distinct learning style, variations in learning dispositions, we have to provide support at the appropriate situations during their period of learning. Further, you need to encourage the learners to be engaged in learning activities whenever you find them remaining inactive.

E7. State the three roles of a teacher in a learner- centred classroom.

4.2.2 Learning-centred Approach

Learning-centred education focuses on the learning process. Although, its primary concern is on the learning of the students, all those involved in the education of students such as teachers are also co-learners with the students in the learning-centred education. It is basically learner-centred, but includes teachers in the process of learning in a classroom situation. Research has shown that a learning-centred education helps students acquire competency in skill areas and creates lifelong learners.

For example, when you take your students on a field trip to a new place like a dam or a factory, the students not only learn a great deal from observation and interaction with technical experts and workers, you also learn several aspects of construction, operation and utility of the organization which you can further use in developing your understanding and that of your students through mutual discussion.

Learning-centred education places the student at the centre of education. It begins with understanding the educational contexts from which a student comes. It continues with the teacher evaluating the student's progress towards learning objectives. By helping the student to acquire the basic skills to learn, it ultimately provides a basis for learning throughout life. It therefore places the responsibility for learning on the student, while the teacher assumes the responsibility for facilitating the student's education. This approach strives to be individualistic, flexible, competency-based, varied in methodology and not always constrained by time or place. In other words, learning-



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centred education advocates a student-focused teaching and learning environment facilitating the exploration of meaning and content knowledge through personal and interpersonal inquiry. The teachers attempt to maximize student productivity, knowledge acquisition and increasing skills and development of personal and professional abilities. The teachers may hence use a variety of instructional tools and methods, as well as flexible arrangements of time and place. Learners assume primary responsibility for their choices and have opportunities to exercise control over their learning. As a result there are collaborative partnerships among all those who are the stakeholders of children's learning.

Some examples of learning-centred educational practices are:

- Collaborative group learning, both inside and outside the classroom
- Individual student inquiry and discovery
- Inquiry and discovery by students and teachers together
- Problem-based inquiry learning
- Synchronous interactive distance learning
- Hands-on, experiential learning activities
- On-site field experiences
- Self-paced performance on contextual tasks.

Characteristic of the learning-centred education:

The major characteristics are the following:

- Students construct knowledge through gathering and synthesizing information and integrating it with the general skills of inquiry, communication, critical thinking, problem solving, and so on.
- Emphasis is on using communicating knowledge effectively to address enduring and emerging issues and problems in real-life contexts.
- The teacher's role is to coach and facilitate.
- The teacher and students evaluate learning together.
- Teaching and assessing are intertwined.
- Assessment is used to promote and diagnose learning.
- Emphasis is on generating better questions and learning from errors.
- Desired learning is assessed directly through papers, projects, performances, portfolios etc.



- Approach is compatible with interdisciplinary investigation.
- Culture is cooperative, and supportive.
- Teacher and students learn together.

According to Weimer (2002) there are *five practices that need to change to achieve learning centred teaching*:

- The functions of content*: In addition to building a knowledge base, the content facilitates students in this approach to:
 - Practice using inquiry or ways of thinking in the discipline,
 - Learn to solve real problems,
 - Understand the function of the content, why it is learned,
 - Build content/discipline-specific learning methodologies,
 - Build an appreciation for value of content,
 - Help students develop a way to learn through the content and make meaning out of the content.
- The role of the teacher*: The teacher creates an environment that:
 - Fosters students learning,
 - Accommodates different learning styles,
 - Motivates students to accept responsibility for learning,
 - Explicitly aligns objectives, teaching methods and assessment consistently,
 - Utilizes multiple teaching techniques appropriate for student learning goals,
 - Designs activities in which students interact with the material, the teacher and each other,
 - Inspires and encourages student ownership of learning.
- The responsibility for learning*: Although the responsibility of learning is shared between the teacher and the students, it is expected that the students take the overall responsibility for learning and assessment. As a consequence, students:
 - develop learning skills for further learning,
 - become self-directed lifelong learners,



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- can and do assess their own learning,
 - become proficient at self-assessment,
 - become proficient with all information literacy skills
- iv) *The processes and purposes of evaluation:* Assessment in learning-centred education is more holistic and integrated with learning. It comprises of:
- Integrated assessment,
 - Formative assessment with constructive feedback,
 - Peer and self-assessment,
 - Multiple opportunities to learn and demonstrate mastery,
 - Students encouraged to justify their answers,
 - Students and teachers agree on feedback timeframes,
 - Authentic assessment is used throughout.
- iv) *The balance of power:* It is the students, more than the teacher, who has the control over their own learning. Therefore, the teacher needs to make deliberate efforts to empower the students to assume control over their learning.
- Students are encouraged to explore additional content,
 - Students are encouraged to express alternative perspectives whenever appropriate,
 - Use of mastery or contract grading,
 - Assignments are open ended,
 - Students take advantage of opportunities to learn

E8. If we are to change over to the learning-centred classroom transactions then what are the changes to be incorporated in the existing teacher-centred practices? (State any three practices)

A comparative picture on some major aspect of the three approaches to education viz, Teacher-centred, Learner-centred and Learning-centred Education is presented below:



Table 4.1 Comparison among Three Approaches of Education

Aspects	Teacher-centred	Learner-centred	Learning-centred
Nature of Knowledge	Knowledge exist prior to the learner	Knowledge is discovered by the learner	Knowledge is constructed by the learner
Roles of teacher and learner	Teacher active and learner passive	Teacher makes learner active	Learner acts and teacher facilitating learning
Dominant Teacher function	Instruction, Direction	Designing learning tasks and teaching	Facilitating learning supporting
Situation	Not situation specific (situation independent)	Lerner friendly	Natural and contextual to learning
Control	Entirely teacher controlled (Rigid and totalitarian)	Shared teacher and learner control (Partially flexible)	Dominantly learner controlled(Flexible and democratic)
Inputs	Bits of facts and knowledge	Competencies and experiences	Techniques and strategies of learning
Methods and approach	Mostly lecturing and demonstration, Authoritarian approach	Play-way and joyful methods	Activity-based scaffolding
Curriculum	Prescribed	Developmental	Emergent
Evaluation	Objective-based summative	Activity-based formative	Authentic assessment and self-analytical
Discipline	Imposed	Shared, Participatory	Self-controlled

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4.2.3 Cooperative Learning

The cooperative learning model was developed to achieve at least three important instructional goals: *academic achievement, acceptance of diversity and social skill development*. This is a specific small group approach that incorporates democratic processes, individual accountability, equal opportunity and group rewards. A number of types of cooperative learning activities and models are frequently used in today’s classroom such as student teams achievement divisions, jigsaw and group investigation. All cooperative learning lessons, however, have following key features:

- Students work in groups to master academic materials
- Groups are heterogeneous consisting of high, average and low achievers
- Whenever possible teams include a mix of racial, cultural and gender of students
- Reward systems are group-oriented rather than individually oriented.

Studies have shown that cooperative approach has positive effects on academic achievement, collaborative behaviour, cross-cultural understanding and relationships and attitudes towards disabled students. There are five basic and essential elements to cooperative learning (Brown & Ciuffetelli Parker, 2009):



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1. Positive interdependence:

- Students must fully participate and put forth effort within their group
- Each group member has a task/role/responsibility therefore must believe that they are responsible for their learning and that of their group

2. Promoting Face-to-Face Interactions:

- Members promote each other's success.
- Students explain to one another what they have or are learning and assist other with understanding and completion of assignments.

3. Individual Accountability

- Each student demonstrates master of the content being studied.
- Each student is accountable for their learning and work.

4. Social Skills

- Social skills are necessary for successful cooperative learning to occur.
- Social skills include effective communication, interpersonal and group skills like
 - (i) Leadership (ii) Decision-making (iii) Trust-building (iv) Communication (v). Conflict-management skills

5. Group Processing

Every group must assess their effectiveness and decide how it can be improved.

For student achievement to improve considerably, two characteristics must be present

- a) Students are working towards a group goal or recognition, and
- b) success is reliant on each individual's learning.

When designing cooperative learning tasks and reward structures, individual responsibility and accountability must be identified. Individuals must know exactly what their responsibilities are and what they are accountable to the group in order to reach their goal. Positive interdependence among students in the group for the task should be there and visible for effective learning. All group members must be involved in order for the group to complete the task. For this to occur each member must have a task that they are responsible for which cannot be completed by any other group members.

Guidelines for Using Cooperative Learning:

- Limit group size to three to five students.
- Compose groups heterogeneously by mixing students considering academic achievement, sex and race.



- Give each student in the group a specific role, responsibility or task that contributes to the success of group.
- Use cooperative learning as a supplemental activity for review, enrichment or practice, allowing student in the group to help one another master material. Groups can also complete project such as reports, presentations, experiments and art work.
- Consider room arrangement, task materials and time frame as you plan cooperative activities.
- Grade individual students' contributions.
- Consider providing a group reward to students in the group.
- Vary group composition so that no student feels labelled by being in a 'slow' group and all students have an opportunity during the school year to work with every other student in the class.
- For cooperating learning groups to function effectively, collaborative social skills must be taught, modelled and reinforced regularly.

The roles of a teacher at different phases of the cooperative learning are summarized in the Table 4.2. below:

Table 4.2 Teacher's Role in the Cooperative Learning Model

Phases	Role of the Teacher
Phase 1 : Present goals and learning set	Teacher goes over objectives for the lesson and establishes the learning set.
Phase 2 : Present information	Teacher presents information to students either verbally or with a text material.
Phase 3 : Organize students into learning teams	Teacher explains to students how to form learning teams and helps to groups make efficient transition
Phase 4 : Assist team work and study	Teacher assists learning teams as to do their work
Phase 5 : Test on the materials	Teacher lists knowledge of learning materials or groups present results of their work
Phase 6 : Provide recognition	Teacher finds ways to recognize both individual and group effort and achievement

Advantages and Limitations of Cooperative Learning: Research on cooperative learning demonstrates overwhelmingly positive results. Cooperative learning requires students to engage in group activities that increase learning and adds other important dimensions. The positive outcomes include: *academic gains, improved interpersonal relations and increased personal and social development*. Some of the prominent advantages of the approach that emerged from the extensive research are:



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- Students demonstrate academic achievement.
- Cooperative learning methods are usually equally effective for all ability levels.
- Cooperative learning is effective for all ethnic groups.
- Student perceptions of one another are enhanced when given the opportunity to work with one another.
- Cooperative learning increases self-esteem and self-concept of the learners.
- Differences among learners arising out of gender, social category and physically/mentally challenged barriers are broken down allowing for positive interactions and friendships to occur.

However, cooperative learning has many *limitations* that could cause the process to be more complicated than perceived. Due to the fact that cooperative learning is constantly changing, there is the possibility that teachers may become confused and lack complete understanding of the method. Teachers implementing cooperative learning may also be challenged with resistance and hostility from students who believe that they are being held back by their slower teammates or by students who are less confident and feel that they are being ignored or demeaned by their team.

E9. How does cooperative learning enhance self-confidence of the learner?

4.2.4 Collaborative Learning

Collaborative learning is a more generalized approach than the cooperative learning approach. This approach provides a situation in which two or more people learn or attempt to learn together. Unlike individual learning, people engaged in collaborative learning capitalize one another's resources and skills (asking one another for information, evaluating one another ideas and monitoring one another's work) etc. More specifically, collaborative learning based on the fact that knowledge can be created within a population where members actively interact by sharing experience and take nearly equal roles. Thus, collaborative learning is a method of teaching and learning in which students and teachers team together to explore a significant question or create a meaningful project. A group of students discussing a lecture or students from different schools working together over the Internet on a shared assignment are both examples of collaborative learning.

In other words we can say that collaborative learning refers to methodologies and environments in which learners engage in a common task where each individual finds out and is accountable to each other. This method allows face-to-face conversation and discussions using the computers also (like online forums, chat rooms etc.). Methods

for examining collaborative learning processes hence include conversation analysis and statistical discourse analysis.

Cooperative and collaborative learning differ from traditional teaching approaches where students work together rather than compete with each other individually. The subtle *differences between the collaborative and cooperative approaches* would demonstrate the nature of the collaborative learning.

- Collaborative learning can take place any time students' work together, for example, when they help each other with homework. Cooperative learning takes place when students work together in the same place on a structured project in a small group.
- Collaborative learning is more a qualitative approach, analyzing student's talk in response to a place in literature or a primary source in history. The cooperative learning on the other hand tends to use quantitative methods which look at achievement (the product of learning).
- In the collaborative learning approach, once the task is set which is always open-ended, the teacher transfers all authority to the group. It is up to the group to plan and perform the task as per their combined effort. In the cooperative learning approach, the authority remains with the teacher who retains ownership of the task, and he/she continuously monitor, guide and suggest modifications to keep the group on the track of solving the problem.
- Collaborative learning truly empowers students whereas cooperative learning does not. Instead cooperative learning employs them to serve the teacher's ends and produces a 'right' or acceptable answer.
- Collaboration in education is a dialogue between the student, teacher and the curriculum. Students are viewed as problem solvers, and problem solving and inquiry approaches are employed for emphasising cognitive skills. This views teaching as a 'conversation' in which teachers and students learn together through a process of negotiation with the curriculum to develop a shared view of the world. Cooperation on the other hand, represents the best means to approach mastery of fundamental knowledge. Once students become reasonably conversant, they are ready for collaborative, ready to discuss and assess.

Benefits of Collaborative Learning:

The benefits of small-group learning in a collaborative environment include:

- *Celebration of diversity:* Students learn to work with all types of people. During small-group interactions, they find many opportunities to reflect upon and reply to the diverse responses fellow students bring to the questions raised. Small groups also allow students to add their perspectives to an issue based on their differences. Such exchange inevitably helps students to better understand other cultures and points of view.



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- *Acknowledgment of individual differences:* When questions are raised, different students will have a variety of responses. Each of these can help the group to create a product that reflects a wide range of perspectives and is thus more complete and comprehensive.
- *Interpersonal development:* Students learn to relate to their peers and other learners as they work together in group enterprises. This can be especially helpful for students who have difficulty with social skills. They can benefit from structured interactions with others.
- *Actively involving students in learning:* Each member has opportunities to contribute in small groups. Students take more ownership of their material and think critically about related issues when they work as a team
- *More opportunities for personal feedback:* Because there are more exchanges among students in small groups, students receive more personal feedback about their ideas and responses. This feedback is often not possible in large-group instruction, in which one or two students exchange ideas and the rest of the class listens.

E10. State any two differences between cooperative and collaborative learning.

4.3 ACTIVITY-BASED APPROACH

What is an Activity? Is it all work to be done by the student? As a teacher will you have fewer roles in comparison to students in the Activity based classroom? Such questions must be in your mind.

We know that three important elements of classroom teaching-learning process are - teacher, learners, subjects or experiences incorporated in curriculum. We have discussed that the learner-centred approach is more appropriate in the teaching learning process. In learner-centred approach, need, interest, mental ability and social context of the learner are taken into account. In the activity based approach importance is given to the learner who gets new knowledge by doing activity in his/her own environment.

4.3.1 Learning Activity And Its Elements

Although all of us are acquainted with teaching process, we do have different views regarding activity. Some general views regarding 'activity' are:

- Singing a song, dancing, role playing, story telling, mono action etc.
- Work which is pleasurable is an activity.
- Activity involves some form of physical work.
- Each activity must require some teaching material.

Let us observe the two classroom situations where some activities are being done.



Situation 4: Ms. Vidya, a teacher in a school had requested the children to bring some paper, match box, gum and scissor. On the day of her class, Ms. Vidya checked whether each child brought materials or not. She drew a picture of a chair on the blackboard, and told the children to prepare a model of chair as drawn on the black board by using the material they have brought. While students are engaged in preparing the model she facilitated and helped them to complete the work. She requested all to maintain discipline in the classroom and to concentrate on the work without talking or disturbing others. She praised those who have prepared the model in time.

Situation 5: Ms. Vinoya, mathematics teacher came to class well prepared and ready to teach Mathematics. He found that the outside environment was very favourable and children were looking outside. The tree and flowers outside was attracting the students. He changed his plan and allowed the students to go outside for five minutes to collect at least one object from the environment. All children went outside cheerfully and came back collecting objects like flowers, leaves, sticks, small stones etc. Then he divided the class into two groups and asked the two groups to sit in semi-circles facing each other and started a game 'Vastu pehchaan' (Identify the object). The collected materials were kept in the middle in front of the two groups. A member of one group wrote a name of a material kept in front of them on a slip of paper and gave it to the teacher. The other group then asked questions to identify the name of the material. The students of the second group were allowed to ask a maximum of ten questions in order to identify the material which was answered in either "yes" or "no" by the first group. The questions were related to identifying features of the material. Whenever the group succeeded in identifying the material by asking only one question they got ten points. For each additional question asked, the score reduced by one point successively. All children in their respective groups discussed the question they put forth. After five rounds, the children clapped and danced with enjoyment as they were able to tell the name of the material. The game went on like this. Finally the group who secured more points was declared the winner of the game. Meanwhile the period was over and nobody was conscious or waited for the bell to ring.

In the above two situations, the teacher tried to engage the children. The first situation was totally controlled by the teacher, without considering why the child did the work and whether the child had interest in it or not. The students did the work as directed by the teacher.

The second situation was different in the following ways.

- The teacher changed the plan looking into the interest of the student.



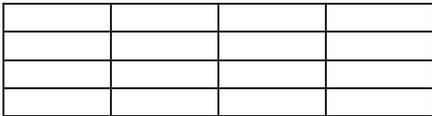
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- Group work was planned in such a manner that children interacted freely among themselves.
- Children have adopted the skill of questioning by discussing among them.
- Children cooperated with each other.
- Children enjoyed achieving the goal.

You may notice that in this activity neither physical work was done nor song, dance, and storytelling were done. Still children were involved actively and achieved the objective deriving pleasure.

Observe and go through the activities given below in Table 4.3.

Table 4.3 Examples of Activities

Objectives	Activity	Process
To know animals living in forest. To develop the ability of recitation.	Singing the song with action	Children/Students will stand in a circle. Teacher recites the first two lines in middle of the circle and students go round with action. One student will make sound of a animal in the middle and other will move according making sound and action. The student who doesn't do will go out, observe and then rejoin the group.
To recognize the geometrical shape of known objects.	Drawing of pictures using geometrical shapes	Teacher will draw some geometrical shapes in blackboard like ○ \ △ □ Students are instructed to draw picture by using the above shapes. For example:  Students are asked to draw as many figures as they could able to draw within 15 minutes.
Formation of number	Grid game	Draw a 4x4 square. ((3x3) or (5x5) can also be drawn)  Students are instructed to write one number in one cell They are instructed to write numbers using at least 3 adjacent cells. They also may write alphabets to frame word. After 10 minutes each child is able to write/frame how many numbers. The student who will make maximum number he/she is to be declared the first winner.



From these examples, we observe that:

- Activity can be in the form of a game, story, role play or song. These are however not the only ways. Activities can also be performed in several other ways as shown above.
- Activity can provide scope for each child to participate.
- Activity may be both individual and/or group.
- Every activity may or may not need physical exercise but needs mental exercise like thinking, discrimination, arranging in serial, developing problem solving skills, etc.
- Involvement and participation in each activity gives a sense of satisfaction to a student.
- By making small changes, one activity may be used for achieving other objectives.

Thus **activity is an objective oriented task in which learner gets spontaneously involved and derives pleasure in achieving the learning objectives.**



ACTIVITY - 1

Prepare at least two learning activities from Language, Mathematics and Environmental Studies choosing the concepts of any particular class of your choice.

Elements of Activity: When you enter into activity based classroom, what are the aspects that convince you that activity is going on properly? Well you ought to notice the following:

- Children are totally involved in doing work without being disturbed by your presence.
- They are talking among themselves, manipulating materials, trying different arrangements and ways of solving the problem.
- If you asked about what they are doing, they could clearly state the objectives and cause of doing that activity.

In other words activities are engaging and encourage students to achieve the learning objectives. However, should the activity be too hard or too easy for the student?

If the activity is too easy, the student loses interest in it and if the activity is too hard the student avoid getting involved in the work. The students engage in such activities where they are able to perform the work. The activity is designed in such a manner that the student individually or discussing among themselves or taking help of teacher tries to



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finish the work. Creating spontaneous involvement in work is an important element of a learning activity.

It is found that if a student gets pleasure in an activity he/ she performs it and he/she gets more and more involved in it taking it as a challenge. If he/she does not derive pleasure and take the work as a load, he /she repeat the work mechanically resulting in failure. So activity should be a type of work in which the learner must derive pleasure.

Hence, there are *four major elements of an effective learning activity*. These elements of an effective learning activity are:

- *Focused*: Activity for learning is always goal directed and is so designed that the participating students are focused to solve the problem or reach the target and are not easily distracted.
- *Challenging*: An effective activity poses a challenge before the students. It is neither too easy to neglect nor too difficult to attempt for solving. It is moderately

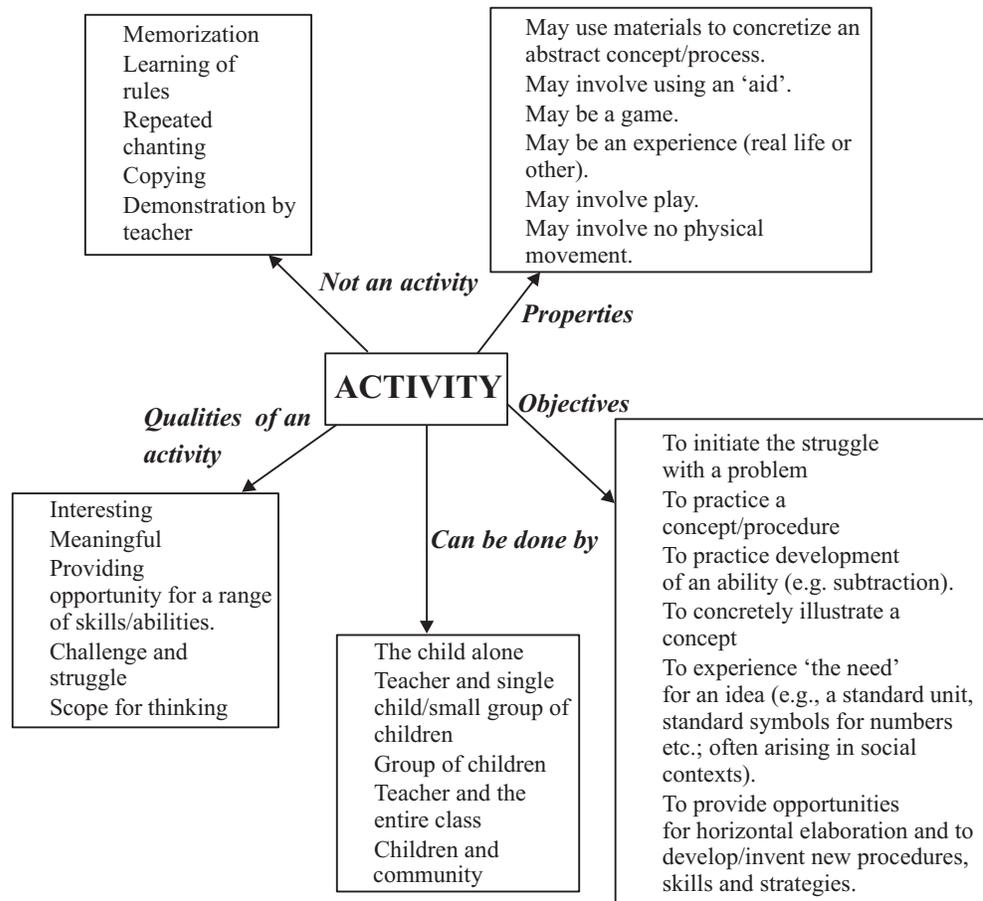


Fig 1. A schema for 'activity'

(Source: IGNOU- LMT-01 Block 2, 2000 p.63)



difficult which is within the capability of the students to solve but with concentration and with a little more effort.

- *Spontaneous Involvement*: A good activity is such that it attracts the students immediately when it starts and they join in it out of their own interest without any persuasion or compulsion.
- *Joyful*: The test of the efficacy of the activity is when the student derives a sense of satisfaction after its completion. The very nature of a good activity is that it is interesting for the students to conduct and it brings a sense of achievement, provides joy, which ultimately becomes the source of intrinsic motivation for the students to go for the next activity which might be more challenging.

These elements are not independent of each other, they are mutually interdependent. A schema for 'activity' is given in Fig 1.

E11.1 What are the main qualities of an activity?

E12. Why memorization is not considered as an activity?

4.3.2 Classroom Management Of Learning Activities

By this time you must have noted some differences between the classroom organization and practices in a normal class with which we are familiar and a class where activity-based practices are going on.



ACTIVITY - 2

List the differences between the classroom practices of a teacher-centred classroom and an activity-based classroom.

One important difference is in planning activity-based classroom transactions are to be clear about the objectives. For example, do you want to introduce a new concept or desire to improve the understanding of a concept already introduced to the children earlier, or provide some more challenging tasks? Once your objective is clear, you would need to plan for appropriate activities. Some may be new activities while others are extensions of previous activities you have introduced earlier. Some may be directly related to your objective, while others are indirectly related. But on both occasions, the activities have to provide a great deal of interesting investigations. You need to ensure the essential characteristics of the activity to make it more effective in facilitating learning.

After you decide the activities to be conducted in your classroom, you need to take note of planning other aspects of classroom management for efficient and effective



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conduct of activities. Some important points which are a must for successfully using an activity as a learning task are:

- **Management of available space:** Space available in the classroom has to be planned properly for conducting activities. Some space is to be marked for storing teaching-learning materials, placing and using black board(s) and display boards, some for placing racks/shelves to keep records and portfolios of the students. For students to sit, move freely and perform activities in groups, quite a larger portion of the classroom space is needed. Specifically, you need to plan in advance the minimum space required for group activities and accordingly you have to decide about the number of groups to be formed, the space for movement of students as well as for your movement in the classroom.
- **Material management:** Sufficiently ahead of the commencement of the activities, you need to have quite a large stock of materials in the Teaching Learning Material (TLM) corner in each class. You might be aware that the TLMs are mainly of two categories: i) basic materials like dice, marbles, sticks, flash cards, seeds, pebbles etc. which have multiple uses in various activities and ii) specific materials for use in particular activities. You need to have sufficient (TLMs) of the first category stored separately and required number of TLMs appropriate to the specific activities for different subject areas. Selection, collection and proper storing of materials should be done much in advance, preferably at the beginning of the academic session. You need to review the activity in advance to make sure you have the materials needed for the class. The students may be involved in the selection of materials so that they can bring the materials from the TLM corners at the appropriate time. This helps in spontaneously introducing relevant activities. Simple games may be kept handy to be used by those students who finish their work earlier and get bored sitting around. It should be made a regular practice to reassemble the materials after use in each period and to keep them back in their appropriate places in the corner. The students should be given full charge of doing this job.
- **Students' involvement in activities:** Learning is facilitated through the involvement of students in the activity. Therefore, the following points need to be taken care of at the time of conducting activity.
 - **Nature of activity:** While selecting an activity for a topic, decide the nature of activity considering its relevance and appropriateness in the context of the topic as well as the cognitive levels of the students. You have to decide whether it should be individual or group or whole class activity, whether it is a warm up activity, or a relaxing activity, or an activity dominated by physical actions, or an activity for thinking and reflecting.
 - **Presentation of activities:** The activity must be introduced with clear instruction on how to proceed. Instead of using long verbal explanations, a simple illustration or example conveys the idea more clearly. Additional rules



could be introduced as the activity proceeds, either by you or by the children. Different activities are to be conducted at appropriate time during a period. But preferably small group activities may be conducted during the early part of the period after the warm up activity. It may be followed by open class discussion reflecting on the different important events/points of the activity. If required, individual activities may be conducted during the mid-period. During the end of the period, whole class reflection on what has been done need to be organized for summarizing the outcomes. Without such an ending, the activity may generate a lot of involvement, but fail to focus on specific aspects that you wanted students to learn.

- *Ensuring involvement of each student:* It is important that each and every student participate in the activity. It is not always possible that all students in the class/group participate equally in an activity. There are variations in their degree of involvement, but you must ensure more involvement of each learner. Whenever required, you may make small changes in the activity to increase the degree of involvement of the students. You must keep a close watch on the students when they are engaged in the activity and try to motivate the students who seem to be remaining inactive in the class. You will need to make sure you are available for clarifications, at least in the beginning of the activity. If the activity involves students working in small groups, you must try to find time to go around, sit with and talk to each group. You would need to discuss the results with each group during the activity to ensure that all the students are involved and engaged in the activity. By going around you may also be able to facilitate the social interactions in the groups and give the students feedback on what they are doing. You would also be able to judge the efficacy of the activity in terms of what the students are learning.
- *Community involvement in activity:* Several community resources can be utilised to make the activity more meaningful and contextual. Locally available materials, folk lore, folk songs, games, riddles and puzzles can be used in different classroom activities in which the student can effortlessly get involved. Further, community members can act as resource persons like the local artisans, farmers, craftsmen, etc. can bring their experience to the classroom to enrich the quality of activities and to make them socio-culturally contextual and relevant. Even the old ladies of the community can tell stories to children, and young women can teach children to dance and sing.
- *Process of assessment:* In an activity approach of learning, the process of assessment of learning specifically during the formative stage, involves self-assessment, peer-assessment and/or group assessment which need to be carried out on continuous basis so that the students get to know about their progress in learning at the right moment and can be able to improve their learning based on the feedback they get from time to time. Of course, assessment by peers is inbuilt in the small group activities and that is one reason why it is considered as an



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effective method of learning. Besides informal assessment of student's learning need to be carried out also.

- **Time management:** The available time in a class period is fixed and this need to be kept in mind while planning an activity. Time allotment for each activity to be conducted during the period is essential. Usually, it is advisable to allot less time for introductory or warm up activities (5 to 10 minutes) and for closure activities (around 5 to 10 minutes), while most of the time may be utilized for conducting activities. Before commencing each activity, the students need to be intimated specifically regarding the time allocation.

In an activity-based class, one period of 40 to 50 minutes may not be always adequate to conduct activities properly. Therefore, at the time of preparing time table for the class more time allocation (preferably combining 2 periods before or after lunch break), without disturbing the proportionate time allotment for each subject per week, is advisable.

4.3.3 Advantages Of Activity

Some advantages of activities are:

- **Activities provide enough scope** for learning in one's own style and own pace of learning. It develops the ability of self-learning. While performing activities one develops the abilities of enquiry, assessing one's own knowledge and construction of new knowledge.

The nature of activity is such that the learners get totally involved in it thereby creating interest in learner to learn more and more.

- **Learning to know, learning to do, learning to live together, learning to be**-the four pillars of learning is possible through activity-based approach.

By modifying an activity, it is easier to transact in multi-grade and multilevel situations.

While participating in an activity, either in group, or individual or peer-learning situations, a student is required to perform different tasks using multiple methods which require several abilities at the same time like, thinking, reasoning, searching for alternatives, responding in a socially desirable ways, emotion control, cooperation etc. Therefore, performing activities as a regular classroom practice develops several cognitive, socio-emotional and psycho-motor aspects in the children ensuring the development of a holistic personality.

4.3.4 Issues And Concerns Associated With Activity Based Approach

We are so much used to teach in a teacher-centred approach that it is difficult for most of us to accept the activity-based approach or learner-centred approach as a viable



approach. Some of the issues often raised by the teachers are worth considering. Think about them and try to answer the questions following them.

1. For a teacher it is a difficult and time consuming task to prepare an activity.

Suggest what a teacher may do to overcome the difficulty?

2. To design an activity from a particular concept is easier in case of experienced and expert teacher rather than a fresher in teaching.

State the steps to be taken by a teacher to develop an activity based approach on a concept or a group of concepts.

3. Time management is a pertinent problem associated with activity to be transacted in a classroom. Generally a period is meant for 40 to 45 minutes. It is difficult to conduct an activity during this period. Also the syllabus cannot be completed within the stipulated time.

What can a teacher do to follow activity based learning?

4. It is quite impossible on the part of a teacher to sing a song, to dance, to role play, to tell story, to draw diagram and pictures and to prepare a model.

Suggest the ways to deal with such a problem.

5. A large number of TLMs are required for conducting an activity in the classroom and preparation or collection of TLMs is very time consuming.

Suggest ways to overcome the issue.

It is believed that the Activity-based Approach is a great approach in learner-centred teaching- learning process. The teacher who is familiar with teacher- centred approach requires an attitudinal change to practice activity based approach. When a teacher adopts activity based approach regularly in the classroom, he/she will be convinced of its advantages for providing adequate scope and opportunities to students for learning in a meaningful manner which can be sustained for a longer period of time. Moreover, by promoting peer and self-learning, this approach helps the teacher to focus his/her time for developing more interesting and challenging tasks for enhancing the quality of learning.

4.4 LET US SUM UP

- Since learner is at the centre of all educational endeavours, it is essential that we know in details the characteristics of each and every learner in the class.
- In order to adopt the learner-centred approaches we need to understand various aspects of the learners such as health and physical development, mental abilities, personality attributes, learning styles, motivation, and their home and cultural background.



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- The teacher has three critical roles in learner-centred approaches which are:
 - (i) an observer and diagnostician, (ii) provider of the environment of learning, and (iii) facilitator of learning.
- Learning-centred education focuses on the learning process with its primary concern on the learning of the students. It is basically learner-centred, but includes teachers in the process of learning in a classroom situation.
- Cooperative learning is a specific small group approach that incorporates democratic processes, individual accountability, equal opportunity and group rewards. The cooperative learning model aims at achieving at least three important instructional goals: academic achievement, acceptance of diversity and social skill development.
- Collaborative learning is a method of teaching and learning in which students and teachers team together to explore a significant question or create a meaningful project. Collaborative learning refers to methodologies and environments in which learners engage in a common task where each individual finds on and is accountable to each other.
- Activity is a goal oriented task in which learner gets spontaneously involved and derives pleasure in achieving the learning objectives. There are four major elements of an activity, namely, focused, challenging, spontaneous involvement, and joyful.
- If managed properly in the classroom, activity has several advantages in facilitating students learning in a more contextual, relevant and meaningful manner.

4.5 MODEL ANSWERS TO CHECK YOUR PROGRESS

E1. Any three of the following:

- Teacher is more active,
- Students are mostly passive,
- Discipline in the class is as dictated by the teacher,
- Students demonstrate very limited interest in what the teacher is doing

E2. (b), (c), and (e).

E3. (i) Learner is at the centre of all educational practices, and (ii) Knowing status on different aspects of the learner shall help in providing appropriate learning experiences.

E4. (i) Use information and imagination to solve problems in divergent learning styles whereas those using convergent learning style use practical experience



to solve problems, (ii) those with divergent learning style look at things from various perspectives while those with convergent learning style are more focused on practical values.

- E5. (a) observer and diagnostician of learners, (b) provider of environment for learning, and (c) facilitator of learning.
- E6. (i) Grasping experience and (ii) transforming experience.
- E7. (i) construct understanding through mutual interaction, and (ii) derive contextual meaning from alternative values.
- E8. Any three for Weimer's five practices
- E9. With the mutual help in the group and positive outlook of cooperation than competition one builds self-confidence.
- E10. Any two differences may be stated.
- E11. Focused, challenging, spontaneous involvement, and joyful.
- E12. Memorization is a way mechanical repetition which has none of the four characteristics of an activity.

4.6 SUGGESTED READINGS AND REFERENCES

1. Brown, H., and Ciuffetelli, D.C. (Eds.). (2009). Foundational methods: Understanding teaching and learning. Toronto: Pearson Education.
2. Cooper, James M. Classroom teaching skills. Boston, New York: Houghton Mifflin Company.
3. IGONU (2000). Learning Mathematics: Encouraging Learning in the Classroom (LMT-01). New Delhi: School of Sciences, IGONU.
4. Weimer, M. (2002). Learner-centered teaching. San Francisco: Jossey-Bass.

4.7 UNIT-END EXERCISE

1. Differentiate between the learner- centred and learning –centred approaches.
2. State the characteristics of collaborative learning. Why is it considered as a method of learning-cantered approach?
3. Elaborate the characteristics of an activity with suitable examples from different subjects of primary school curriculum. State the advantages and limitations of this approach.
4. State the different aspects of management of activity in the classroom.