Farook Training College Innovative Academia (FTCIA)

Online Collaborative Learning Project (OCLP)

Pre-Edited Version of Study Materials.

(Chance for minor errors)

QCLP

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The entire materials are prepared by the B.Ed students(2019-21) of Farook Training College, Calicut, Kerala.

It is expected that this will be a support for those who need simplified, concise but comprehensive study materials for their examination preparation. It is a smart footstep to self learning and peer learning.

A note of appreciation to all student teachers who are the workforce behind this great endeavor.

Team OCLP

B Ed. II. Sem. EDU 07 FACILITATING LEARNING

Unit 1

Learning-a conceptual framework

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EARNING

oncepts of learning

Learning is the process by which an individual acquires knowledge, attitudes, and skills that are necessary to meet demands of life.

The change in behaviour brought about by experiences is commonly known as learning.

Eg: A child touches a burning candle many times. radually he learns to avoid all burning things.

Definitions of learning

- Learning is a process of progressive behaviour adaptation- Skinner
- Learning is the modification of behavior through experiences- Gates
- Learning refer to more or less permanent change in behavior which occurs as a result of practice- Kimble

Characteristics of learning

1. Learning as adjustment:
   Learning is a progressive adjustment to ever changing environment and conditions in life.

2. Learning as improvement:
   Normally learning is aimed to bring about desirable changes that lead to improvement.

3. Learning as development:

According to woodworth “ All activity can be called learning so far it develops the individual”.

4. Learning and behavioral changes:

The behavioral changes brought by learning is enduring and stable.

5. Learning and performance:

Learning produces changes in the efficiency of performance.

6. Learning is purposeful:

It is the purpose that determines what one has to attend in the learning situation.

7. Learning and Education:

Education is the process of learning that takes place in the classroom under the supervision of the teacher.

8. Learning takes place through experience:

Learning is the change in behavior through experiences provided by situations and activities.

9. Learning has a wide scope:

Learning’s scope includes formation of habits,interests,beliefs,values and ideals etc.

10. Learning as a social orientation:

An individual learns many behavioral patterns,knowledge,lifestyle etc. from the society.

11. Learning is continuous:

Learning starts from womb and ends in tomb.

Learning and maturation

- The development of the child in terms of his ability in goal setting, necessary physical and mental maturity previously learned skills etc.constitutes his learning readiness.
- The factors that detrimentally affect the learning readiness are defects in development, illness, physical handicaps, lack of motivation social maladjustment etc.
- Testing the previous knowledge and other attainments is one of the various means of ascertaining readiness.

- Readiness is determined by introducing a simple dose of task anticipated and checking the rate of learning during the early practice session.
- slow rate of gain indicates lack of readiness or excessive difficulty of learning material.
- Accelerated rate of gain indicates that the material is suitable to the learning capacity of the pupil.
- •Readiness is essentially an educational concept associated with the maturation of the child

Factors Affecting Learning

The factors which influence the process of learning can be classified in to three.

1. **LEARNER VARIABLES**. Those which are related with the learner
2. **METHOD VARIABLES**. Those which are related with the method.
3. **TASK VARIABLES.** Those which are related with the material.

Learner variables

1. Maturation
2. Age
3. sex
4. previous experience
5 capacity
6. physical handicaps

Maturation

- The learning which an individual is capable of taking up is dependent on the level of his maturation.
- Maturation is a natural developmental process by which development takes place in the individual.
- Maturation and learning are closely related to each other.
- Maturation which depends upon hereditary endowment provides the raw material for learning.
- Without practice, development willnot take place through maturation alone

Age

- The ability to.learn new material increases untill about 20 years of age.
- It remains constant till 30 and declines rapidly after 50.
- The older children learn more efficiently than younger ones, because the possess advanced maturational level, sharper intelligence and broader experience.

SEX

- There is no significant difference in learning, between sexes.
- It is generally observed that boys are superior in motor activities and girls excel in skills requiring delicate co-ordination of smaller muscles.

- In regard to verbal learning, girls are found superior in word fluency reasoning and rote memory and boys in spatial and verbal meanings.
- Boys obtain superior scores in mechanical aptitude and in science and mathematics. Whereas girls obtain higher scores in clerical.aptitude and language skills.

Previous experience

- Previous experience helps learning.
- If there is previous experience we can build up behavioural changes based on those that already taken place

Capacity

- By capacity we means the person's potential for learning.
- Capacity of the individual necessarily controls his performance.

Physical handicaps

- Physical defects tend to retard progress in learning.
- Defective vision, hearing and speech are some of the handicaps that adversely affect learning progress.

Motivation

- It is an important factor.
- It energizes the organism.
- It gives direction to action by projecting valuable goals.
- Without motivation no.learning is possible.
- Motivation is the heart of the learning process

Task variables

The nature of the learning in different forms such as its length,meaningfulness,difficulty level and organisation constitute the task variables.

Different types of task variables are,

1. Length of material ----- If the length of the learning task exceeds the memory span of the learner,the time taken to learn will be more.
2. Meaningfulness material ----- There is greater ease and facility for memorisig meaningful materials as compared to meaningless material.
3. Difficulty level of material ----- If the material is difficult the rate of learning is slowed down and forgetting will be more and fast.

4. Organisation of materials ----- The learning material should be arranged in the order of increasing difficulty as in programmed learning and modular instruction.

Method variables

- The amount and distribution of practice, the extent of learning the practice of recitation during, immediate knowledge of results, the use of the whole and part method, the sensory modality adopted are some of the features which come under method variables.

1. **Distribution of practice**

- It is usually said that practice the extent of learning the practice need not produce improvement.

With practice there must be some kind of check or appraisal of achievement so that improvement could be ensured.

- Practice on any task can be done in two ways.
- If one has to memorize a poem he may do it in one sitting and go on reading unit it is committed to memory or he may spread the practice over a few days.

- The former is known as **massed practice** and the latter is **Distributed practice.**

2.Extent of learning

- If we want to ensure better retention and recall, practice must be continued beyond the point of the first errorless reproduction and recall are ensured by over learning.

3. Practice of Recitation during Learning

- Recitation is a presentation made by a student to demonstrate knowledge of a subject or to provide instruction to others.
- First the learners may read the material a number of times. Then he must try to recite the material from his memory.
- If he fails at a particular point he may refer to the material and learn that part again.

4.whole and part method

- It's a learning techniques.
- The learner repeats the material as a whole every time or only a part of it.
- If the unit for study is meaningful and compact the whole method is better.
- In cases where the material is rather long and parts themselves are more closely integrated than the whole, the part method may work well.

5.sensory modality

- Human beings are considered to have five main senses.sight, hearing, taste, smell, and touch.
- We learn things using our senses.
- One may receive impressions better through the eyes and other may do so through the ears. Hence a multiple approach should be adopted.

- T.v attracts people better than radio since at the same time it appeals to two senses. Eyes and ears.
- The use of audio-visual aids in the classroom is justified and recommended on the basis of the proven efficiency of the multi sensory approach.

Cognitive factor

Cognitive aspects of learning refer to thinking processes and mental procedures involved in the learning process. Cognitive factors that influence learning range from basic learning process, such as memorizing facts or information, to higher-level process. Such understanding, application,analysis and evaluation. An important cognitive aspect. Of learning, that can hinder or facilitate learning, is prior knowledge and prior learning experience of students.

Definition of cognitive factor

Cognitive factors refers to characteristics of the person that affect performance and learning. These factors serve to modulate performance such that is may improve or decline. These factors

Involve cognitive functions like attention, memory, and reasoning

(Danili& Reid 2006)

Cognitive skills

- Sustained attention
- Response inhibition
- Speed of information processing
- Cognitive flexibility and control
- Multiple stimulations attention
- Working memory

- Category formation
- Pattern recognition

Cognitive skills in a child

Cognitive skills development in children in involves the progressive building of learning skills , such as attention , memory and thinking. These crucial skills enable children to process sensory information and eventually learn to evaluate, analyze, remember make comparisons and understand cause and effect

Affective factors

Affective factor include inhibition, attitudes, levels of anxiety ,and self esteem.

Affective factors in learning

Affective factors are emotional factors which influence learning. They can have a negative positive. Negative affective factors are called affective fillers and are an important idea in theories about second language acquisition.

Acquisition language factors are:

Motivation, attitudes, age, intelligence ,aptitude, cognitive style, and personality are considered as factors that greatly influence someone in the process of his or her second language acquisition.

Socio-cultural factors

Socio- cultural context refers to the idea that language, rather than existing in isolation, is closely linked to the culture and society in which it is used learners are looking at the language of advertisements. In order to do this effectively, they need to understand the culture I which the adverts function.

Examples of socio- cultural factors :

* customs, lifestyle and values that characterize a society . More specifically cultural aspects include aesthetics, education, language,law,and politics, religion, social organizations, technology and material culture, values and attitudes.

Socio- cultural dimensions of learning;

- Learning is influenced by social interactions, interpersonal relations and communications with others
- Learning can be enhanced when the learner has an opportunity to interact and to collaborate with others on instructional tasks.

Importance of socio- cultural factors;

Socio- cultural values are the beliefs, values traditions and habits that influence our everyday behavior. These values influence the decision we make and actions we take. Because of this socio-cultural values can have an important impact on economic development.

Types of learning

Leaning is the acquisition of knowledge or skills through study, experience or being taught. It is classify into various groups and thus divide human learning into the following types.

1.Conditioning

2.Verbal learning

3.Motor learning

4.Discrimination learning

5.Concept learning

6.Principle learning

7.Problem learning

8.Attitude learning

1. Conditioning…….

*Fundamental form of learning

*It involves the substitution of one stimulus for another and the forcing of connection of both

2.Motor learning……..

**Motor learning is the understanding of acquisition or modification of movement.

*As applied to patients, motor learning involves the reacquisition of previously learned movement skills that are lost due to pathology or sensory motor or cognitive impairments, this process is often referred to as recovery function.

3.Verbal learning…….

*It is the process of actively memorising new materials using mental pictures, associations and other activities.

*It is different from conditioning

*It is limited to human beings.

**Human beings acquires features largely in terms of words and then words come to be associated with one another.

4.Discrimination learning

* Occurs when an organism learn to respond to one stimulus but not the stimulus that one are similar

*For example we salivate when we hear ice cream truck bell.However we salivate at the door bell ringing.

5.Concept learning

*Learning from example

*General to specific ordering over hypothesis

**Picking new examples

*The need for inductively bias

6.Principle learning……

*Common relationships are noted and generalized in principle learning

7.Problem learning

*A problem is any situation in which the organism, can discover some sort of manipulation.

*Then by verbal reasoning a solution can be attempted.

*Attitude learning

*Based on attitude

*Much of our learning involves changes in attitudes.

*Its because of formation of attitudes show favorable and unfavorable responses to various objects, persons, situations or to ideas.

2 Mark Questions & Answer key words

1. Define learning?
2. Mention any four characteristic of learning?
3. which are the factors affecting learning?
4. write any 5 learner variables?
5. write any four socio- cultural factors that affects learning?
6. Mention the cognitive factors affecting learning

4 Mark Short Essays & Value Points

1. Briefly explain the concept of learning.?
2. Explain any four characteristics of learning.
3. Briefly explain any 4 characteristics of learning variables?
4. Explain the relationship between learning and maturation?
5. What are the socio- cultural factors affecting learning

10 Mark Essays & Value Points

1. Define learning and explain the concept and characteristics of learning.

B Ed. II. Sem. EDU 07 FACILITATING LEARNING

Unit 2
Motivation

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MEANING AND DEFINITION, HISTORICAL PERSPECTIVE

MEANING OF MOTIVATION

- Motivation is a transitive form of the noun, **“MOTIVE”**. Motive is derived from the Latin word **“MOVERE”** which meaning **“TO MOVE”**.
- Motivation is what moves people to do the things they do.
- It is the act or process by which the needs and desires of a person move him towards some action.
- It is defined as a driving force that initiates and directs behaviour.
- It is the heart of the learning process.

DEFINITION OF MOTIVATION

- Motivation is defined as the “processes that account for an individual’s intensity, direction and persistence of efforts towards attaining a goal”.

-Stephen P. Robbins

- Motivation as an internal process that activate, guide and maintain behaviour.

-Baron

HISTORICAL PERSPECTIVES OF MOTIVATION

- The concept of motivation can be traced from ancient Greeks, Socrates, Plato and Aristotle ages.
- **Plato** (**427 B.C – 347 B.C)**, the desire for truth (curiosity) is one of the greatest motivation in life, and wisdom is one of the greatest intrinsic joys.
- **Sigmund Freud (1856- 1939),** put forth a very different view of human motivation. he said that, from cradle to tomb, what people want is sex, sex, and more sex. Later he modified his ideas to say that both sex and aggression drive our behaviour.

- Many psychologist who were contemporaries of Freud, or who came after him, embraced much of what Freud said but differed with him on the importance of sexual motivation. For example.
  - **Alfred Adler (1870- 1937)** wrote about desire for superiority and power.
  - **Carl Jung (1875- 1961)** thought that the will to live, a general life force, is the greatest human motivator.
  - **Clark Hull (1884- 1952)** and **Kenneth Spence (1907- 1967)** develop an influential model of behaviour and discussed human motives in terms of a series of learned and unlearned drives. Such as the drive to eat when hungry or the drive to escape from anxiety.

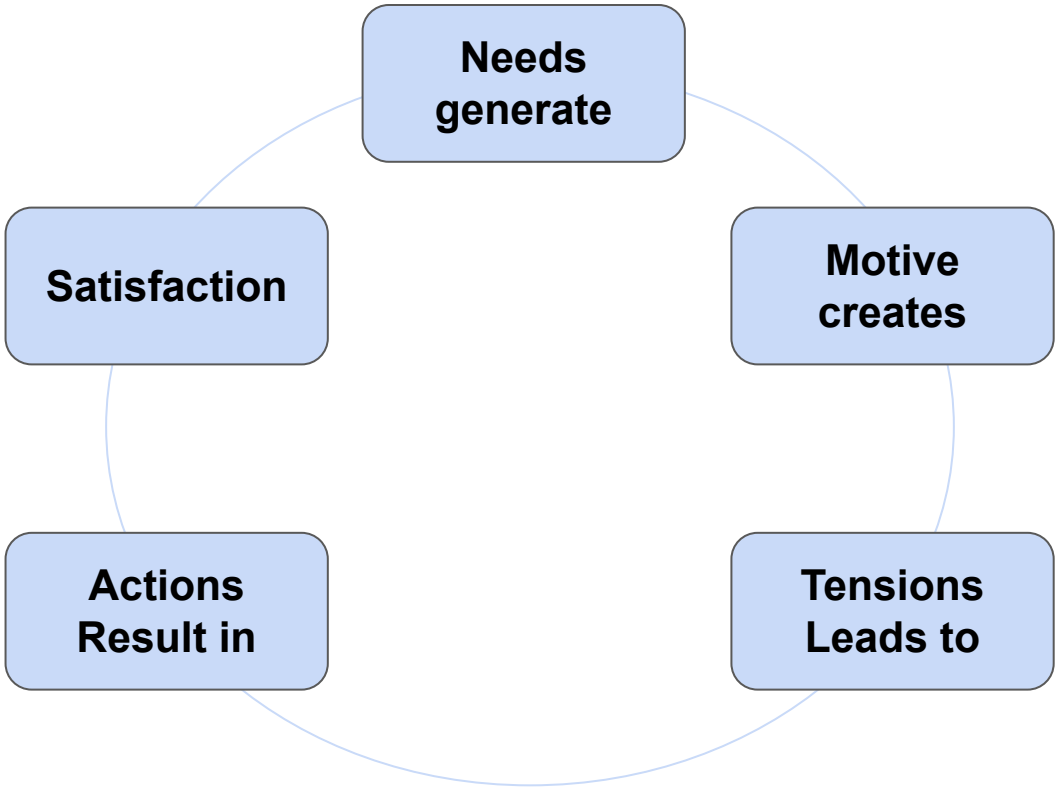
- **Erik Erikson (1902- 1994)** developed a theory of Ego development or what might be loosely called a desire for human growth.
- Various schools of behaviourism have expressed different views on the on the question of what motivates people.
- **Carl Rogers (1902- 1987)** said that people are driven more or less by two desires, the desire to grow, called SELF-ACTUALIZATION, and the desire for SELF ACCEPTANCE.
- **B.F.Skinner (1904-1990)**, another leading behaviourist, urged psychologists to pay little attention to finding the basic motives that guide our lives. He believed that all motives, thoughts, and feelings (including pleasure and pain) are private.
- The great American psychologist and philosopher William James said, “the deepest principle in human nature is the craving to be appreciated.
- **William James (1842- 1910)**, philosopher, and educator, and **William McDougall (1871-1938)**, the brilliant Harvard social psychologist, believed that behaviour is guided by instinctual desires.

❖ **The following list of basic instinctual desires are;**

1. saving – the desire to hoard and collect
2. construction – the desire to build and achieve
3. curiosity – the desire to explore and learn
4. exhibition – the desire for attention
5. family – the desire to raise our children
6. hunting – the desire to find food
7. order – the desire for cleanliness and organization
8. play – the desire for fun
9. sex – the desire to reproduce
10. shame – the desire to avoid being singled out
11. pain – the desire to avoid aversive sensation
12. herd – the desire for social contact
13. vengeance- the desire for aggression

- McDougall expanded and improved on this list. Together, James and McDougall realised that human desire is multifaceted.
- James and McDougall were the 1st influential psychologists to develop a comprehensive theory of basic human desires.
- **Henry A Murray (1893- 1988)** restated McDougall's list of instincts as a list of psychological needs. Murray's work was influential, partially because he developed a popular technique for assessing a person's motives.
- **Abraham Maslow (1908- 1970)** he was one of the few psychologists who looked at human nature primarily from a motivational perspective.
- He made the important point that we are creatures of desire who always want something.
- Motivation as a state of the organism which involve the existence of a need that moves the organism and directs its activities to a goal that can bring about the satisfaction of the need.
- Therefore it constitutes a cycle.

MOTIVATION CYCLE



Types of motivation

KINDS OF MOTIVATION

The motivation can be broadly classified into two kinds :

1. Natural Motivation or Intrinsic Motivation
2 Unnatural Motivation or Extrinsic Motivation

Natural Motivation or Intrinsic Motivation

This type of the motivation is directly linked with the natural instincts, urges and impulses of the organism. The individual, who is intrinsically or naturally motivated, performs an act because he finds interest within the activity. He is engaged in learning something because he derives pleasure in learning that thing. The activity carries its own reward and the individual takes genuine interest in performing the activity not due to some outside motives and goals.

When a student tries to solve a mathematical problem and derives pleasure in the task of solving it or tries to read poetry and the reading itself gives him pleasure, we can say that he is intrinsically motivated. In these cases the source of pleasure lies within the activities. He solves the problems or reads the poetry for its own sake. Such type of motivation has real values in the learning task as it creates spontaneous attention and interest and sustains it throughout.

Unnatural or Extrinsic Motivation

ln such motivation, the source of pleasure does not lie within the task. Such kind of motivation has no functional relationships to the task. The individual does or learns something not for its own sake, but as a means of obtaining desired goals or getting some external reward.

Working for a better grade or honour, learning a skill to earn the livelihood, receiving praise and blame, rewards and punishment etc. all belong to this category.

In comparison to Extrinsic motivation, Intrinsic motivation, as a source of spontaneous inspiration and stimulation, brings better results in the teaching- leaming process. Therefore. It is always better to make use of intrinsic motivation, whenever possible.But in case it is not appropriate to make use of intrinsic motivation, the use of extrinsic motivation should not be suspended. Depending upon the learning situation and nature of the task, the choice for providing appropriate motivation should be made by the teacher so that the learner may be profound interest in the learning activity.

Achievement motivation

- Achievement motivation or the need for achievement is the psychological drive to exel, a social form of motivation to perform at a high level of competence.
- The term “Need for achievement ”was first introduced by Henry Murray in his book “Explorations of personality ” where he used it in the sense of overcoming obstacles or being regularly willing to take on difficult tasks.
- The term achievement motivation has been the preferred term more recently.
- The theory of achievement motivation was developed by David McClelland in 1951 at the university of Havard.
- According to McClelland , the achievement motivation is a constant drive to improve one’s level of perfomance, to accomplish success in contention

Achievement motivation - Meaning

- Achievement motivation which can be defined as an individual's need to meet realistic goals, receive feedback and experience a sense of accomplishment.
- It may be defined as the energization and direction of competence - relevant behaviour or why and how people strive toward competence (success) and away from incompetence (failure).

Characteristics of achievement motivation

1. Undertaking innovative and engaging tasks.
2. Need for precise goal setting.
3. They tend to be more future oriented.
4. Appreciate accomplishment rather than rewards (tangible or intangible).
5. Prefers working alone to group works.
6. Demands regular feedback from the superiors
7. Calculate risk of the task beforehand.
8. Have strong mind setting to accomplish the given task.
9. Believe in excellence
10. High performers

IMPORTANCE OF ACHIEVEMENT MOTIVATION

- It will help to moderate risk propensity.
- It undertaking innovative and engaging tasks.
- It enhance internal locus of control and responsibility for own decision and behaviour.
- It need for precise goal setting of students
- It help to predict student’s future success or failure.
- Through the prediction of failure ,teacher can give special training programmes for achievement.

HOW TO DEVELOP A.M ?

- The home,school,society play an important rolein the development of A.M.
- Early training at home,parental expectation,

  guidence received,etc
- Social philosophy of society(every society follow certain rules and regulations).
- Stories of great men and their acheivements.
- Proper environment in the classroom.
- Teacher attitude towards students.
- Opportunity to take an independent responsibility

- Commitment and social climate.
- Focus on playing games regarding real life situations.Through this child’s behaviour is scoring on several criteria and they recieved individual feedback.
- Through developing a personal plan of change.Child should think about everyday change and manage possibile difficulties.
- Child should be understand or realise their own charactristics and goals.

Role of motivation in learning

Motivation occupies a central position in the teaching learning process. The fundamental aim of motivation is to stimulate and to facilitate learning activity.

- Motivation is the heart of learning
- Motivating the students is essential to make classroom instruction effective
- Learning becomes effective and pleasant only when children are motivated.

- Motivation encourage the participation of the learner.
- Motivation of learning activities helps the pupil to concentrate on what he is doing, and thereby to gain satisfaction.
- Continuous motivation is needed to help learners concentrate on the lessons to be learned.
- In the absence of motivation there will be either no learning or very little learning.
- Sufficient motivation will be release energy for the continuation of the process of learning.
- Motivation leads to increased effort and energy.

- Motivation increases the initiation and persistence of activities.
- A good teacher tries to arouse motivation in the students before he begins the lesson.
- It arouses, sustains, directs and determines the intensity of learning.

classroom motivation techniques

- Motivation occupies a central place in learning .
- All teachers are faced with the problem of arousing motivation.
- Several steps are there to arousing motivation in class room situation.

➔ **Child centered approach:**

- It is child who has to learn. The teacher only helps him to learn.
- The learning meterials or experiences should always be assigned according to the needs, interest and abilities of the child.

1. **Linking the new learning with past:**
2. What has been learned or experienced in the past proves a good base for the present learning.
3. The assigned task seems to be interesting, easy and within the capacity of the child if it is properly related with past experiences.
4. **Use of effective methods, aids and devices in teaching:**
5. Use of audio-visual aids and service rendered by musuem,places of visit etc….
6. **Definiteness of the purpose and goal:**
7. Child must be told the purpose of acquiring a new skill or

ExPeriences so that a clear perception of the goal may motivate them and bring required results.

➔ **Providing immediate feed back and achievements:**

- Immediate knowledge of the result of an activity gives incentive for taking further steps.
- Therefore, the teacher should make provision for acquainting the students well with their progress.
- Hand books, graghs, charts, and progress card should be maintained properly.

➔ **Praise and reproof:**

- Both praise and reproofs are potent incentives.
- They can be safely used for the achievement of the desired motivation in classroom situations.
- The teacher must recognise the nature of students and consequently make use of praise and reproof in motivating them.

➔ **Ego involvement:**.

- Ego - attitudes rising to the self.
- Teachers, generally are in the habit of rediculing the students. it is not the proper way of motivation.

- Teacher should ty to engage them in activities which can appeal his self respect and raise status among his peers.

➔ **Development of proper attitude:**

- Attitude is defined as the one's set to react in a particular situation.
- It is closely related to attention and interest.
- The childs have positive as well as negative attitudes.
- Teacher should try to develop proper attitudes towards the desired act or learning.

➔ **Competition and cooperation:**

- Competition indicates the desire to excel others
- Competition may take one of the two forms;
    - ★ Competition against one person: it may develop undesirable habits.
    - ★ Competition against one's own record: stimulate the learner to compete with his own past record
- Group competition may lead to bitter criticism, improper rivalry, enimity etc….
- To remove these bad effects the remeady is often suggested in the form of cooperation.
- Cooperation and friendly competition develop team spirit, community feeling, and other socially desirable habits.

➔ **Rewards and punishment:**

- Rewards and punishments are powerful incincincentives.
- **Punishment:**

★ Negative motive is based on the fears of failure,losing prestige,physical pain and so on.

- **Rewards:**

★ Positive motive.

- Use of punishment as a motivating agent should be avoided as it kills leadership resourcefullness and spirit of free thinking.

- Rewards like prizes,certificates, medals etc..have psychologival value and develop in the students creative abilities and self confidence and so on.
- Teacher should be very careful in using rewads or punishmentas an incentive to motivate his students.

➔ **Appropriate learning situation and environment:**

- The environment will influence the learning process of the learner.
- A well equipped, healthy classroom environment proves a motivating force.

- Favourable situations like;

★ Suitability of school building.

★ Seating arrangements.

★ Affection from teachers.

★ Mutual cooperation within the classmates.

- All influence and motivate the learning behaviour of the child.

2 Mark Questions & Answer key words

1. What is achievement motivation? (accomplishment - goals - success)
2. What are the two types motivation ? (intrinsic motivation and extrinsic motivation)
3. What you mean by extrinsic motivation ? illustrate with example. (individual is motivated for obtaining particular goal or getting some external reward.eg : individual learn a skill for earning his livelihood,doing something for getting honour or reward)
4. Explain the concept of natural motivation
5. Define motivation.

4 Mark Short Essays & Value Points

1. Explain the techniques that the teacher can employ for motivating students?(child centerd approach,linkng the new learning with past,adopting effective method of teaching,providing immediate feed back of achievement,praise and re proof)
2. Discuss the role of motivation in learning ?
3. How to develop achievement motivation?
4. Explain motivation cycle?

10 Mark Essays & Value Points

1. Explain different types of motivation and classroom motivating techniques.(intrinsic motivation,extrinsic motivation..compare them, child centerd approach, linking the new learning with past, adopting effective method of teaching, providing immediate feedback of achievement, reward and punishment, promoting competition and cooperation)
2. How will you analyse the learning styles of students ? Suggest different strategies of motivation that can be Used for different learning style?

3. Briefly explain historical perceptives of motivation?

Unit 3

Perspectives on learning

1. Sithara
2. Shemi
3. Smitha. M
4. Keerthana
5. Hannath
6. Fida
7. Ajay Lal
8. Greeshma
9. Ayana Sudheer

BEHAVIOURIST VIEWS ABOUT LEARNING

★ **THEORY OF CLASSICAL CONDITIONING** – PAVLOV

- **Pavlov**, a Russian physiologist, first described classical conditioning in **1899** while conducting research into the digestive system of dogs.
- After performing various experiments Pavlov formulated a new theory of learning known as **Conditioned Response Theory.**
- Conditioning means modification of the relation between a natural stimulus and natural response.
- Natural stimulus may be substituted by an artificial stimulus by which a new connection of artificial stimulus and natural response is created.

Pavlov’s Experient

- A dog was tied on to the experimental table which was fitted with certain mechanically controlled devices.
- The dog was made comfortable and distractions were excluded as far as possible.
- Arrangement was made to give meat to the dog.
- When meat was presented there was natural secretion of saliva.
- After that a bell was rung but the dog did not salivate at the sound of the bell.
- Every time meat was presented the bell was rung too. The activity of presenting the meat accompanied with the ringing of the bell was repeated several times. So the sound of the bell and the sight of the meat got interconnected.

- Next time the dog was given no meat but the bell was rung.
- It was found that even in the absence of meat (natural stimulus), the ringing of the bell (artificial stimulus), caused the dog to secrete the saliva (natural response).

Conclusion

★ In this experiment the conclusion was that the dog learned to salivate at the sound of the bell. Establishment of this new artificial association is what is known as conditioning.

★ The natural stimulus can thus be said to be unconditioned stimulus (UCS), the natural response unconditioned response (UCR), the artificial stimulus the conditioned stimulus (CS) and the response to the conditioned stimulus the conditioned response (CR).

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Learning in Classical Conditioning

- In conditioning learning is considered as a habit formation and is based on the principle of association and substitution. It is simply a stimulus response type of learning where in place of a natural stimulus an artificial stimulus can evoke a natural response.
- In this experiment when both the artificial and natural stimuli are brought together several times the dog becomes habituated or conditioned to respond to this situation. This creates a perfect association between the types of stimuli presented together.
- As a result, if adequately repeated a natural stimulus could be substituted or replaced by an artificial stimulus to evoke a natural response.

Classical conditioning of behavior

- Behaviours that have been classically conditioned may occur so automatically that they appear to be reflexive.
- CC behaviours are like reflexes in that they occur involuntarily, but they are unlike reflexes in that they are learned.
- A conditioned reflex is an automatic response that occurs as the result of previous experience.
- A conditioned reflex involves little conscious thought or awareness on the part of the learner.
- E.g. **listening for thunder when you see lightning.**

Conditioned Emotional Response

- An emotional reaction such as fear of a specific stimulus is learned through CC.
- A conditioned emotional response is an emotional reaction that usually occurs when the autonomic nervous system produces a response to a stimulus that did not previously trigger that response.
- E.g. fearing the sound of the dentist’s drill.

Educational Implications

- Avoid classically conditioned negative emotions.
- Anticipate situations where negative emotions might be learned through classical conditioning.
- Link learning with positive emotions. Arrange repeated pairing of positive feelings with certain kinds of learning,especially subjects that are anxiety provoking.
- Teach students to generalize and discriminate appropriately.
- Poor performance on one assignment or test does not mean that the student is a poor performer.
- Help students cope with classically conditioned anxiety.
- Help students learn to relax when facing anxiety provoking situations.

- The human fears and superstitions are developed in an individual due to conditioning.
- The pupil’s fears, bad habits and blind belief can be avoided through conditioning.
- The new learning materials are associated with the past learning.
- The students should be allowed to utilise and associate their past experience with the new materials.
- This theory is most helpful in teaching of language to small children.
- Teachers should associate the sound with the actual object by using audio visual aids.
- This theory emphasizes the idea of continuity, similarity and contrast as the factors of association in a learning situation.
- Montessori system is based on this theory.

Thorndike’s Trial and Error Theory

Connectionism or the Bond Theory

- Edward L Thorndike was the chief exponent of the theory of connectionism.
- The basis of learning according to Thorndike is an association between stimulus (S) and response (R). Such an association he called by the name bond or connection.
- A stimulus is connected with its response by what is known as the S – R bond. It is the strengthening or weakening of such bonds that accounts for the making and breaking of habits.
- On this account the theory is known as connectionism or bond theory of learning.

Trial and Error Theory

Thorndike thinks that learning is a mechanical process leading to formation of bonds and these are created by the learner making mistakes and then correcting them. That is why his theory is also known as **trial and error theory**.

- Trial and error is a fundamental method of problem solving.
- It is characterized by repeated, varied attempts which are continued until success, or until the agent stops trying.
- Learning begins when the organism faces a new and difficult situation – a problem.
- In learning organism counters errors, and with repeated trials, errors reduce.
- The phenomenon is called Trial and Error Learning in a simple sense.

Thorndike's laws of learning

Law of Readiness

- The law of readiness was intended to account for the motivational aspects of learning and was tightly coupled to the language of the science of neurology.
- In its most concise form, the law of readiness was stated as follows, “for a conduction unit ready to conduct to do so is satisfying, and for it not to do so is annoying”

Law of Exercise (has two parts- the **law of use** and the **law of disuse**)

- This law stated that connections grow stronger when used— where strength is defined as “vigor and duration as well as the frequency of its making” and grow weaker when not used.

Law of Effect

- The law of effect added to the law of exercise.
- The notion that, connections are strengthened only when the making of the connection results in a satisfying state of affairs and that they are weakened when the result is an annoying state of affairs

Subordinate Law

Law of Multiple Response or Varied Reaction

When faced with a problem an animal will try one response after another until it finds success.

Law of Set or Attitude

The responses that an animal will try, and the results that it will find satisfying, depend largely on the animal's attitude or state at the time.

Law of prepotency of elements or Partial activity

Certain features of a situation may be prepotent in determining a response than others and an animal is able to attend to critical elements and ignore less important ones. This ability to attend to parts of a situation makes possible response by analogy and learning through insight.

Law of Response by analogy -Assimilation

Due to the assimilation of analogous elements between two stimuli, an animal will respond to a novel stimulus in the way it has previously responded to a similar stimulus.

Law of Associative Shifting

Associative shifting refers to the transfer of a response evoked by a given stimulus to an entirely different stimulus.

Educational Implications

- An instructor or a teacher must try to prepare the learner by bringing the **mechanism of motivation** into play.
- Whatever we want to learn or teach, we must first identify the aspects which are to be **remembered** and those which may be **forgotten**
- after this, we may try, to strengthen the links or connections between the stimuli and responses of those things which are to be remembered, through repetition, drill and reward.
- for forgetting , the connection should be weakened through disuse and unpleasant results.
- According to this theory the task can be started from the easier aspect towards its difficult side.This approach will benefit the **weaker and backward children.**

- the teacher should make use of the **previous knowledge** and **experiences** of the students. The child must also be encouraged to see similarities and dissimilarities between different kinds of responses to stimuli.
- with the help of comparison and contrast the child may be encouraged to apply the learning acquired from one situation to effectively respond to other **similar situations.**
- The learner should be encouraged to do his task **independently**. He must try **various solutions of the problems** before arriving at correct one.
- Habits are formed as a result of repetition. With the help of this theory the **wrong habits of the children can be modified and the good habits strengthened.**
- **Practice** is the main feature of trial and error method. Practice helps in reducing the errors committed by the child in learning any concept.

Skinner’s Operant Conditioning

- modified extension of the S – R theory propounded by Pavlov.
- called his theory **‘operant conditioning**’ as it is based on certain operations or actions which an organism has to carry out.
- Skinner used the operant conditioning approach to the study of learning.
- Operant is the response made by an organism to the surrounding environment.
- also known as **reinforcement conditioning.**
- Reinforcement is correlated with the response rather than with the stimuli.
- If the occurrence of an operant is followed by a reinforcing stimulus, then the conditioning is strengthened.
- Behavior changes according to its immediate consequences.

Skinner’s Experiment 1

- Skinner put a hungry rat in his box known as ‘**Skinner box**’.
- Inside the box there was a lever and a device for delivering a pellet of food when the lever is operated in a particular way.
- The rat began to move restlessly and sometimes pressed its paw on the lever, by which it could get a pellet of food.
- Gradually the rat learned to press the lever to get food, and the response in the form of lever-pressing got strengthened because it gave reward in the form of food.
- Here food (**reward**) reinforced the lever pressing response (**operant response**). It was also found that when the lever pressing was not followed by food (reinforcing stimulus), the operant response was discontinued.

Skinner’s Experiment 2

- he kept a hungry pigeon in his box.
- The pigeon has to raise its head to a particular height and peck at a particular spot in order to get its food which got automatically released on pecking.
- The operant behavior got strengthened.
- The reinforcer was the food and the reinforcement was provided by supplying food (the need-reducing reward given immediately) when the operant behavior (lifting the head to the desired height and pecking at a particular spot) was emitted by the pigeon.
- Here the operant is the behaviour upon which the reinforcement is contingent, i.e., ***lifting the head to the required height and pecking at a given spot.***

Educational Implications

Instructional Objectives

Objectives are divided into many small steps/tasks and reinforced one by one.

- Programmed instruction and Computer Assisted Instruction.
- Desired behaviour should be rewarded immediately.
- Reinforcers should be applied frequently so that possibility of extinction of the desired behaviour is resisted.

Teaching machines. Are automatic devices, present items in an essentially predetermined sequence, permit the students to respond and give them immediate feedback .

Contingency Contracts

- “A contract between the teacher and a student specifying what the student must do to earn a particular reward or privilege.”

Applied Behaviour Analysis

- The application of behavioral learning principles to understand and change behavior.”

GAGNE'S THEORY OF LEARNING AND INSTRUCTION

GAGNE'S HIERARCHY OF LEARNING

★ **Robert. M Gagne** analysed and graded the learning processes in their heirarchial order of complexity and hence is popularly known as **GAGNE'S hierarchy of learning**.

★ Gagne described **8** types of learning.

1. **Signal Learning**
   - simplest form of learning
   - Classical conditioning form of learning
   - Learner acquires a conditioned response to a given stimulus or signal.
   - Examples: *When there is a Red Signal in road, people stop their Vehicles.*

2. **Stimulus-Response learning**

- Trial and error form of learning.
- This is all about getting a response to the signal.
- Example: *Master says to his dog, 'shake hands'. At the same time he gently raises the dog's paw and shakes it,then gives him a biscuit. The master repeats the procedure. Finally the dog performs the act correctly*.
- Repetition and contiguity are important in stimulus response learning

3. Chaining

- This involves putting together previously learned stimulus - response associations in a prescribed order.
- That is the ability to connect two or more previously-learned stimulus-response bonds into a linked sequence.
- Many motor skills are acquired through chain learning
- Examples - *Writing, buttoning, proper holding of the pencil.*
- Practice is required inorder to put together each stimulus - reponse in the proper sequence.

4. **Verbal Association**

- A form of chaining where the links are verbal units
- key process in the development of language skills.
- *Images* as well as previously learned verbal associations may be part of a chain.

5. **Multiple Discrimination.**

- This involves developing the ability to make appropriate (different) responses to a series of similar stimuli that differ in a systematic way
- The process is made more complex (and hence more difficult) by the phenomenon of interference, whereby one piece of learning inhibits another
- Interference is thought to be one of the main causes of forgetting
- Example: *Young child learning colours and different shapes.*

6. Concept Learning

- It forms the basis of the ability to generalise, classify etc.
- In learning a concept we respond to stimuli in terms of abstract characteristics like *color, shape, position* and number as opposed to concrete physical properties.

7.Principle Learning.

- high level learning.
- Learners a principle and then demonstrates the ability to apply the principle in a new situation.
- It forms the basis of learning of general rules, procedures etc.

8.Problem solving.

- Highest level of cognitive process according to GAGNÉ.
- It involves developing the ability to invent a complex rule, algorithm or procedure for the purpose of solving one particular problem, and then using the method to solve other problems of a similar nature.
- *Requires higher order thinking.*
- Without the knowledge of related principles, problems cannot be solved.

Educational Implications

Helps the teachers -

- To select appropriate teaching technique.
- To decide what lower skills or behaviors are to be taught before teaching higher learning skills.
- To break a complex task into component skills and teach those skills only that the students are lacking.

GAGNE'S NINE EVENTS OF INSTRUCTION

- ★ Robert Gagne created a nine step process called the **Gagne's Nine Events of Instruction**
- ★ The nine events provide a framework for an effective learning process.
- ★ Each step addresses a form of communication that supports the learning process.
- ★ When each step is completed, learners can retain the information or skills being taught.

"Organisation is the hallmark of effective instructional materials" - Robert Gagne


Gaining Attention
Informing Learners of the Objective
Stimulating Recall of Prior Learning
Presenting the Stimulus
Providing Learning Guidance
Eliciting Performance
Providing Feedback
Assessing Performance
Enhancing Retention and Transfer

1. Gaining attention

Most important part of the learning session.

What should be done?

- Pose thought provoking questions.
- Create interesting situations that provoke curiosity.
- Present meaningful challenges.
- Motivate them

2. Informing Learners of the Objective

- Describe what they will be able to do at the completion of the session.
- Describe required performance.
- Explain how their learning will benefit them.
- Explain how they can apply their knowledge in future.

3. Stimulating Recall of Prior Learning

Methods for stimulating recall include:

- Ask if they have any previous experiences with the topic
- Ask questions about previous experiences
- Ask about their understanding of previous concepts
- Give them an example of an experience similar to what they are learning.

4. Presenting the Stimulus

- Organize your information in a logical and easy-to-understand manner.
- Provide examples.
- Use a variety of text, graphics, figures, pictures, sounds, simulations, etc. to stimulate the senses
- Use a variety of approaches (such as visual cues, verbal instruction, and active learning) to suit people with different learning styles

5. Providing Learning Guidance

Ways to provide learning guidance include:

- Concept mapping for associations
- Mnemonics to cue and prompt learning
- Role playing for visualization of application
- Case studies for real world application
- Analogies to help knowledge construction
- Graphics to make visual associations

6. Eliciting Performance

- Ask the learner to do something with the newly acquired behavior.
- Make them demonstrate practicing skills.
- Make them apply knowledge to a scenario or case study.
- Ask questions.
- Make them do a complete a role playing exercise

7. Providing Feedback

After the learner attempts to demonstrate their knowledge, provide immediate feedback of learner's performance to assess and facilitate learning.

- Be positive
- Be objective
- Use first-hand observation
- Deliver focused and concise feedback

8. Assessing Performance

Methods for assessing performance learning include:

- Written test
- Short questionnaires
- Short essays
- Oral questioning
- Other measurement tool to show that they've learned the material or skill effectively

9. Enhancing Retention and Transfer

Repeated practice with effective feedback is the best way to ensure that people retain information and use it effectively.
Make them

- Summarize content.
- generate examples
- create mind maps / concept map
- create other types of reference material.

EDUCATIONAL IMPLICATIONS

- ★ It ensures an effective and systematic learning program.
- ★ It gives structure to the lesson plans and a holistic view to the teaching.
- ★ Provide aluable information to teachers

COGNITIVE VIEWS ABOUT LEARNING

Jean piaget's theory of cognitive development

- children move through **four different stages** of mental development.
- focuses not only on understanding **how children acquire knowledge**, but also on understanding the **nature of intelligence.**
- As kids interact with the world around them, they continually add new knowledge, **build upon existing knowledge**, and adopt previously held ideas to accommodate new information.

Piaget's Theoretical Notions

Schema

Ø Schema is a bit of knowledge which makes the fundamental structure of knowledge.

Ø A schema is a repeatable behaviour pattern,

Piaget’s Theoretical Notions

Assimilation

Fitting the world in to existing schemas

Accommodation

Changing existing schemas to fit the world

Piaget's Theoretical Notions

Equilibration

It is an adjustment mechanism

Equilibration of the mental disequilibrium

Assimilation & Accommodation leads to Equilibration

Adaptation

Adaptation is the result of disequilibrium.

These processes occurred and developed through many stages

Developmental Stages..

The Sensorimotor Stage

(Ages: Birth to 2 Years)

- The infant knows the world through their movements and sensations
- Children learn about the world through basic actions such as sucking, grasping, looking, and listening
- Infants learn that things continue to exist even though they cannot be seen (object permanence)
- They are separate beings from the people and objects around them
- They realize that their actions can cause things to happen in the world around them

The Preoperational Stage. (Ages: 2 to 7 Years)

- Children begin to think symbolically and learn to use words and pictures to represent objects.
- Children at this stage tend to be egocentric and struggle to see things from the perspective of others.
- While they are getting better with language and thinking, they still tend to think about things in very concrete terms.

The Concrete Operational Stage (Ages: 7 to 11 Years)

- Major Characteristics and Developmental Changes
- During this stage, children begin to thinking logically about concrete events
- They begin to understand the concepts; that the amount of liquid in a short, wide cup is equal to that in a tall, skinny glass, for example

The Formal Operational Stage(Ages: 12 and Up)

- At this stage, the adolescent or young adult begins to think abstractly and reason about hypothetical problems
- Abstract thought emerges
- Teens begin to think more about moral, philosophical, ethical, social, and political issues that require theoretical and abstract reasoning
- Begin to use deductive logic, or reasoning from a general principle to specific information

Educational Implications

- A focus on the process of children's thinking, not just its products. Instead of simply checking for a correct answer, teachers should emphasize the student's understanding and process they used to get the answer.
- Recognition of the crucial role of children's self-initiated, active involvement in learning activities. In a Piagetian classroom, children are encourage to discover themselves through spontaneous interaction with the environment, rather than the presentation of ready-made knowledge.
- Acceptance of individual differences in developmental progress. Piaget's theory asserts that children go through all the same developmental stages, however they do so at different rates.
- teachers must make special effort to arrange classroom activities for individuals and groups of children rather than for the whole class group.

Learning Theory of Bruner

Jerome S. Bruner proposed three modes of representation

1. **Enactive representation (action based)**

- The first kind of memory. Thinking is based entirely on physical actions, and infants learn by doing, rather than by internal representation (or thinking).
- It involves encoding physical action based information and storing it in our memory. For example, in the form of movement as a muscle memory, a baby might remember the action of shaking a rattle.
- This mode continues later in many physical activities, such as learning to ride a bike.

Iconic (1 - 6 years)

- Information is stored as sensory images (icons), usually visual ones, like pictures in the mind. For some, this is conscious; others say they don't experience it.
- This may explain why, when we are learning a new subject, it is often helpful to have diagrams or illustrations to accompany the verbal information.
- Thinking is also based on the use of other mental images (icons), such as hearing, smell or touch.

Symbolic (7 years onwards)

- This is where information is stored in the form of a code or symbol, such as language. In the symbolic stage, knowledge is stored primarily as words, mathematical symbols, or in other symbol systems, such as music.

- a learner even of a very young age is capable of learning any material so long as the instruction is organized appropriately
- In sharp contrast to the beliefs of Piaget and other stage theorists, he suggests learning as discovery.
- **Discovery learning** is a powerful instructional approach that guides and motivate learners to explore information and to construct new ideas
- Discovery learning create new models of thinking and behaviour.

Discovery learning

“an approach to instruction through which students interact with their environment—by exploring and manipulating objects, wrestling with questions and controversies, or performing experiments” (Ormrod, 2001, p.442).

Discovery learning

- Is a method of inquiry-based instruction and a constructivist learning theory

–that guides and motivates learners to explore information and concepts

–to construct new ideas,

– identify new relationships

- Children discover the facts and relationships through their own explorations.
- It will be more usable and these will tend to be better retained.
- The role of student as discoverer

The role of teacher as guide

Educational Implications

- The aim of education should be to create autonomous learners (i.e., learning to learn).
- For Bruner (1961), the purpose of education is not to impart knowledge, but instead to facilitate a child's thinking and problem-solving skills which can then be transferred to a range of situations. Specifically, education should also develop symbolic thinking in children.
- In 1960 Bruner's text, The Process of Education was published. The main premise of Bruner's text was that students are active learners who construct their own knowledge.

Learning Theory of VYGOTSKY

SOCIAL CONSTRUCTIVISM

- According to Lev Vygotsky, cognitive abilities are socially guided and constructed.
- Cognitive development of children is advanced through social interaction with other people.
- He suggests 3 zones of development.
  1. **Level of actual development (LAD)**
     - Refers to what a child can learn alone without the help of others
     - Level at which the learner is capable of solving problems independently

2. Level of potential development (LPD)

- Level that learner is capable of reaching under the guidance of teachers or peers.
- Learner is potentially capable of solving problems and understanding material at a level higher than that of **actual development**.

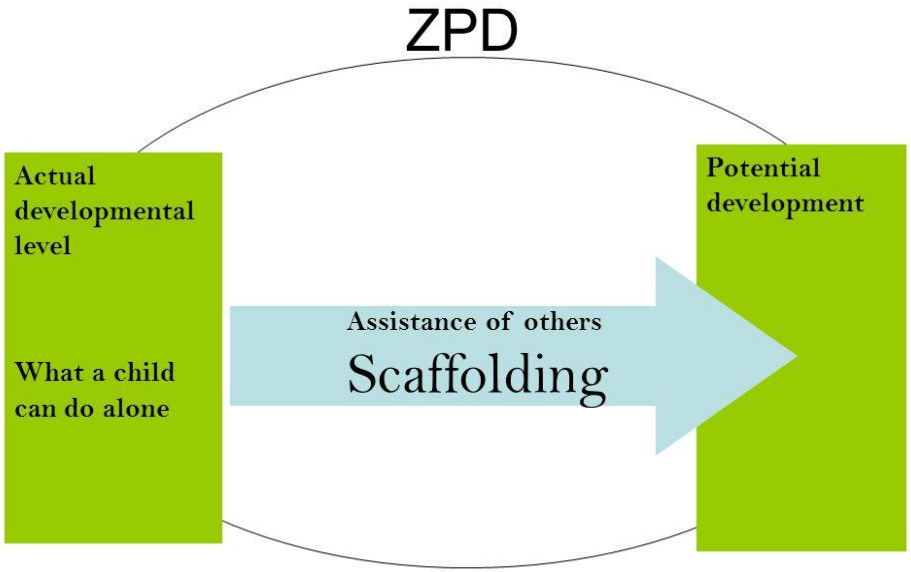
3. Zone of Proximal Development (ZPD)

- Wide gap between the level of actual development and the level of potential development.

★ ZPD has to be filled by raising LAD so that the individual develops to the maximum.

★ Filling this gap is the function of education (formal and informal)

★ Vygotsky says, gap can be filled only by effective social interaction



"what children can do with the assistance of others might be in some sense even more indicative of their mental development than what they can do alone". Vygotsky (1978)

SCAFFOLDING

- Helping hand provided to cross the ZPD
- A teacher can do this through well chosen tasks

SOCIAL LEARNING THEORY OF ALBERT BANDURA

- emphasizes the importance of observing and modeling the behaviors, attitudes, and emotional reactions of others.
- explains human behavior in terms of continuous reciprocal interaction between **cognitive, behavioral, environmental** influences.

Examples…

The most common (and pervasive) examples of social learning situations are **television commercials**.

Commercials suggest that drinking a certain beverage or using a particular hair shampoo will make us popular and win the admiration of attractive people.

Depending upon the component processes involved (such as attention or motivation), we may model the behavior shown in the commercial and buy the product being advertised.

Principles

- The highest level of observational learning is achieved by first organizing and rehearsing the modeled behavior symbolically and then enacting it overtly.
- Coding modeled behavior into words, labels or images results in better retention than simply observing.Individuals are more likely to adopt a modeled behavior if it results in outcomes they value.
- Individuals are more likely to adopt a modeled behavior if the model is similar to the observer and has admired status and the behavior has functional value.

Applications

- Social learning theory has been applied extensively to the understanding of aggression and psychological disorders, particularly in the context of behavior modification.
- It is also the theoretical foundation for the technique of behavior modeling which is widely used in training programs.
- In recent years, Bandura has focused his work on the concept of self-efficacy in a variety of contexts

Educational Implications

- Students often learn a great deal simply by observing other people.
- Describing the consequences of behaviors can effectively increase appropriate behaviors and decrease inappropriate ones.
- Modeling provides an alternative to shaping for teaching new behaviors.
- Teachers and parents must model appropriate behaviors and take care that they don't model inappropriate ones.
- Teachers should expose students to a variety of other models.
- Students must believe that they are capable of accomplishing school tasks.
- Teachers should help students set realistic expectations for their academic accomplishments.
- Self-regulation techniques provide effective methods for improving behavior.

Learning Theory of David Ausubel

- David Paul Ausubel was an American psychologist whose most significant contribution to the fields of educational psychology, cognitive science, and science education.
- Ausubel believed that understanding concepts, principles, and ideas are achieved through deductive reasoning.
- Similarly, he believed in the idea of meaningful learning as opposed to rote memorization.
- The most important single factor influencing learning is what the learner already knows. This led Ausubel to develop an interesting theory of meaningful learning and advance organizers.

Meaningful Verbal Learning

- According to Ausubel, meaning is created through some forms of representational equivalence between language and mental context. There are two processes involved:

First discovery: Reception, which is employed in meaningful verbal learning.

Second: Discovery, which is involved in concept formation and problem solving.

- Ausubel's work is usually compared to Bruner's work because both of them held similar views about the hierarchical nature of knowledge.
- However, Bruner gave more emphasis on discovery process.
- On the other hand, Ausubel was strongly oriented toward the verbal learning methods of speaking, reading, and writing.

Subsumption Theory

- This theory is applied in the 'advance organizer' strategy developed by Ausubel.
- When information is subsumed into the learner's cognitive structure it is organized hierarchically. New material can be subsumed in two different ways, and for both of these, no meaningful learning takes place unless a stable cognitive structure exists.
- This existing structure provides a framework into which the new learning is related, hierarchically, to the previous information or concepts in the individual's cognitive structure.
- His works focused on verbal learning. He dealt with the nature of meaning, and believes the external world acquires meaning only as it is converted into the content of consciousness by the learner.

The two types of subsumption are:

- Correlative subsumption - new material is an extension or elaboration of what is already known.
- Derivative subsumption - new material or relationships can be derived from the existing structure. Information can be moved in the hierarchy, or linked to other concepts or information to create new interpretations or meaning. From this type of subsumption, completely new concepts can emerge, and previous concepts can be changed or expanded to include more of the previously existing information. This is "figuring out.”

Pre - requisites for significant learning to occur..

- The material itself must have a logical meaning
- Learner must be proactive in the new concept of knowledge and there is adequate contact between the tendencies
- Learners’ existing cognitive structures must have the proper assimilation of new knowledge and ideas.

Educational Implications

- Take into account the previous knowledge of the students.
- Make use of activities that are of interest to students.
- Create a motivational environment to learn.
- Make use of debates, group work, games, analogies, illustrations, and previous organizers.
- Use examples at all times.
- Be a facilitator of the learning process, clarify doubts, and allow students to be an active entity during the process

CONSTRUCTIVIST LEARNING STRATEGIES

1. CO-OPERATIVE AND COLLABORATIVE LEARNING
2. PEER TUTORING
3. CONCEPT MAPPING
4. BRAIN BASED LEARNING
5. COGNITIVE APPRENTICESHIP
6. ENGAGED LEARNING

CO-OPERATIVE AND COLLABORATIVE LEARNING

COLLABORATIVE LEARNING

- Collaborative learning is a personal philosophy, not just a classroom technique
- Student centred
- It respects and high lights individual group members' abilities and contributions
- There is a sharing of authority and acceptance of responsibility among group members for the group's actions
- The premise is based upon consensus building through cooperation by group members, in contrast to competition in which individuals best other group member

Continued...

- Collaborative learning practitioners apply this philosophy in the classroom, At committee meetings, with community groups, within their families and generally as a way of leaving with and dealing with other people
- It is a method of teaching and learning in which student’s team together to explore significant question or create a meaningful project
- E.g.:-A group of students discussing a lecture , students from different schools working together on a shared assignment.

ADVANTAGES

- Develop higher level of thinking skills
- Promote student faculty interaction and familiarity
- Increase students retention
- Builds self esteem in students
- Enhance student satisfaction with the learning experience
- Promotes a positive attitude towards the subject matter
- Develop oral communication skill
- Promote positive race relationship
- Creates an environment of active, involved, exploratory learning
- Uses a team approach to problem solving while maintaining individual accountability
- Encourages student responsibility for learning

LIMITATIONS

- Usually there is no sufficient time for true collaboration
- In collaborative learning, teacher may not be able to monitor groups effectively
- Teachers may have a difficult time going from instructor to facilitator

CO-OPARATIVE LEARNING

- Specific kind of collaborative learning
- It is a set of processes which help people interact together in order to accomplish a specific goal or develop an end product which is usually content specific
- More directive and closely controlled by the teacher
- Students work together in small groups on a structured activity
- They are individually accountable for their work, and the work of the group as a whole is also assessed
- Co- operative groups work face-to-face and learn to work as a team

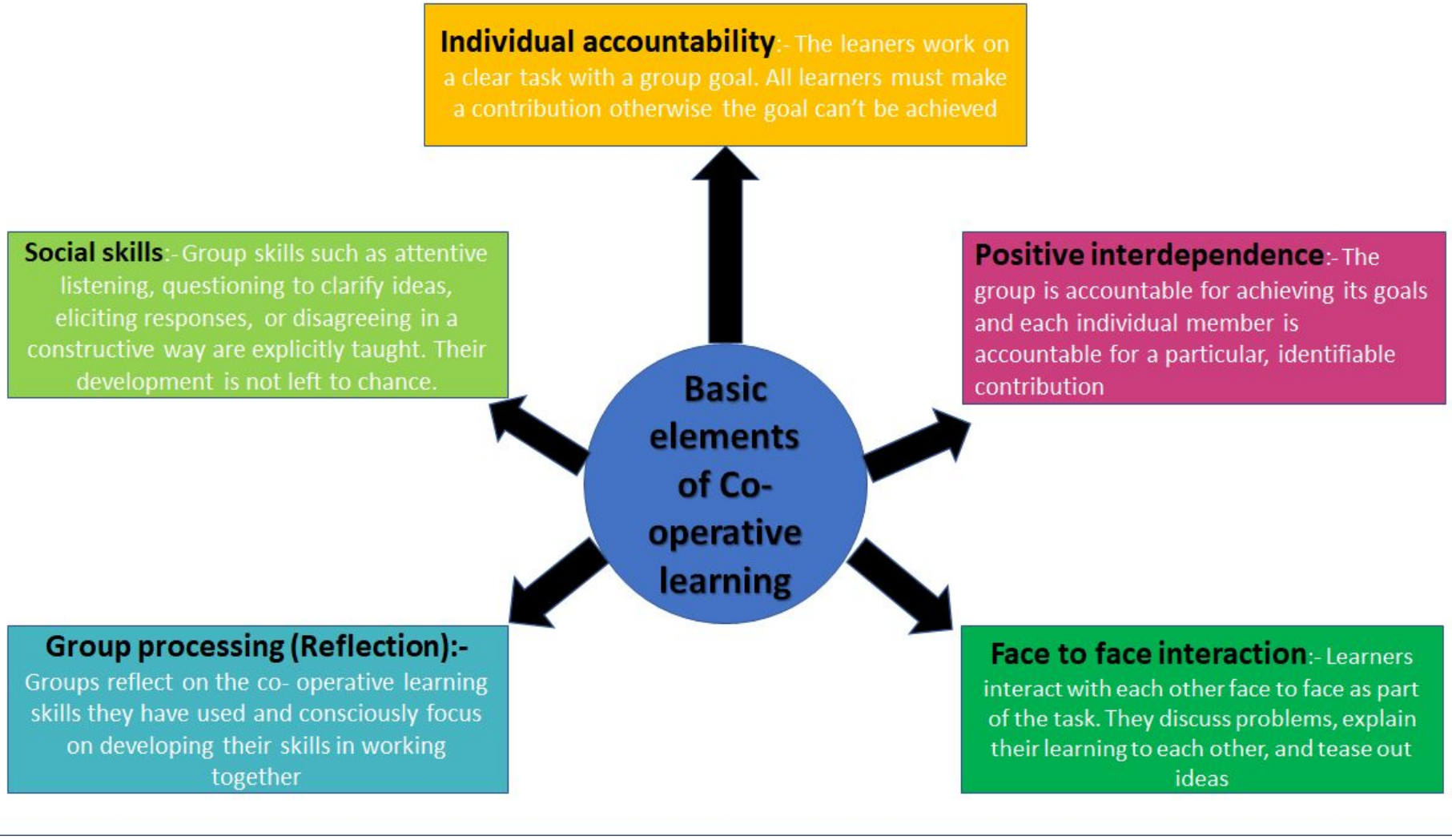
Continued...

- In small groups, students can share strengths and also develop their weaker skills , interpersonal skills and learn to deal with conflict. In order to create an environment in which cooperative learning can take place, 3 things are necessary

➔ Students need to feel safe, but also challenged

➔ Group need to be small enough that everyone can contribute

➔ The task students work together one must be clearly defined


Individual accountability:- The leaners work on a clear task with a group goal. All learners must make a contribution otherwise the goal can't be achieved
Social skills:- Group skills such as attentive listening, questioning to clarify ideas, eliciting responses, or disagreeing in a constructive way are explicitly taught. Their development is not left to chance.
Positive interdependence:- The group is accountable for achieving its goals and each individual member is accountable for a particular, identifiable contribution
Basic elements of Co-operative learning
Group processing (Reflection):- Groups reflect on the co- operative learning skills they have used and consciously focus on developing their skills in working together
Face to face interaction:- Learners interact with each other face to face as part of the task. They discuss problems, explain their learning to each other, and tease out ideas

Co-operative learning small groups provide a place where:

- Learners actively participate
- Teachers become learners at times, and learners sometimes teach
- Respect is given to every member
- Projects and questions interest and challenge students
- Diversity is celebrated, and all contributions are valued
- Students learn skills for resolving conflicts when they arrive
- Members draw upon their past experience and knowledge
- Goals are clearly identified and used as a guide
- Students are invested in their on learning

ADVANTAGES

- It promote student learning and academic achievement
- Increase student retention
- Enhance student satisfaction and their learning experience
- Help students develop skills in oral communication
- Develop students social skills
- Promote students self esteem
- Help to promote positive relations

LIMITATIONS

- Time consuming method compare to many other method
- The instructor has got lesser control over the learner
- Since the classroom will be made up of several small group, the noise level will escalate

Significance of Co-operative learning

- Students demonstrate academic achievement
- Co-operative learning methods are usually equally effective for all ability levels
- Co-operative learning is effective for all ethnic groups
- Student perceptions of one another are enhanced when given the opportunity to work with one another
- Co- operative learning increases self-esteem and self-concept

Characteristics of good learning team

- **Team activities begin with training in, and understanding group processes. An instructor begins by facilitating discussion and suggesting alternatives but does not impose solutions on the team, especially those having difficulty working together**
- **3 to 5 people : larger teams having difficulty in keeping everyone involved**
- **Teacher-assigned groups : they function better than self-assigned groups**
- **Diverse skill levels, background, experience**

1. Each individual brings strength to a group
2. Each member of the group is responsible to not only contribute his/her strengths , but also help others understand the source of their strengths
3. Any member who is at a disadvantage or not comfortable with the majority should be encouraged and proactively empowered to contribute
4. Learning is positively influenced with a diversity of perspective and experience increasing options for problem solving, and expanding the range of details to consider

- **Commitment of each member to a goal that is defined and understood by the group**

1. Confidential peer ratings are a good way to assess who is and who is not contributing
2. Groups have the right to fire a non-cooperative or non-participating member if all remedies have failed (the person fired then has to find another group to accept him/her)
3. Individuals can quit if they believe they are doing most of the work with little assistance from the others (this person can often easily find another group to welcome his/her contributions

- **Shared operating principles and responsibilities, defined and agreed to by each other. These include**

1. Commitment to attend, prepare and be on time for meetings
2. Have discussions and disagreements focus on issues, avoiding personal criticism
3. Take responsibility for a share of the tasks and carry them out on time you may need to perform tasks that you have little experience, feel ill-prepared for, or even think others would do better. Accept the challenge, but be comfortable in stating that you may need help, training, a mentor or have to resign and take on different task

Co-operative and Collaborative Learning; how do differ from the traditional approach?

- Students work together rather than compete with each other individually
- Collaborative learning can take place any time students work together- for e.g.:-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. Mixed-skill groups can be especially helpful to students in developing their social abilities.
- The skills needed to work together in groups are quite distinct from those used to succeed in writing a paper on one's own or completing most homework or "seatwork" assignments.
- For some assignments individual work may be most efficient, while for others cooperative groups work best

CO-OPERATIVE LEARNING TECHNIQUES

- Think - Pair - Share
- Jigsaw
- Jigsaw II
- Reverse Jigsaw
- Reciprocal Teaching
- STAD (Student-Teams-Achievement Divisions)

Think - Pair - Share

- Developed by Frank T. Lyman(1981)
- This allows for students to contemplate a posed question or problem silently
- The student may write down thoughts or simply just brainstorm in his or her head
- When prompted the student pairs up with a peer and discuss his or her ideas and then listen to the ideas of his or her partner
- Following pair dialogue, the teacher solicits responses from the whole group

Jigsaw

- Students are members of 2 groups: home group and expert group
- In the heterogenous home group , students are each assigned a different topic
- Once a topic has been identified, students leave the home group and group with the other students with their assigned topic
- In the new group , students learn the material together before returning to their new group
- Once back in their home group each student is accountable for teaching his or her assigned topic

Jigsaw II

- It is Robert Slavin's (1980) variation of jigsaw
- Members of the home group are assigned the same material, but focus on separate portions of the material
- Each member must become an expert on his or her assigned portion
- Teach the other members of the home group

Reverse Jigsaw

- Created by Timothy Hedeen (2003)
- Differ from the original Jigsaw during the teaching portion of the activity
- Here students in the expert groups teach the whole class rather than return to their home groups to teach the content

Reciprocal teaching

- Brown and Paliscar (1982)
- Student pairs to participate in a dialogue about text
- Partners take turns reading and asking questions of each other, receiving immediate feedback
- It allows students to use important metacognitive techniques such as clarifying, questioning, predicting, and summarizing
- Students can effectively learn from each other
- Allows students to progress and meet the learning objective

STAD (Student-Teams-Achievement Divisions)

- Robert Slavin
- STAD is a cooperative learning strategy

  in which small groups of learners with different

  levels of ability work together to accomplish a shared learning goal

- Convey the purpose and motivation
- Grouping
- Presentation (teacher)
- Team work
- Quiz(evaluation)
- Recognition of team's achievement

PEER TUTORING

Peer tutoring is the process between two or more students in a group where one of the students acts as a tutor for the other group mate(s).

Incidental peer tutoring

- ★ takes place,either at school or while students are playing after school or when they are socializing.
- ★ whenever children are cooperating, playing or studying and one guides the other, incidental peer tutoring occurs..

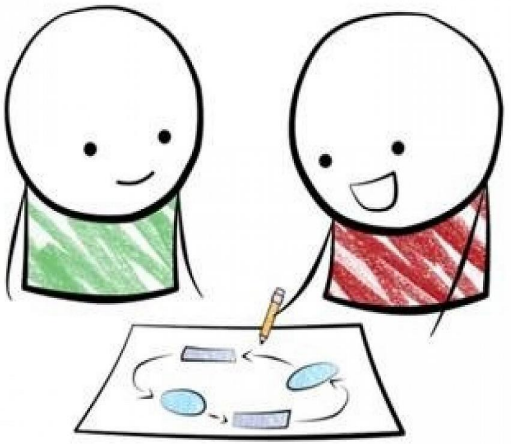
Structured peer tutoring

- ★ well-structured plan prepared by the teachers.
- ★ Implimented in specific cases for specific subjects.

Advantages of peer tutoring

- Children understand easily their peers ,since they are **cognitively closer** to each other.
- Children find their own ways of communicating with other children and many times they can present a subject to other children better than an adult

- Peer-tutors can give to their class-mates their own models of understanding a subject,using their personal experience, fresh ideas, examples from children's every-day life,even popular communicating symbols that make learning easier.



Peer tutor gains….

- Acquires **deeper and clearer knowledge** on the specific subject they deal with.
- Develop their ability and **skill to teach and guide** other students.
- Enjoy a rise in their **self-esteem**, feeling that they do something useful and seeing their tutees to improve.
- Enjoy respect from tutees
- The ambition of children to be selected as tutors increases **competitiveness**
- Improves **communication and cooperation** among students.
- Enhances the **team spirit**
- Helps **socialization**.

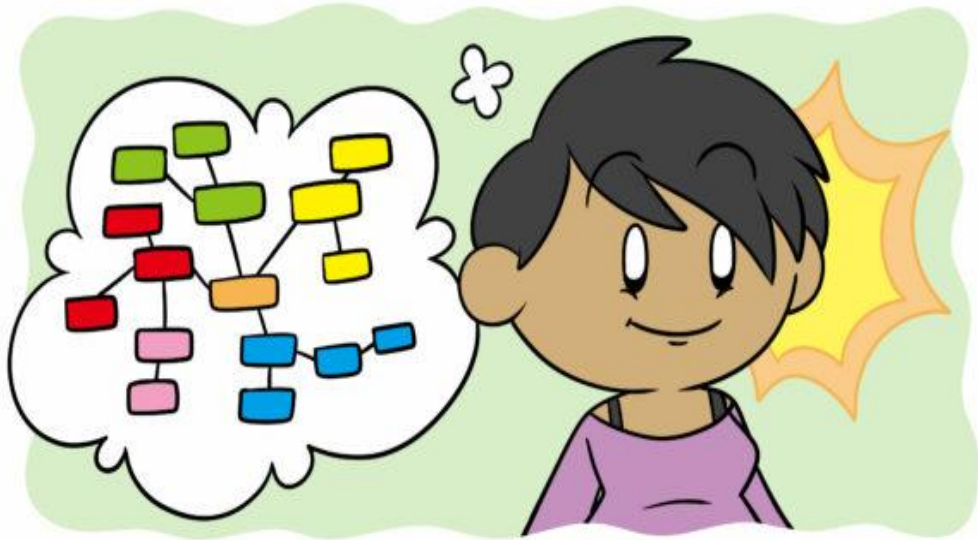
Suggestions for good practice..

- Good planning
- careful selection of tutors
- detailed design of tutoring activities
- ongoing supervision and support for tutors
- utilise school resources and ICT infrastructure
- keep record of the students activities
- discuss with peer tutors
- discuss with tutees

CONCEPT MAPPING

- Graphical tools for organizing and representing knowledge.
- They include concepts usually enclosed in circles or boxes.
- Relationship between concepts is indicated by a connecting line linking two concepts.

- Words on the line referred to as **linking words** or **linking phrases**.
- They specify relationship between the two concepts



Concept maps are constructed with reference to some particular question we seek to answer.We call it a **focus question**

Joseph D.Novack and his research team at Cornell developed university in the 1970s science knowledge of students.

- Tool to increase meaningful learning in science and other subjects as well as to represent the expert knowledge of individuals and teams in education, government and business.
- Specific examples of events or objects given help to clarify the meaning of a given concept

Steps..

1. **preparation** (including participant selection and development of focus for conceptualization).
2. **generation** of statements.
3. **structuring** of statements.
4. **representation** of statements as a concept map(using multi dimensional scalling and cluster analysis).
5. **interpretation** of maps.
6. **utilization** of maps

- helps groups to **manage the complexity** of their ideas without trivializing them or losing detail.
- helps people to think **more effectively** as a group without losing their individuality

Brain based learning

- Brain based education emphasizes how the brain learns naturally and is based on what we currently know about the actual structure and function of the human brain at varying developmental stages.
- based on the structure and function of the brain.
- It is the engagement of strategies based on how the brain works.
- The exciting learning about brain function and its effects on learning have the potential to revolutionize teaching and learning .
- Brain research has provided new knowledge about the many ways that human learn.

Core principles directing Brain Based Learning

- The brain is a parallel processor. It can perform several activities at once
- The brain perceives wholes and parts simultaneously
- Information is stored in multiple areas of brain, and can be can be retrieved
- Human search for meaning is innate and search for meaning comes through pattering
- Emotions are critical to pattering and drive our attention, meaning and memory
- Learning involves focused attention and peripheral perception
- When the facts are embedded in natural spatial memory, we understand best
- Complex learning is enhanced by challenge and inhibited by stress
- Learning is developmental. Every brain is uniquely organized

Instructional techniques associated with BBL

Orchestrated immersion. It is the creating environments that fully immerse students in educational experience.

Relaxed alertness Trying to eliminate the fear of learners, while maintaining a highly challenging environment.

Active processin It is the allowing the learner to consolidate and internalize information by actively processing it.

Twelve design principles based on Brain based research

- Rich stimulating environments using student created materials and products are evident on bulletin boards and display areas
- Places for group learning like tables and desks grouped together to stimulate social skills and cooperative work groups
- Link indoor and outdoor spaces so students can move about using their motor cortex for more brain oxygenation
- Safe places for students to be where threat is reduced particularly in large urban setting
- Variety of places that provide different lighting and nooks and crannies
- Change displays in the classroom regularly to provide a stimulating situation for brain development

- Provide multiple resources available also provide educational, physical and variety of setting within the classroom so that learning activities can be integrated
- Flexibility is common for above all. The teachable moment must be recognized and capitalized
- Students need quiet areas for reflection and retreat from others to use intrapersonal intelligences
- Students need a home space, a desk a locker area to express the learner their unique identity
- Teachers need to find ways to fully use city space and natural spaces to use as a primary learning setting
- The brain can grow new connections at any age so challenging complex experiences with appropriate feedback are best for cognitive development of learner.

- based on researches in **neuroscience**
- Information’s are collected and gleaned by **neuro scientists** and these information’s help to determine how human learning actually occurs.
- **Music** can lower stress and boost learning when used as carrier, as arousal and as primer.
- **Art** provides many learners with avenues of expression and emotional connection and release.

- Students should be exposed to **multiple methods of assessment.** Teachers also need to maintain appropriate content mastery through **variety of testing programmes.**

Cognitive Apprenticeship

- mastering of knowledge and cognitive procedures through training.
- Traditional apprentices such as black smiths would master skills by shadowing an expert throughout the learning process.
- learning through apprenticeship came naturally and was the primary vehicle for transferring knowledge in many fields

"**Cognitive apprenticeship is defined as learning through guided experience on cognitive and metacognitive, rather than physical, skills and processes**"

- **DONALD CLARK**

Goals…

- Recover all benefits of traditional apprenticeship, by reconciling formal schooling objectives with traditional methodologies
- Take advantage of the benefits of traditional apprenticeships by adapting its methodologies for the cognitive domain.
- Take the learning methods of traditional apprenticeships and applies them to modern cognitive learning objectives to produce effective form of higher learning

Foundations of cognitive apprenticeship

- Teach through guided learning
- Make progress and desired outcomes explicitly observable
- Situated learning facilitates this idea
- Combining the idea of learning through real world context
- The result of this type of teaching through guided learning is that progress and outcomes are all made explicit.

Teaching methods...

- **Collins, Brown and Newman** developed six teaching methods rooted in cognitive apprenticeship theory and claim these methods help students attain cognitive and metacognitive strategies.
- The first three of them (modeling, coaching, and scaffolding) are at the core of cognitive apprenticeship and help with cognitive and metacognitive development.
- The next two (articulation and reflection) are designed to help novices with awareness of problem solving strategies and execution similar to that of an expert.
- The final step (exploration) intends to guide the novice towards independence and the ability to solve and identify problems within the domain on their own.

1) **Modelling**

- an expert , usually a teacher within the cognitive domain or subject area demonstrate a task explicitly so that a student can experience and build a conceptual model of the task at hand.

2) **Coaching**

- observing students task performance and offering feedback and hints to sculpt the student’s performance to that of an expert.

3) **Scaffolding**

- act of putting in to place strategies and methods to support the students learning.This support can be teaching manipulative, activities and group work.

4) **Articulation**

- Any method of getting students to articulate their knowledge, or problem solving process in a domain.
- Three type of articulation are enquiry teaching, thinking aloud and critical student role.
- Through inquiry teaching teachers ask students a series of questions that allows them to refine and restate their learned knowledge and to form explicit conceptual models.
- Thinking aloud requires students to articulate their thoughts while solving problems.
- Students assuming a critical role monitor others in cooperative activities and draw conclusion based on the problem solving activities.

5) **Reflection**

- allows students to compare their own problem solving processes with those of an expert and ultimately an internal cognitive model of expertise.
- The goal of reflection is for students to look back and analyze their performances with desire of understanding and improvement towards the behavior of an expert.

6) **Exploration**

- Involves giving students room to problem solve on their own and teaching student's exploration strategies.
- Exploration allows the student to frame interesting problems within their domain and then take initiative to solve these problems.

ENGAGED LEARNING

- Engaged-Learning is an educational strategy in which either part or all of the class objectives are learned by working on projects with a community partner.
- Engaged-Learning is a type of education that put classroom skills and knowledge into practice while serving your community.
- Engaged-Learning is a type of education that put classroom skills and knowledge into practice while serving your community.

- Engaged-Learning provides an area where students work in a professional capacity with community members, their peers and the instructor of their course.
- Engaged-Learning relies heavily on team-work and the skills that promote effective team-building.

1. Vision of Engaged learning

- Responsible for learning - Students take charge of their own learning and are self -regulated.
- Energized by Learning - Engaged Learners find excitement and pleasure in learning.

- Strategic - Engaged learners continually develop and refine learning and problem-solving strategies.
- Collaborative - Engaged learners understand that learning is social.

2. Tasks for Engaged Learning

- Challenging
- Authentic - Tasks closely related to real -world problems and projects, build on life experiences.
- Integrative / interdisciplinary - challenging and authentic tasks often require integrated instruction,which blends disciplines into thematic or problem-based learning.

3. Assessment of Engaged Learning

- Performance-Based
- Generative
- Interwoven with Curriculum and Instruction
- Equitable Standards - Parents and students should be familiar with the standards that apply to all students and able to evaluate the performance of an individual or group using those standards.

4. Instructional Models and strategies for Engaged Learning

- Interactive - Instruction actively engages the learner.
- Generatve - Encourages learners to construct and produce knowledge in meaningful ways.

5. Learning Context for Engaged Learning

- Knowledge-Building Learning Community
- Collaborative - Collaborative classrooms, schools, and communities encourage all students to ask hard questions; define problems and engage in entrepreneurial activities
- Empathetic - Learning communities search for strategies to build on the strengths of all members

6. Grouping for Engaged Learning

- Heterogeneous - groups include males and females and a mix of cultures, learning styles,socioeconomic status and ages.
- Flexible
- Equitable

7. Teacher Roles for Engaged Learning

- Facilitator
- Guide
- Co-Learner and Co-Investigator

8. Students Roles for Engaged Learning

- Explorer - Students discover concepts and connections and apply skills by interacting with the physical world, materials, technology and other people.
- Cognitive Apprentice - Students reflect on their practice in diverse situations and across a range of tasks, and they articulate the common elements of their experiences.
- Producers of knowledge - Students generate products for themselves and their community that synthesize and integrate knowledge and skills.

HUMANISTIC VIEWS ON LEARNING

- Human being have purpose in life.
- Learning is experience based.
- Learning become effective when it is need based.
- Freedom and independence learning.
- It emphasizes self motivation for better learning.
- Learning as a process inevitable and unique for every individual.
- It gives emphasis on learners self direction and independence.
- Concerned with the welfare of all human being.
- It emphasizes on learning in natural environment of human love, peace, cooperation, freedom, equality rather than of physical, money, wealth etc.
- Believes in co existence.
- This approach is based on humanism- concerned with human and humane interests

EXPERIENTIAL LEARNING(Carl Ramson Rogers)

Principles..

- Independence, creativity and self-reliance are all facilitated.
- Self-criticism and self-evaluation are basic.
- Retaining and openness to experience.
- "Learning during the process of learning"

Experiential learning Cycle.

Plan

- ➔ Set a goal.
- ➔ Decide the activities to achieve the go
- ➔ Decide expected learning outcomes

Do

- ➔ Engaging Activities.
- ➔ Self-directed learning

Review

- ➔ Check the effectiveness
- ➔ Compare the actual outcomes with the expected outcomes

- Can be a highly effective educational method.
- Learner should involve in the whole learning wheel
- A fun learning environment helps the learner to retain the lessons for a longer period.
- May apply on teaching, experimenting and even gaming

Implications of humanistic approach

- Believes in **child-centered** education.
- Emphasizes on reach, touch and teach the child according to his **nature, interests, aptitude**, etc.
- Teacher should assess student's **attitude, aptitude, potentialities,abilities, level of aspiration, his social,intellectual, physical, aesthetic development and mental health**
- Plan his teaching activities based on this.

Transfer of learning.

- The process of carrying over habits of thinking, knowledge, skills and attitudes from one situation to another is called **Transfer of Training** or **Transfer of Learning.**
- Transfer of training implies the application of knowledge to the study of various subjects and activities in various fields.

Types of transfer

❖ **Positive Transfer** :- If the learning of one subject or activity facilitates the learning of another subject or activity, it is called positive transfer.Eg- **A bus driver can drive a truck also very efficiently.**

- **Negative Transfer** :- If the learning of one subject or activity interferes with the learning of another subject or activity, it is called negative transfer.

Eg:- Learning Malayalam language in which we write as we pronounce and vice versa will interfere with the pronunciation and spelling of English which is a phonetic language.

- **Zero Transfer** :- If learning of one subject or activity neither facilitates nor interferes with the learning of another subject or activity, it is called zero transfer.

Eg:- Transfer between learning of Language and Mathematics may be considered to be almost zero.

Gagne distinguishes between Lateral and Vertical Transfer.

- **Lateral Transfer** :- It occurs when past learning is generalizable to present learning.

Eg:- Certain elements of the scientific method learnt in Physics can be transferred to the solution of problems in Biology.

- **Vertical Transfer** :- It occurs when subordinate capabilities make higher order learning possible.

Eg:- Learning to compute the length of the hypotenuse of a right triangle becomes a sub-skill in learning to find vectors of forces.

Theories of transfer

Theory of Formal Discipline

- This is the forerunner in the field of transfer of training.
- Learning in one situation improves learning and performance in another situation regardless of how different the situations might be.
- It was once thought that taking courses such as Latin would lead a person to think more logically. This assumption is called the "Theory of Formal Discipline."
- **Thorndike** (1923) studied it and concluded that the expectation of any large difference in general improvement of the mind from one study to another was false.

Theory of Identical Elements

- This theory has been developed by **E.L.Thorndike**.
- According to him most of transfer occurs from one situation to another in which there are most similar or identical elements.
- It explains that carrying over from one situation to another is roughly proportional to the degree of resemblance in situation, in other words- more the similarity, more the transfer.
- The degree of transfer increases as the similarity of elements increase.
- Eg:- **Learning to ride moped is easy after learning to ride a bicycle. Here, transfer is very fast because of identical elements in both vehicles.**

Theory of Generalization

- This theory was developed by **Charles H. Judd.**
- Theory of generalization assumes that what is learnt in task ‘A’ transfers to task ‘B’, because in studying ‘A’, the learner develops a general principle which applies in part or completely in both ‘A’ and ‘B’.
- Experiences, habits, knowledge gained in one situation help us to the extent to which they can be generalized and applied to another situation.
- Generalization consists of perceiving and understanding what is common to a number of situations.
- The ability of individuals to generalize knowledge varies with the degree of their intelligence.

Theory of Transposition

- This theory was put forth by the **Gestalt psychologists**.
- This theory explains that it is the pattern of relationships which is the most important in transfer.
- For instance, in poetry, a particular rhythm may be repeated even though the lines differ in length and have no words in common.
- This theory maintains that if the learner has got the ability of insight learning, he can transpose it from one situation to another.

Theory of Ideals

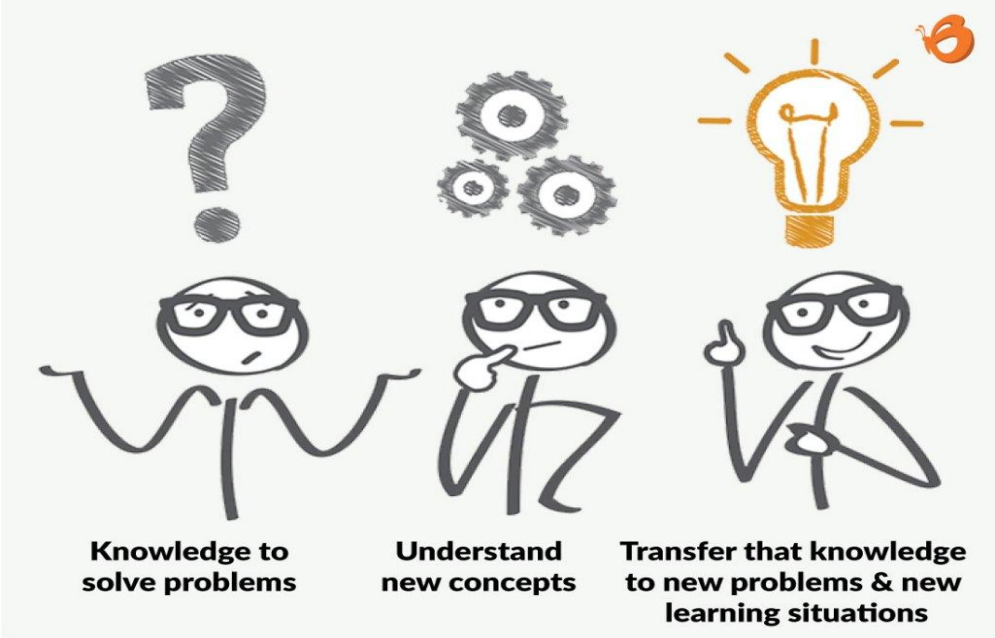
- Prof. Bagley holds that presentation of ideals has more transfer value than isolated instructions.
- This has been illustrated by an experiment. Bagley advised children to keep their Mathematics note book neat. These children kept their Mathematics note book neat but all other note books were more or less shabby. But when neatness was presented as an ideal, he could find better transfer effect; they learnt to keep their book, class room and surrounding neat.

Factors affecting transfer of learning.

- **Intelligence**:- Transfer of training depends upon one's ability to generalize and the ability to perceive relationships between two situations. Hence the degree of transfer is closely related to the intelligence of the learner as the above said abilities are closely and positively related to intelligence too.
- **Attitude**:- Formation of a positive and self-confident attitude towards transfer helps one to transfer the knowledge and the skill from one situation to another. Transfer of training is most effective if the students are conscious of such a goal envisaged in learning.

- **Study habit**:- Proper study habits have to be developed, so that students try to see relationship between various situations and try to apply what they know, to other situations. The over emphasis to reproduce information as it is from the text with a view to score high marks hinders transfer.
- **Methods of teaching**:- When teachers teach everything and do not encourage pupils to see relationships or to generalize by themselves, students fail to apply the knowledge obtained in new situations. Thus teacher-centered approach adversely affects transfer of training.

- **Learning material**:- Transfer depends heavily on meaningfulness of the material studied. Students should be helped to see the purpose of learning prescribed for study. This purpose should not be interpreted merely in theoretical terms but also in terms of the needs of practical life.



Facilitating learning

1. Learn information meaningfully.
2. Have mental set.
3. Prerequisite skills should be practiced.
4. Numerous and varied examples.
5. Differences between two ideas should be emphasised.
6. Over learning.
7. Connect school and life outside.
8. Family and community partnership

2 Mark Questions & Answer key words

1. Differentiate between Engaged learning and Experiental learning?
2. Explain the humanistic views on learning?
3. What is the significance of experiental learning?
4. What is engaged learning?
5. what is classroom strategies for discory learning?
6. Expand ZPD
7. What is ZPD, LAD, LPD according to Vygotsky's learning theory?
8. What is memory based learning?
9. Differentiate memory based learning and rote learning?
10. Who proposed the Advance Orgagaiser model?
11. What is theory of identical elements in transfer of learning?
12. Whhat is transfer of learning? List the different types of transfer in learning
13. Write any two differences between classical conditioning and operant conditioning.
14. Mention the laws emerged out from Thorndike's Theory of learning.
15. What is readiness in learning?

4 Mark Short Essays & Value Points

1. Outline the various constructivist learning strategies
2. Explain any 2 constructivist learning strategies
3. Elaborate any 2 constructivist learning strategies
4. Write the significance of Experiental learning
5. Describe the three modes of knowledge acquisition advocated by bruner?
6. Explain the intellectual stages according to Piaget?
7. What is the contribution of Piaget to learning?
8. Explain cognitive Apprenticeship
9. How will you bring maximum positive transfer of learning in your students?
10. Illustrate transfer of learning.
11. Describe transfer of learning of learning with examples
12. What is the importance of transfer of learning?
13. Define transfer of learning. What are the different types of transfer in learning? What are educational implications of transfer of learning to a classroom teacher?

4 Mark questions.

Bring out the educational implications of conditioning theories.

Bring out the educational implications of operant conditioning.

Distinguish between classical conditioning and operant conditioning.

Compare the role of teachers in behaviourism and constructivism.

“Skinner has revolutionized the concept of reward in terms of reinforcement”. Do you agree? Explain the different schedules of reinforcement according to Skinner.

10 Mark Essays & Value Points

1. Explain GAGNE'S hierarchical classification of learning styles.
2. "Cooperative learning is the only method which simultaneously addresses both the academic skill and social skill among learners".
3. Explain humanistic views on learning with the special reference to Carl Roger's Self theory of learning. What are the educational implications of this theory ?
4. Explain the learning theories of Piaget and bruner.
5. Explain the learning theory of VYGOTSKY with special emphasis to its educational implications.
6. Elucidate the contributions of Bandura towards educational psychology
7. Explain Ausbels theory of cognitive learning. .
8. Explain the three modes of representation according to Bruner.
9. Critically evaluate the various theories based on behaviourism and constructivism with special emphasize on classroom strategies.

Unit 4
Remembering and Forgetting

Group Members

1.Linsha VV

2.Manju K

3.Mrudula P

4.Najiya CK

5.Nusra E

6.Varsha K

Memory

Memory consist in remembering what has previously been learned

WOODWORTH (1948

Elements of memory

1. Learning
2. Retention
3. Recall
4. Recognition

Learning

- Primary condition of memory
- It is the acquisition of new experience
- Learning experience should be interesting.So that they could create mental images that would be revived when needed
- It depends upon
  active observation, Intelligent study, strong will, creative interest, constant repetition

Retention

- It is the process of preserving the material learnt
- Influenced factors are,
  - nature of the learning material
  - Amount of learning done
  - Method of learning

- Speed of learning
- Mental set
- Attention
- Interest
- Intension
- Appreciation

Recall

- It means revival of memorised things
- Recall are two types
  Spontaneous recall
  Deliberate recall
- Factors helpful for easy recalling are,
  Right motives

Healthy physique
Right emotion
Absence of inhibition
Perfection of clues

Recognition

- It is the awareness of the experience by which we identify the material retained and

recall

- Recognition are two type
  1. Indefinite recognition
  2. Definite recognition

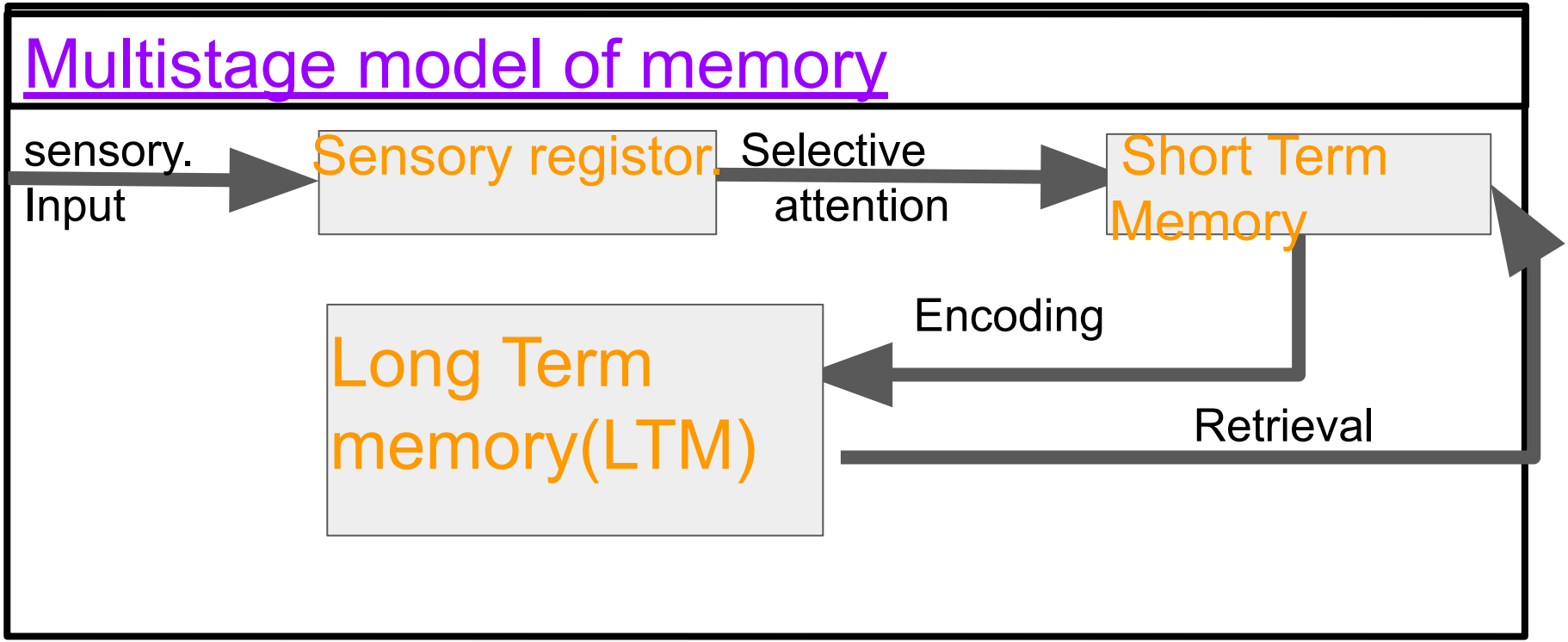
Characterisation of Good Memory

- Easy learning , Accurate recognition
- Quick recall , Long retention

- *Memory is remarkable mental process and a mental system which receives information from stimuli, retains it and makes it available on a future occasion*
- *Capacity that permits humans to benefits from past experience*

Tulving, 1985

Multistage model of memory



Way to remember things in STM… …So they go to LTM

- Chunking
  Organizing items into familiar, manageable units
- Mnemonic device
- Rehearsal

Types of memory

1. Sensory memory

- All of the environmental information that we are capable of sensing
- Probably stays with us in the sensory memory for a very brief time

2.Short Term Memory

- We recall digits better than letters
- The stuff we encode from the sensory goes to STM
- Events are encoded visually acoustically or semantically
- Holds about 7itmes for about 20 seconds

3.Long Term Memory

- Unlimited storehouse of information
- Explicit (declerative memory)
- Implicit(non declarative memories)

Memory structure

*. Part of memory is oriented to events just occurred

STM & LTM

Table –1: *Comparison of Short-term Memory (STM) and Long-Term Memory (LTM)*

Features	Short-term Memory	Long-term Memory
Capacity	Limited up to 7 items or chunks	Unlimited
Duration	Usually up to 30 seconds but varies under different situations	May range from days to a life time
Type of information	Visual images, sounds, words, sentences	Meaningful verbal material, life events.
Causes of forgetting	Displacement of old information by new one, inadequate	Interference, organization of material

Strategies to improve memory

Economic methods for memorising are :

- Recitation method :

  The mental recitation of something is called recitation. A student must always be encouraged to recite learnt material to himself. After reading a lesson a few times the student may be encouraged to try to review the whole thing without referring to the original material. Mental repetition is an active way of study and not only saves the time but also ensure longer retention of materials learnt.

- Spaced and Unspaced Method:

  Spaced method is one in which there are time intervals in learning trials. On the contrary in the unspaced method learning is done at one sitting, without any intervals being used. The spaced method has many advantages over the unspaced method. Not only fatigue eliminated by giving ocational intervals, there is also an

- Part and whole methods :

  In the part method, the learning material is divided into parts and each part is memorized separately. On the other hand, in the whole method, every time the material as a whole is read from the beginning till the end.

- Rote and intelligent methods :

  If a person is learning and memorizing something without understanding it, he is said to be using the rote or unintelligent method of memorization. On the other hand the intelligent method involves deep understanding of the learning material.

- Grouping and the rhythm methods :

  Memorization is considerably fascilitated by rhythm and grouping. It is easier to memorize poetry than prose because of the rhythm involved.

- Attention is one of the major components of memory. Try to study in a place of free distractions such as television music and other distractions.
- Students who study regularly remember the material far better than those who do all of their studying in one marathon session.
- Relate new informations to things you already know.
- Pay extra attention to difficult information.

- Try grouping similar concepts and terms together or make an outline of the notes and textbook readings to help group related concepts.
- Sleep is important for memorising and learning. Taking a nap after you learn something new can actually help you learn faster and remember better.

Forgetting

concept

- Loss, permanent or temporary ,of the ability to recall or recogonize something learned earlier
- Forgetting is failing to recall what has been learned when attempting to do so.
- Forgetting is accelerated by engaging in mental processes that take place during the interval between remembering and forgetting.

Definitions

- According to ***Munn(1967) "*** forgetting is the loss , temporary or permanent , of the ability to recall or recognize something learnt earlier".

- According to ***Drever(1952) "*** forgetting means failure at any time to recall an experience , when attempting to do so, or to perform an action previously learnt"

Causes of forgetting

1. Inadequate impression
2. Disuse or decay with passage of time
3. Interference of newly learnt material
4. Emotional disturbance
5. Alteration of stimulus condition
6. Inadequate mental set
7. Illness and brain injury

1. Inadequate impression

Inadequate learning is likely to be forgotten easily. Forced learning either results in no learning or has very temporary effect. Sometimes we pay least attention while learning and materials thus

learnt will be soon forgotten.

1. Disuse or decay with the passage of time

The theory of disuse postulates that any accumulated knowledge will be gradually forgotten if it is not regularly practised.

3.Interference of newly learnt material

The effect of new learning over the recall of previous learning is known as ***retroactive inhibition***,where as the

effect of earlier learning on the recall of later learning is known as *proactive inhibition*. 'Retroactive' indicates acting backward while 'proactive' indicates acting forwards.

4.Emotional disturbance

Emotions play a key role in forgetting as well as in learning.Sudden rise of strong emotions blocks the process of recall. When one is taken over by emotions like fear,anger or anxiety,he forgets all he had learnt.

5.Alteration of stimulus condition

We learn to associate a specific response to a given stimulus situation. When the stimulating conditions are sufficiently changed and modified, we fail to produce Same response.When new stimuli are introduced retention or reproduction of the learnt response become more difficult.

6. Inadequate mental set

Retention and recollection are the result of mental set.

I

If the learner has to recall a situation,he must perceive in it something related to his need structure.

7.Illness and brain injury

People suffering from serious diseases forget what they have learnt.Often when a person suffers a brain injury he forgets many incidents and experiences and the extent of the forgetting depends upon the seriousness of the injury.

Curve of Forgetting

- Forgetting curve describes the decrease in ability of the brain to retain memory over time.
- Generally the curve shows that forgetting is rapid at first,the time passes the rate of memory loss gradually decline.
- **Hermann Ebbinghaus**,our recall declines rapidly over the first 30 days after we learn a new concept or piece of information

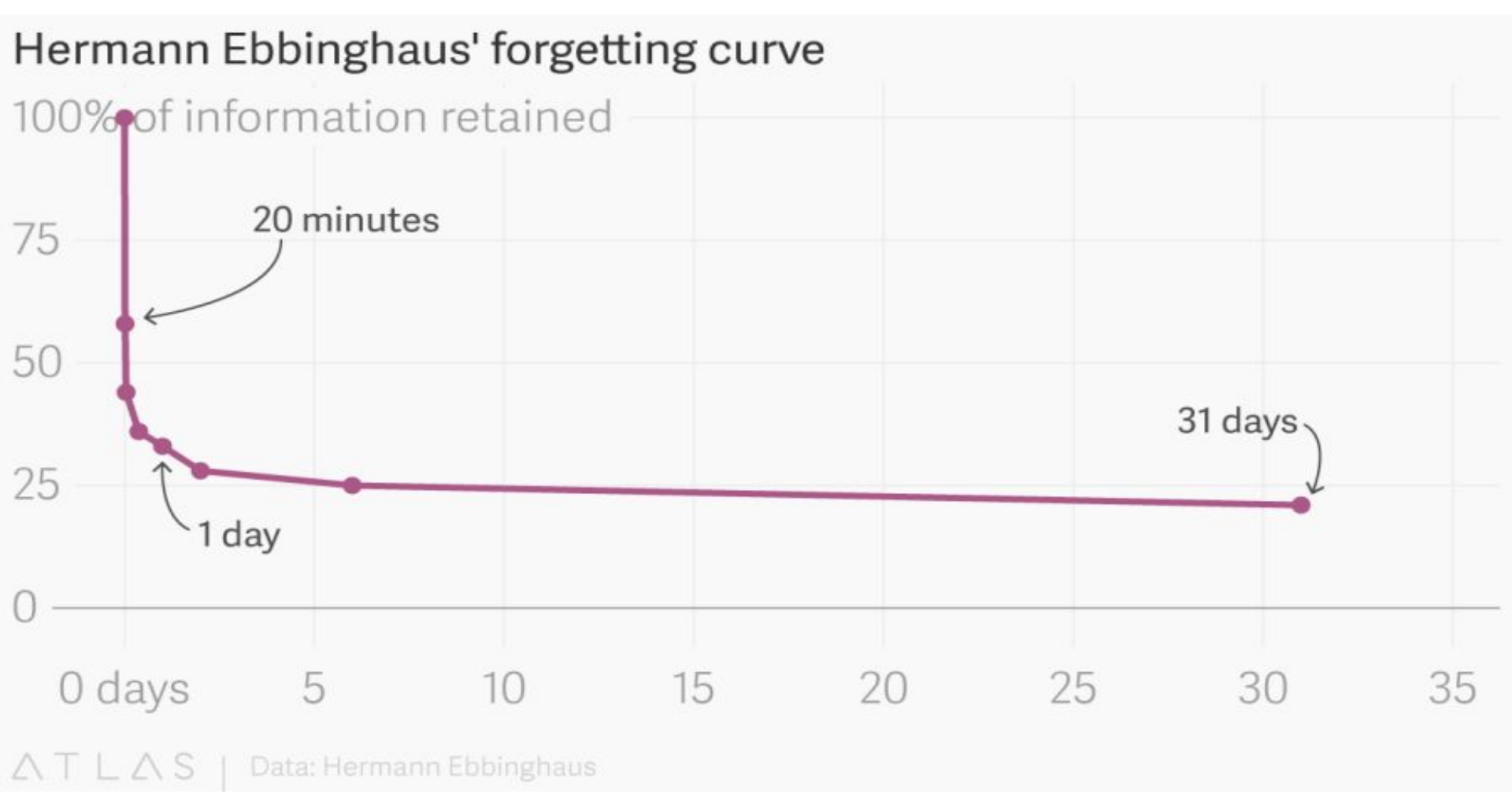
Curve of forgetting cntd……

- **Ebbinghaus** called this phenomenon ‘the forgetting curve’

Ebbinghaus ‘Experiment

- He memorised a list of nonsense syllables and then tested himself at intervals varying from 20 minute to a month to see how much from the list he forget each time

Time elapsed	Amount forgotten
2o minutes	47%
One day	66%
Two days	72%
Six Days	75%
One month	79%


Hermann Ebbinghaus' forgetting curve
100% of information retained
75
50
25
0
20 minutes
1 day
31 days
0 days
5
10
15
20
25
30
35
ATLAS | Data: Hermann Ebbinghaus

Ebbinghaus conclusion

1. The amount of learnt material forgotten depends upon the time lapsed after learning
2. The rate of forgetting is very rapid in the beginning and this then gradually goes on diminishing

Educational implications

- Processes of learning and forgetting happen together.
- If a lesson is revised immediately after learning it can be retained effectively.
- If you want to retain learn and relearn the material

Multi stage model of memory

- It is proposed by Richard Atkinson and Richard shiffrin (1968)
- It is a structural model

Human memory has 3 separate components

1. Sensory register
2. Short term store
3. Long term store

- Information passes from store to store in a linear way
- It has been described as an information processing model with an input, process and output
- It is like a computer

1. Sensory register

- An environmental stimulus is detected by the senses and is briefly available in the sensory register/ sensory memory.
- This store is generally referred to as “the sensory register” or “sensory memory”.
- It is composed of multiple registers , one for each sense.
- Information is only transferred to the short term memory , when attention is given to it ; otherwise it decays rapidly and is forgotten.

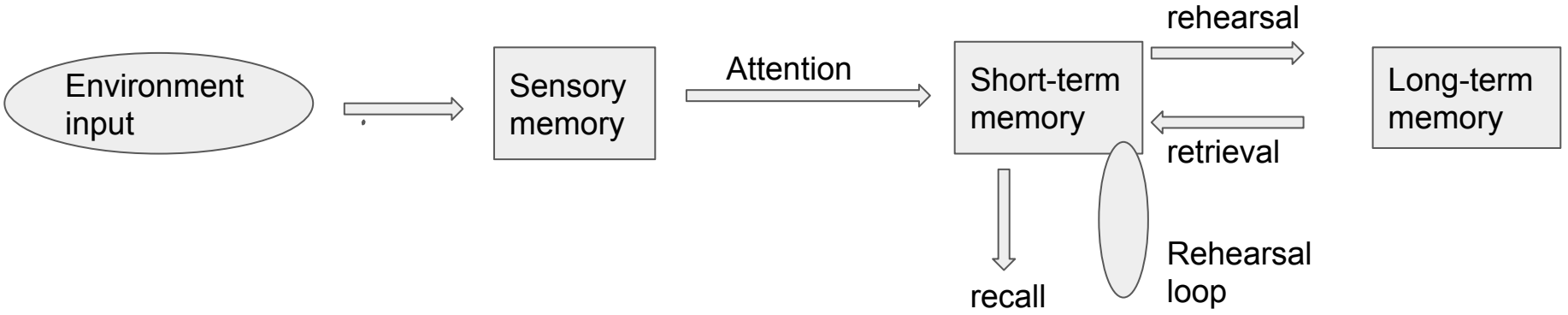
2. Short-term store

While much of the information in sensory memory decays and id forgotten , some is attended to the information that is attended is transferred to the short term memory , working memory; note that while these terms are often used interchangeably they were not originally intended to be used as such.

3. Long-term store

- It is a more or less permanent store.
- Information that is stored here can be “copied” and transferred to the short-term store where it can be attended to and manipulated.

Atkinson and Shiffrin suggest that memory is made up of a series of stores..



Sensory memory

- Duration: ¼ to ½ seconds
- Capacity: All sensory experience (very larger capacity)
- Encoding: Sense specific (e.g. different stores for each sense)

Short term memory

- Duration 0-18 seconds
- Capacity: 7 +/- 2 items
- Encoding: Mainly auditory

Long term memory

- Duration: Unlimited
- Capacity: Unlimited
- Encoding: Mainly semantic (but can be visual and auditory)

THEORIES OF FORGETTING

The main theories of forgetting are

1. **Cue-dependant forgetting**
2. **Trace decay**
3. **Organic causes**
4. **Interference theories**
5. **Decay theory**

CUE-DEPENDENT FORGETTING

- Also known as ***Retrieval failure***
- It is the failure to recall a memory due to missing stimuli or cues that were present at the time the memory encoded
- Memory is sometimes temporarily forgotten purely because it cannot be retrieved
- Proper cue can bring memory to mind
- A good retrieval cue must be consistent with the original encoding of information
    - Eg: sound of a word is emphasize during the encoding process
- It may be depending on the age of person
        - Usually common in older adults

- Information is encoded into the memory and retrieved with a technique called ***spaced retrieval.***
- It helps older adults to retrieve the events stored in the memory better.
- How well something has been encoded in the memory can be measured
    - Eg: Cued recall test, Word fragment completion.

TRACE DECAY

- Memories that are stored in the short term and long term memory system
- STM can only retain information for a limited amount of time around 15 to 30 seconds.
- If it is not rehearsed , the information will start to gradually fade away & decay
- Donald Hebb proposed that incoming information causes a series of neurons to create neurological memory trace in the brain.
- Rehearsal of repeated firing maintains memory in STM until structural changes is made.
- Forgetting happens as a result of *automatic decay of the memory trace in the brain*
- The time between encoding the information and recalling it is going to be filled with all different kinds of events that might happen to the individual is the major problem of this in real life situation.
- This theory is very plausible, but impossible to test.

ORGANIC CAUSES

- Forgetting that occurs through physiological damage or dilapidation to the brain.
- Inability to encode new information again
- Loss of information already retained in LTM
    - Eg: alzheimer’s, Amnesia, Dementia, Consolidation theory & Gradual slowing down of the central nervous system due to aging

INTERFERENCE THEORIES

- Learning of something new causes forgetting of older materials
- Information memory may become confused or combined with other information during encoding leads to distortion or disruption of memories.

It has three branches

1. **Proactive:** Old information interferes with retrieval of new information
2. **Retroactive:** new information interferes with old information
3. **Output:** the initial act of recalling specific information interferes with retrieval of original information.

DECAY THEORY

- Theory that proposes that memory fades due to the mere passage of time.
- When something new is learned, a neuro chemical physical “*memory trace”* is formed in the brain and overtime this trace tends to disintegrate, unless it is occasionally used,
- It states the reason we eventually forget something or an event is because the memory of it fades with time.
- Greater the interval time between the time when the event from happening and the time when we try to remember , the memory will start to fade.
- Time is the greatest impact in remembering an event.

2 Mark Questions & Answer key words

1. Write any two theories of forgetting.
2. What is spaced retrieval?
3. What is Decay theory?
4. How does interference affect forgetting?
5. What are the educational implementations of forgetting curve?
6.

4 Mark Short Essays & Value Points

1. Explain theories of forgetting.

2. Explain main parts if memory (Woodworth)

3. Explain the multi stage model of memory by Atkinson and Shiffrin.

10 Mark Essays & Value Points

1.Briefly explain types of memory?

Unit 5
Creating facilitative learning environment

Group members

1.Anusha TK

2.Aysha Nidhi Kasim

3.Aysha Nihala V

4.Binsha BS

5.Fahmida KM

6.Jahaana Shireen K

7.Jihada Muhammed

LEARNING ENVIRONMENT

MEANING

A learning environment is a place and setting where learning occurs.It is not limited to a classroom and includes the characteristics of the setting.

DEFINITION

A learning environment can be defined as Social,Physical, Psychological and Pedagogical context in which learning occurs and which affect student achievement and attitude.

FORMAL LEARNING

- It is typically provided by an educator or training institution.
- It is structured in terms of learning objectives.
- It leads to certification.
- Examples; Classroom,Library,Computer lab,Laboratory,Online classes

INFORMAL LEARNING

- Learning resulted from day to day life activities related to work,family,leisure etc
- It is non-structured and indefinite.
- Does not leads to certification.
- Examples; Home,Playground,Peer group,Social media,Society,Newspaper,Television,Field trip etc

Distinction between formal and informal learning

FORMAL LEARNING	INFORMAL LEARNING
• Planned,purposive,systematic and organised	• Unplanned,non-purposive and unorganised
• Imparted through formal lessons	• Not imparted through formal lessons
• Definite syllabus to be covered	• No definite syllabus and period
• Rigid and authoritarian	• Natural and participatory
• Organised by some agency	• It is an unorganised process
• Requires qualified,trained personnel	• Permits anyone willing and desirous of sharing knowledge,ideas,skills

Home learning environment

- It is the first social institution.
- Plays significant role in laying the foundations of child's personality in terms of cognitive,social,emotional and moral development.
- Curriculum materials can be simple or elaborate.
- Place for the upbringing of children.
- Home learning environment has been found to predict higher levels of vocabulary,spelling and emergent literacy in young children.

Educational implications

- Overall development of child's personality.
  - Skills
  - Attitude
  - Values
  - Behaviour
- Educability of the child.
  - Means development of interest and motivation for learning

School environment

- The term school is derived from a an old Greek word meaning ‘leisure’.
- School is a miniature form of society.
- Teacher,student and members interactively participate in their distinctive ways.
- School has its own mores,social setting,rules and regulations.
- It should keep pace with the emerging needs of the society.

DEFINITION

School environment can be defined as a measure of quality and quantity of cognitive,emotional and social support that has been available to the students during their school life in terms of teacher-pupil interaction.

Educational implications

- To generate commitment and capacities in pupils for future adult life.
- Providing equality of opportunity for social position.
- Learning to live together.
- Diffusion of new knowledge.
- Social competence.
- Character education.

Classroom climate

Classroom climate is the classroom environment.

- Classroom environment is a place where the teacher is the leader, is fully aware of what is happening and is in control of the classroom.
- Students are responsible for their own behaviour.

Aspects of classroom climate

- Intellectual
- Social
- Emotional
- Physical

INTELLECTUAL

- ❑ **The lesson develops knowledge,skills and attitude.**
- ❑ **Performance expectations are explicit.**
- ❑ **Students regularly present disciplinary skills.**
- ❑ **Tasks are challenging,important and authentic.**
- ❑ **Students receive prompt and specific feedback.**

SOCIAL

- ❑ **Students work together.**
- ❑ **Teacher-student interaction.**

- The teacher is proactive.
- The teacher solicits student feedback.

EMOTIONAL

- **The atmosphere is non-competitive and motivating.**
- **Student's background and identities are valued.**
- **Students are allowed to make low risk mistakes.**

PHYSICAL

- interact with each other.
- Students have equal access to physical and online materials.
- The classroom is free from distractions.

MODELS OF TEACHING

MEANING:

A model for teaching is a pattern or plan which can be taken up with a view to shape a curriculum or course,select appropriate instructional material and to guide the teachers action.Models of teaching have been developed to help a teacher to improve his/her capacity to reach more children and create a richer and more diverse environment for them.

DEFINITION:

Models of teaching are prescriptive teaching strategies designed to accomplish specific instructional goals. **(Paul.D.Eggen)**

CHARACTERISTICS OF MODELS OF TEACHING

- They differ from general teaching techniques and strategies in the sense that they are designed to meet specific objectives or goals.
- Give specific instructional design for particular type of instruction in specified teaching-learning situation.
- Provide systematic procedure and organised efforts for the desirable modification of the behavior of the learners.

FAMILIES OF TEACHING MODELS

There are four families of teaching models.

1. **Family I - Information Processing Family**
2. **Family II - Personal Family**

3. Family III - Social Family

4. Family IV - Behavioural Systems Family

I : INFORMATION PROCESSING FAMILY

Models of this family focus on intellectual capacity.The primary purposes are:

- Mastering the methods of enquiry.
- Fostering the ability to think logically.

Eg: Concept Attainment Model, Inquiry Training Model, Advance Organiser Model

II : PERSONAL FAMILY

Models belonging to this family deal with the personal development of the individual.The primary goals are:

- ❖ To foster the students creativity.
- ❖ To help students refine their emotions.

Eg: Classroom Meeting Model, Non-directive Teaching Model

III : SOCIAL FAMILY

The models in this family emphasise the relationship of the individual to society.The primary goals are:

- ❖ To train students work together.
- ❖ To inculcate personal and social values.

Eg: Jurisprudential Inquiry Model, Social Inquiry Model, Laboratory Training Model

IV : BEHAVIOURAL SYSTEMS FAMILY

The models in this family emphasise on changing the observable behaviour of

the learner.The specific goals are:

- ❖ To foster leadership quality.
- ❖ To master techniques for stress reduction.

Eg: Contingency Management Model, Simulation Model, Mastery Learning Model

KEY CONCEPTS/BASIC ELEMENTS OF MODELS OF TEACHING

1. **Syntax (Phases/ Steps)**
2. **Social system (Structure of learning environment)**
3. **Principles of reaction (Rules to be followed)**
4. **Support system**
5. **Instructional (Direct) and Nurturant (Indirect) Effects**

1. SYNTAX (Phases/Steps) :

- Refers to the description of the model in the action.

- Description of how the various phases in the development of a lesson are sequenced when the model is translated into action.
- It is the most important component of a model of teaching.
- Following the syntax is necessary to implement a model of teaching.

2. SOCIAL SYSTEM (Structure of learning environment):

- The relationships between the teacher and the learners as well as the role played by each in the activities that take place define the nature of social system.
- **Highly structured:** The activities of the pupils will be more controlled by external restriction with a predetermined structuring ie., Teacher dominating.
- **Low structured:**The teacher withdraws to the maximum possible and free interaction among the learners will determine the course of action in the learning environment ie., Student dominating.
- **Moderately structured:** Teacher and the pupils jointly decide upon the course of action ie., Both teacher and student have equal role.

3. PRINCIPLES OF REACTION (Rules to be followed):

- This defines the nature of reaction expected from the teacher to every pupil activity.
- It tells how to react according to the action of the students.
- It tells about the rewards, punishments and directions.
- This give guidance to the teacher as to how he is expected to react to each activity of the learners,to suit the characteristics of the model selected.

4. SUPPORT SYSTEM:

- It is the teaching- learning aids and various other requirements needed for the successful implementation of a model of teaching.
- A description of support system in advance will help the teacher ensure that he can create or pool these and apply these for the execution of the model successfully.

5. INSTRUCTIONAL (Direct) AND NURTURANT (Indirect) EFFECTS:

- Direct or instructional effects of a lesson are purposefully envisaged by the teacher and it will be always positive.
- Indirect or nurturant effects might happen as a by-product and it may be negative and unexpected.

TEACHER'S PERSONALITY

Factors essential to be an effective teacher

- ***Affection for the child:***

  Teacher who lacks affection and sympathy will never able to bring out the best in a child.

- ***Emotional balance:***

  Temperamental instability will be reflected in her pupils behaviour.

- ***Aptitude for vicariousness:***

To understand a child, the teacher should be able to put himself in the child's place to know child's experience and feelings.

- ***Health and energy:***

  A teacher who is weak or suffers from I'll health, will discourage the spirit of the youngsters.

- ***Willingness to utilize one's time and energy:***

  Teacher's job is never ending,even after closing hours,she has to carry home her school work,correction,next day's preparation, etc.

- ***Acceptance of oneself:***

  A teacher should accept herself and should engage countinously in self- improvement.

- ***Team spirit:***

Teacher should not only work in team but also promote team spirit.

- ***Fairness:***

Teacher should not be partial to any child.

- ***Self evaluation:***

A stagnant teacher will not remain a true teacher any more. Should continuously evaluate herself putting forth new efforts for improvement.

Role of teacher

- Subject expert
- Initiator, director, evaluator of learning experience.
- Should poses values like fairness, truthfulness,honesty and concern for others.
- Should develop moral attitudes, thinking patterns, life goal for becoming ideal citizens.
- Disciplinarian and also helps parents to know their child and his school

❖ Psychological oriented roles of teacher

1.Artist in human relation: Teacher has to develop sensitivity for the

needs and feelings of the pupil.

2.Group Builder: Teacher knows that factors within a group can be used to stimulate learning.

3. Catalytic Agent: Many psychological changes occur in the classroom due to the presence of teacher. As a catalytic agent teacher should make changes that are integrative.

4. Mental Hygiene Worker: Teacher should help the Children to learn more effective patterns of living, reduce anxieties and lead them to a mature citizens.

IMPORTANCE OF TEACHING STRATEGIES

- It facilitates effective organization of learning material.
- It enhances effectiveness of teaching.
- It brings more motivation to learners.
- It make learners more attentive.
- It makes learners more interested in the class and subject.
- It facilitates easy understanding.
- It facilitates more effective assessment.
- It develops teacher's creativity.
- It facilitates professional development of teachers.
- It meets different learning styles of learners.

LEARNING IN GROUP

CONCEPT OF GROUP

A group is a collection of individuals who have regular contact and frequent interaction ,mutual influence,common feeling and who work together to achieve a common set of goals.

DEFNITION

A group is two or more interdependent individuals interacting and influencing each other in collective pursuit of a common goal

TYPES OF GROUPS

1. C.H.COOLEY'S CLASSIFICATION

a.Primary group: The members are in an intimate face to face relationship with one another. Eg:Family

b.Secondary group:The relationship of the members are more or less casual. Eg:Social organisation

c.Tertiary group:The degree of intimacy or relationship is quite marginal and temporary in charecter. Eg:Audience in a theatre

2.W.G.SUMNER'S CLASSIFICATION

a.In group:Strong identification and loyalty with members of their own group.The group by which an individual identifies oneself.

b.Out group:Those persons who feel a sense of indifference, avoidance, disgust, competition among themselves.

3.a.Crowd: Collection of people for a short time, as long as the common source of interest last.A group which has come together temporarily and most cases governed by emotions.

b.Club:Association of people united by a common interest or goal.More permanent that of a crowd.Eg:Sports clubs

c.Community :A group of people living in the same place or having a particular characteristics in common such as norms religion values or identity.

4.a.Permanent group :Family

b.Temporary group :Accidental crowds in the street.

5.a.Open group:Everybody can become a member.

b.Closed group :Where membership is not open to all.

6 a.Organized group :Formed as a result of previous planning and exist for some specific purposes. Eg:NSS units.

b.Spontaneous group :Individuals come together naturally without specific purpose.

7.a.Formal group: Formed on the basis of specific norms, rules and values.Eg:School.

b.Informal group :The members are not bound by any specific rules.Eg:Play groups

Class as a group

- The class room is a social group.
- The structure consisting of the teachers and pupils.
- There will be a constant interaction between teacher and the pupils and pupils themselves.
- The classroom helps the members to satisfy their needs and achieve the goals.
- IClass is a formally organized group, certain informal subgroups are also found in the class room such as stars, isolates and cliques.

Role of teacher

- Teachers has to do something to improve groups relations in his or her class room.
- Maintaining a pleasant and democratic atmosphere in the classroom by sharing experience and exchanging ideas with the pupils

Peer group

- A peer groupis both a social group and primary group of people who have similar interest, age, background and social status.
- The members of this groups are likely to influence the persons beliefs and behavior.
- Peer groups are the most influential agency in the life of the child.

Peer groups help

- Getting along with others
- Developing moral values
- Learning appropriate sociocultural roles
- Achieving personal independence
- Developing qualities of leadership and loyalty.

An undeesirable peer group can spoil the members by developing antisocial tendencies, unhealthy interests, attitude and bad behaviors.

Characteristics of group

Group structure

aa.Size of group:A single person cannot form a group as it at least requires two people. Size of group determined by the operation of arbitrary external factors. Eg:size of family determined by the number of births and deaths.

b.Individual role within the group :The dynamic interactions among people have much more significance in determining the role of the individual.

c.Group relations :Social relations are the fundamentals of the group life.There is a reciprocal communication and relationship among the group members.

MODELS OF TEACHING

TYPES :

1. Concept attainment model
2. Jurisprudential inquiry model
3. Contingency management model
4. Advance organiser model
5. Cognitive development model

CONCEPT ATTAINMENT MODEL

- It belongs to information possessing family.
- Proposed by JEROM S. BRUNER
- It explains The Nature of Concept and Strategies of Concept Formation.

DESCRIPTION OF THE MODEL :

1. SYNTAX:

Phase 1: Presentation of data and identification of concept.

Phase 2: Testing attainment of the concept.

Phase 3: Analysis of thinking strategies.

2. SOCIAL SYSTEM

- Phase 1 highly structured
- Phase 2 moderately structured
- Phase 3 lowly structured

3. PRINCIPLES OF REACTION

- Support the pupils hypothesis and creates dialogue.
- Encourages different strategies.

4. SUPPORT SYSTEM

- Material mainly in the form of positive and negative exemplars.

5.EFFECTS:

1. INSTRUCTIONAL EFFECT
- Getting clear notion about nature of concepts.
- Developing skills in using appropriate concept building strategies.
- Attaining the specific concepts.
- Developing skills involved in inductive reasoning.

2. NURTURANT EFFECT
- Sensitivity to logical reasoning.
- Tolerance of ambiguity and initial errors.
- A sense of using alternative perspectives.

JURISPRUDENTIAL INQUIRY MODEL

- This model is based on the serial interactions of family.
- It comes under information processing family.
- Proposed by DONALD OLIVER and JAMES P SHAVER.

DESCRIPTION OF THE MODEL:

1. SYNTAX

   Phase1 : Orientation of the case.
   Phase2 : Identifying the issue.
   Phase3 : Taking a position.
   Phase4 : Exploring the stance and patterns of argumentation.
   Phase4 : Refining and qualifying the position.
   Phase5: Testing factual assumptions behind qualified positions.

2. SOCIAL SYSTEM

- Ranges from highly structured to lower structured.
- To start with, it has to be high, but with experience it become low.

3 PRINCIPLES OF REACTION

- Teacher's reactions are mostly probing.
- He questions the relevance, consistency, specificity of student's opinion and viewpoint.
- Ensures continuity of thought.

4 SUPPORT SYSTEM

- A comprehensive collection of source documents including all the facts and values associated with the issue is the main support.
- A relevant issue with all the related facts and other materials decides the success of model.

5.EFFECTS :

1. INSTRUCTIONAL EFFECT

- Competency for analyzing social issues, ability to assume role of the other, competence in social dialogue.

2 NURTURANT EFFECT

- Empathy /pluralism, awareness of facts about social problems, capacity for social involvement and desire for social action.

CONTINGENCY MANAGEMENT MODEL

- This model applies Theories of behaviorst psychology.
- It mostly associated with the Principles of reinforcement formulated by SKINNER.

DESCRIPTION OF THE MODEL :

1. SYNTAX

   Phase1 : specifying a final performance
   Phase2 : accesing the entering behaviour.
   Phase3 : formulating the Contingency.
   Phase4 : instituting the programme.
   Phase5 : evaluating the programme.

2.SOCIAL SYSTEM

- Highly structured.
- The Contingency schedule is in the hands of the teacher.
- But at a times negotiation with pupils is also possible.

3 PRINCIPLES OF REACTION

- Based upon operant conditioning and the specific Contingency management, the teacher positively reinforces appropriate behaviour.

4. SUPPORT SYSTEM

- Reinforces, programmed instructional materials, etc.
- patience and careful planning on the part of the teacher.

5.INSTRUCTIONAL AND NURTURANT EFFECTS

- Academic skills and knowledge
- Local skills/behaviour
- Self - management skills
- Emotional responses
- Personal skills

ADVANCE ORGANISER MODEL

- This model is based upon the learning theory.
- Formulated by DAVID AUSUBEL.
- It comes under information processing family.

DESCRIPTION OF THE MODEL :

1.SYNTAX

Phase1: Presentation of advance organiser.

Phase2: Presentation of the learning task or materials.

Phase3: strengthening cognitive organisation.

2.SOCIAL SYSTEM

- Phase 1&2 highly structured.
- Phase3 lowly structured.

3.PRINCIPLE OF REACTION

- Teacher reacts to pupils reactions by way of giving clarifications.

4 SUPPORT SYSTEM

- Well organised learning material.
- Well planned advance organiser.

5. EFFECTS

- INSTRUCTIONAL EFFECT

  Meaningful verbal learning mastery of the content.

- NURTURANT EFFECTS

  Precise thinking, ability to process information.

COGNITIVE DEVELOPMENTAL MODEL

- This model is based upon the developmental theory of Jean piaget.
- This model focused on how the children think and develop intellectually.

DESCRIPTION OF THE MODEL :

1.SYNTAX

Phase1: confrontation with stage- relevant tasks

Phase2: Inquiry

Phase3: Transfer

2.SOCIAL SYSTEM

- It can vary from highly structured to minimally structured.

3.PRINCIPLE OF REACTION

- Teacher is a facilitator for proper environment that promote thinking.
- He should ask heuristic questions only that call for scientific thinking.

4 SUPPORT SYSTEM

- An environment that provides stage.
- The expertise of the teacher in questioning and raising counter arguments also is important.
- This model is suited not only for cognitive development but also social and moral development.

5.INSTRUCTIONAL AND NURTURANT EFFECTS

- The instructional effect is the cognitive development with respect to the pre-determined learning material.
- The nurturant effect is transfer of learning to other aspects of cognitive and socio- economic development.

SOCIOMETRY -USE AND IMPORTANCE

Sociometry is a method developed by **J.L. MORENO** for assessing social relationships among members of a social group. It is a method of assesing the receptive or rejective tendencies of the members in a social group.

SOCIOGRAM

Sociogram is a tool for charting the relationships within a group.

It will reveal the structure of the group,relationship among the members of the group,who interact with whom and who are effective leaders.

It will help the teacher to identify the ***stars,clique*** and ***isolates.***

Stars are those who are chosen by many. They might be having some

qualities that enable them to attract others.

Cliques are groups of two or three who have chosen exclusively among themselves.

Isolates are those who are chosen by nobody.They may tend to break away from the group under pressure.

The sociogram will tell the teacher whether his class is a well knit-group or a loosely knit one.It will help him to prevent social maladjustment in children and to promote social cohesion.

GROUP DYNAMICS

- Group dynamics refers to the forces that regulate the working of the group. It is the study of the forces exerted by the group on the individuals or by the individuals on the group.

-If a change of membership occurs in a group,certain features of the group will change and certain others will remain stable.Certain pressures in a group will bring about uniformity of thinking among its group members while certain others inhibit creativity among them.

-Changes in a group may enhance or lower productivity or may not affect it all.

-In group dynamics,we make a study of these forces and try to understand the components which are responsible for the rise or fall of these forces.

At the same time we study also the circumstances under which these forces are active. Also,we investigate into the consequences of these forces and find out the methods of modifying them to suit the desired goal.

-Some groups are more *stable* than others.Their structure tends to remain unchanged over a period of time.

-The *unstable* group, on the contrary,undergoes progressive changes even in the absence of significant variations in the external situation.

-We must understand what kinds of groups tend to change under what conditions and what the direction of the change is likely to be.

Changes in group structure as a result of internal imbalances

-Instability arises out of conflict among individual members and among sub-

groups within the whole group.As consequence of such conflicts resulting in the lack of balance among the internal forces in the group,changes in group structure occur.

-The most extreme consequence of intragroup tensions is complete dissolution of the group. Complete dissolution means that the cohesive forces tending to hold the group together are over run by disruptive forces tending to pull the group apart.

-The degree of strength or stability of a group can be viewed in terms of the relative strength of the cohesive and disruptive forces.

Changes in group structure as a result of external influences

-External influences are those arising out of the environment of the group,those arising in connection with the change in membership of the group,or

with the changes that take place within the original members of the group.

- As the environmental circumstances in which a group exists undergo changes,significant changes are likely to happen in the group structure itself.

-Threats or attack against the group from outside the group has often been observed to induce important changes in group structure.

-At the time of external dangers, group unity is often found to increase and inner differences are found to diminish.

GROUP COHESION

▪Cohesiveness is the extent of intimacy of the members of a group and may be said to be the sticking force that bind them together.

▪The degree to which the members of a group wish to remain in the group because of a feeling of belonging is called *group cohesiveness.*

▪A sense of belonging,we feeling,favourable attitude towards membership in a group,freedom of action,provision for self-expression and communication etc. are generally considered as cohesive factors.

▪When several persons interact for some time some cohesiveness naturally develops.This feeling of belongingness reinforces the bonds between the members and separates the members of that group from those of other

groups.

▪Good understanding between the members as well as the presence of common motives and goals lead to the development of cohesiveness.

▪Cohesiveness is an essential factor for effective group work.

▪Planning together an activity and carrying it out by mutual co-operation indicate cohesiveness.

▪A cohesive group can work better under conditions of stress and strain and it enhances the morale of the group.

Educational Implications

▪Improves communication skills.

- Improves learning experiences.
- Cooperative learning takes place.
- Better and deeper understanding of the topic.
- Upliftment of the academically backward students.
- Exchange of new and innovative information.
- Learn to value others opinion.
- Increases the performance level of a group.
- Easy attainment of a specified goal through mutual helping and understanding.

GUIDANCE AND COUNSELLING

GUIDANCE

- Guidance is the process of assisting an individual by properly trained guidance personnel in planning his future wisely and in developing his potentiality to maximum for him to solve his immediate or future problems and to lead a successful personal and social life.
- According to skinner, guidance is a process of helping young persons learn to adjust to self, to others , and to circumstances.
- **TYPES OF GUIDANCE**
- There are three types of guidance - **Personal guidance, educational guidances and vocational guidance.**

- **PERSONAL GUIDANCE**

  Personal guidance refers to the help given to an individual towards a better adjustment in the development of attitudes and behaviour in all areas of life.

  The area of personal guidance is the individual adjustment

- ***NEED OF PERSONAL GUIDANCE***

  • It is required for the personal adjustment.

  • It is essential for developing individual competence.

  • It helps in taking decisions with regard to personal problems.

  • It brings happiness, peace and satisfaction in the life of an individual.

- **EDUCATIONAL GUIDANCE**

  JONES defines educational guidance as the assistance given to the pupils in their choices and adjustments with relation to school, curriculum,courses and school life.

  Educational guidance helps the student in choosing wisely, in planning

Intelligently and in pursuing purposefully the curriculum best suited to his needs.

- **NEED OF EDUCATIONAL GUIDANCE**
  - To check wastage and stagnation in education.
  - To make right educational choices.
  - To make proper educational adjustment.
  - To help the pupil make educational plans consistent with his abilities, interests and goals to select appropriate curricula and course.
- **VOCATIONAL GUIDANCE**

  Vocational guidance is a process of assisting the individual to choose an occupation, prepare for it, enter upon and progress in it. International labour organisation(***ILO***) defines vocational guidance as assistance given to an individual in solving problems related to occupational choice and progress with due regard for the individual's characteristics and their relation to occupational opportunity.

❖ NEED OF VOCATIONAL GUIDANCE

•To help the individual in occupation choice by providing information about the world of work around him.

• It helps him to prepare for entering into the desired profession.

•It helps an individual to get absorbed in the occupation of his choice.

• To ensure efficient use of manpower and resources.

COUNSELLING

COUNSELLING is a scientific process of assistance extended by an expert in an individual situation to a needy person.

According to ***Rogers***, Counseling is a series of direct contacts with the individual which aim to offer him assistance in changing the attitudes and behaviour .

• It involves two individuals- the counsellor and the counsellee .

NEED AND GOALS OF COUNSELLING

- To provide the student with the information on important matters leading to his success.
- To gather relevant information about the student and to make him aware of this with a view to help him solve his problems.
- To establish mutual understanding between students and teachers.
- To help student to know about himself better and to give encouragement to his endeavours.

Types of counselling

- There are three types of counselling- ***Directive counselling, non-directive counselling and eclectic counselling.***

1- Directive counselling

- It is a counsellor centred process
- Counsellor direct the client to take steps in order to resolve his conflicts
- It is based on the assumption that client cannot solve his own problems for lack of information and experience
- Counsellor tries to direct the thinking of the counsellee by informing , explaining, interpreting, and advising . Hence known as ***prescriptive counselling.***
- Directive counselling gives more importance to intellectual aspects.

2- NON- DIRECTIVE COUNSELLING

- It is a client-centred process
- Here counsellee is the pivot of the whole counselling process
- The counsellor lead the client to a point of self - realization , self actualisation,and self help without telling him anything directly.
- The main function of the counsellor is to create an atmosphere in which the client can work out his problems
- In this, counsellor accepts completely what the counsellee says and recognizes his feelings. Hence it is also known as ***permissive counselling***
- Emotional elements rather than intellectual element are stressed.

3- ECLECTIC COUNSELLING

- It is a type of counselling which is neither counsellor- centred nor client centred; but a combination of both.
- Here the counsellor is neither too active as in Directive counselling not too passive as in non-directive counselling, but follows a middle course.
- He can start with the directive one but when the situation demands, the counsellor may switch over to the non- directive or vice versa.
- It is highly flexible in nature
- Here, freedom of choice and expression is open to both the counsellor and the counsellee

Differences between guidance and counselling

GUIDANCE

- It is broad and comprehensive process
- Guidance includes counselling as one of it's services
- Usually guidance is given to normal individual
- It can be personal or impersonal
- Changes are brought about in the attitude of the client

COUNSELLING

- It is characterized by more precision and depth
- Counselling is a part of guidance, not all of it
- Counselling is usually given for the abnormal behaviour
- It is always personal
- Changes are brought about in the feeling and emotions of the client

ROLE OF TEACHER AS A COUNSELLOR

- The counsellor should try to understand children- their abilities, needs, interests and problems.
- Counsellor should collect educational and occupational information regarding students
- Counsellor conducts interviews, helps the pupil to unfold his problem and formulate his own solution
- Give orientation talks to pupils regarding curricular offerings, work experience s, co curricular activities etc. available in the school.
- Providing counselling services to the pupils thus assisting them to understand themselves and their social and psychological world

2 Mark Questions & Answer key words

1. **Write briefly the concept of counselling**
2. **What is the significance of educational guidance**
3. **Distinguish between guidance and counselling**
4. **Define educational guidance**
5. **Write the relevance of proper learning environment**
6. **What is meant by classroom climate?**

4 Mark Short Essays & Value Points

1. **Explain different types of counselling**
2. **Explain the various types of guidance**
3. **Differentiate between formal and informal learning environment**
4. **Write a note on informal learning environment**

10 Mark Essays & Value Points

1. **Bring out the importance of guidance and counselling in secondary schools. What is the role of teacher?**
2. **Illustrate any one model of teaching that can facilitate maximum learning.Explain the role of teacher.**
3. **Explain the significance of models of teaching in facilitating learning?Illustrate any one model.**

B Ed. II. Sem. EDU 07 FACILITATING LEARNING

Unit 6

Learning in learner's perspective

Group Members

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7.Thabsheena N

8.Vaheeda UK

LEARNING STYLE

Meaning

- Learning style refers to the preferential way in which the student absorbs processes, comprehends and retain information.
- Individual learning style depends on cognitive, emotional and environmental factors as well a one's prior experience.

Definitions

Dunnet et al. (1978) defines Learning style as " The way in which each person absorbs and retains information and skills ; regardless of how that process is described, it dramatically different for each person".

Oxford *et al.* (1991) defines Learning style as the general approaches, students used to learn a new subject or tackle a new problem.

APPROACHES TO LEARNING

1. Deep approach
2. Surface approach
3. Strategic approach

1. **Deep approach**

Concentrates on the meaning of what is learned.

- Knowledge transforming
- Focus is on ‘ what is signified’
- Actively seek to understand the material or the subject.

- Relates previous knowledge to new knowledge.
- Take a broad view and relates ideas to one another.
- Relate concepts or theoretical ideas to everyday experiences.
- Make use of evidences , inquiry and evaluation
- Are motivated by interest
- Emphasis is internal; from within the student.

2. Surface approach

Examining new facts and ideas critically and tying them into existing cognitive structures and making numerous link between ideas.

- Information reproducing
- Focus is on the “signs” (or on the learning as a signifier of something else).

- Try to learn in order to repeat what they have learned.
- Memorise information needed for assessments.
- Make use of rote learning.
- Take a narrow view and concentrate on detail.
- Fail to distinguish principles from examples.
- Facts and concepts are associated unreflectively.
- Are motivated by fear or failure.
- Emphasis is extern, from demands of assessment.

3. Strategic approach

Consiously set out to achieve the highest possible grades.

- Organizing information.
- Intend to obtain high grades.

- Organise the time and distribute their effort to greatest effect.
- Ensure that the conditions and materials for studying are appropriate.
- Use previous exam papers to predict questions.
- Are alert to cues about marking scheme.

ORIENTATIONS IN LEARNING

- Learning orientations describe an individual's disposition to approach, manage and achieve learning intentionally and differently from others.
- The intentional Learning Orientation Construct (LOC) is a multidimensional representation offering an elaborated view of factors influencing individual learning differences.
- The construct provides measure to assess learning ability and readiness to learn.
- The LOC describes how three primary factors impact intentional learning success and influence individual learning differences.

1. **Learning Independence Domain (Autonomy) :**

- It refers to the individual's desire and ability to take responsibility, make choices, control, manage and improve their own learning for the attainment of learning and personal goals.
- self-assess and self-motivate (make choices independent of the instructor or prescribed sequences)

2. Committed Strategic Planning and Learning Effort Domain :

- It refers to the degree that learners persist and commit deliberate, strategic purpose and effort to accomplish learning and achieve goals.

3. Conation / Affective Learning Focus (Desire to Learn or Achieve Mastery) Domain :

- It refers to the individual's desire or striving to learn.
- It considered the learner's will, commitment, intent, drive, or passion for improving, mastering, transforming, and setting achieving goals, taking risks, and meeting challenges.
- It describes the individual's typical conative and affective orientation to the process of learning, regardless of content, environment, resources, or course delivery.

CLASSIFICATION OF LEARNING STYLE (DUNN & DUNN)

- Learning style inventory designed by : **Dr. Rita Dunn and Dr. Kenneth Dunn (1970)**
- Dunn & Dunn Learning style dimensions include,

  * **Environment**

  * **Emotional**

  * **Sociological**

  * **Physiological**

  * **Psychological**

Dunn and Dunn Learning Style Model

Designed By Dr. Rita Dunn and Dr. Kenneth Dunn

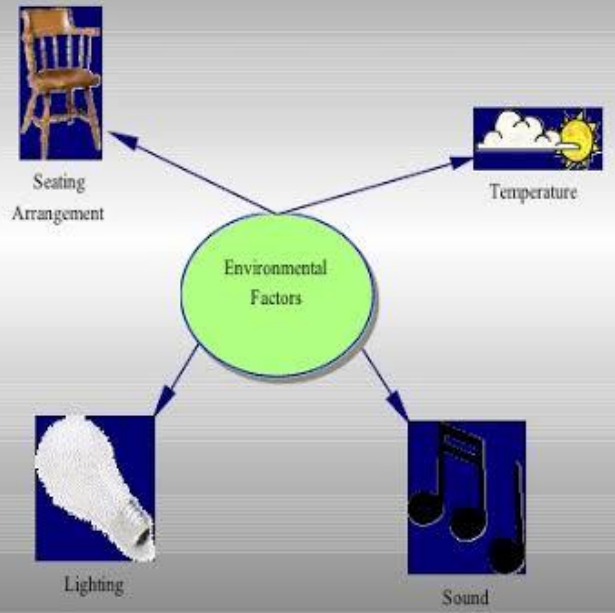
Graphic Design by Susan M. Rundle

STIMULI	ELEMENTS					
Environmental	Sound	Light	Temperature	Seating		
Emotional	Motivation	Responsibility/ Conformity	Task Persistence	Structure		
Sociological	Self	Pair	Peers	Team	Adult	Variety
Physiological	Perceptual	Intake	Time of Day	Mobility		
Psychological	Analytic	Global	Reflective	Impulsive		

Environmental Elements

Environmental Factors

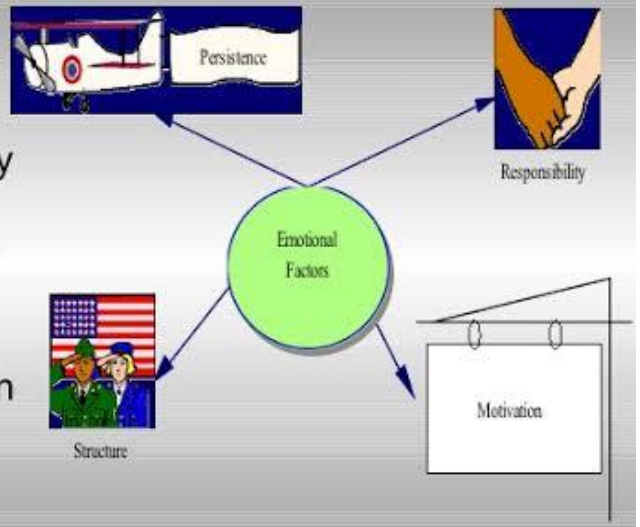
- Lighting
- Sound
- Temperature
- Design (Seating Arrangement and Furniture Design)



Emotional Elements

Emotional Factors

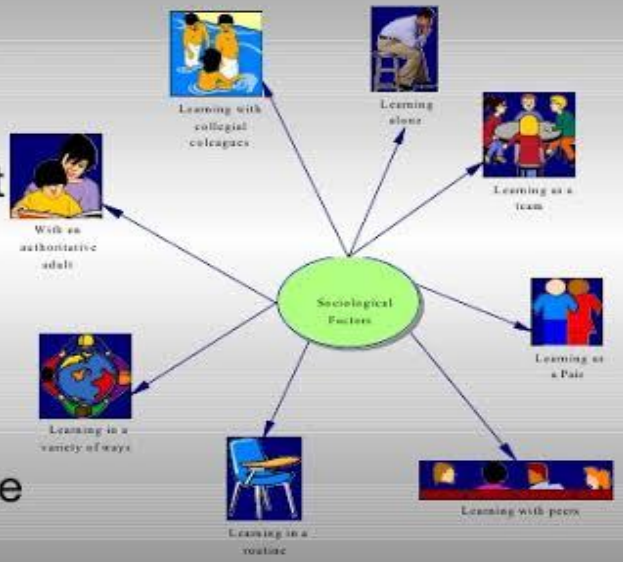
- Motivation
- Persistence
- Responsibility (conformity vs. nonconformity)
- Structure need for either externally imposed structure or the opportunity to do things in their own way)



Sociological Elements

Sociological Factors

- How to people learn in association with other people?
- An authoritative adult or with a collegial colleague
- Alone or with peers
- As a pair or team
- Learning in a variety of ways or in a routine

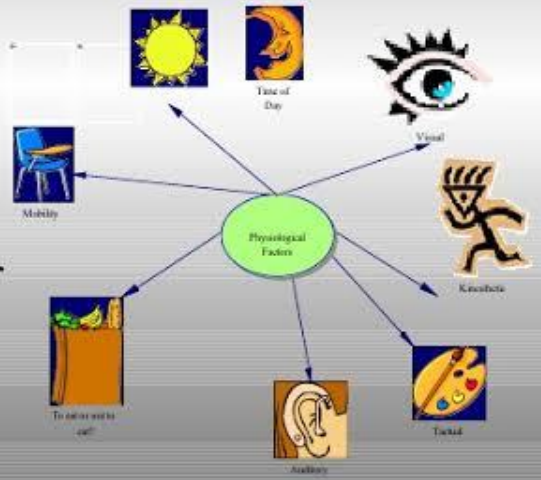


Physiological Elements

Physiological Factors

- Perceptual strengths (auditory, visual, tactile and kinesthetic)
- Time-of-day energy levels
- Intake (eating or not while studying)
- Mobility (sitting still or moving around)

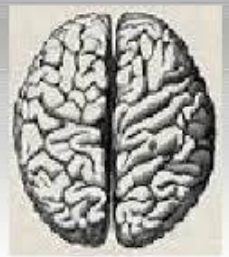
"You can observe a lot by just watching."- Yogi Berra



Psychological Elements

Psychological Factors

- Hemispheric (right or left?)
- Impulsive or reflective
- Global vs. Analytic



Multiple intelligence as learning styles

Types of learning styles

(1) . visual/spatial : prefer using pictures ,images and spatial understandings.

(2). Aural/auditory-musical : prefer using sounds and music.

(3). Verbal/ linguistic : prefer using words ,both in speech and writings.

(4). Physical/ Kinesthetics : prefer using body, hands and sense of touch.

(5). Logical / mathematical : prefer using logic,reasoning and systems.

(6). Interpersonal/ social : prefer to learn in groups or with other people.

(7). Intrapersonal/solitary : prefer to work alone and use safe-study.

Visual/spatial

- Can easily visualize objects, plans, and outcomes in mind's eye.

Learning and techniques :

- Use colour , layout,and spatial organization in your associations,and use many

‘ visual words’ in your assertions.

- Use mind maps.
- Systems diagram can help visualize the links between parts of a system.
- The visual journey or story techniques helps to memorize content that isn't easy to see.
- Peg word and events comes easily to you.

Aural/ auditory- musical

- Can sing , play a musical instrument, or identify the sounds of different instruments.

Learning and techniques:

- Use sound, rhyme,and music in learning.
- Use sound recordings to provide a background and help get into visualizations.
- When creating mnemonics or acrostics,make the most of rhythm and rhyme.
- Use the anchoring techniques to recall various states.

Verbal / linguistic

- One find easy to express themself both in written and spoken word.

Learning and techniques:

- Verbal learner, try the techniques they involve speaking and writing.
- Make the most of the word based techniques such as assertions and scripting.
- Mnemonics are used for recalling lists of information.
- When they read content aloud, makes it dramatic and varied.
- Try working with others and using role playing to learn verbal exchanges such as radio calls.

Physical/ Kinesthetic

- Use a physical style, use touch ,action,movement and hands-on work in learning activities.

Learning and techniques:

- For assertions and scripting, describe the physical feelings of their actions.
- Use physical objects as much as possible.
- Keep in mind as well that writing and drawing diagrams are physical activities, so don't neglect these techniques.
- Use breathing and relaxation to focus while they learn and perform.
- Use role playing, either singularly or with someone else,to practice skills and behaviours.

Logical/ mathematical

- Can recognize patterns easily, as well as connections between seemingly meaningless content.

Learning and techniques:

- Aim to understand the reasons behind content and skills.
- While they study, create and use lists by extracting key points from their material.
- Association often works well when it is illogical and irrational.
- Make use of ‘ system thinking’ to help understand the links between various parts of a system.
- Sometimes overanalyze certain parts of learning and training.

Interpersonal/ social

- Can communicate well with people, both verbally and non verbally.

Learning and techniques:

- Aim to work with others as much as possible.
- Role playing is a technique that works well with others, whether its one on one or with a group of people.
- Rather than reciting assertion to themselves, try sharing their key assertions with others.
- Working in groups to practice behaviours or procedures helps to understand how to deal with variations.
- If you are working in groups it may help to have everyone do the learning styles questionnaire.

Intrapersonal / solitary

- Those who are more private , introspective and independent.

Learning and techniques:

- Align their goals and objectives with personal belief and values.
- Create personal interests in their topics.
- Keep a log or journal.
- Set their goals, objectives and plans.
- Modelling is a powerful techniques for them.
- Their thoughts have a large influence on your performance and often safety.

Educational Importance of Learning style.

- Learning style can be defined as, it's nothing but a preferential mode through which a person likes to master learning, solve problems, think or react in a pedagogical situation.
- Learning styles are the unique ways in which individual process information.
- It can be described as a set of factors, behaviours and attitudes that helps to learn an individual in a given situation.
- Learning style has an important place in an individual when s/he knows his/her learning style,s/he will integrate it in the process of Learning. So s/he will learn more easily & fast and will be successful.

- Learning style will help the students to become an effective problem solver
- Confidence in the Learning process will constantly rise when learners know how to learn.
- The awareness of knowing what they(students) want to know and how will change their perspective on learning new things.
- Teacher can plan the lesson according to different learning styles and concentrate on students having different learning style equally.
- By identifying the Learning style, students nd teachers can understand about their strength and weaknesses and they can overcome the difficulties.

- Understanding the students learning style can be the key to unlocking their full potential and making difficult concepts seem easy as can be.
- Educational institutions can modify or develop their infrastructure structural facilities to meet the needs of students in accordance with their respective learning styles.
- Teaches can develop and use appropriate teaching aids and teaching methods in the teaching process.
- Students can change their learning habits according to their learning style.
- Teachers can help students to practice with variety of games nd plays which will improve their learning styles and strategies and there by make them successful in their preferred area.

REFLECTIVE PRACTICES

- Reflection refers to an activity or process in which an experience is recalled, considered and evaluated.
- Reflective practice is the application of skill of reflection to our practice in order to improve performance.
- It means analysing, reconsidering, and evaluating one's experiences within a context

Importance:

- It develops student's understanding and critical thinking skills.
- It may modify learner's actions, behaviours, treatment and learning needs.
- It make learners aware about their own merits and limitations in learning.
- It facilitates improvement in learning.
- Enables individual to think more deeply and holistically about an issue leading to greater insights and learning.
- Connects rational decision making process to more effective experiential learning process.

Stages involved in Reflective Practices

1. ATTENDING TO THE EXPERIENCE

- Take notice and describe the experience or incident.
- Describe what happened during a critical incident you were involved (what did you do, know, feel, think, need..)

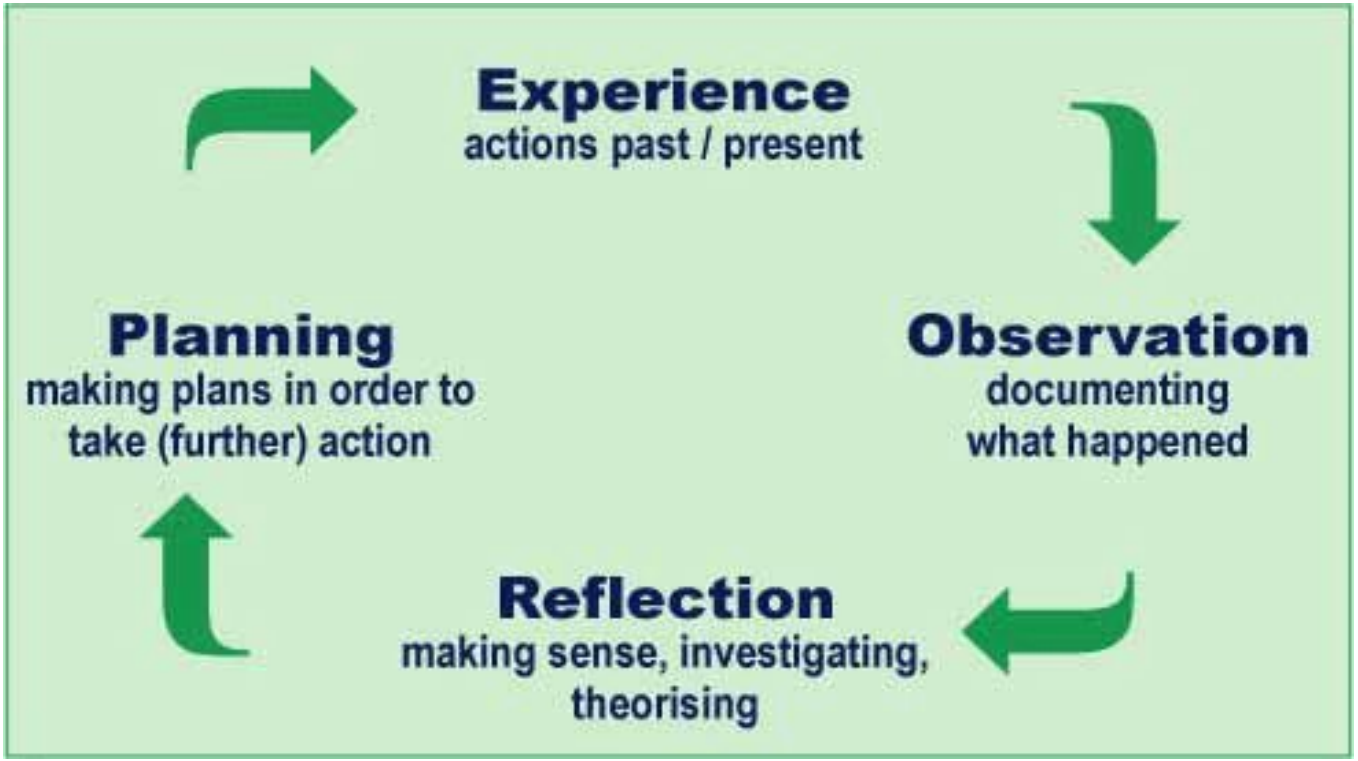
2. RETURNING TO THE EXPERIENCE

- Think in depth about your experience or incident
- Implications of your decisions , actions and reactions.(why it occur, how it occur)

3. REEVALUATING THE EXPERIENCE

- Reflect What you learned from the experience or incident.
- Thinking about what improvements are needed and planning for next.

The Reflection process:



Types of Reflective practices

1. **Reflection-on-action**
   - It requires looking back on what one has done and reviewing actions, thoughts and product.
2. **Reflection-in-action**
   - It requires looking back into an action while it is being accomplished.
3. **Reflection-for-action**
   - It requires learner to review what has been accomplished and identify constructive guidelines to follow in order to succeed in accomplishing the tasks in future.

METACOGNITION

I. Metacognition is simply defined as thinking about thinking

- The term meta-cognition is used by Flavell (1979) refers to an individual's awareness of his or her cognitive processes and strategies.
- Metacognition is knowledge and understanding of our own cognitive processes and abilities and those of others, as well as regulation of these processes.
- It is the ability to make your thinking visible
- Metacognition refers to higher order thinking which involve active control over the coagnitive process engaged in learning

Meta cognition plays a critical role in successful learning

According to Flavell(1979,1987). Metacognition consist of

- Meta cognitive knowledge
- Meta cognitive experience or regulation

Metacoagnitive knowledge refers to acquiring knowledge about coagnitive process,knowledge that can used to control coagnitive process

There are **three types of metacognitive knowledge** that each play a role in learning and problem-solving:

- **Declarative knowledge :** ”knowing what” knowledge of one’s own learning processes, and about strategies for learning
- **Procedural knowledge :** “knowing how”–knowing what skills and strategies to use
- **Conditional knowledge** : “knowing when” –knowledge about why and when various learning strategies should be used.

Metacognition consists of **two** components:

- **Knowledge**
- **Regulation**

Metacognition knowledge includes

- Knowledge about oneself as a learner and the factors that might impact performance,
- knowledge about strategies, and
- knowledge about when and why to use strategies.

Metacognition regulation is the

- monitoring of one's cognition and includes planning activities, awareness of comprehension and task performance,
- and evaluation of the efficacy of monitoring processes and strategies.

METACOGNITION

Meta cognitive skills include:

- Planning your learning
- Monitoring whether your current learning strategies are successfull
- Evaluating results of your learning

Improving your Meta cognitive skills is associated with increased success in all your academic life

Metacognition cycle

Planning

It involves two key tasks:-

- Deciding what you need to learn
- Then deciding how you are going to learn that material

Monitoring

- Monitoring requires you to ask “how am I doing at learning this?”
- In monitoring you are constantly tracking

What you have learned

What do you don’t yet know

Whether your study strategies are helping you to learn effectively

Evaluation

It involves reflection on how well you met your learning objectives after completing an unit of study or receiving feedback.

Developing metacognition is gaining the ability to plan, monitor and evaluate your learning

2 Mark Questions & Answer key words

- What do you mean by reflective practices?
- Define learning style.
- What is Metacognition?

4 Mark Short Essays & Value Points

- Outline the Dunn & Dunn’s classification of learning style?
- What are reflective practices? Briefly describe its types.
- Briefly explain approaches to learning.
- Write a note on Metacognition?
- Explain the different learning style preferences and approaches to studying usually adopted by your students. What are the educational implications of learning style preferences to a teacher.?