### I B.SC PSYCHOLOGY

### **EDUCATIONAL PSYCHOLOGY**

### **UNIT-I**

### INTRODUCTION

Educational Psychology: Definition-Historical background- Effective teacher: Professional knowledge and skills, Commitment and motivation- Research methods in educational psychology.

### **UNIT-II**

### MAJOR THEORIES AND MODELS OF LEARNING

Contemporary theories: Bronfenbrenner ecological theory, Erikson's life span development theory-Constructivist theory (J.Bruner)- Behaviorism learning: Classical conditioning, Operant conditioning-Experiential learning (C.Rogers)-Cognitive learning (Piaget and Vygotsky).

### **UNIT-III**

### **EXCEPTIONAL LEARNERS AND TEACHNING STRATEGIES**

Children with disabilities: Learning disabilities, Attention Deficit Hyperactive Disorder, Intellectual Disability, Physical disorder, Sensory disorder, Speech and language disorders, Autism Spectrum disorders, Emotional and behavioral disorder.

Gifted Children: Characteristics, educating gifted children

### **UNIT-IV**

### EFFECTIVE TEACHING PLAN AND TECHNOLOGY

Planning and instruction: Instructional planning, timeframes, Teacher- Centered lesson planning and instruction, Learner- Centered lesson planning and instruction —Technology and education-Social constructivist approaches: Teacher and peers as joint contributors, structuring small group work.

### **UNIT-V**

# CLASSROOM MANAGEMENT AND ASSESSMENT

Need of classroom management- Physical environment of the class room- Positive environment for learning-Good communicator- Dealing with problem behavior.

Assessment: Grading and reporting performance.

### **UNIT-I**

### INTRODUCTION

Educational Psychology: Definition-Historical background- Effective teacher: Professional knowledge and skills, Commitment and motivation- Research methods in educational psychology.

### **DEFINITION**

❖ Educational psychology is the branch of psychology that specializes in understanding teaching and learning in educational setting

**Ex:**Individual difference, motivation, theories, development, assessment, engaging students and co - operative learning.

### HISTORY OF EDUCATIONAL PSYCHOLOGY

- ❖ Psychology emerged as a scientific discipline as and when Wilhelm Wundt—the founder of experimental psychology— established the first psychological laboratory at Leipzig in Germany in the year 1879.
- ❖ This led more and more to the application of theories, branching and specialization.
- ❖ One such branching is educational field and has been termed as Educational Psychology which emerged as a separate discipline applied in the field of education.

# Early 19th Century contributors

In the early 19th century was

- **◆ Pestalozzi** emphasizing upon 'education' as a process of drawing out the functional mind of the individual.2
- **Johann Frederich Herbart**, a German professor, formulated an *approach to education* based psychology.
- **♣ Francis Galton**, the oldest of the founders of educational psychology. He conducted the *first* experimental investigation of associationism, tests on reaction time and sensory acuity.
- **Stanley Hall** published his papers using the *questionnaire to investigate the minds of children*.
- **Alfred Binet** in the field of *intelligence testing*.

Education psychology started in 19th to 20th Century.

The founder Names are William James, John Dewey and E. L. Thorndike.

### **William James**

- He Launch the psychology textbook first "Principle of Psychology " in 1890.
- He gave the series of lecturers called "Talks to teachers".
- It is about the application of Psychology to educate the children.

- He argued that laboratory psychology experiment often cannot tell us hour to effectively teach children.
- He thinks that importance of observing teaching and learning in classroom for improving education.
- Lessons must be child level knowledge and understanding to the child mind.

### **John Dewey**

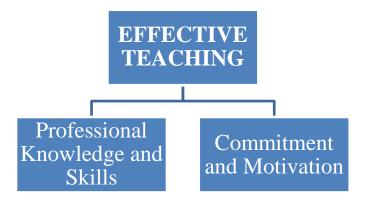
- He is the second major figure in shaping the filed of Educational psychology.
- He introduced the force in practical application psychology.
- He established the first laboratory in United States.
- He argued that children try to learn Best by doing and whole child and emphasize the child adoption to the environment.

# E.L.Thorndike

- Edward L. Thorndike came out with his revolutionary 'laws of learning'. (1874- 1949)
- He was possibly the first man to be called an educational psychologist in the modern sense of the term.
- He proposed important task for learning
- He insisted important skill for learning
- Educational psychology in scientific based.
- He focused strongly in assessments and measurements.

### EFFECTIVE TEACHING

The teacher required the following skills and strategies to make their more effective



### I.PROFESSIONAL KNOWLEDGE AND SKILLS

- They should have well clear in their subjects and a solid core of teaching skills.
- They should know how to communicate and motivate the students.

## (a)Subject-Matter Competence

- Lists of teacher characteristics, secondary school students increasingly have mentioned "teacher knowledge of their subjects"
- Having a thoughtful, flexible, conceptual understanding of subject matter for being an effective teacher.
- Knowledge of subject matter includes more than just facts, terms, and general concepts.
- Includes knowledge about organizing ideas, connections among ideas, ways of thinking and arguing, patterns of change within a discipline, beliefs about a discipline, and the ability to carry ideas from one discipline to another.

## (b)Instructional Strategies

- The constructivist approach was at the center of William James' and John Dewey's philosophies of education.
- The direct instruction approach has more in common with E. L. Thorndike's view.
- The **constructivist approach** is a learner-centered approach that emphasizes the importance of individuals actively constructing their knowledge and understanding with guidance from the teacher.
- Constructivists argue that for too long children have been required to sit still, be passive learners, and rotely memorize irrelevant as well as relevant information.
- Constructivism may include an emphasis on **collaboration**—children working with each other in their efforts to know and understand.
- **Direct instruction approach** is a structured, teacher-centered approach characterized by teacher direction and control, high teacher expectations for students' progress, maximum time spent by students on academic tasks, and efforts by the teacher to keep negative effect to a minimum.

# (c) Thinking Skills

- Effective teachers model and communicate good thinking skills.
- The most important thinking skills for teachers to engage in and guide their students developing are **critical thinking** skills, which involve thinking reflectively and productively and evaluating evidence.

### (d)Goal Setting and Instructional Planning

- They take a constructivist or more traditional approach, effective teachers don't just "wing it" in the classroom.
- They set high goals for their teaching and organize plans for reaching those goals.
- Good planning requires consideration of the kinds of information, demonstrations, models, inquiry
  opportunities, discussion, and practice students need over time to understand particular concepts and
  develop particular skills.

## (e) Developmentally Appropriate Teaching Practices

- Teachers have a good understanding of children's development and know how to create instructional materials appropriate for their developmental levels.
- Understanding developmental pathways and progressions is extremely important for teaching in ways that are optimal for each child

### (f) Classroom Management Skills

• An important aspect of being an effective teacher is keeping the class as a whole working together and oriented toward classroom tasks.

 Create this optimal learning environment, teachers need a repertoire of strategies for establishing rules and procedures, organizing groups, monitoring and pacing classroom activities, and handling misbehavior.

## (g) Motivational Skills

- Effective teachers have good strategies for helping students become self-motivated and take responsibility for their learning.
- Effective teachers give them the opportunity to think creatively and deeply about projects.

# (h) Communication Skills

- Indispensable to teaching are skills in speaking, listening, overcoming barriers to verbal communication, tuning in to students' nonverbal communication, and constructively resolving conflicts.
- Communication skills are critical not only in teaching but also in interacting with parents.

### II.COMMITMENT AND MOTIVATION

- An effective teacher also requires commitment, motivation, and caring. This includes having a good attitude and caring about students.
- Commitment and motivation help get effective teachers through the tough moments of teaching.
  - ♣ Effective teachers have confidence in their own self-efficacy,
  - ≠ refuse to let negative emotions diminish their motivation,
  - **bring** a positive attitude and
  - **4** enthusiasm to the classroom.
  - In a national survey of almost a thousand students 13 to 17 years of age,
    - ♣ having a good sense of humor,
    - **#** making the class interesting, and
    - having knowledge of the subject matter

were the characteristics students listed as the most important for teachers to have (NAASP, 1997).

It's important to become aware of times when you've made a difference in an individual student's life. The better teacher you become, the more rewarding your work will be. And the more respect and success you achieve in the eyes of your students, the better you will feel about your commitment to teaching.

# RESEARCH METHODS IN EDUCATIONAL PSYCHOLOGY

**Research** can be a valuable source of information about teaching. Educational psychology is the scientific or systematic study of the behavior of the learner in relation to his educational environment. This behavior can be

studied by a simple approach called observation. However, this observation method has to be adjusted depending upon the conditions in which observations have to be made, the procedure and tools adopted.

# (i)Interviews and questionnaire

- The quickest and best way to get information.
- Students and teachers are to ask them for it.
- Educational psychologist use interview of questionnaire to find our about children and teachers, experience, beliefs and feelings.
- An interview takes place face to face although they can be done in other way such as over the phone or
   Internet

## (ii)Standardized test

- Test with uniform procedure for administration of scoring.
- They allow students performance to be compared with the performance of other students at the Same age or grade Level an often on a national basis.

## The following are the various methods of observation under different situations:

## 1. Introspection method:

- ♣ Introspection method when a person or 'subject' himself observes his own mental states and behaviour, it is introspection or subjective observation.
- ♣ It is one of the oldest methods of psychology, which is derived from two words (1) intro, and (2) spection.
- ♣ Intro means 'within' and spection means 'looking' or' 'observing'. Hence, introspection means looking or observing within.
- **♣** Woodworth has called it 'self observation'

### Merits

- It is simplest and most economical method
- The subject gets direct, immediate knowledge about his mind.
- Possibility for self-evaluation and selfsuggestion

### **Demerits**

- It is most subjective, personal, and unscientific method.
- This method is not of universal application.
- It is not useful for the study of child and animal

For example, when a person is angry he may be asked to determine how he felt during that period of anger by his own observation.

### 2. Observation method:

Observation is a visual method of examining, describing, and interpreting the reactions of individuals and groups in laboratory, class room, or out of school situation'. Here, we observe the mental processes and behavior of others.

## **Types of Observation methods**

- Direct
- Indirect
- Individual
- Group
- Participant
- non-participant

## Methodology of conducting observation method

- Make a plan and write points of observations.
- **♣** Observe the behaviour with a purpose accurately.
- Record the observation very carefully immediately after the observation.
- ♣ After recording, analyse the observed facts scientifically.
- **♣** Interpret and generalize the observation.

### **Merits:**

- It is always specific, systematic, planned and reliable.
- It is more subjective and valid than the introspection.
- It is flexible and economical.
- Easy to supervise and bring improvements.

### **Demerits:**

- It needs trained observers
- Thoughts, in the minds of other personal problems and experiences cannot be studied.

For example, if a person frowns we can say that he is angry. But when we are studying behaviour in natural conditions we have to wait for the event to take place.

### 3. Experimental method:

- ♣ In this method, behavior is observed and recorded under controlled conditions. This is done in psychological laboratory or in classrooms or outside the classrooms7
- ♣ Educational Psychology takes place in certain physical or social environment.

### **Merits:**

- Accordingly the cause and effect relationships are established.
- Theories of behaviour can be developed.

### **Demerits:**

- These experiments take place in artificial environment. Therefore, the scope is limited.
- Human behaviour is very dynamic and unpredictable.

• This method is also costly and time consuming.

### 4. Case history method:

- The case study method is that method of behavior investigation in which we try to study the behaviour of an individual in all the essential aspects by analysing the past record, present position and future possibilities regarding his felt problem or otherwise guidance functions.
- ♣ This method is one of the steps used in the clinical method of studying behaviour.
- **This method is used for those who are suffering from physical or mental disorders.**
- For this the case history has to be made of the earlier experiences of the individual which may be responsible for the present behaviour.
- ♣ Information is also collected from his parents, family, relatives, guardians, neighbours, friends, teachers, and from reports about the individual's past.
- ♣ This information will enable the clinical psychologists to diagnose and suggest treatment if there is any problem.

### **Merits:**

- It provides quite a deep, intensive and overall investigation of the behaviour.
- Case study can play an effective role in the proper identification, adjustment and rehabilitation of the problem children.
- It helps in collecting data on personal basis, by seeking personal interview, going close to the original source of information etc.

## **Demerits**

- It is quite a technical and professional work.
- There is need of specially trained teacher or professional for carrying out case study of the subject

### **UNIT II**

### MAJOR THEORIES AND MODELS OF LEARNING

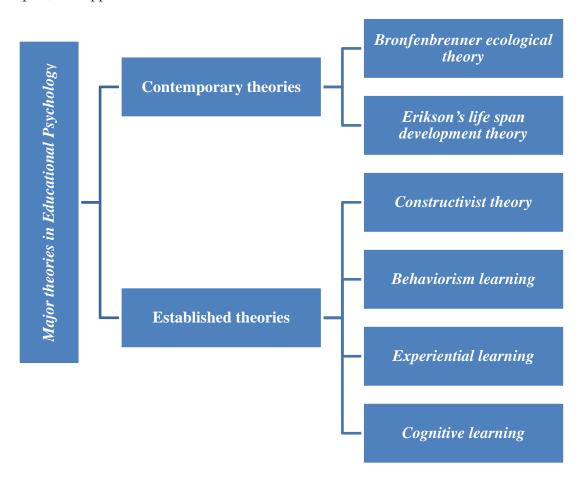
Contemporary theories: Bronfenbrenner ecological theory, Erikson's life span development theory-Constructivist theory (J.Bruner)- Behaviorism learning: Classical conditioning, Operant conditioning-Experiential learning (C.Rogers)-Cognitive learning (Piaget and Vygotsky).

### MAJOR THEORIES IN EDUCATIONAL PSYCHOLOGY

Although the discipline of <u>educational psychology</u> includes numerous theories, many experts identify five main schools of thought:

- behaviorism,
- cognitivism,
- constructivism,
- experientialism, and
- social contextual learning theories.

The following overview summarizes these five major theory groups and outlines the key theorists, definition, history, principles, and applications for each



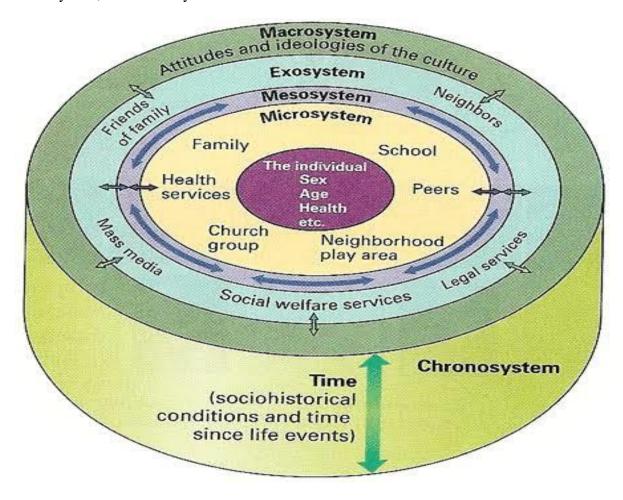
Major type of the theory	Type of the theory	Key theorist	Definition and background	Key Principles	Application
Contemporary Theory	Ecological theory	Urie Bronfenbr enner	we encounter different environments throughout our lifespan that may influence our behavior	a person's development was affected by their surrounding environment. He divided the person's environment into five different levels: the microsystem, the mesosystem, the exosystem, the macrosystem, and the chronosystem	Ecological Systems Model can be useful to help understand the student's learning environments and to establish quality learning environments
	Erikson's life span development	Eric Erikson	We are motivated by a need to achieve competence in certain areas of our lives.	encompassing the notion that we develop through an unfolding of our personality in predetermined stages, and that our environment and surrounding culture influence how we progress through these stages.	Erikson's theory at the different grade levels is important to ensure that students will attain mastery of each stage i
Established theories	Behaviourism	Edward Thorndike , Ivan Pavlov, John B. Watson, and B.F. Skinner	Behaviorism defines learning as observable behavioral change that occurs in response to environmental stimuli such as positive stimuli (reward) and negative stimuli (Punishment)	while education uses the process of positive and negative reinforcement to encourage or discourage behaviors and shape the individuals	Teachers can practice and providing feedback that reinforces the behaviors or skills they wish students to learn or unlearn.
	Cognitive learnng	Jean Piaget, Lev Vgotsky	Rather than measuring learning based on observable behaviours, cognitivists evaluate learning based on a learner's demonstration of knowledge and understanding.	Learning capacity and activity change over time as a person moves through life	Self-reflection — a widely used cognitivist technique — helps students think about and transform their understanding of the subject at hand.
	Constructivis m	Jerome Bruner	learners create their own subjective information by interpreting their world and restructuring their thinking	Constructivists agree that learners create knowledge rather than passively receiving it	constructivist influence shapes the common teaching practice of posing questions or problems and then inviting students to

				answer and solve
				them in their own
				ways.
Experiential	David A.	Experiential	experientialism argues	olleges offer
learning	Kolb and	learning theories	that one person cannot	undergraduates
	Carl	identify meaningful	effectively impart	internships and study
	Rogers	everyday	knowledge directly to	abroad programs,
		experience as the	another person; people	and graduate schools
		most central factor	must learn for themselves.	often incorporate
		in increasing a		practicum
		learner's knowledge		experiences that
		and understanding,		allow students to
		as well as		apply what they
		transforming their		have learned in other
		behavior.		courses.

## 1. BRONFENBRENNER'S ECOLOGICAL THEORY(1917–2005)

The ecological theory developed by Urie Bronfenbrenner primarily focuses on the social contexts in which children live and the people who influence their development.

Environmental Systems Bronfenbrenner's the five systems are the microsystem, mesosystem, exosystem, macrosystem, and chronosystem.



## Microsystem

A setting in which the individual spends considerable time, such as the student's family, peers, school, and neighborhood.

These microsystems, the individual has direct interactions with parents, teachers, peers, and others.

### Mesosystem

Involves linkages between microsystems.

Examples are the connections between family experiences and school experiences and between family and peers.

## **Exosystem**

Is at work when experiences in another setting influence what students and teachers experience in the immediate context.

For example, consider the school and park supervisory boards in a community.

They have strong roles in determining the quality of schools, parks, recreation facilities, and libraries, which can help or hinder a child's development.

## Macrosystem

It is involves the broader culture.

Culture is a very broad term that encompasses the roles of ethnicity and socioeconomic factors in children's development.

For example,

Some cultures emphasize traditional gender roles.

## Chronosystem

It includes the sociohistorical conditions of students' development.

For example, the lives of children today differ in many ways from what their parents and grandparents experienced as children.

Today's children are more likely to be in child care, use computers

They grow up in new kinds of dispersed, deconcentrated cities that are not quite urban, rural, or suburban.

## 2. ERIKSON'S LIFE-SPAN DEVELOPMENT THEORY

Erik Erikson (1902–1994) presents a developmental view of people's lives in stages. Let's take a journey through Erikson's view of the human life span.

Eight Stages of Human Development In Erikson's (1968) theory, eight stages of development unfold as people go through the human life span.

### 1 - Trust vs. Mistrust

- ✓ The first stage of Erikson's theory of psychosocial development occurs between birth and one year of age and is the most fundamental stage in life.2
- ✓ Because an infant is utterly dependent, the development of trust is based on the dependability and quality of the child's caregivers.
- ✓ If a child successfully develops trust, he or she will feel safe and secure in the world. Caregivers who are inconsistent, emotionally unavailable, or rejecting contribute to feelings of mistrust in the children they care for. Failure to develop trust will result in fear and a belief that the world is inconsistent and unpredictable.

## 2 - Autonomy vs. Shame and Doubt

- ✓ The second stage of Erikson's theory of psychosocial development takes place during early childhood and is focused on children developing a greater sense of personal control.
- ✓ Like Freud, Erikson believed that toilet training was a vital part of this process. However, Erikson's reasoning was quite different then that of Freud's. Erikson believe that learning to control one's body functions leads to a feeling of control and a sense of independence.
- ✓ Other important events include gaining more control over food choices, toy preferences, and clothing selection.
- ✓ Children who successfully complete this stage feel secure and confident, while those who do not are left with a sense of inadequacy and self-doubt.

### 3 - Initiative vs. Guilt

- ✓ During the preschool years, children begin to assert their power and control over the world through directing play and other social interaction.
- ✓ Children who are successful at this stage feel capable and able to lead others. Those who fail to acquire these skills are left with a sense of guilt, self-doubt and lack of initiative.3

## 4 - Industry vs. Inferiority

- ✓ This stage covers the early school years from approximately age 5 to 11.
- ✓ Through social interactions, children begin to develop a sense of pride in their accomplishments and abilities.
- ✓ Children who are encouraged and commended by parents and teachers develop a feeling of competence and belief in their skills. Those who receive little or no encouragement from parents, teachers, or peers will doubt their ability to be successful.

# ✓ 5 - Identity vs. Confusion

- ✓ During adolescence, children are exploring their independence and developing a sense of self.
- ✓ Those who receive proper encouragement and reinforcement through personal exploration will emerge from this stage with a strong sense of self and a feeling of independence and control.
- ✓ Those who remain unsure of their beliefs and desires will insecure and confused about themselves and the future.

## 6 - Intimacy vs. Isolation

- ✓ This stage covers the period of early adulthood when people are exploring personal relationships.
- ✓ Erikson believed it was vital that people develop close, committed relationships with other people. Those who are successful at this step will develop relationships that are committed and secure.
- ✓ Remember that each step builds on skills learned in previous steps. Erikson believed that a strong sense of personal identity was important to developing intimate relationships.
- ✓ Studies have demonstrated that those with a poor sense of self tend to have less committed relationships and are more likely to suffer emotional isolation, loneliness, and depression.

### 7 - Generatively vs. Stagnation

- ✓ During adulthood, we continue to build our lives, focusing on our career and family.
- ✓ Those who are successful during this phase will feel that they are contributing to the world by being active in their home and community.
- ✓ Those who fail to attain this skill will feel unproductive and uninvolved in the world.

## 8 - Integrity vs. Despair

- ✓ This phase occurs during old age and is focused on reflecting back on life.
- ✓ Those who are unsuccessful during this phase will feel that their life has been wasted and will experience many regrets. The individual will be left with feelings of bitterness and despair.
- ✓ Those who feel proud of their accomplishments will feel a sense of integrity. Successfully completing this phase means looking back with few regrets and a general feeling of satisfaction. These individuals will attain wisdom, even when confronting death

### 3. CLASSICAL CONDITIONING

Classical conditioning is learning through association and was discovered by Pavlov, a Russian physiologist. In simple terms two stimuli are linked together to produce a new learned response in a person or animal.

John Watson proposed that the process of classical conditioning (based on Pavlov's observations) was able to explain all aspects of human psychology.

Everything from speech to emotional responses was simply patterns of stimulus and response. Watson denied completely the existence of the mind or consciousness.

### **Classical Conditioning Examples**

### **Stage 1: Before Conditioning:**

In this stage, the unconditioned stimulus (UCS) produces an unconditioned response (UCR) in an organism.

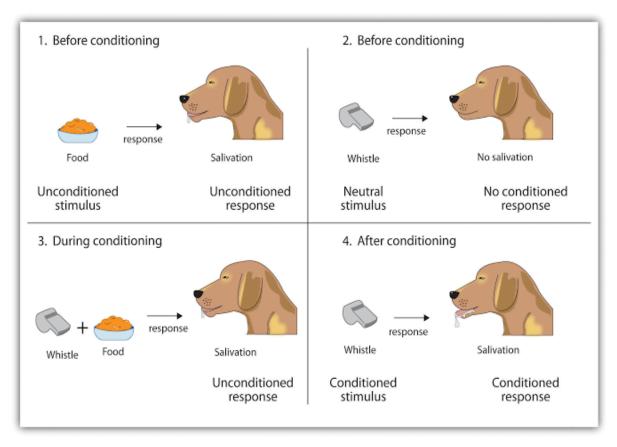
This means that a stimulus in the environment has produced a behavior & response which is unlearned and therefore is a natural response which has not been taught. In this respect, no new behavior has been learned yet.

This stage also involves another stimulus which has no effect on a person and is called the neutral stimulus (NS). The NS could be a person, object, place, etc. The neutral stimulus in classical conditioning does not produce a response until it is paired with the unconditioned stimulus.

# Stage 2: During Conditioni ng:

During this stage stimulus which produces no response (neutral) is associated with the uncondition ed stimulus which at point it now becomes known as

the



conditioned stimulus (CS)

For classical conditioning to be effective, the conditioned stimulus should occur before the unconditioned stimulus, rather than after it, or during the same time. Thus, the conditioned stimulus acts as a type of signal or cue for the unconditioned stimulus.

Often during this stage, the UCS must be associated with the CS on a number of occasions, or trials, for learning to take place.

However, one trail learning can happen on certain occasions when it is not necessary for an association to be strengthened over time (such as being sick after food poisoning or drinking too much alcohol).

### **Stage 3: After Conditioning:**

Now the conditioned stimulus (CS) has been associated with the unconditioned stimulus (UCS) to create a new conditioned response (CR).

### 4. OPERANT CONDITIONING LEARNING

B.F. Skinner proposed his theory on operant conditioning by conducting various experiments on animals. He used a special box known as "Skinner Box" for his experiment on rats.

As the first step to his experiment, he placed a hungry rat inside the Skinner box. The rat was initially inactive inside the box, but gradually as it began to adapt to the environment of the box, it began to explore around. Eventually, the rat discovered a lever, upon pressing which; food was released inside the box.

After it filled its hunger, it started exploring the box again, and after a while it pressed the lever for the second time as it grew hungry again.

This phenomenon continued for the third, fourth and the fifth time, and after a while, the hungry rat immediately pressed the lever once it was placed in the box. Then the conditioning was deemed to be complete.

Here, the action of pressing the lever is an operant response/behavior, and the food released inside the chamber is the reward. The experiment is also known as Instrumental Conditioning Learning as the response is instrumental in getting food.

This experiment also deals with and explains the effects of positive reinforcement. Upon pressing the lever, the hungry rat was served with food, which filled its hunger; hence, it's a positive reinforcement.

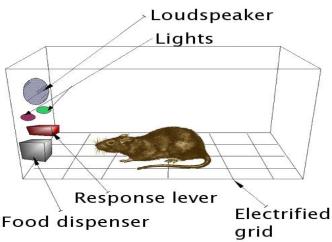
### **B.F. Skinner's Second Experiment**

B.F. Skinner also conducted an experiment that explained negative reinforcement. Skinner placed a rat in a chamber in the similar manner, but instead of keeping it hungry, he subjected the chamber to an unpleasant electric current.

The rat having experienced the discomfort started to desperately move around the box and accidentally knocked the lever. Pressing of the lever immediately seized the flow of unpleasant current. After a few times, the rat had smartened enough to go directly to the lever in order to prevent itself from the discomfort.

The electric current reacted as the negative reinforcement, and the consequence of escaping the electric current made sure that the rat repeated the action again and again. Here too, the pressing of the lever is an operant response, and the complete stop of the electric current

flow is its reward.



# 5. Cognitive Learning

### Introduction

Jean Piaget: 'My theory of cognitive development is comprehensive and is the only perspective that should be viewed as correct!'

Lev Vygotsky: 'I disagree. My theory of cognitive development is the obvious choice for explaining how a child learns and develops.'

. There may be no right or wrong theory of cognitive development, but there are definitely differences between Jean Piaget's theory of cognitive development and Lev Vygotksy's cultural-historical theory. This lesson will identify those similarities and differences.

# Piaget's Theory

Jean Piaget's theory of cognitive development described and explained the changes in logical thinking of children and adolescents. Piaget proposed that children proceed through four stages based on maturation and experience.

Piaget's theory is guided by assumptions of how learners interact with their environment and how they integrate new knowledge and information into existing knowledge.

## Briefly, he proposed that:

- Children are active learners who construct knowledge from their environments
- They learn through assimilation and accommodation, and complex cognitive development occurs through equilibration
- The interaction with physical and social environments is key for cognitive development
- Development occurs in stages
- These assumptions are covered in more detail in another lesson.

# Vygotsky's Theory

Lev Vygotsky's theory of cognitive development, referred to as his cultural-historical theory, focused on the role of culture and social interactions. Vygotsky maintained that speech is a major psychological tool in the child's development of thinking. As children age and develop, their basic speech becomes more complex.

## Vygotksy's theory is guided by six major assumptions:

- Children develop through informal and formal conversations with adults.
- The first few years of life are critical for development, as this is where thought and language become increasingly independent.
- Complex mental activities begin as basic social activities.

- Children can perform more difficult tasks with the help of a more advanced individual.
- Tasks that are challenging promote cognitive development growth.
- Play is important and allows children to stretch themselves cognitively.
- These assumptions are also covered in more detail in another lesson.

# **6.** Experiential Learning (Carl Rogers)

Rogers distinguished two types of learning: cognitive (meaningless) and experiential (significant). The former corresponds to academic knowledge such as learning vocabulary or multiplication tables and the latter refers to applied knowledge such as learning about engines in order to repair a car.

The key to the distinction is that experiential learning addresses the needs and wants of the learner. Rogers lists these qualities of experiential learning: personal involvement, self-initiated, evaluated by learner, and pervasive effects on learner.

To Rogers, experiential learning is equivalent to personal change and growth. Rogers feels that all human beings have a natural propensity to learn; the role of the teacher is to facilitate such learning.

### This includes:

- (1) Setting a positive climate for learning,
- (2) Clarifying the purposes of the learner(s),
- (3) Organizing and making available learning resources,
- (4) Balancing intellectual and emotional components of learning,
- (5) Sharing feelings and thoughts with learners but not dominating.

## According to Rogers, learning is facilitated when:

- (1) The student participates completely in the learning process and has control over its nature and direction,
- (2) It is primarily based upon direct confrontation with practical, social, personal or research problems,
- (3) Self-evaluation is the principal method of assessing progress or success. Rogers also emphasizes the importance of learning to learn and an openness to change.

Roger's theory of learning evolved as part of the humanistic education movement.

## **Example**

A person interested in becoming rich might seek out books or classes on ecomomics, investment, great financiers, banking, etc.

Such an individual would perceive (and learn) any information provided on this subject in a much different fashion than a person who is assigned a reading or class.

Self-initiated learning is the most lasting and pervasive.

# 7. Constructivist Theory (Jerome Bruner)

A major theme in the theoretical framework of Bruner is that learning is an active process in which learners construct new ideas or concepts based upon their current/past knowledge.

The learner selects and transforms information, constructs hypotheses, and makes decisions, relying on a cognitive structure to do so. Cognitive structure (i.e., schema, mental models) provides meaning and organization to experiences and allows the individual to "go beyond the information given".

As far as instruction is concerned, the instructor should try and encourage students to discover principles by themselves.

The task of the instructor is to translate information to be learned into a format appropriate to the learner's current state of understanding.

Curriculum should be organized in a spiral manner so that the student continually builds upon what they have already learned.

Bruner's four major aspects:

- (1) Predisposition towards learning.
- (2) The ways in which a body of knowledge can be structured so that it can be most readily grasped by the learner.
- (3) The most effective sequences in which to present material, and (4) the nature and pacing of rewards and punishments.
- (4) Good methods for structuring knowledge should result in simplifying, generating new propositions, and increasing the manipulation of information.

## **Example**

This example is taken from Bruner (1973):

"The concept of prime numbers appears to be more readily grasped when the child, through construction, discovers that certain handfuls of beans cannot be laid out in completed rows and columns. Such quantities have either to be laid out in a single file or in an incomplete row-column design in which there is always one extra or one too few to fill the pattern. These patterns, the child learns, happen to be called prime. It is easy for the child to go from this step to the recognition that a multiple table, so called, is a record sheet of quantities in completed multiple rows and columns. Here is factoring, multiplication and primes in a construction that can be visualized."

### UNIT -III

### **EXCEPTIONAL LEARNERS AND TEACHING STRATEGIES**

Children with disabilities: Learning disabilities, Attention Deficit Hyperactive Disorder, Intellectual Disability, Physical disorder, Sensory disorder, Speech and language disorders, Autism Spectrum disorders, Emotional and behavioral disorder.

Gifted Children: Characteristics, educating gifted children

### **CHILDREN WITH DISABILITIES**

- ❖ A learning disability is not a problem with intelligence or motivation and kids with learning disabilities aren't lazy or dumb. In fact, most are just as smart as everyone else. Their brains are simply wired differently—and this difference affects how they receive and process information.
- Children and adults with learning disabilities see, hear, and understand things differently. This can lead to trouble with learning new information and skills, and putting them to use.
- ❖ The most common types of learning disabilities involve problems with reading, writing, math, reasoning, listening, and speaking.

### LEARNING DISABILITIES

**♣** A child with a learning disability has difficulty in learning that involves understanding or using spoken or written language and the difficulty can appear in listening, thinking, reading, writing, and spelling.



Learning disabilities look very different from one child to another. One child may struggle with reading and spelling, while another loves books but can't understand math. Still another child may have difficulty understanding what others are saying or communicating out loud. The problems are very different, but they are all learning disorders.

It's not always easy to identify learning disabilities. However, some warning signs are more common than others at different ages. If we're aware of what they are, we'll be able to catch a learning disorder early and quickly take steps to get your child help.

## Signs and symptoms of learning disabilities: Preschool age

problem solving).

Organization

Social Skills

Problems pronouncing words.

executive functions

- Trouble finding the right word.
- Difficulty rhyming.
- Trouble learning the alphabet, numbers, colours, shapes, or days of the week.
- Difficulty following directions or learning routines.
- Difficulty controlling crayons, pencils, and scissors, or colouring within the lines.
- Trouble with buttons, zippers, snaps, or learning to tie shoes.

# Signs and symptoms of learning disabilities: Ages 5-9

- Trouble learning the connection between letters and sounds.
- Unable to blend sounds to make words.
- Confuses basic words when reading.
- Slow to learn new skills.
- misspells words and makes frequent errors.
- Trouble learning basic math concepts.
- Difficulty telling time and remembering sequences.

## Signs and symptoms of learning disabilities: Ages 10-13

- Difficulty with reading comprehension or math skills.
- Trouble with open-ended test questions and word problems.
- Dislikes reading and writing; avoids reading aloud.
- Poor handwriting.
- Poor organizational skills (bedroom, homework, and desk are messy and disorganized).
- Trouble following classroom discussions and expressing thoughts aloud.
- Spells the same word differently in a single document.

# PROBLEMS WITH READING, WRITING, AND MATH

Learning disabilities are often grouped by school-area skill set. If your child is in school, the types of learning disorders that are most conspicuous usually revolve around reading, writing, or math.

Name of the L.D	Learning Disability in	Definition	Signs and symptoms
dyslexia	Reading	Difficulty in understanding the relationship between sounds, letters and words  an inability to grasp the meaning of words, phrases, and paragraphs.	<ul> <li>Problems with</li> <li>Letter and word recognition.</li> <li>Understanding words and ideas.</li> <li>Reading speed and fluency.</li> <li>General vocabulary skills.</li> </ul>
dyscalculia	Doing Mathematics	a difficulty with sequencing, memory, or organization	<ul> <li>struggle with memorization and organization of numbers, operation signs, and number "facts".</li> <li>trouble with counting principles (such as counting by twos or counting by fives) or</li> <li>Have difficulty telling time.</li> </ul>
Dysgraphia	Writing	Basic writing disorder refers to physical difficulty forming words and letters.  Expressive writing disability indicates a struggle to organize thoughts on paper.	<ul> <li>They include problems with:</li> <li>Neatness and consistency of writing.</li> <li>Accurately copying letters and words.</li> <li>Spelling consistency.</li> <li>Writing organization and coherence.</li> </ul>

Reading, writing, and math aren't the only skills impacted by learning disorders. Other types of learning disabilities involve difficulties with motor skills (movement and coordination), understanding spoken language, distinguishing between sounds, and interpreting visual information.

Name of the L.D	Learning	Definition	Signs and symptoms	
	Disability in			
Dyspraxia	Motor skills	Motor difficulty refers to problems with	problems with physical	
		movement and coordination whether it is	abilities that require hand-	

		with fine motor skills (cutting, writing) or gross motor skills (running, jumping).  In order to run, jump, write or cut something, the brain must be able to communicate with the necessary limbs to complete the action	eye coordination, like holding a pencil or buttoning a shirt
aphasia/dysphas ia	language	Language is also considered an output activity because it requires organizing thoughts in the brain and calling upon the right words to verbally explain or communicate something.	<ul> <li>Inability to understand or produce spoken language.</li> <li>problems with retell a story,</li> <li>the fluency of speech, and</li> <li>the ability to understand the meaning of words, directions.</li> </ul>
Auditory processing disorder	Hearing	The ability to hear things correctly greatly impacts the ability to read, write, and spell  Define as "auditory processing skills"	An inability to distinguish subtle differences in sound make it difficult to sound out words and understand the basic concepts of reading and writing.
Visual processing disorder	Seeing	Define as "visual processing." that can affect motor skills, reading comprehension, and math.	Problems in visual perception include missing subtle differences in shapes, reversing letters or numbers, skipping words, skipping lines, having problems with eye—hand coordination

TYPE OF DISORDER	CREATES PROBLEMS WITH	
<b>Dyslexia</b> – Difficulty with reading	Reading, writing, spelling, speaking	
<b>Dyscalculia</b> – Difficulty with math	Doing math problems, understanding time, using	
	money	
<b>Dysgraphia</b> – Difficulty with writing	Handwriting, spelling, organizing ideas	
Dyspraxia (Sensory Integration Disorder) –	Hand-eye coordination, balance, manual dexterity	
Difficulty with fine motor skills		
<b>Dysphasia/Aphasia</b> – Difficulty with language	Understanding spoken language, reading	
	comprehension	
Auditory Processing Disorder – Difficulty hearing	Reading, comprehension, language	
differences between sounds		
Visual Processing Disorder – Difficulty interpreting	Reading, math, maps, charts, symbols, pictures	
visual information		

### ATTENTION DEFICIT HYPERACTIVITY DISORDER

- ❖ Attention deficit hyperactivity disorder (or ADHD) is a problem with sustaining attention and controlling impulses.
- ❖ ADHD is a common neurodevelopment disorder that typically appears in early childhood, usually before the age of seven. ADHD makes it difficult for children to inhibit their spontaneous responses—responses that can involve everything from movement to speech to attentiveness.
- ❖ But inattention, impulsivity, and hyperactivity are also signs of attention deficit hyperactivity disorder (ADHD), sometimes known as attention deficit disorder or ADD.

## **Signs and Symptoms of ADHD:**

The signs and symptoms a child with attention deficit disorder has depend on which characteristics predominate.

## Children with ADHD may be:

- Inattentive, but not hyperactive or impulsive.
- Hyperactive and impulsive, but able to pay attention.
- Inattentive, hyperactive, and impulsive (the most common form of ADHD).
- Children who only have inattentive symptoms of ADHD are often overlooked, since they're not disruptive.

# **Symptoms of inattention in children**

### Your child may:

- Be easily distracted or get bored with a task before it's completed.
- Appear not to listen when spoken to.
- Have difficulty remembering things and following instructions; not pay attention to details or makes careless mistakes.
- Have trouble staying organized, planning ahead, and finishing projects.
- Frequently lose or misplace homework, books, toys, or other items.

### Symptoms of hyperactivity in children

### Your child may:

- Constantly fidget and squirm.
- Have difficulty sitting still, playing quietly, or relaxing.
- Move around constantly, often running or climbing inappropriately.
- Talk excessively.
- Have a quick temper or "short fuse."
- Kids with hyperactive symptoms of attention deficit disorder are always moving.

- They may try to do several things at once,
- Bouncing around from one activity to the next.
- their foot is tapping,
- their leg is shaking, or
- Their fingers are drumming.

## **Impulsive signs and symptoms of ADHD**

The impulsivity of children with ADHD can cause problems with self-control.

### Symptoms of impulsivity in children

Your child may:

- Act without thinking.
- Guess, rather than taking time to solve a problem; blurt out answers in class without waiting to be called on or hear the whole question
- they'll interrupt conversations,
- invade other people's space,
- ask irrelevant questions in class,
- make tactless observations, and ask overly personal questions.
- Instructions like, "Be patient" and "Just wait a little while" are twice as hard for children with ADHD to follow as they are for other youngsters.
- Children with impulsive signs and symptoms of ADHD also tend to be moody and to overreact emotionally.
- Be unable to keep powerful emotions in check, resulting in angry outbursts or temper tantrums.

## Positive effects of ADHD in children

ADHD has nothing to do with intelligence or talent. What's more, kids with attention deficit disorder often demonstrate the following positive traits:

- a) **Creativity.** Children with ADHD may be easily distracted, but sometimes they notice what others don't see.
- b) **Flexibility.** Because children with ADHD consider a lot of options at once, they don't become set on one alternative early on and are more open to different ideas.
- c) **Enthusiasm and spontaneity.** Children with ADHD are rarely boring! They're interested in a lot of different things and have lively personalities.

d) **Energy and drive.** When kids with ADHD are motivated, they work or play hard and strive to succeed. It actually may be difficult to distract them from a task that interests them, especially if the activity is interactive or hands-on.

# Classroom strategies for children with ADHD

To meet the needs of children with ADHD, schools may offer

Type of classroom strategy	Action taken at schools for ADHD children		
a) behavioural	encourages a student's positive behaviors in the classroom, through a reward		
classroom	systems or a daily report card, and		
management	discourages their negative behaviors		
b) organizational	• teaches children time management, planning skills, and ways to keep school		
training	materials organized		
c) Special education	here are two laws that govern special services and accommodations for children		
services; or	with disabilities:		
	<ul> <li>The Individuals with Disabilities Education Act (IDEA)-Unique needs</li> <li>Section 504 of the Rehabilitation Act of 1973- to change classroom setting to suit them</li> </ul>		
<b>d</b> ) Accommodations	Extra time on tests;		
	Instruction and assignments tailored to the child;		
	Positive reinforcement and feedback;		
	Using technology to assist with tasks;		
	Allowing breaks or time to move around;		
	Changes to the environment to limit distraction; and		
	Extra help with staying organized.		

### INTELLECTUAL DISABILITY

- ♣ Intellectual disability is a term used when there are limits to a person's ability to learn at an expected level and function in daily life. Levels of intellectual disability vary greatly in children.
- ♣ Children with intellectual disability might have a hard time letting others know their wants and needs, and taking care of themselves.

- ♣ Intellectual disability could cause a child to learn and develop more slowly than other children of the same age. It could take longer for a child with intellectual disability to learn to speak, walk, dress, or eat without help, and they could have trouble learning in school.
- ♣ Intellectual disability can be caused by a problem that starts any time before a child turns 18 years old even before birth.

### **Causes of Intellectual Disabilities:**

It can be caused by

- injury,
- disease, or
- a problem in the brain.

For many children, the cause of their intellectual disability is not known.

## Some of the most common known causes of intellectual disability – like

- Down syndrome,
- fatal alcohol syndrome,
- ❖ fragile X syndrome,
- genetic conditions,
- birth defects, and
- ❖ infections happen before birth.
- Still other causes of intellectual disability do not occur until a child is older; these might include serious head injury, stroke, or certain infections.

### Signs and symptoms of intellectual disability

Usually, the more severe the degree of intellectual disability, the earlier the signs can be noticed. There are many signs of intellectual disability. For example, children with intellectual disability may:

- sit up, crawl, or walk later than other children
- learn to talk later, or have trouble speaking
- find it hard to remember things
- have trouble understanding social rules
- have trouble seeing the results of their actions
- have trouble solving problems

## Classroom strategies to help the ID children

The teachers can try the following modification to help ID children

- Make small steps
- Modify teaching to be more hands-on.
- Think visual.
- Use baby steps.
- Incorporate more physical learning experiences.
- Start a feedback book or chart.
- Encourage music in the classroom.
- Provide visual stimulus.

## PHYSICAL DISORDER

- Physical Disorder is any type of physical condition that impacts one more life activities.
- Physical disorders in children include orthopedic impairments, such as cerebral palsy, and seizure disorders.
- Orthopedic impairments can be caused by prenatal or perinatal problems, or they can be due to disease or accident during the childhood years.

## **Orthopedic Impairments Orthopedic impairments**

- Involve restricted movement or
- lack of control over movement due to muscle, bone, or joint problems
- **Cerebral palsy** is a disorder that involves a lack of muscular coordination, shaking, or unclear speech. The most common cause of cerebral palsy is lack of oxygen at birth.

## **Seizure Disorders**

• The most common seizure disorder is **epilepsy**, a neurological disorder characterized by recurring sensor motor attacks or movement convulsions.

### Classroom strategies to help the PD children

Many children with physical disorders require special education and related services, such as transportation,

- physical therapy,
- school health services, and
- psychological services.
- Special computers especially can help children with cerebral palsy to learn.
- Children who experience seizures are usually treated with one or more anticonvulsant medications, which often are effective in reducing the seizures but do not always eliminate them.

### SENSORY DISORDER

- Sensory disorders include visual and hearing impairments. Visual impairments include the need for corrective lenses, low vision, and being educationally blind.
- ❖ Children who are hearing impaired can be born deaf or experience a loss in hearing as they develop.

# I have Sensory Processing Disorder



## **Visual Impairments**

- A small portion of students have very serious visual problems and are classified as visually impaired. This includes students who have low vision and students who are blind.
- Children with low vision have a visual acuity of between 20/70 and 20/200 with corrective lenses. Children with low vision can read large-print books or regular books with the aid of a magnifying glass.
- Children who are educationally blind cannot use their vision in learning and must rely on their hearing and touch to learn.

# **Hearing Impairments**

- A hearing impairment can make learning very difficult for children.
- Children who are born deaf or experience a significant hearing loss in the first several years of life usually do not develop normal speech and language.
- Manual approaches involve sign language and finger spelling.
- Sign language is a system of hand movements that symbolize words. Finger spelling consists of "spelling out" each word by signing.

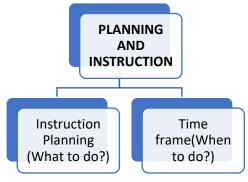
### **UNIT IV**

### EFFECTIVE TEACHING PLAN AND TECHNOLOGY

Planning and instruction: Instructional planning, timeframes, Teacher- Centered lesson planning and instruction, Learner- Centered lesson planning and instruction—Technology and education-Social constructivist approaches: Teacher and peers as joint contributors, structuring small group work

### PLANNING AND INSTRUCTION

The people fail to plan, they plan to fail. Many successful people attribute their accomplishments to effective planning. Our introduction to planning describes what instructional planning is and the different time frames of planning.



### INSTRUCTIONAL PLANNING

- ❖ Involves developing a systematic, organized strategy for lessons. Teachers need to decide what and how they are going to teach before they do it.
- Although some wonderful instructional moments are spontaneous, lessons still should be carefully planned Instructional planning might be mandated by the school in which you teach.
- Many principals and instructional supervisors require teachers to keep written plans, and you may be
  asked to submit lesson plans several weeks in advance.
- Observing classroom teachers, supervisors check to see if the teacher is following the plan. If a teacher is absent, a substitute teacher can follow the plan.
- When standards are in place, teachers must figure out how to plan and organize their curriculum around the most important dimensions implied by the standards and create a "sequence and set of learning activities for the particular students they teach"

### **Elements of planning strategies:**

Many planning strategies are organized around four elements:

- ✓ The nature of the subject matter,
- ✓ the learners,
- ✓ the context, and
- ✓ the teacher's role.

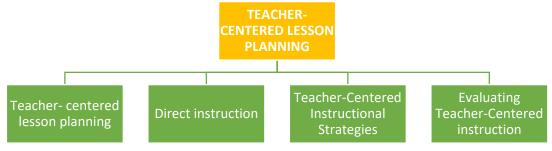
• One effective planning strategy that many teachers use is *mapping backward* from "goals to desired performances to activities and elements of scaffolding needed to support student progress."

### **TIMEFRAMES**

- We just indicated, developing systematic time plans involves knowing what needs to be done and when to do it, or focusing on "task" and "time."
- Need to plan for different time spans, ranging from yearly to daily planning.
- If school-wide planning or your own career planning is involved, the time frame likely will be a number of years.
- Robert Yinger identified five-time spans of teacher planning:
  - Yearly planning,
  - **4** term planning,
  - unit planning,
  - weekly planning, and
  - **4** daily planning illustrates these time frames and shows planning for them.
- Yinger also recommends that teachers attend to four areas when planning:
  - Goals,
  - sources of information,
  - the form of the plan, and
  - criteria for the effectiveness of the planning.
- A final comment needs to be made about planning. It is increasingly understood that teachers need to
  monitor and evaluate their curriculum planning in terms of how well students are making progress
  toward learning goals as they go through the term.

### TEACHER-CENTERED LESSON PLANNING

In this approach, planning and instruction are highly structured and the teachers direct student's learning.



# I. <u>Teacher- centred lesson planning</u>

Three general tools are especially useful in teacher-centered planning.

Behavioral Task Instructional objectives Analysis Taxonomies

## a. Behavioral objectives:

- These are statements about changes that the teacher wishes to see in students' performance.
- Behavioral objectives should be very specific and often have three parts.
- 1. Student's behavior: Focus on what the student will learn or do.
- 2. Conditions under which the behavior will occur: State how the behavior will be evaluated or tested.
- 3. Performance criteria: Determine what level of performance will be acceptable.

## b. Task Analysis

 Task analysis which focuses on breaking down a complex task that students are to learn into its component parts.

The analysis can proceed in three basic steps.

- 1. Determine what skills or concepts the student needs to have to learn the task.
- 2. List any materials that will be required in order to perform the task, such as paper, pencil, and calculator.
- 3. List all of the components of the task in the order in which they must be performed.

### c.Instructional Taxonomies

- ➤ Bloom's taxonomy was developed by Benjamin Bloom and his colleagues It classifies educational objectives into three domains:
- ➤ Bloom's taxonomy has been used by many teachers in their lesson planning to create goals and objectives.
- ➤ Benjamin Bloom (1956), identified three domains of educational activities:

Domains of Bloom's taxonomy	Meaning	Objectives
Cognitive	mental skills (Knowledge)	<ul> <li>a) Knowledge – Recall the information</li> <li>b) Comprehension- Understand</li> <li>c) Application-Apply it practically</li> <li>d) Analysis- Separate concepts, facts and inferences.</li> <li>e) Synthesis – Builds structure</li> <li>f) Evaluation- Makes judgement</li> </ul>

Affective	growth in feelings or emotional response to tasks (Attitude)	b)	Receiving phenomena- selective attention eg: ask Responding to phenomena- Willing to respond eg: Discuss Valuing- The worth or value a person attaches to a particular object, phenomenon, or behavior eg: Demonstrate
		d) e)	Organization- Organizes values into priorities eg: Organize Internalizing values – Values that controls behavior eg: Act
Psychomotor	manual or	a)	Reflex movement- eg:blinking eyes
	physical	b)	Basic fundamentals- eg:grasping
	movement, coordination,	c)	Perceptual abilities- eg:using senses like seeing ,hearing
	and use of the	d)	Physical abilities- eg: jogging
	motor-skill areas	e)	Skilled movement- eg: proficiency
	(Skills)		

## **II.Direct Instruction**

Direct instruction is a structured, teacher-centered approach that is characterized by

- teacher direction and control,
- high,
- maximum time spent by students on academic tasks and
- efforts by the teacher to keep negative affect to a minimum.

Characteristics of direct instruction	Task done by the teacher
Teacher's direction and control	<ul> <li>Choose students learning tasks</li> </ul>
	<ul> <li>Direct students to learn</li> </ul>
	<ul> <li>Minimize the nonacademic talks.</li> </ul>
Teacher expectations for student's	<ul> <li>Sets high standards for performance and</li> </ul>
progress	expects students to reach their levels of
	excellence.
Providing Academic learning time	<ul> <li>Creates high standard academic environment</li> </ul>
	for students to spend maximum learning time in
	the classroom
Keep negative affect to a minimum	<ul> <li>Make the student to remain only academically</li> </ul>
	focus.
	avoid spaces for negative feelings.

# **III.**Teacher-Centered Instructional Strategies:

The teacher centered instructional strategies includes

- Orienting students to new material
- Lecturing, explaining and demonstrating
- Questioning and discussing
- Mastery learning
- Seatwork
- HomeWorks

**Orienting**: Before teaching new material, the teacher should establish a framework for the new lesson and orient students to new material.

It can be done by

- Reviewing the previous day's activities
- Discussing the lesson's objective
- Providing clear instruction about the work to be done.
- Giving and overview of current lesson.

**Lecturing, explaining and demonstrating**: These are the common teacher activities for an effective teaching. The following are the strategies to use during lecturing

- Be prepared
- Keep lecture notes short and discuss them with questions
- Make lecturing interesting and exciting
- Follow a sequence.
- Create interest among students.
- Introduce the topic and encourage students to read about it on own.
- Summarize after discussion
- Explain the difficult areas in the lecture.

**Questioning and discussion**: It is a challenging task for the teacher to integrate questions and discussion among the students. It is challenging to keep the group's interest and attention and also encouraging them all to participate in discussion.

**Mastery learning**: Mastery learning involves learning one concept or topic thoroughly before moving on to a more difficult one.

## Procedure involved in mastery learning:

- Specify the task or lesson.
- Break the course into learning units
- Plan instructional procedure to provide feedbacks, supplemental materials, tutoring and small group instruction.
- Evaluating at the end of each course or unit.

#### **Seatworks:**

- Seatwork refers to the practice of having all or a majority of students work independently at their seats.
- Eg: Pen and pencil-based assignments.
  - Learning centers like computer can be used as good alternatives for seatworks.

## **Homework:**

- Homework can be a valuable tool for increasing learning especially in middle school and high school.
- It is important to make homework meaningful, monitor it and evaluate to give feedback to students.
- Homework should be connected with next day class activities to maintain the sequence.

# IV. Evaluating teacher- centered instruction:

Teacher- centered instruction includes useful techniques and it advocates especially believe it is the best strategy for teaching basic skills such as math computations, grammar rules and reading vocabulary.  But critics on teacher centered instruction says that in ling run this provides very few opportunities for children for real world learning.



LEARNER CENTERED PLANNING AND INSTRUCTION

Learner-centered teachers are good lesson planners. They begin with the end in mind. They determine what they want their students to learn and how they will assess them

# **I.** Learner -Centred principles:

- Learner-centered lesson planning and instruction move the focus away from the teacher and toward the student.
- The Principle emphasize on active, reflective nature of learning and learners.

The fourteen learner centered principles are classified into four main factors which contribute to learner centered principles are

## Cognitive and metacognitive

- 1. Nature of the learning process (learning complex subject matter to get info and exp)
- 2. Goals of learning process (creating support, guidance and meaningful knowledge)
- 3. Construction of knowledge (linking new knowledge with existing)
- 4. Strategic thinking (using reasoning to achieve complex goals)
- 5. Thinking about thinking (high order critical and creative thinking)
- 6. Context of learning (learning is influenced by various environmental factors)

## Motivational and emotional

- 7. Motivational and emotional influences on learning (based on beliefs, goals and habits)
- 8. Intrinsic motivation (leaner's personal choice, personal interest and control)
- 9. Effects of motivation on efforts (learners' willingness to acquire complex knowledge)

### **♣** Developmental and Social

- 10. Developmental influences on learning (Development within and across physical, social and socioemotional domain)
- 11. Social influences on learning (influenced by social interactions, interpersonal relationship)

### Individual differences.

- 12.Individual differences in learning (different approaches used based on prior experience)
- 13.Learning and diversity (learner's language, cultural and social background)
- 14.Standards and assessment (Assessing learner's progress- including diagnostic, process and outcome assessment)

# **II.Learner- Centered Instructional Strategies:**

The learner centered instructional strategies generally includes the theories of Jean Piaget and Lev Vygotsky cognitive learning theories, constructivist theories of thinking.

The learner centered instructional strategies can be examined through

- Problem based learning
- Essential questions
- Discovery learning

**Problem based learning**: This is a learner centered approach that focuses on a problem to be solved through small group efforts.

Teachers act as guides, helping students to monitor their own problem-solving ability.

**Essential questions:** are questions that reflect the heart of the curriculum, the most important things that students should explore and learn.

**Discovery learning:** Discovery learning is learning in which students construct an understanding on their own. The development of guided discovery learning in which students are encouraged to construct their understanding with the assistance of the teacher guided questions and directions.

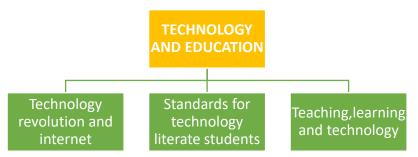
# **III.Evaluating learner- centered strategies:**

The 14 principles encourage teachers to help students actively to

- construct their understanding,
- set goals and plan,
- think deeply and creatively,
- monitor their learning,
- solve real world problems,
- develop positive self esteem and
- control their emotions,
- learn in appropriate ways
- Critics says that the application of learned centered classroom is more challenging and it is less effective in the beginning.

# TECHNOLOGY AND EDUCATION

We have described many aspects of planning and instruction. In contemporary society, technology plays important roles in planning and instruction.



# Three important ways that technology affects curriculum planning are:

- ➤ A learning goal for students to develop certain technology competencies.
- A resource for curriculum planning through the extensive materials those are available on the Internet.
- As tools that improve students' ability to learn through techniques such as simulation and visualization in science and text analysis in literature, as well as software that encourages reflection and provides models of good performance.

# I.The Technology Revolution and the Internet

If students are to be adequately prepared for tomorrow's jobs, technology must be an integral part of schools and classrooms.

#### a. Internet

- A system of computer networks that operates worldwide.
- As the core of computer-mediated communication, the Internet is playing an important role in the technology revolution, especially in schools. In many cases, the Internet has more current, up-to-date information than textbooks.

# b. Web

A system for browsing Internet sites. It is named the Web because it is made of many sites linked together.

- ➤ The Web presents the user with documents, called Web pages, full of links to other documents or information systems.
- ➤ Web indexes and search engines such as Google can help students find the information, they are seeking by examining and collating a variety of sources.
- ➤ The Internet can be a valuable tool for helping students learn. However, it has some potential drawbacks.
- > The concerns have been raised about students accessing pornographic material and biased Web sites, as well as the questionable accuracy of some information gleaned from the Internet.

# The following are some effective ways that the internet can be used in classroom:

USES OF INTERNET AND WEB			USEFUL TO					
i.	Navigating	and	integrating	information from multiple sources as well as				
	knowledge			teaching	and	modeling	evaluation	of

		information, analysis of source credibility,		
		and documentation of Internet resources.		
ii.	Collaborative learning	organize, analyze, and summarize the data		
		they receive, and then share them with other		
		classes around the world.		
iii.	Computer-mediated	Do increasing number of innovative		
	communications (CMC).	educational projects include the use of		
		computer-mediated communications.eg:		
		chats and blogs		
iv.	Improving teachers' knowledge	Educational Resources Information Center		
	and understanding	and the Educators' Reference Desk, which		
	G	provide free information about a wide range		
		of educational topics.		
		•		

# II. Standards for technology literate students

The International Society for Technology in Education has developed six technology standards for students to achieve technology literacy:

- Creativity and innovation
- Communication and collaboration
- Research and information fluency
- Critical thinking, problem solving and decision making
- Digital citizenship
- Technology operations and concepts

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# III. Teaching, learning and technology:

There is huge gap between learning technology and skill acquired by the students.

Stone Wiske has been instrumental in creating ways to incorporate technology into classroom contexts that transform student learning.

The following are the ways to use technology for understanding

- Evaluate which topics are worth understanding
- Think about that student about understand about a topic
- Pay attention to how students develop and demonstrate understanding
- Consider how students and teachers assess learning
- Reflect on how students and teachers can learn together.

#### SOCIAL CONSTRUCTIVIST APPROACHES

The level of potential development is the level at which learning takes place. It comprises cognitive structures that are still in the process of maturing, but which can only mature under the guidance of or in collaboration with others.

# **Background**

- Social constructivism is a variety of cognitive constructivism that emphasizes the collaborative nature of much learning.
- Social constructivism was developed by post-revolutionary Soviet psychologist Lev Vygotsky.
- Vygotsky was a cognitivist, but rejected the assumption made by cognitivists such as Piaget and Perry that it was possible to separate learning from its social context.
- Every function in the child's cultural development appears twice: first, on the social level and, later on, on the individual level; first, between people (intrapsychological) and then inside the child (intrapsychological.
- Vygotsky's theory of social learning has been expanded upon by numerous later theorists and researchers.

# Teacher and peers as joint contributors

- Cognitivists such as Piaget and Perry see knowledge as actively constructed by learners in response to interactions with environmental stimuli.
- Vygotsky emphasized the role of language and culture in cognitive development.
- Vygotsky is language and culture play essential roles both in human intellectual development and in how humans perceive the world.
- Humans' linguistic abilities enable them to overcome the natural limitations of their perceptual field by imposing culturally defined sense and meaning on the world.
- Language and culture are the frameworks through which humans experience, communicate, and
- Language and the conceptual schemes that are transmitted by means of language are essentially social phenomena.
- Vygotsky believed, essentially socially constructed. Knowledge is not simply constructed, it is coconstructed.
- Vygotsky accepted Piaget's claim that learners respond not to external stimuli but to their interpretation of those stimuli.
- The level of actual development is the level of development that the learner has already reached, and is the level at which the learner is capable of solving problems independently.

# Structuring small group of work

• Behavioral motivation is essentially extrinsic, a reaction to positive and negative reinforcements, cognitive motivation is essentially intrinsic based on the learner's internal drive.

- Social constructivists see motivation as both extrinsic and intrinsic.
- Learning is essentially a social phenomenon, learners are partially motivated by rewards provided by the knowledge community.
- Knowledge is actively constructed by the learner, learning also depends to a significant extent on the learner's internal drive to understand and promote the learning process
- Collaborative learning methods require learners to develop teamwork skills and to see individual learning as essentially related to the success of group learning.
- The optimal size for group learning is four or five people. Since the average section size is ten to fifteen people, collaborative learning methods often require GSIs to break students into smaller groups, although discussion sections are essentially collaborative learning environments.

### **UNIT V**

### CLASSROOM MANAGEMENT AND ASSESSMENT

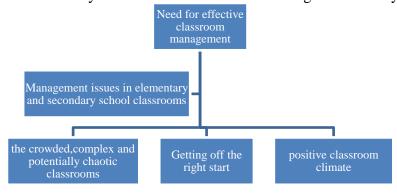
Need of classroom management- Physical environment of the class room- Positive environment for learning-Good communicator- Dealing with problem behavior.

Assessment: Grading and reporting performance.

### NEED OF CLASSROOM MANAGEMENT

- When classrooms are effectively managed, they run smoothly and students will be actively engaged in learning.
  When they are poorly managed, they can become chaotic in learning.
- ❖ Act as a place for *maximizing children's learning opportunities*.
- The new version of classroom management focuses on need for nurturing relationship and opportunities for self-regulation.
- This one also emphasizes on guiding students towards self-discipline
- **Fewer requirements for monitoring** or controlling students.
- In current learner centered mode teachers are viewed as guides, coordinators and facilitators rather as directors to only control the class.

The following are the reasons why the classrooms need to be managed effectively.



# (i)Management Issues in Elementary and Secondary School Classrooms

- These two types of schools are structured differently.
- Secondary school students' problems can be more long-standing and more difficult to address, than those of elementary school students.
- In secondary schools, discipline problems are frequently more severe, the students being potentially more unruly and even dangerous.

• Every hour there is another "settling down" process. Became secondary school students have more reasoning skills and look for long explanation of rules a than elementary students.

# (ii) The Crowded, Complex, And Potentially Chaotic Classroom

Carol Weinstein and Andrew Mignano used the title of this section, "The Crowded, Complex, and Potentially Chaotic Classroom," as an alert for potential problems and highlighted Walter Doyle's.

# Six characteristics that reflect a classroom's complexity and potential for problems:

Characteristics	Activities performed
1. Classrooms are	Classrooms are the setting for many activities, ranging from academic activities such as
multidimensio	reading, writing, and math to social activities such as playing games, communicating
nal	with friends, and arguing.
	Teachers have to keep records and keep students on a schedule.
2. Activities occur	Many classroom activities occur simultaneously. One cluster of students might be
simultaneously	writing at their desks, another might be discussing a story with the teacher, one student
•	might be picking on another, others might be talking about what they are going to do
	after school, and so on
3. Things happen	Events often occur rapidly in classrooms and frequently require an immediate response.
quickly.	
4 Events and	Even though year might constally also the day's activities and he highly appointed
4. Events are often	Even though you might carefully plan the day's activities and be highly organized,
unpredictable	events will occur that you never expect:
	Eg:A fire alarm goes off; a student gets sick; two students get into a fight; a computer
	won't work; a previously unannounced assembly takes place; the heat goes off in the
	middle of winter; and so on.
5. There is little	Classrooms are public places where students observe how the teacher handles discipline
privacy	problems, unexpected events, and frustrating circumstances.
6. Classrooms	Students have memories of what happened earlier in their classroom. They remember
have histories	how the teacher handled a discipline problem

# (iii).Getting Off to the right start

One key to managing the complexity of the classroom is to make careful use of the first few days and weeks of school. Taking the time in the first week of school to establish these expectations, rules, and routines will help your class run smoothly and set the tone for developing a positive classroom environment

At the beginning of the school year,

- (1) Communicate your rules and procedures to the class and get student cooperation in following them
- (2) Get students to engage effectively in all learning activities.

# (iv). Emphasizing Instruction and a Positive Classroom Climate

Despite the public's belief that a lack of discipline is the number one problem in schools, educational psychology emphasizes ways to develop and maintain a positive classroom environment that supports learning.

- This involves preventive and proactive strategies rather than becoming reactive.
- Today's classroom is refereed as "beehive" not in the sense to refer that it is noisy but to say that students are actively involved in learning than before.

# (v). Management Goals and Strategies

Effective classroom management has two main goals:

Classroom Goals	Activities performed to achieve		
To help students spend more time on learning and less time on non-goal-directed activity	<ul> <li>The amount of time available for various classroom activities in a typical 42-minute secondary school class over the course of a school year.</li> </ul>		
To prevent students from developing academic and emotional problems	A well-managed classroom not only fosters meaningful learning but also helps prevent academic and emotional problems from developing.		

### PHYSICAL ENVIRONMENT OF THE CLASSROOM

Designing of physical environment involves

- Principles of classroom arrangement
- ❖ Actual arrangement styles.

### PRINCIPLES OF CLASSROOM ARRANGEMENT

The four basic principles that we can use when arranging our classroom.

	PRINCIPLES	THINGS TO REMEMBER		
I. Reduce congestion in high-traffic areas.		✓ Distraction and disruption group work areas, students' des the teacher's desk, the pencil sharpener, bookshelv computer stations, and storage locations.		
		✓ Separate these areas from each other as much as possible and make sure they are easily accessible		
II. Make sure that you can easily see all students.		<ul> <li>✓ Make sure there is a clear line of sight between your de instructional locations, students' desks, and all student we areas.</li> <li>✓ Stand in different parts of the room to check for blind spot</li> </ul>	ork	
III. Make often-used teaching materials and student supplies easily accessible.		✓ This minimizes preparation and cleanup time, as well slowdowns and breaks in activity flow.		
IV.	Make sure that students can easily	✓ Students should not have to move their chairs or stretch th	neir	

observe whole-class presentations	necks. To find out how well your students can see from their
	locations, sit in their seats in different parts of the room

### ARRANGEMENT STYLE

Consider the physical arrangements that will best support that type of activity where students will mainly be engaged in (whole-class, small-group, individual assignments, and so on).

# **Standard Classroom Arrangements**

Auditorium	Face -Face	Offset	Seminar	Cluster
	1	1	1	

# **Auditorium style:**

- ♣ All students sit facing the teacher.
- ♣ This arrangement inhibits face-to-face student contacts, and the teacher is free to move anywhere in the room. Auditorium style often is used when the teacher lectures or someone is making a presentation to the entire class.

# Face-to-face style:

- **\$\infty\$** students sit facing each other.
- **♣** Distraction from other students is higher in this arrangement than in the auditorium style.

# Offset style:

- **♣** small numbers of students (usually three or four) sit at tables but do not sit directly across from one another.
- ♣ This produces less distraction than face-to-face style and can be effective for cooperative learning activities.

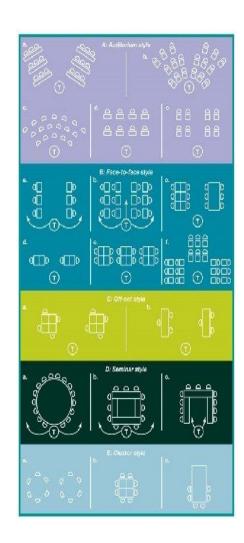
### **Seminar style:**

- ♣ Larger numbers of students (ten or more) sit in circular, square, or U-shaped arrangements.
- ♣ This is especially effective when you want students to talk with each other or to converse with you.

# **Cluster style:**

- ♣ Small numbers of students (usually four to eight) work in small, closely bunched groups.
- **♣** This arrangement is especially effective for collaborative learning activities.
- ♣ Clustering desks encourages social interaction among students.

Variations of Classroom Seating Arrangements



### POSITIVE ENVIRONMENT

An effective positive environment for learning can be created by means of

- Creating general strategies for providing the positive learning environment
- ❖ Finings a way to create, teach and maintain rules and procedure
- ❖ Making positive strategies for getting students to cooperate.

# I. General Strategies

General strategies include

a) The <b>authoritative</b>	❖ A management style that encourages students to be independent	
classroom	thinkers but still provides effective monitoring.	
management style	❖ These teachers engage students in considerable give and take and show	
	caring attitude. Yet they set limits of boundary	
b) The <b>authoritarian</b>	A management style which is tight, restrictive and punitive.	
classroom	It focuses on keeping the classroom and students under control	
management style	Less communication and passing of information	
	Students from this class will be passive learners, fail to start activities,	
	anxiety and poor communication skills.	
c) The <b>permissive</b>	❖ Offers students considerable autonomy but provides them with little	
classroom	support for developing learning skills or managing their behavior.	
management style		

# II.Creating, Teaching, and Maintaining Rules and Procedures

- Classrooms need clearly defined rules and procedures. Students need to know specifically how you want them to behave.
- Without clearly defined classroom rules and procedures, the inevitable misunderstandings can breed chaos. For example, consider these procedures or routines:
- \* Rules-Focus on general or specific expectations or standards for behavior. An example of a general rule is "Respect other persons."
- ❖ **Procedures or routines-**Communicate expectations about behavior, but they usually are applied to a specific activity, and their aim is to accomplish something rather than to prohibit a behavior or define a general.

# **III.Getting Students To Cooperate**

# There are three main strategies to get students cooperation in classroom:

- 1. Develop a positive relationship with students,
- 2. Get students to share and assume responsibility.
- 3. Reward appropriate behavior.

### A. Develop a Positive Relationship with Students

- Teachers who are showing genuinely care about students as individuals apart from their academic work helps to gain their can create positive relationship with students.
- The teachers were sensitive to their needs and anxieties they effectively expressed their feelings to students.

  The classroom atmosphere was relaxed and pleasant.

### **B.Get Students to Share and Assume Responsibility**

• Some experts on classroom management argue that sharing responsibility with students for making classroom decisions increases the students' commitment to the decisions.

# C. Rewarding Appropriate Behavior

• Rewarding the appropriate behaviors is most important to motivate the students.

### The following are few ways to reward appropriate behaviors:

- ♣ Choosing effective reinforces
- **↓** Use prompting to shape their behaviors.
- ♣ Use rewards only to motivate but not to control their behaviors.

#### BEING A GOOD COMMUNICATOR

❖ Being a good communicator is more important to manage classrooms and resolve conflicts effectively.

### ASPECTS OF GOOD COMMUNICATION:

The major three key aspects of good communication are

Speaking skills

Listening skills

Non verbal communication

# (i)Speaking Skills

Teachers and students will benefit considerably if speaking skills are effectively developed.

# **Speaking with the Class and Students**

Speaking with your class and with individual students, one of the most important things to keep in mind is to clearly communicate information.

# Clarity in speaking is essential to good teaching.

- ✓ Selecting vocabulary that is understandable and appropriate for the level of your student.
- ✓ Speaking at an appropriate pace, neither too rapidly nor too slowly.

- ✓ Being precise in your communication and avoiding being vague.
- ✓ Using good planning and logical thinking skills as underpinnings of speaking clearly with your class.

# **Barriers to Effective Verbal Communication**

Barriers		Reason to treat it as barrier	Example	Possible intervention
a) Criticizi	ing	Harsh, negative evaluations of another person generally reduce communication.	It's your fault you flunked the test; you should have studied."	Evaluate why they did not do well on a test and try to get them to arrive at an attribution that reflects lack of effort as the reason for the poor grade.
b) Name-c and labe	_	Students engage in a lot of name-calling and labeling.	You are a loser," or "You are stupid	Intervene and talk with them about considering other students' feelings.
c) Advisin	g	Advising is talking down to others ineffectively in our point of view without understanding their problem	That is so easy to solve, I cannot understand why	Give them a solution to a problem
d) Orderin	g	Commanding another person to do what you want	Clean up this space, right now	Give a a calm, firm reminder such as "Remember the rule of cleaning things up when we are finished" works better.
e) Threater	ning.	Threats are intended to control the other person by verbal force	If you don't listen to me, I'm going to call your parents"	Approach the student more calmly and talk with the student about listening better.
f) Moraliz	ing	preaching to the other person about what he or she should do	You know you should have turned your homework in on time.	A better strategy in this case is not to use words such as <i>should</i> and <i>ought</i> but, instead, to talk with the student in a less condemning way about why the homework was not turned in on time

# Strategies to give an effective speech

- Connect with the audience. Talk directly to the audience; don't just read your notes or recite a memorized script.
- State your purpose. Keep this focus throughout the talk.
- Effectively deliver the speech. Use eye contact, supportive gestures, and effective voice control.
- Use media effectively. This can help the audience grasp key ideas and varies the pace of the talk.

# (II).Listening Skills

Effectively managing your classroom will be easier if you and your students have good listening skills. Listening is a critical skill for making and keeping.

# **Active listening**

❖ A listening style that gives full attention to the speaker, focusing on both the intellectual and the emotional content of the message.

# Some good active listening strategies follow:

- Pay careful attention to the person who is talking, including maintaining eye contact.
- Paraphrase.
- Synthesize themes and patterns.
- Give feedback in a competent manner.

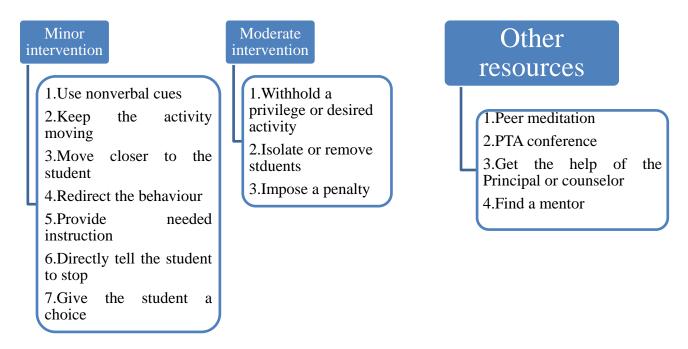
# (III). Nonverbal Communication

- Communicate by how you fold your arms, cast your eyes, move your mouth, cross your legs, or touch another person.
- Nonverbal communication by examining
  - facial expressions,
  - personal space, and
  - silence.
- People **face discloses** emotions and telegraph what really matters to them. Eg; aa smile, puzzled look
- Students expect a lot **of personal space** in classroom to keep their belongingness and materials, this speaks in volume about a student's satisfaction.
- By **being silent**, a good listener can observe the speaker's eyes, facial expressions, posture, and gestures for communication; think about what the other person is communicating.

## DEALING WITH PROBLEM BEHAVIORS

No matter how well that we create a positive environment, what really matters is how well that we manage the problematic behaviors effectively.

The following are the few management strategies aims at dealing with problem behaviors



### MANAGEMENT STRATEGIES

# A. Minor Interventions

Some problems require only minor interventions. These problems involve behaviors that, if infrequent, usually don't disrupt class activities and learning.

#### Use nonverbal cues

Make eye contact with the student and give a signal such as a finger to the lips, a head shake, or a hand signal to issue a desist."

# Keeps the activity moving

Sometimes transitions between activities take too long, or a break in activity occurs when students have nothing to do.

♣ In these situations, students might leave their seats, socialize, crack jokes, and begin to get out of control.

# **4** Move closer to students

When a student starts misbehaving, simply moving near the student will often cause the misbehavior to stop.

### **Redirect the behavior**

If students get off-task, let them know what they are supposed to be doing. You might say, okay, remember, everybody is supposed to be working on math problems.

# **Provide needed instruction**

Sometimes students engage in minor misbehaviors when they haven't understood how to do the task they have been assigned.

# **♣** Directly and assertively tell the student to stop

Establish direct eye contact with the student, be assertive, and tell the student to stop the behavior.

### **4** Give the student a choice

Place responsibility in the student's hands by saying that he or she has a choice of either behaving appropriately or receiving a negative consequence

### **B.** Moderate Interventions

Some miss behaviors require a stronger intervention than those just described.

**Example,** when students abuse privileges, disrupt an activity, goof off, or interfere with your instruction or other students' work.

# **Withhold a privilege or a desired activity**

Inevitably, the students who abuse privileges they have been given, such as being able to move around the classroom or to work on a project with friends. In these cases, you can revoke the privilege.

#### Isolate or remove students

As per behavioral and social cognitive approaches, which involves removing a student from positive reinforcement. If you choose to use a time-out, you have several options.

- o Keep the student in the classroom, but deny the student access to positive reinforcement;
- o Take the student outside the activity area or out of the classroom
- o Place the student in a time-out room designated by the school

### **Impose penalty**

Repetitions in works can be used as penalty to get desired behavior and reduce misbehaviours. Eg: Writing extra pages.

# C. Using Others as Resources

Among the people who can help you get students to engage in more appropriate behavior are peers, parents, the principal or counselor, and mentors.

# **4** Peer Mediation

Peers sometimes can be very effective at getting students to behave more appropriately. Peer mediators can be trained to help students resolve quarrels and change undesirable behaviors. For example, if two students have started to argue with each other, an assigned peer mediator can help to mediate the dispute, as described later in the chapter when we discuss conflict resolution.

# **Parent-Teacher Conference**

You can telephone the student's parents or confer with them in a face-to-face conference. Do not complain the student's behavior but can convey that we will appreciate if their parents support in reducing their wards misbehavior

# **♣** Enlist the Help of the Principal or Counselor

Getting the help of Principal or counselor will help to take effective steps in reducing problematic behaviors. The Principal may take necessary administrative steps like detention or warning if required

### **♣** Find a Mentor

Earlier we underscored the importance of students having at least one person in their life who cares about them and supports their development. A mentor can be once such supported for the student who do not have any moral support.

#### ASSESSMENT

❖ Educational assessment or educational evaluation is the systematic process of documenting and using empirical data on the knowledge, skill, attitudes, and beliefs to refine programs and improve student learning.

# **Characteristics of assessment:**

# (i)Assessment as an integral part of teaching

In a research study it is evidenced that teachers spend more time on assessment.

The following are the reason how assessment in an integral part of the teaching

- ✓ Preinstruction assessment
- ✓ Assessment during instruction
- ✓ Post instruction assessment

### **During preinstruction assessment**

❖ Much of the preinstruction assessments are only informal observations. In first week of school the teachers will get lot of space to observe student's characteristics and behavior.

### Assessment during instruction:

- ❖ Formative assessment is the assessment conducted during the period of instruction rather than after its completed. Formative assessment emphasis on learning rather than assessment of learning.
- ❖ It students to actively observe others students and improve oneself.
- ❖ Feedback is the most important aspect of formative assessment which helps the students to learn and progress.

#### Post instruction assessment:

- Summative assessment is the assessment done post the instruction of the course or at the end of the course
- ❖ This provide information on the progress of the student by means of grade.

# (ii)Creating clear and appropriate learning targets

A learning target consists of what students should know and be able to do.

### (iii)Establishing high quality assessments

Assessment reaches a high level of quality when it yields reliable and valid information about student's performance.

High quality assessment depends on

- **4** Reliability
- **♣** Validity
- **4** fairness

Validity- refers to the extent to which the assessment reflects what you have been teaching.

Reliability- is the extent to which a test produces consistent, reproducible scores.

Eg: The reliability refers to consistency in marks of a student who is taking same math exam in two different times.

Fairness- Assessment is fair when all students have an equal opportunity to learn and demonstrate their knowledge and skill.

#### (iv)Current trend

Here are some current trends used during classroom assessment

- Using performance-based assessment through Objective tests and Performance assessment
- Examining higher cognitive skills like problem solving, critical thinking.
- Using multiple assessment methods like mcq, project
- Having high performance standards

Using computer as part of assessment

### TRADITIONAL ASSESSMENT CONDUCTED THROUGH TEST

The traditional tests are conducted using

- 1. Selected response items
- 2. Constructed response items

# (i)Selected response items:

- ♣ Selective response items have an objective format that allows students responses to be scored quicky.
- ♣ A scoring guide is created and can be applied by an examiner or computer.

# This is conducted by means of

- Multiple choice items
- True or false
- Matching items

# (ii)Constructed –Response items

**Constructed-** response items require students to write out information rarher than select a response from a given menu.

# This is conducted by means of

- Short answer items
- Essay items

### ALTERNATIVE ASSESSMENTS (NEW TRENDS IN ASSESSMENT)

The new alternative are replacing the traditional test assessment methods namely

- 1. Authentic assessment
- 2. Performance assessment
- 3. Portfolio assessment

### **Authentic Assessment:**

This assessment evaluates a student's knowledge or skill in a contact that approximates the real world or real life as closely as possible.

#### **Performance assessment:**

Performance assessment evaluate the student performance based on direct methods of evaluation, self-assessment, writing skills and oral presentation than simply asking series of questions through pen paper based.

#### Portfolio assessment:

It is a systematic and organized collection f student's worth that demonstrates the student's skill and accomplishments.

# The portfolio is mainly evidenced through

- a. Artifacts such as homework
- b. Reproductions- such as student work outside the class like project
- c. Attestations- such as teacher documentation on the student performance
- d. Production- such as student goal statement, reflection of their own learning and giving caption for each piece of their own work.

#### GRADING AND REPORTING PERFORMANCE

**Grading** means translating descriptive assessment information into letters, numbers, or other marks that indicate the quality of a student's learning or performance.

### The Purposes of Grading

Grading is carried out to communicate meaningful information about a student's learning and achievement.

- a. **Administrative:** Grades help to determine students' class rank, credits for graduation, and whether a student should be promoted to the next grade.
- b. **Informational**: Grades can be used to communicate with students, parents, and others (such as admissions officers for subsequent schooling) about a student's work.
- c. **Motivational:** Many students work harder because they are externally motivated by a desire for high grades and a fear of low grades.
- d. **Guidance:** Grades help students, parents, and counselors to select appropriate courses and levels of work for students. They provide information about which students might require special services and what levels of future education students will likely be able to handle.

# **The Components of A Grading System**

Grades reflect teachers' judgments.

# Three main types of teacher judgments underlie a teacher's grading system:

a. **Standards of Comparison** A student's performance can be graded by *comparing it with the performance* of other students or to predefined standards of performance.

- b. Comparing Performance Across Students Norm-referenced grading is a grading system based on comparison of a student's performance with that of other students in the class or of other classes and other students.
- c. Comparing Performance with a Predetermined Standard Criterion-referenced grading is being used when students receive a certain grade for a *certain level of performance*, regardless of any comparison with the work of other students.

# Reporting Students' Progress and Grades to Parents

Grades are the most common method of informing parents about a child's progress and performance in the classroom. Especially important in reporting students' progress is the report card.

# A. The Report Card

- The report card is a standard method of reporting students' progress and grades to parents.
- Some report cards have categories for affective characteristics, such as effort, cooperation, and other appropriate and inappropriate behaviors.

# **B.** Written Progress Reports

- Another reporting strategy is to provide parents with a weekly, biweekly, or monthly report of the student's progress.
- These written reports can include the student's performance on tests and quizzes, projects, oral reports, and so on.
- They also can include information about the student's motivation, cooperation, and behavior, as well as suggestions for how parents can help students improve their performance.

### C. Parent-Teacher Conferences

Parent-teacher conferences are another way to communicate information about grades and assessment. Such conferences are both a responsibility and an opportunity.

Parents have a right to know how their child is doing in school and how their child might improve

# Some Issues in Grading

- **❖** Should a Missed Assignment or Paper Receive a Zero
- **❖** Should Teachers Go Strictly by the Numbers in Grading
- **Should Grading Be Abolished**