

TEACHING AND LEARNING

Unit-I

NATURE OF LEARNING AND TEACHING

Learning: meaning and definitions - Basic principles of learning-Rote learning vs.meaning full learning-Techniques of active learning and their implications–Self-learning-Teaching: meaning and definitions- Characteristics of good teaching.

Meaning:

Learning is an active process that needs to be stimulated and guided towards desirable outcomes. External stimuli that encourage learning include particularly, the influence of the teacher through the assignments he/she makes, the questions he/ she asks, the visual aids and other procedures that he/she utilizes to arouse learning interest and activity. Learning is the acquisition of habits, knowledge and attitudes. It involves new ways of doing things and it operates in an individual's attempts to overcome obstacles or to adjust to new situations. When learning takes place, it can be expected that a more or less permanent change will be evidenced in the learner's behavior.

Definition:

“Learning is the acquisition of habits, knowledge and attitudes. It involves new ways of doing things and it operates on an individual's attempt to overcome obstacles or to adjust to new situation. It represents progressive changes in behavior, it enables him to satisfy interest to attain a goal” Crow & Crow'

“Learning is a relatively permanent change in behavior that results from experience”

Stephen B.Klein

“Any activity may be called learning so far as it develops the individual in any way; good or bad and makes his behavior and experiences different from what that would otherwise have been” Woodworth

NATURE OF LEARNING

(1) Learning is growth:

Learning is actually a form of growth. It is something that is natural and inevitable. Through daily activities, the child grows both mentally and physically. These are all the source of learning. The individual grows through living and learning. Thus, growth and learning are inter-related.

(2) Learning is adjustment

Learning enables the individuals to adjust himself properly with the new situations. The individuals face new problems and new situation throughout his life and learning helps him to solve the problems encountered by him. That is why; many psychologists describe learning as “a process of progressive adjustment to the ever-changing conditions which one encounters”.

(3) Learning is organizing experience

Learning is not just an addition of new experience nor is old experience summed up, rather it is a synthesis of the old and the new experiences which result in a completely new organization of pattern of experiences. This organization of experiences involves the elimination of many habits unnecessary in the final consummation of the

act. Facts are arranged and rearranged in proper relation and then appropriate learning takes place.

(4) Learning is purposeful

All true learning is purpose-goal-directed. When the learner finds that his desires are fulfilled, learning is effective. The studies on forgetting show that irrelevant material is more rapidly forgotten than relevant material.

(5) Learning is intelligent

Meaningless repetition does not produce permanent learning. Learning takes place when an insight is gained, and the processes are understood. Only understanding and intelligent repetitions can ensure lasting results in learning.

(6) Learning is action

Learning is the natural outcome of the individual's attempts to meet his basic and normal needs. All genuine learning is self – learning.

(7) Learning is both individual and social

Learning is more than an individual activity; it is a social activity too. No one can deny that the social agencies like the family, the community, the gang, the films, the religious places, and other institutions have a tremendous influence on the child and are always affecting his behavior pattern. Individual mind is affected by the group mind consciously as well as unconsciously.

(8) Learning is unenforceable

Human learning is a matter of human action; it cannot be enforced upon the human beings. Most pupils are, generally, able to comply with normal expectations. But when any child is not, the teacher must wait for that child to be ready for learning

or he will destroy the very work which is being attempted. It is a characteristic of learning that it is unenforceable.

(9) Learning is a product of the environment

Learning cannot take place in vacuum-it can only take place in relation to environment. The environment should be healthy and rich in educative possibilities. It must be conducive to learning.

(10) True learning affects the conduct of the learner

True learning produces changes in the conduct (behavior pattern) of the learner. Every experience produces a change in the mental structure of the learner which in turn affects the conduct of the learner. This, in short, is the goal of learning.

(11) Learning is whole

The human organism functions as a whole. Wholesomeness, as distinct from splitting, is a central principle of life. It makes whole changes in human life.

(12) Learning frequently depends upon insight

Insight has sometimes been described as the “flash of understanding”. The ability to gain insight depends upon interest, previous knowledge and intelligence. In the case of a dull child, it will be necessary for the teacher to give more than usual assistance to enable him to grasp the meaning underlying a situation.

ELEMENTS OF LEARNING

The elements of learning are

1. **Face-to-face promotive interaction**—refers to students talking to each other in order to share insights and ideas.
2. **Individual responsibility**—refers to holding students accountable for themselves to prevent “freeloading” in a learning group.
3. **Collaborative skills**—include skills necessary for effective group functioning, such as leadership, teambuilding, and conflict resolution.
4. **Group processing**—refers to how well the group is functioning aside from the academic products or performances.
5. **Positive interdependence**—the perception among members of the group that “we sink or swim together.”
6. **Ability:** The students’ native ability dictates the prospects of success in any purposeful activity. It determines their capacity to understand and assimilate information for their own use and application.
7. **Aptitude:** It refers to the students’ innate talent or gift. It indicates a natural capacity to learn certain skills.
8. **Interests:** Learners vary in activities that are undertaken due to a strong appeal or attraction. Lessons that give the learners the chance to express themselves will be more meaningful and easily absorbed
9. **Family & Cultural background:** Students who come from different socio-economic background manifest a wide range of behavior due to difference in upbringing practices.
10. **Attitudes:** Attitude refers to an individual perspective and disposition. Some positive attitudes are curiosity, responsibility, creativity & persistence.

11. **The learner or the pupil is involved:** Unless the pupil is prepared or enabled to learn, learning cannot take place. Learning is a very personal experience. One cannot “give” this experience to a child.
12. **The Experience:** “The experience or the situation provides that experience which causes learning”. These situations are provided by the school in the form of subjects, activities or atmosphere and the teacher organizes them for the pupils.
13. **The teacher is the key person:** In the learning process, the teacher is the key person. He is to organize learning experiences for children and the child would learn by reacting to such experiences. The teacher cannot make a child learn. He can only facilitate the learning process by properly organizing experiences and creating a conducive climate for learning, e.g., arranging facilities, providing materials and gadgets, managing social relationships and activities which promise rich, worthwhile productive living for children.
14. **The climate:** The climate or the environment is an important element in learning in school. It can stimulate or retard learning.

BASIC PRINCIPLES OF LEARNING AND THEIR IMPLICATIONS

BASIC PRINCIPLES

a) Readiness

Getting students ready to learn, creating interest by showing the value of the subject matter and providing continuous mental or physical challenge is usually the instructor’s responsibility. Reading implies a degree of concentration and eagerness. Individuals learn best when they are physically, mentally and emotionally ready to learn and if they feel there is no reason to learn, they don’t learn well. If students have a

strong purpose, a clear objective and a definite reason for learning something they make more progress than if the lack of motivated students. Since learning is an active process, students must need adequate rest, health and physical ability.

b) Exercise

The principle of exercise states that those things most often repeated are best remembered. It is the basis of drill and practices. It has been proven that students learn best and retain information longer when they have meaningful practice and repetition. The key here is that the practice must be meaningful. It is clear that practice leads to improvement only when it is followed by positive feedback.

c) Effect

The principle of effect is based on the emotional reaction of the student. It has a direct relationship with motivation. It means that the learning is strengthened when accompanied by a pleasant or satisfying feeling and that learning is weakened when associated with the unpleasant feeling. The student will strive to continue doing what provides a pleasant effect to continue learning. Positive reinforcement always leads to success and motivate the learner, so the instructor should recognize and commend the improvement of the learner. Whatever the learning situation, it should contain the elements for the student's positivity and give them a feeling of satisfaction. Therefore, instructors should be cautious about using punishment in the classroom.

d) Primacy

The state of being first, often creates a strong almost unshakeable impression. Things learned first, create a strong impression in the mind of the learner and it is difficult to erase. The instructor must be careful in teaching the right thing at first time for the students. It creates a strong impression in the minds of the students. If the

instructor taught the wrong thing at first, it is very harder to change that wrong to right thing.

e) Recency

The principle of recency states that things most recently learned are best remembered. Conversely, if a student is removed from time-wise to form a new thing, it is more difficult to understand and remember

f) Intensity

The principle of intensity implies that a student will learn more from the real thing than from a substitute. The more intense the material taught the more likely it will be retained. A sharp, clear, vivid, dramatic or exciting learning experience teaches more than a routine or boring experience.

IMPLICATIONS

Haynes lists the activities fit for students of different learning style.

1. For auditory learners:

Activities include interviewing, debating, participating on a panel, giving oral reports and participating in oral discussions of written material.

2. For visual learners:

Computer graphic, maps, graphs, charts, cartoons, posters, diagrams text with a lot of pictures.

3. For tactile learners:

Some favorite activities include drawing, playing board games, and making models.

4. For kinesthetic learners:

Playing games that involve the whole body, movement activities, making models, and setting up experiments.

5. For global learners:

Choral reading, recorded books, story writing, computer programs, games group activities.

6. For analytic learners:

Information presented in sequential steps, teacher directed, clear goals and requirements.

ROTE LEARNING VS MEANINGFUL LEARNING

ROTE LEARNING

It is defined as the memorization technique based on repeating the material again and again. The idea behind the rote learning is able to quickly recall the meaning of the material. It is generally based on only repeating the topic or content and not the clear understanding of the topics. These methods are generally used when quick memorization is required such as telephone number, dates, etc. It does not give any meaningful learning experience to the learners. It is like singing along with a song playing on radio and after a couple of time picking up interesting lines and slowly realize that one has learned the whole song. This method of learning is referred as “cramming”.

MEANINGFUL LEARNING

It refers to the concept of learning the subject or topic with the clear understanding of all the related facts. Human brain is designed for meaningful learning. Brain works in an associative way and serves in a chained structure. Existing knowledge acts as a mental block for new learning to occur.

ROTE LEARNING VS MEANINGFUL LEARNING

Rote learning will be different from Meaningful learning, which generally means reproduction of the received information. It implies that the learned persons will follow a prescribed behavioral pattern.

In rote learning methods, the learner reproduces whatever she or he is taught and is not worried about the correctness of the information being imparted to her/him. On the other hand, in a meaningful learning process the learner is expected to properly examine the information received by her/him and question even the methodology at each and every step. She/he internalizes that information only after having full satisfaction as per her/his own reasoning. As such, whereas in the rote learning process the output is at most equal to the input, in meaningful learning process output can be more than the input. It is so because a meaningful learner will always contribute something new.

Rote learning leads to set responses only, but meaningful learning teaches one to critically appraise the problem and come to the right solution relevant for the particular problem. A rote learner is just like a parrot, which reproduces whatever it is taught, but a meaningful learner learns to examine everything critically with an open mind to bring out something new every time.

A rote learner is, basically, a reproducer, whereas a meaningful learner is an innovative person. A rote learner is, generally, a passive participant in any event, but a meaningful learner is an active participant in the whole process. Rote learning means just imitating a pattern, but meaningful learning means adding something new to the pattern to change it for better.

S.No	ROTE LEARNING	MEANINGFUL LEARNING
1	A Process in which there is no full involvement of the learner	A Process takes place with the full involvement of the learner
2	What is taught, will be repeated verbatim	Whatever is taught will be expressed by the learners in their own individual style
3	It is a non-participatory process	Full participation of the learners
4	Passive participant	Active participant
5	Reproducer	Innovative person
6	Matter learned will be recalled as fragmented pieces.	What were taught are being expressed back in letter and spirit
7	Interest in learning decreases	Interest in learning increases more and more
8	Learning of students fully depends upon the teacher	Learning increases the independent functioning of the teacher
9	The output of learning will be less	The output of learning will always be equal

	than the input.	or more than the output.
10	Just imitating a pattern	Adding something new to the pattern

PRINCIPLES AND TECHNIQUES OF ACTIVE LEARNING AND THEIR IMPLICATIONS

ACTIVE LEARNING

Meaning:

It is a method of learning in which students are actively or experientially involved in the learning process and there are different levels of active learning depending on student's involvement. It relates to three learning domains referred as knowledge, skills and attitude. Active learning engages students in two aspects (i) doing things and (ii) thinking about the things they doing. In this learning, teachers are the facilitators. The presentation of facts introduced through lecture is de-emphasized in favor of lass discussion, problem solving, co-operative learning and writing exercises. For example: debates, team teaching, group projects and so on.

Definition

Active learning is "anything that involves students in doing things and thinking about the things they are doing" **-Bonwell & Eison**

Active learning is "anything course-related that all students in a class session are called upon to do other than simply watching, listening and taking notes" **-Felder & Brent**

How to promote Active Learning Mini-Lecture Format: In which the instructor talks for ten to twenty minutes about a particular topic and then pauses for students to consolidate their notes, find gaps and work with classmates to fill in gaps.

Nature of Active Learning

- It is done through technology and activity-based learning such as project method, group work, etc.
- It is learner centered
- Active participation of each and every student is necessary aspect
- It enhances students higher order thinking capabilities
- It transforms the students from passive listeners to active listeners

PRINCIPLES OF ACTIVE LEARNING

1) Effort produces Achievement

The amount of effort the students makes how much more to do with one's academic achievement than inherited ability. Right condition and support are the factors to everyone for the high level of achievements.

2) Learning is about making Connection

Knowledge is a constructive process. One may learn by adding new knowledge into existing knowledge and integrating it with that knowledge. To make that process of integration effective, one has to organize existing knowledge into some sort of structure. One has to made their own that constitutes or must alter the structure to accommodate the new knowledge.

3) We learn with and through others

Most learning is done in setting in which others are present. We teach one another, exchange ideas, reinforce concepts, solve problems, debate ideas and challenge assertions with others. Students learning greatly increase when students understand and accept the concept of structure such as social interaction in the classroom.

4) Learning takes time

A given task will be learned only if the learner spends the amount time needed to learn it. Individuals differ from one another. So, each and every individual need different amount of time in order to learn the same things.

5) Motivation

Among the students who believe themselves as learner make more progress than one who see no purpose in learning, who doubt their abilities, fearful to failure are excessively anxious about their deep understanding and a feeling can produce highly motivated students.

6) The teacher

If all the teachers in the school puts high effort in a given subject as well as the bell teacher, the result will be higher student achievement.

7) Focused teaching promotes Accelerated Learning

The term "targeted teaching" refers to instruction that is appropriately aligned with the intended instruction. The role of the instructor is to "scaffold" the learning of the new task, which means that they should show the learner how to progress from what they are now capable of doing on their own to a higher level of cognitive functioning.

8) Clear Expectation and continuous feedback of Active Learning

Students are most likely to produce work that meets the standard when they have access to continuous feedback on their work. So that they know how to bring it up to the required standard.

9) Good teaching builds on student's strength and respect individual's difference

Each child has unique strengths and weakness learners make use of different ways of knowing and use individual strengths to exploit in learning a new task. Some may have strong language skills and others may have specific talent. These abilities and styles are capable of being developed in school

10) Good teaching involves modelling what student should learn

In the early stages, the teacher provides a lot of guidance and support; later on, progressively less guidance is provided until the student is able to perform the task independently. The teacher sets the level of difficulty in each new task at a level that is within the students "Zone of Proximal Development".

11) The curriculum should focus on powerful knowledge

Knowledge is powerful when it provides a basis for further learning and when it concerns important and validated knowledge. Three most important kinds of knowledge are

- The new basics provide the foundation of learning
- Discipline based subjects provide entry points to the stock of human knowledge and foundations for understanding validated and important knowledge
- Skills, strategies and attitudes that support independent purpose learning and problem solving

12) All students should experience a thinking curriculum

Challenging tasks will support deep thinking, stimulate intelligence behavior as read assigned material outside of class, respond to short questions online.

TECHNIQUES OF ACTIVE LEARNING

1. **Think Pair Share:** Students ponder the answer to a question and then share their thoughts with a neighbor.
2. **Role Playing:** Each student takes the role of a person affected by an Earth science issue, such as a volcano or a polluted lake and studies the impacts of Earth science issues on human life and/or the effects of human activities on the world around us from the perspective of that person.
3. **Discovering Plate Boundaries:** This is a group discussion method employing many aspects of cooperative learning.
4. **Peer Review:** Students review and comment on materials written by their classmates.
5. **Discussion:** Promoting a successful discussion depends on correctly framing questions. Discover tips for framing discussion questions to promote higher order thinking.
6. **Problem Solving Using Real Data:** Students use a variety of data to explore scientific questions.
7. **Game Based Learning:** Uses competitive exercises, either pitting the students against each other or through computer simulations.

ACTIVE LEARNING AND THEIR IMPLICATIONS

These techniques are aimed at individual students they can very easily be used without interrupting the flow of the class. These exercises are particularly useful in

providing the instructor with feedback concerning student understanding and retention of material.

1. The "One Minute Paper"

This is a highly effective technique for checking student progress, both in understanding the material and in reacting to course material. Ask students to take out a blank sheet of paper, pose a question and give them one minute to respond. Ask questions like "What was the main point of today's class material?".

2. Affective Response

This is similar to the above exercises, but here you are asking students to report their reactions to some facet of the course material - i.e., to provide an emotional or evaluative response to the material. Obviously, this approach is limited to those subject areas in which such questions are appropriate. However, it can be quite a useful starting point for courses such as applied ethics, particularly as a precursor to theoretical analysis.

3. Daily Journal

This allows for more in-depth discussion of or reaction to course material. The teacher may assign this as homework. The only disadvantage to this approach is that the feedback will not be as "instant" as with the one-minute paper. But with this approach, the teacher may ask more complex questions, such as, global warming, the ozone layer, and so forth.

4. Reading Quiz

Active learning depends upon students coming to class prepared. The reading quiz can also be used as an effective measure of student comprehension of the readings

5. Clarification Pauses

Throughout a lecture, particularly after stating an important point or defining a key concept, stop and then ask if anyone needs to have it clarified. Students who would never ask a question in front of the whole class during a clarification, pause as you move about the room.

6. Questions and Answers

Asking questions is the best way to increase the student's involvement and comprehension.

7. The "Socratic Method"

The instructor chooses a particular student, presents her with a question, and expects an answer forthwith; if the "chosen" student cannot answer the question presented, the instructor chooses another until the desired answer is received.

8. Student Summary of Another Student's Answer

In order to promote active listening, after one student has volunteered an answer to your question, ask another student to summarize the first student's response. There is possibility of being asked to repeat a classmate's comments, most students will listen more attentively to each other.

9. The Fish Bowl

Students are given index cards, and asked to write down one question concerning the course material. They should be directed to ask a question of clarification regarding some aspect of the material which they do not fully understand; or, perhaps

you may allow questions concerning the application of course material to practical contexts. At the end of the class period students deposit their questions in a fish bowl. The instructor then draws several questions out of the bowl and answers them for the class or asks the class to answer them.

10. Flash Cards

This method tests students' comprehension through their response to flash cards held by the instructor. This is particularly useful in disciplines which utilize models or other visual stimuli, such as chemistry, physics or biology.

SELF LEARNING

Meaning

A person who has learned a subject without the help of a teacher or formal education are a self-learning person. Self-learning is taking information, processing it, retaining it without the need of another individual to be teaching it in order for the understanding. Simple stated, teaching requires the ability of a student to work independently. Self-taught students are motivated by the sense of a job they done. They are self-motivated because they have the confidence that if they don't know any answer to a question, they know how to use the resources available to find out the answers. Self-taught students often can complete course work in a fraction of the time it would take to finish than a teacher-directed student.

Definition:

Self-learning described as "Process by which the individuals take the initiative with or without the assistance of others, in diagnosing their learning needs, formulating learning

goals, identify human and material resources for learning, choosing and implement appropriate learning strategies and evaluating learning outcomes”.

Importance of self-learning

- ❖ Understanding How to Learn
- ❖ Learning without External Aids, and
- ❖ Preparing for the Future

A self-learning individual can aim to learn a little bit about everything, or they can work hard toward mastering a single subject. Either way, it is the act of taking your learning into your control. It is this drive to further you which ultimately leads to success on a personal and financial level. Everyone can benefit from continuing to strive for a well-rounded self-learning; this is especially true if you run your own business.

BENEFITS OF SELF-LEARNING

- Student becomes an independent thinker.
- Student learns to accept responsibility.
- Student gains the freedom to learn without restrictions
- Student earns accountability.
- Intrinsic rewards become the focus, that good feeling inside that comes from a job well done
- Student tests well because he is used to tackling problems on his own, which equals confidence.
- Students retain more naturally when they do the work versus parent’s spoon feeding the information into them.

- Students learn where to go when help is needed. There is no need to worry about gaps in their education because if they need to know something down the road, they will just look it up on their own.
- Student has the courage to delve into an area of interest to study it without having to wait for a teacher to teach it.
- Students become more than prepared for college study, which will require motivation and planning ahead.
- Self-learning gives the opportunity to develop a good work ethic.
- Self-learning allows the learner to go as deeply into a subject and interact with the subject matter as deeply as he would like to go.
- Self-learning enables the learner to limit the number of interests undertaken so as not to be spread too thinly.
- Self-learning allows the family to function as a family without emulating an institution at home.
- Self-learning eliminates all excuses for not reaching one's potential. It will never be anyone else's fault if the student doesn't learn.
- Self-learning is more fun than being taught at.
- Self-learning means that mom can read great books rather than teacher's manuals and text books.
- Self-learning trains one to go to the source for information which reduces the possibility of erroneous material.
- Self-learning is the wave of the future now that so much information is available at our fingertips.

- Self-learning means that babies and toddlers get more attention from mom because she is not busy playing teacher

Nature of Teaching

Teaching

Teaching in simple terms, is referred as either an occupation or profession of group of teachers or the activities of a group undertaken to help an individual to learn or acquire some knowledge, skill, attitudes or interests. Teaching is a relationship which is established among three focal points in education teacher, the student and the subject matter. In teaching, the learning is a process by which the teacher brings the students and the subject-matter together. The teacher and the students are active, the former in teaching and the latter in learning.

A teacher has many responsibilities for a student because a child spends a lot of time in school so he has to study with the teachers. The teachers influence his growth and development also along with the knowledge which they impart. In school the teachers are regularly given orientation classes, this is just to make them more skilled to deal with the children. In college, teachers make the students aware of the reality and the situation prevailing in the country.

The teacher is great and the teaching profession is greatest of all as it is very noble to impact education to other. By teaching it means to following:

T – Transfers knowledge

E – Enlightens with the present living conditions

A – Aligns with portion and real life

C – builds character

H – offer healing touch

I – Involvement of the students in studies

N – Nurturing the thoughts into reality

G – Giving a final shape

Meaning

- The job or profession of a teacher.
- Something that is taught
- Teaching is a process that improves the students seeking level more easily and it might be over any situation as an easy way
- Teaching means interaction of teacher and students. They participate for their mutual benefits. Both has their own objective and target to achieve goal
- Teaching includes all the activities of providing education to other. The person who provides education is called teacher. The teacher uses different method for giving best knowledge to his student. He tries his best to make understanding of students. His duty is to encourage students to learn the subject.
- Teaching is the process of attending to people's needs, experiences and feeling and making specific interventions to help them learn particular things.

Definition:

- According to **Gage**, “Teaching is a form of interpersonal influence aimed at changing the behaviour potential of another person”.
- **Albert Einstein**, “The supreme art of teaching is to awaken joy in creative expression and knowledge”.
- According to **Clarke**, “Teaching refers to activities that are designed and performed to produce change student”.
- **Edmund Amidon** defines it as, “Teaching is an interactive process, primarily involving class room talk which take place between teacher and pupil and occurs during certain definable activity”.
- **Brubacher**, “Teaching is an arrangement and manipulation of a situation in which an individual will seek to overcome and from which he will learn in the course of doing so”.
- **John Dewey**, “One might as well say he has sold when no one has brought, as to say he taught when no one has learned”.
- **Skinner**, “Teaching is the arrangement of contingent of reinforcement”.
- **Ryans**, “Teaching is concerned with the activities which are concerned with the guidance or direction of the learning of others”.
- **Me-** “Teaching is a process that improves the students seeking level more easily and it might be overcome any situation as an easy way”.

Characteristics of good teaching:

- It gives desirable information.
- It creates self-motivation for learning.

- Effective planning is essential for good teaching.
- The students remain active in good teaching.
- It focuses on selected information.
- It is based on democratic ideas.
- It is sympathetic and full of pity
- It is directional in nature.
- It is based on the co-operation of teacher and student.
- It is based on previous knowledge of teacher.
- It is progressive.
- It includes all sorts of teacher's performances and teaching methods.
- It produces emotional stability.
- It attempts to adjust the students with the environment.
- It is a diagnostic and therapeutic in nature.
- It is the best medium for preparing the next generation for the changing world.
- It enhances the potentialities of the students.
- The teacher works as a philosopher, friend and a direction.
- The teacher's classroom behaviour includes both direct and indirect behaviour.
- It reflect harmony between teacher and the students.

UNIT-II

TEACHING IN DIVERSE CLASSROOMS AND LEARNING IN AND OUT OF SCHOOL

Introduction:

Diversity in classroom means the condition or result of being changed. Diversity in Classroom or Classroom with Diverse Learners refers to an inclusive classroom consisting of diverse students who differ in their intelligence, language ability, interests, aptitudes, learning style and socio-economic status.

Meaning of diverse classroom:

Making sure each student feels like they belong in the classroom is essential in order to maximize the effectiveness of the learning process. If a student does not feel like they belong, or that they are not valued for who they are, they are less likely to have any interest in being involved in the class. Teachers will notice decreased participation, low self-esteem, short attention spans, and general feelings of detachment from students who are struggling to feel included. Teachers cannot afford to treat every student in the class the same. Uniform standards do not apply when there is necessarily a lot of diversity in the Classroom. Therefore, teachers should really think about how to make the classroom as inclusive as possible.

A classroom consisting of students with much dissimilarity is known as diverse classroom.

Diversity in classroom

- Culturally diverse

- Colour diversity
- Gifted and talented
- Slow learners
- Psychiatric or cognitive disabilities
- Deaf and hearing impairment

Definition of diverse classroom:

“ A process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion from education and from within education”.

-UNESCO

Teaching in a diverse classroom

A diverse class, teachers’ instructional activities should be such that they fulfill the learning needs of all students i. e. teachers should take into account the abilities of students and implement ‘differentiated instruction’ in the classroom. There are three important aspects in this method of teaching.

- Differentiating content to be learned
- Differentiating learning process
- Using different methods for evaluating learning

(a) Differentiating Content to be Learned

- Different topics of the curriculum, practical skills and positive attitudes to be developed.

- Demonstration, using audio-visual aids, lecturing, explaining, discussing, using graphical representations.

(b) Differentiating learning process

- The teacher may arrange with the support of the school administration, for learning activities which are helpful for reflective thinking such as Workshop, Group Learning, utilizing the Learning Resource Centers etc.
- The teacher arranging for group learning, by forming learning groups each having both boys and girls, will help to promote social skills and harmonious behavior of functioning with understanding the differences among the people.

(c) Using Different Methods for Evaluating Learning

- In addition to the traditional methods of evaluation like using written tests and examinations.
- Teacher can adopt novel methods of evaluation such as Quiz Programme, Objective type test consisting of Multiple Choice test items only, practical examination, evaluating student's project work, evaluating student's assignments.
- Teacher can compare students' evaluation with his own evaluation and finalize the evaluation of each students learning achievement.

Besides these vital instincts from which the impulse to learn springs, there are some physical agents which enable a child to acquire skills and knowledge.

They are as follows:

1. The hands - Learning by touching and doing.
2. The eyes - Learning by seeing.
3. The ears - Learning by hearing.
4. The mouth - Learning by saying.
5. The nose - Learning by smelling.
6. The tongue - Learning by tasting.

These senses should be utilized as much as possible in our methods of teaching do creating effective teaching-learning situation in diverse classroom.

Preparation of Teachers of diverse classroom:

- Intensive teaching practice in a proper classroom environment in schools, student-teachers should develop the important teaching skills such as skill of set induction, skill of explaining, skill of questioning, skill of demonstration, skill of blackboard writing, and skill of closure through '**Micro-teaching**' programme.
- Before moving on to intensive teaching practice in a school setting, student-teachers should be asked to observe '**peer teachings**' besides analyze them, listen to their subject professors and understand the various techniques of teaching a concept in the subject.
- For getting a firsthand experience, student-teachers should be asked to visit government schools where students from the weaker sections of the society are studying in large numbers, special schools for the challenged, schools for mentally retarded, residential schools, international schools and similar other institutions and observe their programmes.

- In addition to getting various types of teaching experiences such as visiting the slums and villages nearby during weekly holidays and engage themselves in literary movement, creating awareness with respect to maintaining good health, importance of balanced food and simple ways of preparing them, promoting personal hygiene and similar other social service programmes.
- Teacher trainees, during their internship should be trained in the teaching methods to diverse students employing different teaching strategies and approaches, help to develop social concern, social awareness, they could be prepared to teach in a diverse classroom.

Diversity in the classroom:

Each student in a classroom brings something new and distinct to the table, including world views, backgrounds, experiences, cultural contexts, preferences, dislikes, personalities, etc. Since diversity is something that needs to be fostered in the classroom, here are a few tips that teachers should keep in mind.

1. Understand the students:

One of the best ways to foster an inclusive environment in the classroom is by understanding each individual student. Take the time to understand the strengths, weaknesses, personality traits, and learning styles of the students in your classroom. As a teacher, this level of engagement with the students shows that you have a vested interest in their success. Always remember that all students learn differently, so by taking the time to understand each student, you will also make teaching process easier on you.

2. Incorporate different teaching styles:

As mentioned, each student learns in different ways. Some students may be more visual than others, while some students may be more hands-on in terms of learning. By incorporating different teaching styles to accommodate different ways of learning, not only do you ensure that each student is learning the material effectively, you also broaden students abilities.

If students who typically learn better in one specific way are constantly exposed to a variety of different learning methods they may become inclined to try different approaches to learning. This will help them to push their limits and really step outside of their comfort zones.

Learning Styles in a Diverse Classroom

Eddy (1999) describes a learning style as the way in which we prefer to organize, classify and assimilate information about the environment.

Auditory learners

Auditory learners prefer to receive ideas and information by hearing them. These students may struggle with reading and writing, but excel at memorizing spoken words such as song lyrics.

Visual learners

Visual learners prefer to receive information by seeing it. Outlines, graphs, maps and pictures are useful in helping these students learn.

Kinesthetic

These students are often labelled “hyperactive”. It is important to note that the various styles are those preferred by learners. But we could also probably identify our dominant style. Sensitive teachers can allow for group work during class to create smaller, safer environments for these students to speak and for their classroom performance to be evaluated.

Students Special Needs

Some students will have unique challenges that make learning in a traditional classroom difficult. Example includes visual or hearing impairments, attention deficit disorder, mobility challenges, chronic illness, and learning disabilities. Below are suggestions to consider when you work with students with special needs:

- Even though two students may have the same disability, their needs for accommodation may be quite different. Treat each student as an individual.
- Keep in mind that disabilities are not always visible to us. You are not required to assess a student’s health; you should accept authorized documentation concerning an individual student’s needs.
- Using many modes to present information is one way to help some learners with special needs learn more effectively.

Purpose of learning in and out of school

Purposes of learning in the school

- To develop in students cognitive and physical skills required for leading a successful day to day life.

- Providing adequate opportunities for students to get training in higher order mental abilities such as inquiry, logical thinking, value analysis and clarification and solving problems faced in day to day life.
- To make students learn the elements of culture in which they live (language, social practices, values and beliefs, the knowledge and technology, social traditions and practices, ethics and laws accumulated and conserved over generations).
- To make them learn good conduct, ethical behavior and personal hygiene.
- To make them acquire the basic knowledge of vocational skills to become self-reliant in their future life.
- To prepare them to become good citizens to discharge their duties.

Purposes of learning out of school

A change in the life style of the majority of a community or society is called 'Social change'. It includes a wide variety of changes ranging from a change in dress habits, food habits, marriage rituals, techniques of production and distribution of goods, artifacts, tools and techniques used, transport and communication facilities etc. to a change in language and literature, customs and traditions, beliefs and values, attitudes, rules and laws etc. A change in one or more of the culture-components or all of them may be termed as 'social change'.

Important purposes of learning outside the school are:

- Developing in students, keen observation, ability to select and use tools and techniques appropriately according to the situations, developing scientific temper and aesthetic sense.

- Developing social skills like collaborating with fellow students and sharing learning with others.
- Getting training in context-specific skills.
- Verifying the information already received results of classroom debates and results of individual tests.
- Collecting basic information about a particular lesson.

Meaning of observational learning

Observational learning involves as individual keenly watching. Particular task, understanding the components of the task and the way they are arranged, remembering these details, trying himself to do task repeatedly a number of times, eliminating the errors in the performance and getting the ability to perform the task more or less. Learning by observation, helps to develop in children language and physical skills, moral behaviour, social attitudes etc.

Importance of observation learning out of school

Importance of observation

Observational Learning states that we learn mimetically. This mimetic learning theory has 4 essential factors which allow for successful Observational Learning: attention, retention, reproduction, and motivation.

From role models, adolescents are able to learn the meaning of:

- Manners

- Hard work
- Communication
- Aggression
- Power
- Teamwork
- Motivation
- Prejudice
- Tolerance
- Confidence
- Doubt

The four stages of observational learning are:

- Attention
- Retention
- Production
- Motivation

Examples of observational learning include:

- An infant learns to make and understand facial expressions.
- A child learns to chew
- After witnessing an older sibling being punished for taking a cookie without asking, the younger child does not take cookies without permission.
- A newer employee avoids being late to work after seeing a co-worker fired for being late.

- A child learns to walk.
- A child learns how to play a game while watching others.
- A child shows that she has learned the basic steps of cooking a meal by doing so at a play kitchen in her classroom.
- A child learns a science concept by demonstration from the teacher.
- After watching her mother, a young girl shows she has learned how to hold a baby by walking around with the baby in her arms the correct way.
- An inexperienced salesperson is successful at a sales meeting after observing the behaviors and statements of other salespeople.
- A child shows observational learning of how to drive a car by making appropriate motions after seeing a parent driving.
- A young boy swings a baseball bat without being explicitly taught how to do it after attending a baseball game.
- A young girl watches a basketball game, and then shoots hoops without being explicitly taught how to do so.
- Without previous experience, a child puts on roller skates and skates without being taught.
- A student learns not to cheat by watching another student be punished for cheating.
- A girl sees another child fall on ice in front of her so she avoids stepping on the ice.
- A person moves to a new climate and learns how to properly remove snow from his car after watching others.
- A tenant sees a neighbor evicted for late rent payment and as a result consistently pays her rent on time.

- A new customer in a store learns the process for lining up and checking out by watching other customers.
- A woman in a clothing store learns the procedure for trying on clothes by watching others.
- A man in a coffee shop learns where to find cream and sugar by watching other coffee drinkers locate that area.
- A new car salesperson learns how to approach potential customers by watching others.
- A girl learns how to mow her own lawn by watching neighbors mowing their lawns.

Observational Learning

The process of learning by watching others is called Observational learning. It is classified as a form of social learning, and instead of reinforcement the learning occurs through social role models like parent, teacher, sibling, or a friend.

For example:

- A child learns to make and different facial expressions by observing his/her mother.
- A child learns to walk through observation.
- A newer employee is always punctual after seeing a colleague get fired for being late.

Advantages of Learning outside the classroom

- Students develop learning and other skills and gain meaningful knowledge that will help them throughout life.
- It can help to built social skills and self esteem.
- And also students gain more emotional and cognitive support from their peers.
- The relationship between rights and responsibilities is learned.
- Students discover that learning is interesting and fun.
- Teachers have less traditional work to do.
- Students are more attentive and willing to participate in the class.
- Complaints about irrelevance and unfairness decrease.
- Reports and papers generated by students increase a teacher's collection of useful information.
- The pupil has more of an active role to play in their learning.
- Students can adapt the way they learn to make their studies more effective.
- The ideal situation for this type group work is that weaker students should be placed with more able students to act as scaffolding.
- Students work on projects or problems in teams with both personal and team accountability for conceptual understanding.
- Students work together in achieving goals by upholding the norms of the group.
- Students are actively helping and motivating spirit to succeed together.

Advantages of learning outside the classroom

- Gives first hand or quality experiences.
- Helps students to have close contact with the environment.
- Develops the power of observation and reasoning skills.

- Encourages active learning in students.
- It socializes the school activities; school and community get closer.
- It paves the way to collect materials for forming a school museum/exhibition.
- It develops social skills in students.
- It provides opportunities for collaborative learning and sharing of learning.
- It helps the learners to function actively and make their knowledge meaningful and also enlarge it.
- Develops the skill of problem-solving in students.

Advantages of learning by using websites

- Develops the ability to derive meaning and engage in active discourse.
- Encourages the learners to collect the information they need and develop their own knowledge.
- Provides for the teacher and the taught to share information mutually.
- It is learner-centered.
- It encourages learner's active participation and knowledge-construction.
- It encourages active learning among the learners.
- It helps both the teacher and students to have interaction at different levels.
- Focuses on real-world events and problem-solving.

Approaches to Learning outside the Classroom

The traditional view that, out of school learning refers to learning through non-formal method in a social environment by using community resources like hospitals, engineering industries, botanical gardens, zoo, museum, science centres, libraries e work an industrial units etc., has undergone change in automobile workshops, bakery shops, various recent times.

In Out of school learning, usually three approaches are followed. They are

- Providing Field Training
- Field Research
- Internet web-based learning

Field Training

It is also known as "Field Trip". It is a training designed for students to get full sensory experiences with things and phenomena which cannot be brought into the classroom. It refers to the learning which takes place outside the classroom and laboratory. In this, there are three phases (or stages).

i) Pre-field Stage: When teaching a topic in the class, the teacher gives an outline of the key concepts present in it; he asks the students to study the topic in the text book with more concentration; he displays the topic-related video cassette/slides.

ii) Field Work Stage: Teacher makes necessary arrangements for the field trip and reaches the particular place with students and gives brief directions to the students by way of providing about things they have to see, information to be gathered and facts/scenes they have to record. Accordingly students collect information and record visuals. If possible they record their interpretations too.

iii) Post Field Stage: After returning to the classroom, teacher and students discuss about what they had seen and heard Lastly, they submit their assignments individually to the

teacher based on the observations they made and the experiences they had, in the form of reports, diagrams, stories, poems, essays etc. Teacher evaluates and return them with feedback.

This approach, if properly implemented students will report to the class about the scenes they have observed or the information they have collected about the process / activities, and recorded with their own interpretations based on the information they received in the classroom.

This approach helps students to get direct experiences through teacher's well-structured learning situations. Even those students, who could not get such personal experiences can, by using the notes given by the teacher, collect and interpret the data.

Using Field Trip as an Aid to Teaching

The following points have to be borne in mind in using field trip as an aid to teaching:

- The teacher must preview the place, after determining the purpose of the field-trip.
- He must make necessary arrangements with the school authorities and the authorities concerned with the places to be visited.
- He must prepare the pupils physically and mentally for the trip. The pupils must feel the trip essential and interesting. They should be very clear about what they are to look for.
- Throughout the trip, the teacher should function as a prudent guide. He must allow the pupils to observe for themselves, take notes, draw sketches, collect materials, specimens and so on.

- Follow-up-work reinforces learning. After the field trip, the teacher may initiate on the trip. Pupils may read out their recorded observations, ask questions, arrange for an exhibition or conduct an experiment in the laboratory to verify the same Phenomenon observed during the trip and so on.
- The teacher must evaluate the field-trip in terms of specific educational gains.

Field Research

Steps involved in Field Research are:

- Sensing the Problem: From what the teacher explained regarding the subject matter in a topic or as a result of what the students have learned from their own observations or due to personal interest, students will select the problem for which solution is to be found.
- Formulation of Hypothesis: Based on critical thinking about the problem, reading related books or discussing with fellow students / the teacher, students may propose a statement considered to be the solution for the problem under study.
- Undertaking Field activities to collect the required data to test hypothesis.
- Data Analysis: Processing the information or raw data, classifying and tabulating the data, and make useful and purposeful statistical analysis.
- Hypothesis Testing: On the basis of the findings obtained in statistical analysis, accepting the hypothesis as a solution to the problem or rejecting it.
- Preparing a short write up of the method for solving the problem identified initially.

In this approach, both inductive and deductive reasoning are made use of. In this procedure, skills like observation, collecting information, describing and explaining the data

collected etc. are used, centering around problem-solving. This approach is based on problem-solving using the scientific method.

Learning Through Websites

The steps involved in learning through websites are given below:

- With a computer having internet connection, searching websites related to the topic to be studied, using search engines like Google.
- Selecting the appropriate websites related to the topic to be studied and surfing them with the help of the browser.
- Finding out the relevant information from the websites visited; downloading and storing them in the computer as a file.
- Taking print out from the saved file; if it is to be shared with others, sending the downloaded file through e-mail to them.
- The collected information may be processed, sequentially arranged and prepared in the form of an essay which will include text and pictures (Report submission).

Advantages of Learning outside the Classroom

Advantages of Learning Through Field Trip or Field Research

Gives first hand or quality experiences. One can find natural phenomena in their proper background.

- Helps students to have close contact with the environment.
- Develops the power of observation and reasoning skills

- Encourages active learning in students.
- It socializes the school activities; school and community get closer.
- It paves the way to collect materials for forming a school museum/exhibition.
- It develops social skills in students.
- It provides opportunities for collaborative learning and sharing of learning.
- It helps the learners to function actively and make their knowledge meaningful and also enlarge it.
- Develops the skill of problem-solving in students.

Advantages of Learning by Using Websites

- Advantages of learning by using web sites are:
- Develops the ability to derive meaning and engage in active discourse.
- Encourages the learners to collect the information they need and develop their own knowledge instead of one person providing tailor-made knowledge to others.
- Provides for the teacher and the taught to share information mutually.

- It is learner-centred.
- It encourages learners' active participation and knowledge-construction.
- Fosters the higher order cognitive abilities like analysis, synthesis and evaluation.
- It encourages active learning among the learners.
- Allows for group learning too; develops cooperation and understanding among the group members.
- It helps both the teacher and students to have interaction at different levels.
- Focuses on real-world events and problem- solving.

Limitations of 'Learning Outside the Classroom'

The challenges faced in the learning outside the school are:

- Supervising large number of students and providing them the help required.
- Difficulty in framing the school time table.
- If some students miss a lesson, it will be difficult to arrange a learning session for them to learn that topic/lesson.

- It is a challenging job to arrange and conduct a field trip.
- It is very expensive (Travel and stay expenses)
- Lack of knowledge about the place where the field study is to be undertaken.
- Ensuring the safety of students.
- Most of the students lack the ability to collect the needed information and interpret the same.
- The danger of treating the field trip and field study as an excursion or pleasure tour.

UNIT-III

THEORY OF CONSTRUCTIVISM AND LEARNER CENTERED TEACHING

CONSTRUCTIVISM

Learning is the process of learner making the information he receives meaningful in the background of his social and cultural environment and registering it in his memory .

Meaning of Constructivism

- Constructivism is a learning theory found in psychology which explains how people might acquire knowledge and learn. It therefore has direct application to education. The theory suggests that humans construct knowledge and meaning from their experience.
- Piaget's theory of Constructivist learning has had wide ranging impact on learning theories and teaching methods in education and is an underlying theme of many education reform movements.
- Constructivism is a theory about how students learn. Constructivism is an idea that learners construct knowledge for themselves.
- Constructivism is first of all a theory of learning based on the idea that knowledge is constructed by the knower based on mental activity.
- Constructions of meaning may initially bear little relationship to reality, but will become increasing more complex; differentiated and realistic time goes on.
- The physics education research group at University of Massachussets defines the premises of constructivism as follows:
 - Knowledge is constructed, not transmitted.
 - Prior knowledge impacts the learning process.
 - Initial understanding is local, not global.
 - Building useful knowledge structures requires effortful and purposeful activity.

Some of the tenets of constructivism in pedagogical terms are:

1. Students come to class with an established world-view, formed by years of prior experience and learning.

2. Even as it evolves, a student's world view filters all experience and affects their interpretation of observations.
3. For students to change their world view requires work.
4. Students learn from each other as well as the teacher.
5. Students learn better by doing.
6. Allowing and creating opportunities for all to have a voice promotes the construction of new ideas.

Constructivism: Definitions

Joseph Novak (1986) defines, "Constructivism as the notion that humans construct or build meaning into their ideas and experiences as a result of an effort to understand or make sense of them".

According to **Duckworth (1989)**, "All people have their own understanding; one cannot make them believe anything unless they construct it by themselves".

Khadar (2005) defines constructivism as "construction of knowledge in the sense that learners actively construct their own knowledge by linking new information to their existing knowledge on the basis of materials presented to them".

Mascolo and Fisher "Constructivism is the philosophical and scientific position that knowledge arises through a process of active construction".

Brook "As long as there were people asking each other questions, we have had constructivist classrooms. Constructivism, the study of learning, is about how we all make sense of our world & that really has not changes".

Piaget “How humans make meaning in relation to the interaction between their experiences & their ideas”.

Lev Vygotsky “During the infancy, constructivism examined the interaction between human experiences & their reflexes or behaviour patterns”.

The nature of constructivist learners:

- In the policy of constructive ism, the learners should assemble to a centre.
- The students can learn as per their ability and skill.
- They could receive practical experience; therefore, the wealth of education never be obliterated from their brain.
- Teacher and students’ relationship are regarding the respects. The respects are intellectual respects and age respects. But here, the teacher and students’ relationship are a combined respects and each one should skim their dominance over others.
- They should exchange their concepts openly between them.
- They should not hide their views and ideas.
- In this method, each one evaluates their self values.

According to **Cunningham and Duffy**, (a) acquiring knowledge is not acquisition of information; it is the process of knowledge construction which involves examining the received information, using one’s own experiences, understanding their meanings and transforming them as knowledge. (b) Teaching is helping to students to construct their knowledge; it is not just an act of dispensing knowledge.

According to **Jerome Bruner**, learning is an active process. In this, learners with the help of their previous and present knowledge understand new ideas.

Learner is fully responsible for his/her learning

As understanding results from the experience gained through learner's interactions with learning materials, getting direct experiences through active participation of learners in learning activities is emphasized.

Learner's Motivation is a Must

As Van Glaser field (1989) states, only those who have confidence in their ability to learn, are motivated to continuously involve themselves in learning activities.

Learner gets involved actively

Learning takes place through various activities such as interaction with the teacher and students, working together with others, searching for answers through inquiry, reflecting upon their experiences etc.

Collaborating with peers in learning activities

It is also necessary for students to collaborate with others and share each one's experiences, to know the possible interpretations that could be offered from different angles. Then only they can obtain the complete interpretation of what are learned.

Adopting enquiry approach

The constructivist classroom provides opportunity to the students for solving problems. The students will involve themselves in the activities such as questioning,

approaching variety of sources for solutions, critically analysing the information received etc. Hence it is necessary for the students to have the critically examining mindset.

Reflecting on the learning experiences

It is not enough to gain direct experiences by getting involved in learning activities; reflecting on them, selecting the appropriate ones and integrating them with one's existing knowledge alone will lead to true learning.

The nature of learning process

The classroom is so designed as per the environmental application so as the students should feel comfortable in heart and mind. The teachers and the student's relationship have interwoven democratically to them. On the whole, the teachers and students and socially exchanging their concepts in the classroom. The policy of constructivism is designed to particularize learning basic objects.

- Question-Answer Education
- Self-Research Education
- Practical way of Education
- Education through solved problem

Learners control their learning. The simple truth lies at the heart of the constructivist approach to education.

Constructivism and Learning

- Learning is not a passive receptive process but is instead an active meaning-making process required to solve meaningful problems new learning depends on learner's previous knowledge which may sometimes interfere with the understanding of new information.
- Learning implies the reorganization of prior conceptual schemes.
- Learning is facilitated by social interaction.
- Meaningful learning occurs within authentic learning tasks (Sharma,2006).
- Learning environment in constructivist approach supports knowledge construction and multiple perspectives.
- The teacher should also be flexible in evaluating different student outcomes and products which will be present in a constructivist classroom.

Constructivism is a Learning Theory

- Learning is an active process
- Knowledge is constructed from experience
- Learning is a personal interpretation of the world
- Emphasizes problem solving and understanding
- Uses authentic tasks, experiences, settings, assessments
- Content presented holistically-not in separate smaller parts.

Constructivism is a process-The Instructor

- Adapt curriculum to address student's suppositions
- Help negotiate goals and objectives with learners

- Pose problems of emerging relevance to students
- Social context of content
- Provide multiple modes of representation/perspectives on content
- Create new understandings via coaching, moderating, suggesting
- Testing should be integrated with the task and not a separate activity
- Use errors to inform students of progress to understanding and changes in ideas.

Constructivism is a process- The Student

- Help develop own goals and assessments
- Create new understandings
- Control learning
- Member of community of learners
- Collaborate among fellow students
- Learn in a social experience-appreciate different perspectives
- Take ownership and voice in learning process.

Pedagogical approaches to constructivism

Constructivist approach is based on the belief that the student as a learner can construct his/her own knowledge with the help of his/her previous experiences and through interaction with the social environment around him/her. The teacher has the important role as the facilitator of learning. Collaborative approach and Cooperative learning approach are considered the pedagogical approaches to constructivism.

Collaborative learning approach

Collaborative learning is a method of teaching and learning in which students and teachers' team together to explore a significant question or create a meaningful project. Collaborative learning refers to methodologies and environments in which learners engage in a common task where each individual find on and is accountable to each other's.

- Students organize their efforts between themselves
- Students source material to help them complete the activity.
- The activity is not monitored by the teacher.
- Students assess their own individual and group performance.
- Success depends on individual strengths.

The collaborative and cooperative approaches would demonstrate the nature of the collaborative learning.

- Collaborative learning can take place any time student's work together, for example, when they help each other with homework. Cooperative learning takes place when students work together in the same place on a structured project in a small group.
- Collaborative learning is more a qualitative approach, analysing student's talk in response to a place in literature or a primary source in history.
- In the collaborative learning approach, once the task is set which is always open-ended, the teacher transfers all authority to the group. It is up to the group to plan and perform the task as per their combined effort.
- Collaborative learning truly empowers students where as cooperative learning does not.

- Collaboration in education is a dialogue between the student, teacher and the curriculum. Students are viewed as problem solvers, and problem solving and inquiry approaches are employed for emphasizing cognitive skills.

Advantages of Collaborative Learning:

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

Celebration of diversity:

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

1. Acknowledgment of individual differences:

When questions are raised, different students will have a variety of responses. Each of these can help the group to create a product that reflects a wide range of perspectives and is thus more complete and comprehensive.

Interpersonal development:

Students learn to relate to their peers and other learners as they work together in group enterprises. This can be especially helpful for students who have difficulty with social skills. They can benefit from structured interactions with others.

Actively involving students in learning:

Each member has opportunities to contribute in small groups. Students take more ownership of their material and think critically about related issues when they work as a team.

2. More opportunities for personal feedback:

Because there are more exchanges among students in small groups, students receive more personal feedback about their ideas and responses. This feedback is often not possible in large group instruction, in which one or two students exchange ideas and the rest of the class listens.

Cooperative Learning Approach:

Cooperative learning is a specific small group approach that incorporates democratic processes, individual accountability, equal opportunity and group rewards. The cooperative learning model aims at achieving at least three important instructional goals: Academic achievement, acceptance of diversity and social skill development.

In contrast to collaborative learning, a cooperative learning structure takes the following guidelines:

- Activities are structured with each students assigned a specific role.
- Teachers supply information for students to read and analyse.
- Teachers observe, listen and intervene where necessary.
- Students submit work at the end of lesson for evaluation/assessment.
- The success of the group depends upon the efforts of everyone involved.
- Students are learning independently to fulfil the thirst of knowledge.
- It forces the students to think and it helps him to improve the skills.

- The lessons are, so devised as per the needs of student's expectation.
- It induces the students to self-learning creative ideas, clarity, decision making.
- It helps them to apply their acquired knowledge in their practical life.

Advantages of Cooperative Learning:

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

The benefits of pedagogical approaches to constructivism:

- By working with their classmates, students come to recognize, understand and respect cultural differences perspectives.
- Performance is improved. With collaborative/cooperative methods much more valuable than individualistic ways of building student performance and progression.
- Group work helps students who have difficulty with social skills. Providing a safe and structured space to interact with others.
- Confidence is emboldened, with students able to recognize and value the importance of their contributions.

- Inclusivity is encouraged. There is no such thing as an average child, and collaborative/ cooperative methods allow each child to work to their strengths. To help with this, tools such as study groups based on each pupil's ability.

Characteristics of Learner-Centered Teaching and Learning:

1. Catering Multiple Learning Styles

Teacher's classroom teaching activities will be so structured to satisfy the needs of the students, having different learning styles i. e. those who are interested in learning by seeing, learning by listening, learning by doing, individual study, group study etc. For example, teacher's classroom activities involve demonstration, explaining with models, helping to learn by providing assignments, discussions, making students to undertake library work, taking up and completing project work, lecturing, undertaking field work and several such learning activities.

Promote Learning Skills in Student

The teacher uses different types of teaching skills like questioning, using stimulus variation, reinforcement, using blackboard, set induction, explaining, illustrating with examples etc, similarly students are also provided ample opportunities in learner-centered teaching to develop and refine various learning skills such as reflecting, problem-solving, evaluating with evidences, forming hypotheses, analysing the arguments placed before them, reading books with good comprehension etc.

Giving importance for Group Learning

Student-centered teaching gives much importance to student's group learning. It uses those instructional methods which provide opportunities to students to discuss among themselves, work cooperatively ;and share their learning with others such as Project method, Debate, Seminar, Brain-storming, Cooperative Learning, Collaborative Learning and Group Discussion etc.

Using student's prior knowledge effectively

- Teacher's classroom teaching activities will be such that helping students to reconstruct their knowledge i.e. helping them to make use of their prior knowledge and experiences to understand the new information provided by the teacher in the class.
- One of the salient features of Student-Centered Learning is teacher's teaching activities in it be organized in such a way as to give importance for making students know what they will learn and how they will assess their own teaching.
- In student-centered teaching, teacher's classroom activities are so organized as to make students actively involve themselves with enthusiasm.
- In student-centered learning, teacher's classroom activities facilitate students to learn by themselves, evaluate their work and direct their learning.

Learner-Centered teaching encourages collaboration

- Learner-centered teachers work to develop structures that promote shared commitments to learning.

Learner-Centered teaching motivates students by giving them some control over learning processes

- Learner-centered teachers search out ethically responsible ways to share power with students.

Learner-centered teaching engages students in the hard, messy work of learning:

- On any given day, in most classes teachers are working much harder than students.

Learner-centered teaching includes explicit skill instruction:

- Learner-centered teachers teach students how to think, solve problems, evaluate evidence, analyse arguments, generate hypotheses all those learning skills essential to mastering material in the discipline.

Learner-centered teaching encourages students to reflect on what they are learning and how they are learning it:

- They challenge student assumptions about learning and encourage them to accept responsibility for decisions they make about learning, like how they study for exams, when they do assigned reading, whether they revise their writing or check their answers.

Advantages of Learner-Centered Teaching

- Students develop learning and other skills and gain meaningful knowledge that will help them throughout life.
- It can help to built social skills and self esteem.
- And also students gain more emotional and cognitive support from their peers.
- The relationship between rights and responsibilities is learned.
- Students discover that learning is interesting and fun.

- Teachers have less traditional work to do.
- Students are more attentive and willing to participate in the class.
- Complaints about irrelevance and unfairness decrease.
- Reports and papers generated by students increase a teacher's collection of useful information.
- The pupil has more of an active role to play in their learning.
- Students can adapt the way they learn, to make their studies more effective.
- The ideal situation for this type group work is that weaker students should be placed with more able students to act as scaffolding.
- Students work on projects or problems in teams with both personal and team accountability for conceptual understanding.
- Students work together in achieving goals by upholding the norms of the group.
- Students are actively helping and motivating spirit to succeed together.
- Active roles as peer tutors to further enhance the group's success.
- Interaction between students with increasing their ability to argue.

Advantages of Teacher-Centered Learning

- In teacher-centered learning, classroom will be quiet and orderly.
- Classroom activities and climate will be under the full control of the teacher.
- Teachers get more opportunities to monitor and control the teaching-learning activities.
- Teacher-centered learning helps teaching students to achieve lower order cognitive objectives such as knowing the information and understanding them.

- In the teacher-centered learning, as student-activities are not much, more time could be spared for teaching. It enables students to learn more amount of subject content to more number of students.
- Teachers will his limited resources could deliver large amount of subject content to more number of students.
- Teacher-centered teaching is more flexible.
- Teacher could plan his teaching, taking into account the needs of the subject, student's intellectual level and their interests and teaching resources available.
- Teacher can adopt teaching strategies like story-telling, illustrating with suitable analogies, demonstrating, using instructional aides, putting questions intermittently during teaching to make sure that the students have understood the subject content taught to increase the effectiveness of his teaching.
- By using verbal reinforces like praising and approval, non-verbal reinforces like gestures and postures, teacher could motivate the students and reinforce their desirable behavior.
- It enables the teacher to ensure continuity between the ideas expressed and also use the logical method.
- Teacher's charismatic personality and fluent language stimulate students to learn with enthusiasm in the classroom.

UNIT - IV

MODELS OF TEACHING

Model of teaching: Meaning, definitions, and function-Models: Philosophical teaching models: Insight model (Plato) Impression model (Jhon Locke) and Rule model (kanl)-

Psychological models: Basic teaching model (Robert Glasser), Interaction model (Flander) and Computer based model (Daniel Davis) – Modern teaching models; Information processing models -, Personal models, social interaction models and Behavior modification models.

Models of Teaching

Concept

Teaching model is kind of detailed plan of teaching a lesson that could lead to effective learning. It may be called as instructional design prepared for teachers for effective teaching-learning process.

Definitions

According to Bruce Joyce and Marsha well, “Teaching models are just instructional designs. They describe the process of specifying and producing particular environmental situations which cause the student to interact in such a way that specific change occurs in his behavior

Basic Elements of Teaching Models

Generally a teaching model is described in context with some fundamental elements. In the present text, we would be using the following six elements

1. Focus
2. Syntax
3. Principles of reactions

4. The social system

5. The support system and

6. Application context

1. Focus

Focus is the central aspect of teaching model

2. Syntax

Syntax describes the phase of the model. It describes the term of sequences of activities called phases. The phases are

- a) Presentation of data- teacher introduces about activity
- b) Analysis of hypothesis- formation of hypotheses – teacher reaction –rejection and confirmation of hypothesis –more examples
- c) Closure-unorganized
- d) Practice

3. Principles of reaction

The element is related to reaction of teacher and students. It informs the teacher how to regard the learner and how to respond to the reaction of students. Teachers also react for wrong answer, aware students, encourage students

4. Support System

It Refers to additional requirements beyond the usual human skills, capacities and technical facilities necessary to implement a model. E.g., some support is used in the classroom by teachers as blackboard, flash cards, flannel board etc ‘

5.Social System

It describes interaction between student and teacher. It signifies the social role, norms, social control and reasonable freedom

6. Application

Model helps the learner to apply the learnt things in different situations. Students can apply their knowledge in various discipline, language math etc. Model can be applied in different curricula and classes

TEACHING MODEL: CHARACTERISTIC

The Characteristic of teaching model is mentioned below

1.Detailed plan

Teaching model is regarded as detailed plan. It includes construction of curriculum or course, selection of intuition materials, guidance to educational activities to teacher, creation of particular environment situation and change in the behavior of students

2.Goal oriented

Teaching model intends to achieve certain kind of goals. It is designs to attain the specified goal of curriculum

3.Effetive teaching

The model is used to facilitate the teacher so that they can teach concepts to students. it helps to design educational activities and environments

4. Scientific Procedure

Model related teaching and learning process systematically

5. Research work

Model emerged out of the study of thinking process of human being

SOURCES OF TEACHING MODEL

Social Interaction Source

In this category all model of teaching emphasise the importance of social relationship of the person. These are based on the assumption that social relation is the vehicle of education

The Information processing source

Another source of model of teaching is the information processing capability of the learner which means the way in which people handle stimuli, organize data, sense problems and solve them. This category of models emphasizes the use of specific strategies within academic disciplines which lead to development of creativity and general intellectual ability of the learner

3. The Personal source

The sources of this category of models are personal and emotional life of the individual and their internal organization as it affects relationship with his environment

4.Behaviour Modification as a Source

The operant conditioning theory built by B.F.Skinner emphasized model it is used in most of the teaching strategies developed in the last two decades

TEACHING MODEL:FUNCTIONS

In teaching models, the following six functions are included

- To give practical shape to the learning achievement
- To select stimulus so that pupil may give may give expected response
- To specify such situations in which the response of the pupils may be seen
- To determines such criterion behavior so that the performance of the pupils may be seen
- To specify the specific teaching strategies for achieving the desirable educational objectives by analysing the interaction in the classroom situations
- To modify the teaching strategies and tactics if the expected changes in the behavior do not occur

PHILOSOPHICAL TEACHING MODELS

Plato's Insight Model of Teaching

This model of teaching is developed by Plato. The insight model represents a completely different approach. The Impression model assumes that the teacher has to convey ideas or knowledge into students' mental store hours. This model defines the very possibility. It is vision or sight into meaning which makes the crucial difference between

simply storing and reproducing learned sentences, on the other hand, the understanding of their basis, and an application on the other

Augustine argues roughly as follows. The teacher is commonly thought to convey knowledge by the use of language. But new knowledge cannot be conveyed simply by words sounding in the ear. Words are mere voices unless they signify realities present in some way into the mind. Teacher's words prompt the student to reach realities not already known by him

The insight model is strong whereas the impression model is the weakest. The insight model makes use of prompting theory it is specifically cognitive in emphasis, and cannot readily be stretched so as to cover the concepts of character and the related notions of attitude and disposition . it provides a role for the concept of principles, and the associated concepts of reason.

This model is an answer to the impression model. This insight model discards the assumption of impression model that the meaning of a teaching model is merely to deliver the knowledge or ideas through teaching to the mental domains of the pupils. It is the belief of insight model that the knowledge cannot be provided merely through the expressions of sense organs, but knowledge of the content is also essential for this. The developer of this model was Plato. His belief was that the knowledge cannot be provided merely by speaking the words or by merely listening them. Mental processes and language both work together.

JOHN LOCKES IMPESSION MODEL OF TEACHING

This model is given by John Locke. It is the simplest model of teaching. The main assumption of this model is essentially storing the external impression to which he is receptive

The main focus of this teaching model is on an accumulation in the learner of basic elements fed in without organized and processed in standard ways, but, in any event, not generated by learner himself, instructional process of this model concerns with exercising the mental powers engaged in receiving and processing incoming ideas more particularly powers of perception, discrimination, retention, combination, abstraction and representation. In the process of learning the child gets not only sense experiences but the language and theory of his heritage is complicated linkage with relevant context. This model fails to provide place for innovation by the learner.

It is a common assumption that at the time of birth, the child's brain is blank or empty. Whatever experiences are provided through teaching, they go on learning the impression on the child's brain. The impression is termed as learning. In this learning process, the feelings of the sense organs principles of language are given more importance. The success and effectiveness of entire teaching process depends upon teacher's ability and his capability to communicate.

KANT'S RULE MODEL OF TEACHING:

The model is direct improvement over the insight model of teaching. It has been development by Kant. His primary philosophical emphasis is on reason and reason is always based on general rules or principles. This model is based upon psychological phenomenon of insight. The model includes both cognitive and moral realm.

Teaching should be geared not only to the transfer of information not even to the development of insight, but to the inclusion of principle judgment, conduct or building rational character.

This teaching model is much valuable it does not exclude the important aspects or impression and insight models. The main focus of this model is on teaching rationality in the realm of science and moral conduct. The impression model and insight model have their own limitation their drawbacks have been removed by the rule model. In this model, more importance is given to the logic power. Kant gives importance to logic power. In logic, certain rules are followed. The main function of education is to develop the character. The objective of rule model is to develop the capacities of the pupils. For this function, some particular rules are followed such as planning of teaching, organization and interactions occurs under specific rules. Cultural and moral values are developed with this model.

PSYCHOLOGICAL MODEL

It is the assumption of psychologists that the teaching model can acquire the place of teaching theories. In short, it can be stated that the teaching models are the primitive form of teaching theories. In the psychological teaching models, the relationship of teaching objective and teaching –learning activities are explained. John p. Dececco has given the psychological teaching models.

ROBERT GLASSER'S BASIC TEACHING MODEL

This Model was developed by Robert Glaser. He has used psychological laws and principles in this model. This model has the following elements:

- i) Instructional objectives
- ii) Entering behavior
- iii) Instructional procedure
- iv) Performance assessment

Basic teaching model was given by Robert Glaser (1962) and is also called as the 'basic teaching model' by him. It consists of four major components: Instructional objectives, entering Behavior, Instructional procedures and performance Assessment, with feed-back links.

1. Instructional objectives

2. Entering Behavior

3. Instructional Procedure

4. Performance assessment

Instructional Objectives are those that the students should attain upon the completion of segment of instruction. The teaching act actually starts with the formulation of objectives. A teacher is supposed to make useful statements of instructional objectives on the basis of classes of behavior given by Bloom (1956) or Gagne (1965). The basic contention is that a useful statement of instructional objectives refer to observable human performances of student behaviors the teacher can observe

Once the objectives have been determined the next step is to determine the entering behavior of the students which is to be regarded as the level on which further teaching will be based. Entering behavior described the student's level before the

Instruction begins. You can begin instruction only after deciding what you want the students to be able to do (objective) and what they can already do before they engage in a new pursuit of knowledge and skill (Entering behaviors). Entering behavior is sets of learning, learning abilities and learning styles. This requires understanding of background of the students, their previous knowledge, intelligence, aptitudes, motivational level and personally characteristics. Although this model gives priority to the selection of instructional objectives over the assessment of entering behavior, in practice these two components must interact. A change in the decision of the one component must follow a change in the second component. However, Box A and Box B have been shown to be linked with an arrow giving priority to the decision of instructional objectives

Instructional procedure is the third but the main component of this basic model. The teacher designs the instructional procedures in such a way that the objectives are realized and learning takes place. Instructional procedures will be different for teaching different subjects like language, skills, principles, problem solving etc. In the fourth phase of performance assessment the teacher evaluates the results of instruction. This is done with the help of tools and techniques of evaluation

1. Instructional Objectives

2. Entering Behavior

Feedback

3. Instructional Procedure

4. Performance assessment

If the performance assessment indicates that the learners have not been able to achieve the objectives set for them, necessary changes are brought about in anyone or

all the preceding components of this mode, so that ultimately the goals of instruction are attained. The feedback loops in the fig1 show how the changes are affected in instructional procedures, entering behavior and instructional objectives if the performance assessment reveals poor results.

Let us now examine Glasers model according to the definition of the model of teaching given earlier. Each model of teaching contains four aspects, viz, syntax, principle of reaction, social system and optimal support while syntax is the phases or steps in the teaching activity; principle of reaction implies the method of receiving the reaction of pupils, social system indicates the activities of teaching which generate optimum result and optimal support suggested the infra –structure of material which aids teaching process. The following paradigm shall illustrate the Glasers model.

INTERACTION MODEL (FLANDER)

Interaction Analysis

Classroom communication is a vital ingredient in the instructional and learning process in the school environment. It is as necessary as food is a prerequisite for healthy growth. The quality and quantity of teachers-students

interaction is a critical dimension of effective classroom teaching. The term 'Interaction' implies an action-reaction or a mutual or reciprocal influence which may be between individuals, e.g. pupil-pupil; teacher-pupil in classroom setting or between materials and individuals or groups. An interaction is usually inferred from the behavior of persons in the environment being studied. This behavior may be verbal or non verbal and can be classified as being predominantly cognitive, affective or controlling in nature.

Interaction Analysis (IA) Is an analytical observation scheme that gives and insight into what a teacher does while teaching. It is a systematic observation that represents a useful means of identifying, studying, classifying measuring specific variables as the teacher and his/her students interact with in instructional learning situation. It uses a system of categories to encode and quantify classroom behavior of teacher and students. The purpose of developing the observational system is that a teacher can be trained to use it for analyzing classroom behavior; for planning, and studying his/her teaching activities in order to create more effective classroom learning. Interaction Analysis as an observational system captures the verbal behavior of teachers and pupils that is directly related to the socio-emotional climate of the classroom.

Interaction Analysis is a process of encoding and decoding the study pattern of teaching and learning. In the coding process, categories of classifying statements are established, a code symbol is assigned to each category and a trained analyst interprets the display of coded data and reconstructs the original events on the basis of the encoded data even though he may not have been present when

data were collected. Interaction Analysis is used as a technique capturing qualitative and quantitative dimensions of teacher's verbal behavior in the classroom.

Interaction Analysis Category system was developed by Ned. A. Flanders, in the year 1959, that is why this technique of teacher training has been named after Flanders. The Flander's system is an observation tool used to classify the verbal behavior of teachers and pupils as they interact in the classroom.

Flanders Interaction analysis category system(FIAC)

Meaning

As compared to the other systems the interaction category system developed by Flanders is considered more easy. In order to classify the verbal behaviors of the pupils and the teachers, it functions as an observational tool. It has been developed to record the verbal communicating. It does not include the non verbal behaviors

Flanders has divided the classroom behaviors of the pupils and the teachers in ten categories. This classification is as follows:

1. Teacher talk - 7 categories
2. Pupil talk - 2 categories
3. silence or confusion – 1 category

Teacher talk

a. Indirect Talk

1. Accepting feelings
2. Praise or Encouragement
3. Accepting and using Ideas
4. Asking Questions

B. Indirect Talk

1. Lecturing
2. Giving Directions
3. Criticizing

Pupil Talk

1. Responding to Teacher
2. Pupil Talk Initiation
3. Silence or Confusion

Meaning of Various Categories

A. Indirect Influence

In this method of analysis, the first four categories include those activities of the teachers which influence the pupils indirectly.

1. Accepting Feelings

In this category the feelings of the pupils are accepted by the teacher. He feels himself that the pupils should not be punished for exhibiting his feelings

2. Praise or Encouragement

The teacher uses the words Good, Better, Correct etc. while appreciating the activities of the pupils. He encourages them by saying, Carry on, More ahead, Yes tell more etc. it also includes joking but not too much

3. Accepting or Using Ideas

- a. It is just like 1st category. But in this category, the pupils' ideas are accepted only, and not his feelings. If a pupil passes on some suggestion, then the teacher may repeat in his own style or words. The teacher can say, I Understand what you mean etc

4. Asking Questions

- a. It includes asking questions only. In it, there must be an answer to the question. Sometimes, teacher asks the question but he carries on his lecture without receiving any answer. Such questions are not included in this category.

B. Indirect Influence

5. Lecture

It is a sort of verbal interaction and it is used to impart the information or awareness regarding ideas. When a teacher explains something, consults something or provide

6. Giving Directions

Whatever a teacher asks pupils to do in the class is called 'giving directions'. It is included in this 6th category, such as, "all students will write it in their not books"

7. Criticizing

When the teacher asks the pupils not to interrupt with foolish questions, then this behavior is included in this category. Teachers 'what' and 'why' also come under this category

Pupil Talk

8. Pupil talk Response' It includes the pupils talk in response to teacher talk. The teacher initiates communication or contact but the pupils are not given too much freedom

9. Pupil-Talk Initiation

The pupil initiates the talk and presents his ideas. He starts new subjects. He is free to develop his attitude

10. Silence or confusion

Silence or confusion of short spans when no communication is understandable comes under this category

Constructing Interaction Matrix

During the observation procedure of interaction, the coded behaviours are written in 10x10 table. In this coding work, serial numbers of the categories are recorded. This

10x10 table is known as a matrix. Suppose an observer has noted these serial number of the categories during the observation process-6,10,7,5,1,4,8, and 4 etc. As a precaution the beginning and end of the coding should have the same numbers of the categories. There is a tradition of adding number 10 in the beginning and the end. Hence the above numbers will be written as follows"

Category No. and pairs	Tallies	Time in 3 sec
10	1	"
6	1	"
3	1	"
6	1	"
7	1	"
6	1	"
4	1	"
7	1	"
5	1	"
10	1	"

Example of Interaction Metrics

Category	1	2	3	4	5	6	7	8	9	10	Total

1											
2											
3											
4											
5											
6											
7											
8											
9											

10											
Total											

Methods of Analysis

1. Percentage of Teacher Talk

In this method of analysis percentage of the behaviours belonging to the first seven groups can be calculated with regard to the total behaviours occurred in the class

$$\text{Teacher Talk} = \frac{1 + 2 + 3 + 4 + 5 + 6 + 7}{N} \times 100$$

The tallies of first seven categories are added and divided by the total tallies of the matrix and hence the percentage can be calculated

2. Indirect teacher talk

Its percentage can be calculated by adding the tallies of the first four categories and dividing by the total tallies of the matrix (N)

$$\text{Indirect Teacher talk} = \frac{1 + 2 + 3 + 4}{N} \times 100$$

$$\text{Direct Teacher Talk} = \frac{5 + 6 + 7}{N} \times 100$$

N

Ratio of Indirect and Direct Behaviors

$$\frac{\text{Indirect behavior}}{\text{Direct Behaviour}} = \frac{1+2+3+4}{5+6+7}$$

$$\text{Direct Behaviour} = 5+6+7$$

Silence of confusion

$$\text{Percentage} = \frac{N}{10} \times 100$$

$$10$$

6. Teacher Response Ratio

$$\text{Percentage of Teacher Response} = \frac{1+2+3}{1+2+3+6+7} \times 100$$

$$1+2+3+6+7$$

7. Teacher Questioning Ratio

$$\frac{4}{4+5}$$

$$4+5$$

Advantages of Flanders Interaction Method

- It is also used for In-service teachers
- It provides feedback to the pupil teachers
- It is mostly teacher-talk oriented
- It is an analytical method to know the classroom-activities
- It is much useful in simulated and micro-teaching
- It is an effective instrument to measure the social emotional of the class

Precautions

1. Good or bad teaching behaviors should be identified so that the cause and effect relationship can be known
2. the questions which are to be asked should be developed before the observation begins

Limitations

1. It does not explain about all the class-room activities. Some behaviors are left unseen
2. It is very difficult and expensive. It is not a complete research tool in itself
3. it needs automations to collect the data which is not possible completely
4. Less attention has been paid towards pupil-talk
- 5 The training of the reliable observers is also a problem, while for other statistical problems the help of the computers can be taught

COMPUTER BASED MODEL (DANIEL DAVIS)

This model was developed by Lawrence Stolurow and Daniel Davis (1965). They divide teaching process into two phases-the- pre-tutorial phase and the tutorial phase. The purpose of pre-tutorial phase is to select a particular programme for a particular student who will achieve particular instructional objectives. In the tutorial phase- the selected programme put into use and the student's performance is mentored to find out whether a new programme may be more suitable than the original one.

The first component is that of input. At this stage following things are fed into the computer

- i. The aptitude level of the students(A_p)
- ii. The achievement level of the students(P_e)
- iii. The objectives of instruction

For objectives three factors must be taken into account

- The final level of performance(P_f)
- A given topic or subject –matter(T)
- Within a given time (t)

A_p and P_e comprise the entering behaviour of the students and p_f , T and t determine the objectives of teaching .

The second component is search and evaluation. At this stage computer makes a search for a programme in view of the given objectives of the programme and given entering behaviour of the students. There are three possibilities at this stage;

- the computer locates more than one programme.
- the computer locates one programme, and
- the computer locates no programme.

In case of the first possibility when more than one programme is located the one which costs the least or requires the least amount of time is selected for implementation. Here, we can say, the decision is guided by the economic considerations (With respect to money and/or time).

The second possibility is that only one programme is located and in such a situation the same is implemented as it is.

The third possibility is that no programme is located. In this case three changes have been suggested in the figure.

- increase the achievement level (P_e) of the students by displaying the review material.
- accept lower achievement level (P_e) for all the students.
- change the topic (T), increase time (t) or raise or lower the acceptable level of final performance (p_f).

The changes are affected till one programme is located (Represented by second possibility too). Now, after we have located one programme, we pass on to third

phase tutorial instruction, the output. This phase is comprised of two functions the teacher function and the professor function. The teacher function puts the selected programme to work whereas the professor functions are 1) monitoring the student responses as they proceed through the programme and 2) deciding changes to be made in the programme if programme is not effective.

The pre-tutorial phase of this model pertains to the first three stages of Glasers model viz. The objectives, entering behavior and instructional procedures. This model provides for adjustments to be made In these three components for smooth functioning. The tutorial phase of this model clearly exemplifies the third and the fourth components of Glasers model. The teacher function uses the procedures previously selected. The professor function is the on-going performance assessment which is used to make adjustments in both instructional objectives and procedures.

The teaching model was developed by Lowrence Stuloro and Daniel Davisw in 1965. This is the most complicated model. This model has the following elements:

- 1) Entering behavior of the pupil.
- 2) Determination of Instructional objectives.
- 3) Teaching aspect-In this element, computer teaching is selected according to the entering behaviours of pupils and instructional objectives.

The performances of the pupils are evaluated. If the evaluation is satisfactory, then another teaching plan is presented. In this model, the teaching and diagnosis go side by side. On the basis of diagnosis, remedial teaching is provided, In this model, individual differences are also given importance.

MODERN TEACHING MODELS

There is a variety of teaching models. Many attempts have been made to classify them in some specific categories.

Joyce and Weil have grouped the models on the basis of specific educational goals and means into following families:

1. Information Processing Models.
2. Social Interaction Models.
3. Personal Development Models.
4. Behaviour Modification Models.

INFORMATION PROCESSING MODELS

As the name suggests, information procession implies that this model of teaching assists the learners to develop the methods of processing information from the environment. In the words of Joyce and Weil ,” information processing refers to the way people handle stimuli from the environment, organize data, sense problems and employ verbal and non verbal symbols”. Models under this category involve more of intellectual abilities than emotional or social aspects of ones personality. Joyce and Weil include the following models under this category:

1. Concept Attainment(Bruner)
2. Inquiry Training (Suchman)
3. Advance Organiser(Ausubel)
4. Inductive Thinking (Hilda Taba)

Bruner's Model of concept Learning

J.S. Bruner proposes that economy in thinking and responding requires that we categorise phenomena according to their common attributes. An attribute is a property or characteristic of an object which differentiates it from the other. Colour, texture, form. Size, number of parts, position and sound are examples of attributes. Objects having common characteristics are categorised into one group. For example, we categorise as dogs. Similarly we can also categorise more abstract concepts such as enemy or friend, artisan or professional etc. For teaching about a concept the teacher must identify such attributes of that concept which differentiate it from others. For examples, both dog and cat have four legs and a tail, but cat has a different voice than the dog.

Experiment Conducted by Bruner

Bruner studied the strategies people use in acquiring concepts. He used a set of cards, some cards having border, others without them. All the cards have centre figures varying in shapes (square, circle or cross), in colour (red, green or black) and in number (single, double or triple) each card combines four attributes : Figure shapes, figure number, figure colour and presence or absence of borders. Each attribute has three values (variations) as listed above. The subject is told that the experimenter has a concept. The subject is asked to select a card and then told by experimenter whether or not the card was an instance of the concept. With these data in mind, the subject would select another card to determine further the attributes of the concepts. He would continue doing so till he finds the answers, i. e., the card with red circle.

STRATEGIES IN CONCEPT ATTAINMENT

1. SIMULTANEOUS SCANNING:

In it the subject uses each positive instance each correctly identified card, to deduce as to which combinations of attribute values are no longer valid. The subject must keep in mind simultaneously all the rejected combinations in order to narrow down the range of subsequent alternatives. This technique is not very efficient as it places a great strain on the subject's memory.

2. SUCCESSIVE SCANNING

In it the subject makes an overall estimate of each correct characteristics of the concept and test, each one by one. It is called successive scanning as the subject tests individual hypothesis about the correct characteristic one at a time in succession. This technique is also in efficient as the subject may choose redundant cards which give no new information.

3. CONSERVATIVE FOCUSING

In it each attribute is tested by selecting a card that is different from a focus card in only one attribute. If the new card is still a positive instance , then the subject knows that the varied attribute is not parts of the concept. However , if the changed attribute yield a negative instance, then the attribute is a part of the concept. For example , the concept to be attained is “red circles”. Suppose the subject encounters a positive cards with three “red circles” and two borders. This card becomes the focus card and each variable is examined by selecting additional cards. A plus sign in the parentheses means the card is a positive of the concept, a minus sign in parentheses that the card is negative instance.

The selection sequence is given below:

1. Four Cards: 3 red circles, 2 borders (+) 2 red circles, 2 borders (+) First decision: eliminate "Three figure" as a relevant variable
2. three green circles, 2 borders (-) second decision: retain red as relevant attribute value.
3. three red crosses, 2 borders (-) third decision: retain circle as relevant attribute value,
4. three red circles, 1 border (+) fourth decision: eliminate "two borders" a relevant attribute value

Conclusion

The concepts is "red circle"

The technique is more efficient since the subject uses a correct instance as a point of reference and selects additional cards to test each attribute value individually

5 . Focus Gambling

This strategy is called gambling since the subject takes a chance varying two attributes at a time. In it the subject focuses on a correct card, but varies more than one attribute at a time. This can give early result if cards chosen yield a positive instance. If, however, the subject encounters a negative instance, he cannot tell which attribute was essential. Hence, he has to revert to simultaneous scanning technique to test hypothesis

Educational Implications

1. Science Teaching

- a. A Bruner strategy of concept learning has been applied in science teaching. In teaching a science the use of discovery and enquiry techniques provides the pupils with experiences quite similar to the card tasks used by Bruner. For example, if the teacher wants the pupils to invent their own system of classification of plants and animals, they can do it by identifying the attribute and putting the plants or animals with common attributes in one group

2. Language Teaching

- i. The concept attainment model of teaching is widely used in language teaching as the society has devised categories of things and labels for the categories. Teaching of grammar is done through this model

3. Mathematics Teaching

- a. The concept attainment model is used in the teaching of fundamentals of mathematics

4. Teaching learning

The Concept attainment model can be made basis of extensive man-machine systems in modern teaching-learning

2. INQUIRY TRAINING

This model has been propounded by Suchman

Assumption

1. .Pupils inquire naturally when they are puzzled
2. They can be conscious of and learn to analyse their thinking strategies
3. New strategies can be taught directly and added to pupils existing ones
4. Co-operative inquiry helps pupils to learn about the tentative, emergent nature of knowledge and to appreciate alternative explanation

Model

The children are explores by nature. They are energetic adventures. They enjoy inquiry exploration and adventure to satisfy their curiosity. During the process they develop inquiry skills vigorous. But it is now believed that through systematic inquiry training these skills can be refined and improved. So the general goals of inquiry training are to help pupils to develop intellectual skills to raise questions concerning the problem form finding out answers. Suchman provides a systematic structure within which the pupils have to ask questions regarding why events happen in the way they do to collect data and process it logically to arrive at plausible cause- effect relationships .

The inquiry training begins by presenting a puzzling event, a problem or a phenomenon when pupils encounter such a situation, they are motivated to solve the puzzle. Such situations can be used to teach systematic procedures of inquiry

One can always be more sophisticated in his explanations most problems are amendable to several equally plausible explanations. They should also be aware that other persons point of view enriches our own thinking

CARL ROGERS NON DIRECTIVE TEACHING MODEL:

The psychological Carl Rogers has designed Non-directive Model, his basic assumption is that human relationship facilitates the learning which is called therapy. Rogers theory is based upon the assumption that an individual is able to handle his own life situation in constructive ways

Focus

The main goal is to provide student-central instruction for a democratic education. The model facilitates self-learning and self-realization

Syntax

The model develops the student-centered instruction in two phases. In the first phase teacher generates an acceptable climate for the students. The teacher accepts both intellectual and emotional purposes and helps the students in identifying their common and unique objectives. In the second phase the learning experiences are shaped so that desired objectives may be achieved. The teacher should be flexible so that group activities without any fear. His leadership is characteristic by non-directive principles.

Social system

The teacher can be make himself available for students consultation. The teacher can participate on an equal basis without influencing the group's. Teacher should motivate the students and create permissive climate. Rogers assumes that the purposes and structure flow from students. It has very low external structure of the learning situation

Support system

It requires that the teacher should indirect influences (Non-directive) in classroom teaching and employ the open-ended intellectual resources and permissive atmosphere. These should be objective oriented.

Classroom Application

It is useful for improving the general functioning of an individual and his abilities. The non- directive teaching has greater scope for teaching academic subjects, increasing interpersonal effectiveness and developing full abilities of the students

Focuses on self- awareness, understand, autonomy, and self- concept. It is based on Carl-roger's work. According to him positive human relation helps individual grow. Here teacher helps students to explore new ideas. Students have freedom to making decision and choices. Teacher and students are partners in learning. Teacher nurtures and moulds students to be the way they are and encourages students to think and reflect their uncertain feelings and become better and be positive

SOCIAL INTERACTION MODELS

This models is based on democratic principle of social interaction and social give and take. In these words of Joyce and Well, "These models give priority for

the improvement of democratic processes and the improvement of the society to the improvement of individuals ability “

A Few models in this category are

- i. Social Enquiry Model (Byron, Massialas and Cox)
- ii. Group investigation Model (Herbert, Theten and John Dewey)
- iii. Classroom Meeting Model (William Glaser)

Classroom Meeting Model

Strengthens self understanding and responsibility towards self and others. This model has rules and structure and specified intentions it is developed by William Glaser

Focus

The main goal of this model is to develop and maintain satisfactory standard of behavior. It has been basically designed to develop morals, standards, values among.

Syntax

The structure of this model consists of four phases:

In the first phase teacher establishes climate of involvement by his personal relationship. In the second phase teacher or students expose problem for discussion: It may be concerning situation with a problem. In third phase the teacher gets students to make a personal value judgement about their behavior. In the fourth phase teacher and students identify alternative solutions of the problem.

In the fifth phase students make a behavioural commitment for doing the task of learning. In the last phase teacher or group provide behavioural follow up.

Social System:

Most of the teaching activities are controlled by the teacher. The teaching situations are moderately structured. The teacher has to provide the leadership to the group. The students express value judgement and make decisions.

Support System:

Teacher's behavior is governed by personal involvement and non judgemental behavior. The teacher should have warm personality, skillful discussion and interpersonal relationship.

Classroom Application:

It is designed to develop general abilities for more responsible, integrated and responsive persons. The main application is to develop personal functioning of the students.

BEHAVIOR MODIFICATION MODELS

In these models, the desirable changes are emphasized with the help of reinforcement and fearing activity in the behavior of the pupils. Operant conditioning Model is an example of the behavioral modification models and a model of acquiring and using information the teacher cannot be too concerned with subject-matter coverage or corrections.

Managing our own environment is the modification of behavior. He emphasized self-control through operant methods.

Syntax:

It consists of the following four phases.

Phase One:

Introduction to Behavioral Principles:

Communication that control is a function of the environment measuring procedures and schedules. Explain self-control principle.

Phase Two:

Establishing the Baseline:

Specify clearly target behavior determine, carry out measurement, nothing control stimuli, reinforcing consequences, possible competing responses . Establish willingness to participate.

Phase Three:

Setting up the Self-Control Programme :

Make decision regarding stimulus environment, reinforces, set up short term and long term goals possible targets dates. Draw up written program, agree on review meetings and times.

Phase Four:

Monitoring and Modifying the Programme:

Student undertakes programme. Periodic meeting with instructor to review progress and modify program as necessary.

These models are based on the theories of behavior modification.

Examples of these models are:

1. The Training Model
2. Stress Reduction Model
3. Desensitization Model

USES OF TEACHING MODELS:

1. Teaching models assist teachers to develop their capacities to create conducive environment for teaching.
2. Teaching models help curriculum planners to plan learning activities and curriculum which provide a variety of educational experiences to learners.
3. Teaching models assist producers of materials to create more interesting and effective instructional materials and learning sources.
4. Teaching models stimulate the development of new educational innovations which may replace the schools of today.
5. Teaching models help in the formation of a theory of teaching.
6. Teaching models help to establish teaching and learning relationship empirically.
7. Teaching models are useful in developing social efficiency, personal abilities, cognitive abilities and behavioral aspects of the students.

Unit - V

TEACHING AS A PROFESSION

Teaching: Concept, nature and characteristics: Content knowledge, Pedagogical Knowledge, Technological knowledge, professional attitude, reflective practice Continuing professional development of teachers: Concept, process and strategies Teacher's professional ethics and accountability: Meaning, importance and dimensions Recommendations of NPE 1968, NPE 1986, 92, RTE Act 2009 and NPE 2020.

TEACHING: CONCEPT

- i. Payment
- ii. Knowledge and Skills
- iii. Responsibility
- iv. Recognition.
- v. Professional ideal of service.

The three main components of pedagogical content knowledge are:

- i. Knowledge of tasks
- ii. Knowledge of students prior Knowledge
- iii. Knowledge of instructional methods

TEACHING: NATURE

1. Teaching is Dynamic, Social and Humane. Teaching is not fundamental concept because it. Is greatly influenced by social and human factors which are dynamic in themselves giving them.
2. Teaching is Both, Art and Science. It calls for exercise of talent and creativity making it an art and involving application of techniques, procedure and skills which can be studies systematically described and improved makes it science.
3. Teaching is diverse in application. Teaching is diverse in, nature. It may have various forums as formal, informal directional, instructional, formational, training conditioning indoctrination, talking, showing, doing, remedial, etc.
4. Teaching is a process that facilitates learning.
5. Teaching is specialized application of knowledge, skills and attributes deigned to provide unique service to meet the educational needs of the individual and of society.
6. In addition to providing students with learning opportunities to meet curriculum outcomes teaching emphasized the development of values and guides students in their social relationships.
7. Teachers employee practices that develop positive self concept in students.

TEACHING: CHARACTERISTICS

The fact that educational-institutions are spending a, high proportion of the budget for maintaining the teaching staff and, an increased focus on the performance indicators of teaching quality have motivated the teachers to practice the teaching activity in an

effective way. Judy, Brophy and Good suggested the below mentioned characteristics of good teaching.

1. Giving structured information

Teaching is mainly concerned with transferring information. Students may not have the full idea regarding what they, are learning or why they are learning. So teachers have to structure their instruction in order to help students in learning. Giving information in a structured way also help students to utilize the academic learning time effectively. Academic learning time is the time a student spends appropriately engaged with content.

2. Quantity and pacing of instruction

The amount learned is related to the opportunity to learn. A successful teacher always organize the content effectively and pace the instruction in a comprehensible manner according to the receptivity level of students: The teacher has to develop a routine pace of instruction by going fast while teaching simple

topics and she should slow down when dealing with difficult areas so that students can get acquainted with the pace, follow easily and take notes if needed by adopting a student friendly routine pace as instruction, students will get time to interpret what the teacher has told and thereby she can ensure successful learning.

3. Teacher expectations

Efficient teachers expect their students to learn well. They don't just accept student participation in teaching-learning: process. or any behavioural change but demand for participation and behavioural change. Lack of teacher expectation for learning can degrade the morale of students.

4. Teacher enthusiasm

Nothing is infectious as enthusiasm. An efficient teacher is always enthusiastic and actively involve in the teaching activity. An enthusiastic teacher can motivate the students to learn, encourage participation of students in the teaching activity and create a student centered classroom-in an easy manner.

5. Teacher: clarity

Teacher clarity is defined as the ability to explain and demonstrate correctly. Nature of subject matter and limited audio-visual resources makes teaching clarity essential for successful teaching in order to attain this quality, teacher has to spend considerable time to prepare lessons and to practice demonstrations.

6. Teacher feedback

Learning is a progressive activity and in between learner has to know about his or her level of performance or achievements. Teacher has to provide timely feedback preferably through formal ways of asking questions or conducting evaluation tests. Teacher can also set target expectation for the students so that they can know easily whether the appropriate progress is being made or not. Positive feedback always motivate the students efficient teacher possess good question in skill and most of the time questions elicit correct answers. If the students response is incorrect, they have to help the student to find the right answer.

7. Emotional: climate

Neutral or warm classroom environment is essential for effective teaching. Try to avoid negative climate. A teacher need not be worried too, much or about being liked or being popular with students.

8. Teacher observational skill

Observation is an excellent method of assessing students. Efficient teachers possess both the general and specific observation a skills. Being able to observe correctly is an important skill, especially in the case of nursing teachers.

9. Handling assignments

Assignments play a major role in today's teaching-learning process. While dealing with assignments, teachers have to state clear expectations of what is expected how to get help and what to do when finished.

10. Management skills

Efficient teachers are first of all effective managers. They know how to manage the Classroom for achieving desirable ends.

11. Ability to develop appropriate progressions

Efficient teachers not only help students to attain progress but also consider this progress while teaching them. In order to ensure appropriate progression, teacher has to teach the content in relation to the learners: background knowledge-rather than blindly following the content. For instance, while-teaching the impact of consumer protection act on nursing, teacher need not explain full details because students might have gained

knowledge. regarding the impact of consumer protection act on health care professions though different medias like newspaper television, etc.

Context specific

This is the essence of teaching an intelligent teacher always take into account the situations and teach only the relevant subject matter. Revising and, highlighting the importance of universal pre caution just before posting the students in the operation theatre exemplifies context specific nature of teaching.

TEACHING: CONTENT KNOWLEDGE (CK)

This describes teacher's own knowledge of the Subject matter. Content Knowledge may include knowledge of concepts, theories, evidence and organizational frameworks within a particular subject matter, it may also include the field best practices and established approaches to communicating this information to students. Content Knowledge will also differ according to discipline and grade level-for example, middle-school science and history classes require less detail and scope than undergraduate or graduate courses, so their various instructor's content Knowledge may differ, or the Content Knowledge that each class imparts to its students will differ.

TEACHING: PEDAGOGICAL

This describes teacher's 'knowledge of the practices, processes, and methods regarding teaching and learning. As a generic form of knowledge, PK encompassed the purpose, values, and aims of education, and may apply to more specific areas including the understanding of student learning styles, classroom management skills, lesson planning, and assessments.

TEACHING: TECHNOLOGICAL

This describes teaches knowledge of, and ability to use, various technologies, technological tools, and associated-resources. TK concerns understanding edtech, considering its possibilities for a specific subject area-or classroom, learning and adapting to new technology offerings.

TEACHING: PROFESSIONAL ATTITUDE

Teachers draw on a body of professional knowledge and research to respond to the needs of their students within their educational contexts.

Teachers know their students well including their diverse linguistic cultural and religious, backgrounds. They know, how the experiences that students bring to their classroom affect their continued learning. They know how to structure their lessons to meet the, physical, social and intellectual development and characteristics of their students.

Teachers know the content of their subjects and curriculum. They know and understand the fundamental concepts, structure and enquiry processes relevant to programs they teach. Teachers understand. what constitutes, effective, developmentally appropriate strategies in their learning, and teaching programs and use this knowledge to make the content meaningful to students.

Through their teaching practice, teachers develop students literacy and numeracy within their subject areas. They are also, able to, use information and Communication Technology to contextualize and expand their students' modes and breadth of learning.

TEACHING: REFLECTIVE PRACTICE:

Reflective practice provides a means for teachers to improve their practice to effectively meet the learning needs of their students.

Brookfield succinctly describes the advantages of reflective practice to teachers as:

1. It helps teachers to take informed actions that can be justified and explained to others and that can be used to guide further action.
2. It allows teachers to adjust and respond to issues.
3. It helps teachers to become aware, of their-underlying beliefs and assumptions about learning and teaching.
4. It helps teachers promote a positive-learning environment.
5. It allows teachers to consciously develop a repertoire of relevant and context specific strategies and techniques.
6. It helps teachers locate their teaching in the broader institutional, social and political context and to appreciate that many factors influence student learning.

CONTINUING PROFESSIONAL DEVELOPMENT OF TEACHER

Continuous Professional Development:

Concept

Lifelong learning and continuous professional development are almost the same. Learning throughout one's life is a good aim to have for every teacher. This is especially important in the context of the changing belief systems in tune with the emergence of new paradigms. But it is very disheartening to know that most of the teachers are happy with the way they are going perhaps' with the belief that they are doing a reasonably fair job and that they have been well trained. So, they do not want to develop to any further

extent. But there are a few teachers who always strive to push their boundaries and actively create challenges for themselves. They learn from their own experiences and add to their skills and their self knowledge, often on their own.

Continuous, Professional Development:

Process.

We can "learn a lot from the experienced and expert practitioners in the field of education by attending the workshops and seminars on our own. The teachers are lucky for whom the talks are available in their vicinity. But, others can read the articles and books written by "experts" and can participate in online events or blogs with invited professionals as an alternative if the experts are not available in the flesh somewhere near them.

Workshops

The teachers often can get a lot more out of smaller intimate workshops where there is more opportunity to discuss and debate ideas and opinions and take away ideas for classroom activities to one's own reflection.

ONLINE COMMUNITIES

These include an interactive virtual conference such as online conferences or the blogs on the Teaching Subjects website or other forums and discussion boards set up to encourage participation around Subject topics by respective subject teachers from all over the world. We can get online membership from the British Council to post our own blogs or read other's blogs and share our opinions or add, our own comments with a better understanding of what Subject is and how it is being created and propagated by individuals and agencies within the country and outside it.

Informal Talks

Staff room is the best place for our informal chit-chat. We can join other teachers discussing their next lesson-or the material they are using. This is the most effective and one of the easiest ways of developing professionally, especially if you are really serious about borrowing ideas from colleagues and trying them out in classes.

Individual Reading

Bacon says reading makes a man, conference a ready man and writing an exact man. Reading is the most important professional requirement of a teacher.

The teachers can-read-internet journals, materials as well as actual text books. Sometimes the, reference books may be very expensive, so we may make it a habit to go to the library in our area and read the latest arrivals on Subject.

Reading groups

While reading is done individually, what is learnt can be formalized in discussion in a reading group? We may read a txt to our colleague or during cluster. Resource Centre(CRC) meetings and we may come together a few weeks later and discuss he contents. We learn so: much through sharing: of our ideas, impressions and discussing the issues the reading material raise.

Action research

We may be involved in action research-on day today classroom challenges faced by us and find solutions. For examples, at the primary level, we may take, up research on why our pupils are' not able to read English words? At upper primary level "problems of

students, in speaking", etc. The findings can be shared in Teacher centre meetings: SSA is supporting teachers in doing action research studies.

Giving Sessions

This may be in school meetings, and teacher centre meetings, where teaching ideas are' shared Local Subject meetings will provide a platform for giving sessions. Participating-in.anysessi9ns at any stages is very, effective for professional development due to planning and research which takes place before the session and the discussion and feedback which the session provokes later. We grow professionally, before and after the session.

Writing

According to Bacon, writing makes an exact man. Teacher may, write short articles or even books. Keeping a diary and reflecting on our teaching a very good-way to start with we have to write an article and re-write it many times so that it can be refined considerably. Those who have done a course like B.Ed. and. M.Ed. and foreign university or participated in the teacher. development orient and Refresher programme from, DIET/SCERT Know the importance of theory and practical the assignments.

A need-based writing programme for the teachers would be to undertake the production of material for children to, read in the revised Pedagogy, we have aimed at helping the children to produce a variety of discourses at all levels of the learning. We, have also conceived classroom. Processes materialize this goal. Teacher also apply these processes in their own enterprise in the domain of creative writing.

Doing formal Course

A course like M.Ed, and foreign language university or the teacher development programmes from Academic Staff College, South India, will be more helpful for teachers. Academic staff-College is also offering. some courses for in-service teachers.

Membership in professional bodies

We can-be members of professional bodies. There are already some of these in the Teaching field. Teachers can also works, for building up an academic networking among them by blogging, podcasting or through other internet programmes such as facebook, Witter for sharing their field experiences with other teachers across the world.

Continuous Professional Development:

Strategies

There are certain other ways for our professional development:

1. Engaging in new professional activities and doing things for the first time.
2. Peer observation.
3. Exploring different methods, strategies and techniques within the parameters of the emerging paradigm.
4. Following reflective and explorative practices.
5. Participating in projects in a group with fellow professionals.
6. Forming a local group like Language/ Science clubs to discuss and take turns to lead sessions.

In fact, the possibilities are many. The only decisive criteria for our actions should be our own critical thinking - looking at everything including our actions from multiple perspectives.

1. Most training programmes are aimed at improving the teacher's teaching competence but not their subject competence.
2. There are no-effective tools of assessment to measure the entry and exit behaviour of the participants.
3. There is neither teacher support mechanism nor the mechanism to follow-up the training programmes conducted.

The quality of Education can be improved by taking up the following measures. The measures are suggested based on the assumption that teachers should be motivated internally and/ or externally to improve their competence and improve the quality of education they impart.

1. A set of academic standards as well as professional standards should be prepared for English teachers at three levels viz, primary, upper primary and secondary. At each level, standards can be set for three stages of proficiency viz, basic, advanced, and proficient.
2. Reliable and valid test tools should be developed based on the standards laid out as said above. The testing and certification should be given to a reliable player in Testing & Assessment Services.
3. Portfolio assessment of teachers and the assessment of children's performance should be part of the teacher certification.

4. Teachers should have the facility to opt for the test at their convenience They can-be allowed to take tests any number of times allowing 30 days, 60 days, 120 days gap between two Consecutive appearances for basic, advanced and proficient tests respectively.

5. The tests should be preferably on-line.

6. Support system involving. teachers, teacher educators and other resource persons should be evolved. Forming online groups and subject forums, and, organizing seminars help teachers develop their competence.

7. Suitable incentive 7peñal system should be planned to motivate teachers to opt for the tests at various levels/stages.

8. An effective academic supervision and support stem involving teachers (who have proficient certification should-be planned to assess the teacher, the learner and the teaching learning process.

9. Professional development programimeš should be planned' taking into a consideration- the needs felt by the participants, the employer (or the teacher educators), and the needs necessitated by new content/ methods. They can be "Conducted in the teachers own language where necessitated by new content /methods. They can be conducted in the teachers own language, where necessary, to ensure comprehension as well as debate.

10. Good teacher handbooks/ modules multimedia materials, on-line resources, self learning materials/ strategies etc., should be developed/used to compensate transmission losses in cascade mode of teacher development programmes.

11. The programmers should help teachers prepare for the tests' and in the process help them become autonomous-learners. They should, aim at exposing teachers to the wide variety of resources available, on-line and in their surroundings.

TEACHER'S PROFESSIONAL ETHICS ACCOUNTABILITY

Teacher's Professional Ethics: Meaning

The concept of professional ethics maybe described in these words of Laurie If a teacher has not an ideal aim he had better to take to shop keeping at once, he will there doubtless find an ideal within his capacity. The Secondary Education Commission 1952-53 has stated in this connection that they (teacher will not look up on their work as an unpalatable means of carrying a scanty living/but as an avenue through which they are rendering significant Social service as well as finding some measure of self fulfilment and set expression.

Every profession has its own-professional ethics. The professional ethics signifies the code of conduct to be adopted by the persons who profess that Profession. The professional ethics emerges in the focus of broad principles which, are to be followed. For their rendering service to the people for their welfare. These principles are intended to educate, motivate and inspire the, members of the profession. The code of professional ethics has, five parts in it.

1. Professional Ethics of Teachers

i. Every profession has its own professional ethics. The professional ethics signifies the code of conduct to be adopted by the persons who profess that profession.

- ii. The professional ethics emerges in the form of broad principles which are to be followed for their rendering service to the people for their Welfare.
- iii. These principles are intended to educate, motivate and inspire the members-of the profession. The code of 'Professional ethics' has five parts in it.

(i) Teachers: relationship with the students

- i. The teacher should give foremost consideration to the pupils well-being.
- ii. The teacher should direct his whole professional effort to assist the pupil to develop his Whole personality including his ability to work
- iii. The teacher should foster in his pupil the honesty, integrity-and consideration for others.
- iv. He should help for the wholesome development of the students.
- v. He should encourage: scientific attitude and diagnostic tendency in students.
- vi. He should develop in students the love for physical labour and dignity of labour.
- vii. He should develop the feeling of brotherhood for countrymen.

(ii) Teacher's relationship with parents:

- i. The teacher should maintain intimate and cordial relationship with the parents.
- ii. The teacher should keep parents informed about the progress and performance of their pupils in a manner that is in the best of the pupil.

- iii. The teacher should listen to the thought and ideas of parents and adopt for the progress of the students.
- iv. Should strive hard to make parents to have close relationship with the school through parent's teachers associations.

(iii) Relationship, with society and nation:

A teacher should

- i. Try to-develop school as a community centre and human resource development centre.
 - ii. Oppose the separatist power.
 - iii. Make social resources flow to help school activities and make the best use of them.
 - iv. Promote national integration.
- V. Develop. awareness among people about legislative and administrative steps taken by the government in public interest.
- vi. Defined him from injustice exploitation and insults.

(iv) Relationship with colleagues/ other professional organizations

The teacher should

- i. Respect the professional standing and opinions of his colleagues and shall maintain in his relation with them the highest standards of professional-courtesy.
- ii. Be prepared to help in all possible ways the junior colleagues and those in training.

- iii. Recognize his obligation to improve his effectiveness as a teacher in every possible way to match the system it.
- iv. Attend training courses seminars; Workshops meeting and programs related to education.
- v. Adopt 'new techniques in teaching and should .teach effectively.
- vi. Keeping him away from gossiping about colleagues.
- vii. Protect and: uphold the prestige of the institution he is working in.
- viii: Remain as member of professional organization and he obeys.

v) The rules and ethics:

Have the attitudes that serve in professional organization in his responsibility.

Teachers Professional Ethics: Importance

The teachers are called the makers of man, the makers of a nation and the real makers of history. It is therefore, essential that teachers should have professional ethics.

Following points indicate the need and significance of professional ethics for teachers:

- i) Norms and ethics provide credibility to the teaching profession.
- ii) They help in developing a sense of commitment to the teaching profession.
- iii) They serve as beat on light to the teachers in adhering to certain important ideas and values.

- iv) They serve as warnings, to teachers not to fall upon unscrupulous methods.
- v) They are constant reminders to teachers for discharging their responsibilities with a sense of purpose.
- vi) Adherence to the norms enhances the prestige of teachers.

Teachers Professional Ethics Dimensions

In the light of the ongoing discussion, the following dimensions of professional ethics emerge.

1. Dedication to the subject matter
2. Dedication to the welfare of the clients.
3. High service motive.
4. Interpersonal relationship with regard to:
 - (i) Professional and students;
 - (ii) Professional and colleagues;
 - (ii) Professional and authorities
 - (iv) Professional and guardian;
 - (v) Professional and society.

Let us discuss these dimensions of professional ethics briefly in the context of teaching as here under:

1. Dedication-to the subject matter

In order to keep himself alive and up to date a teacher required to dedicate himself to acquire Knowledge at the frontiers of new knowledge. This is required to enhance his competence in teaching. Competency in teachings, by the large, contingent upon knowledge of the subject matter and skill in communication thus for the survival and growth of teaching profession its practitioners must be well- equipped of the latest trends in the areas of their specialization.

2. Dedication to the welfare of the clients

The teacher, in order to dedicate himself to the welfare of his students, should truthfully disseminate his expert service solely for the benefit of his students. His interest should be the interest of the students whom he serves. As such his material comfort and personal interests must be subordinated to the students.

3. High service motive

In teacher, to succeed, a teacher has to be devoted to his work and remain ever ready to help his students. His motivation should emanate from the feeling that he is serving for the cause of upliftment of humanity. Such a service motive is necessary for a teacher to realize himself. Thus, if a teacher is propelled by this motive rather than by Socio-economic condition, then teaching would soon attain the status of a recognized profession.

(i) Relations of the teacher and the students

Maintaining good interpersonal relations with students is considered as a professional role of the teacher. The interaction between the teacher and students should be healthy and congenial. For instance, in the areas of intellectual, cultural sports and

games, the interaction is supposed to be productive, Understanding the students, their home backgrounds and dealing with them in an appropriate, but different manner is also expected from the teachers A judicious blend of both will pay dividends.

(ii) Relations of the teacher and his colleagues

A sound relationship needs to, be established between the teacher and his colleagues. Because it would open the door of sharing each one's knowledge and experiences which, Subsequently would contribute in developing mutual confidence among the colleagues. Each must owe a duty to the other to maintain a high level of professional ethics.

(iii) Relations of the teacher and the authority

For the development and betterment of the institution, teachers should cooperate with the authorities in the areas of formulation of policies, rules and regulations. Teachers are also expected to assist and coordinate with the authorities for advising the university on its long-term plans and for generating new programmes and for periodic evaluation of the work of the institution. Authorities on the other hand, are also expected not to intervene unnecessarily in the areas in which the teacher enjoys his academic freedom and autonomy.

iv) Relations of the teacher and the guardians

Maintenance of regular contact with guardians of the students by the-teachers would certainly help for the-purpose of mutual exchange of ideas and for the academic benefit of the students and the institution as well.

(v) Relations of the teacher and the society

A sound relation between the teacher and the society would help the teacher to create awareness in the society of the educational programmes being offered. Also the teacher could make parents realize the importance of girls education, population education and environmental awareness consequently the intellectual and moral life of the society will be strengthened.

Teacher's Accountability Meaning

Accountability means ones obligations to account for ones action or responsible for the act of the self. It is a part of teachers code of ethics or Conduct.

Accountability of teacher is very significant aspect in teacher education. It is very essential for quality assurance in education. The concept more relevant in profession like teaching to ensure teachers responsibilities. This is necessary if educational accountability is to be successfully implemented.

Good Biddle and Murphy **define accountability as follows** end to Making them responsible for people is accountability

It is not unilateral concept. In the educational system the principal, teachers and non teaching staff and the community is accountable for the products of education.

Accountability is an obligation and responsibility to perform duties effectively according to the directions of the competent authority. Accordingly accountability in school education denotes obligations and responsibility to perform duties effectively and efficiently by all those engaged in the teaching enterprise according to the objectives and directions determined by the society.

Teacher's Accountability: importance

According to Gnanam (1995) the following criteria (having moral and legal basis) may be considered to ensure teacher accountability to their parents, their community and their profession:

1. Regularity and punctuality of the teachers in performing their jobs.
2. Innovative methods of teaching evolved and or adopted for effective teaching, leading to generating interest and motivation, and independent thinking on the part of students.
3. The number of level of courses taught and developed, number and. quality of research papers published, research projects undertaken and ph.D.'s guided.
4. Co- ordination and co operation extended to colleagues and authorities.
- 5 Contribution to the construction of curriculum, design of evaluation methods, preparation of learning/ reading materials and role played in student counseling and remedial teaching.
6. Seminars conferences and symposia organized at university level and international level Fellowship, awards and recognition received.
7. Higher positions secured outside the institution.
8. Office held in national or regional or international organization.
9. Contribution in resolving the social issues, international issues and issues related to national concern and priorities.

10. Contribution. to environment preservation, co-curricular activities and extension services.
11. Implementation of comprehensive objective evaluation system in overall evaluation process of the institution.
12. Role played in enrichment of campus life, student welfare and ensuring quality education.

Teacher's Accountability: Dimensions

Teacher accountability is behavioral in nature and hence measurable in order to measure teacher accountability its various dimensions, about which professional roles of the teacher can be sought, need to be identified. As Such for the identification of the dimensions of the teacher accountability the author reviewed the pertinent literature and found that the works of L.M. Browder (1971), G,U Glass (1972), B.Donald (1982), E.Lewis (1988) and B.Das (1989) provided sufficient clarity to define teacher accountability in terms of the following dimensions

1. Classroom Teaching
2. Professional Growth
3. Personal Qualities
4. Attitudes towards Profession
5. Interpersonal Relationship
6. Occupational Socialization

1. Classroom Teaching

Classroom teaching being the first dimension of teacher accountability describes the teacher behavior in the classroom. Teacher behavior in the classroom necessarily includes dissemination of knowledge and skills, delivery of course content management in terms of classroom condition, group size, teacher's role, interactions with the students and so on.

2. Professional Growth

The second dimension of teacher accountability, i.e., professional growth, requires that the teachers must be engaged in life-long professional development not only through personal experience but through regular renewal of their knowledge and skills by attending seminars, workshops, orientation and refresher programmes, conferences etc.

3. Personal Qualities

Personal qualities, being the next dimension of teacher accountability, involve congeniality, cooperativeness, likability, self-control involving ethics of the profession.

4. Attitude towards Profession

Attitude towards profession as the fourth dimension of, teacher accountability commits the teacher to be dedicated and devoted to promote learning on the part of the students.

5. Interpersonal Relationship

Interpersonal relationship is the fifth dimension of teacher accountability. This holds the view that a sound relationship is required between a teacher and his colleagues. Because it would open the door of sharing each one's knowledge and experience.

Maintenance of a cordial relationship with colleagues would certainly help in the process of upholding the academic environment of an institution.

6. Occupational Socialization

The last dimension of teacher accountability refers to the fact that the members of the teaching profession generally adopt its-values, attitudes, knowledge and skills by a process which is known as occupational socialization. The teacher thus develops the norms and attitude of the culture and this process results in a harmonious social system of his profession for which he is held accountable by his professional organization.

AROUSE A SENSE OF ACCOUNTABILITY

AMONG THE TEACHERS

In order to arouse a sense of accountability among the teachers the following guidelines are Proposed:

1. The teacher should be morally and psychologically disposed for teaching. Having Said this, we may mean self-accountability of the teacher. When a teacher begins to realize that he much more than a mere man, becomes accountable for what he is meant for. For arousing such an ethical sense, the teacher ought to be given a high status in the society, and be publicly honoured on special occasions.
2. Better supply of teachers, is another important prerequisite for arousing a sense of accountability among the teacher in this connection, R. Sharma (1989) was of the view that “if we get right type of teachers then they will be accountable. To ensure better supply of teacher an effective system of, recruitment is necessary. For this, formation of National Teacher Recruitment Board (NTRB) is suggested. Those

teachers who are found unsuitable and incompetent should not be allowed to enter teaching profession.

3. The economic status of the teacher should be raised to a still higher level, as the present scale of pay and other concessions offered to them are largely cancelled by an increase in the cost of living.
4. Guidance and counseling service should be made available in every higher secondary school. Some of the teachers of the school staff should be prepared through a short-term course, in guidance and counseling.
5. Greater educational opportunities should be made available to the promising young men and Women teachers to prepare them both academically and professionally.
6. In order to make the teachers accountable, their professional organizations. should see that the teacher imbibes the code of conduct in. actual practice and always abides-by it in his professional behaviour.
7. To emulate a sense of accountability among the teacher, particularly the secondary school teacher, the teacher education curriculum should be revised with a special emphasis on pedagogy of teaching. It would-help provide up-to-date knowledge and skills required in his day-to-day life. Similarly, new motivations and inventions in teaching and learning must be known to every teacher at any level of education.
8. In order to be accountable, a teacher is always expected to be dynamic. A dynamic teacher is said to be receptive to new ideas and-innovations in his area-of specialization. He loves to teach and learn too he is a free thinker and a liberal worker.

9. Last but not the least, the teacher alone should not be subjected to a code of conduct.

Because the question that often arises in the mind of the teacher is what about the failings of the educational bureaucrats, administrators, politicians and students? Thus, it appears that along with the teachers, the intellectual elites, bureaucrats and other should be made accountable to their respective roles

RECOMMENDATIONS OF NAE, 1968

There should be a well thought out, dynamic and clear cut national policy of education for the development of nation, according to Kothari commission (1964-66). Hence, Our national government, in 1968, declared its national policy of education, the salient features of which are as under

(1) Free and Compulsory Education

According to article 45 of the Indian Constitution, provision should be made for free and compulsory education for all children up to the age of 14.

(2) Position, Salary and Training of Teachers

Salary, grades and emoluments should be adequately raised up to make the teacher respectable and recognizable in the society. Provision should be made for the in-service/training of teachers, ensuring full academic freedom to all.

(3) Development of Languages

To develop languages emphasis should be given to (1) Hindi, (2) Sanskrit (3) regional languages, (4) Three language formula and (5) international languages.

(4) Equality of Educational Opportunities

To provide equality of educational opportunities, following points should be emphasized:

- i. Removal of regional imbalance
 - ii. Raising the standards of schools, methods of teaching should be improved.
 - iii, Special provision should be made for the education of girls.
 - iv. Provision of education to the backward, .abnormal and poor children should be made in right earnest:
- V. Ample provision, should be made for the education of mentality retarded and physically handicapped children.

(5).Recognition of Talents

The state should give adequate encouragement and opportunities to develop the underlying, talents in all fields among the students.

6) Work Experience and National Service

Emphasis should be laid on work experience and national service to bring the school and Community is close contact.

(7) Scientific Education and Research

Encouragement should, be given to scientific education and allied researches for the economic upliftment of the country.

(8) Agricultural and industrial Education

For agricultural and industrial education, following points should be emphasized:-

1. Each State should establish at least one agricultural university.
2. Under technological education, experimental and research work should be encouraged.
3. In agriculture, industry. and other technical areas of education, there should be a positive correlation between man-power and employment according to the needs and also between the input and output in all areas of developmental economy and commerce of the nation.

(9) Production of Books and Allied material

Writers should be rewarded adequately. By the state and publishing of books for the use of all people in all areas of the country should be encouraged. At the same time universities should undertake the task of publishing standard books in regional languages.

(10) Examinations

To have optimum validity and reliability in the examination system, there should be a radical reformation.

(11) Secondary Education

There should be no regional imbalance in the facilities provided-to the people in the areas of primary, secondary, technical and vocational education.

(12) University Education

In the area of university education the following points should be kept in bold belief:-

- i. While opening new universities, full regard should be kept for maintaining high academic standards and adequate financial provision.
 - ii. At these centers, there should be ample provision of good libraries, laboratories, immaterial equipment and educational devices.
 - ii. There should-be full facilities for research work of high standard at these centers
 - iv. The syllabi of higher classes should be very carefully framed with the dynamic support of great scholars.
- V. Effective provision should be made for teacher training courses for new incumbents as well as in-service candidates.
- vi. Full academic and financial freedom should be given to universities and all centers of Higher learning.

(13) Part Time Education and Correspondence Course Various types of part-time courses should be structured and introduced and various correspondence courses for specific degrees should be launched by the universities.

(14) Eradication of Illiteracy and Provision of Adult Education For this, nation-wide schemes, help of all teachers, students, factory workers, office clerks and the literate personnel should be harnessed to achieve quick results Such education should be economically self-sufficient and capable to promote individual and social uplift.

(15) Games and Sports

To develop the physical strength of the Students and encourage sports activities education for games sports and athletics should be developed and launched-on a nation-wide scale

(16) Education of Minorities

For the development and upliftment of minority and backward communities adequate facilities for them should be provided.

(17) Pattern of Education

There should be some national! pattern of education, effective and prevalent throughout the length and. breadth of the country.

Conclusion

The central Government has pledged to spend 6 per cent of the national income on education as per the national policy of education. It has also pledged to support all states in their educational plans and Schemes. The educational states of affairs will be reviewed by the national government once in every five years to bring about the needed reform in its policies and programmes.

5.12 RECOMMENDATIONS OF NPE, 1986

An a prelude to-formulation of new policy on education, the Governments of India tabled on August 20, 1985, a status report titled Challenge of Education a policy prospective seventeen years after the adoption-of the 17-principle policy of 1986. The documents contained among others the problems and prospects of the task of educational reconstruction. The Government was instructed by a wided section of the intelligentsia

including educational experts who expressed their views and opinions hopes and aspirations through media, and also by direct communication in the light of all these Feedback' material, the National Policy on Education 1986 (NPE. 1986) was formulated reflecting thus, as never before the popular expectations as well as the considered views of experts, The NPE1986-is based on the fundamental principle that education is a unique investment in the present and the future". This approach implies that education is essentially for all that education can promote the goals of socialism, secularism and democracy enshrined in our Constitution, and that education develops manpower for different levels and sectors of the economy. The NPE 1986 has significant features and thrust areas. which are discussed blow:

1. National perspective on education

A comprehensive national perspective on education has been sought by this policy that does not have a uniform and rigid system. The concept on the other hand implies (i) equal opportunities to all, both interns of access to education of a comparable quality and conditions of success, (ii) common education. Structure, (iii) A national curriculum framework, and (iv) minimum levels of learning for each stage of education.

2. Education for equality

Educational opportunities to the neglected sections of the society like women, scheduled castes, scheduled tribes, other backward sections and areas, minorities and handicapped is more important in Teaching and Learning Professor. Dr. A. Meenakshisundaram sense to stabilize' and equalize the societies through educational perception.

3. Universalization elementary education

Through a directive participle, the policy has given first priority to, the, unit universalisation of elementary education emphasized in the constitution. The strategies will be universal enrolment and universal retention and improvement in the quality of education.

4. Common Structure of education

The first ten years of schooling will be universal enrolment and universal retention and improvement in the quality of education and the 10+2+3 structure recommended by the education commission has already been implemented in several states and Will be extended all across the country.

5. National Curriculum Framework

The policy stresses on the point that a national curriculum framework with a common core and flexible components should be employed. The history of India's freedom movement, constitutional obligations the countrys common cultural heritage, egalitarianism, democracy and secularism, equality of sexes, environmental protection, removal of Social barriers, observance of small family norm, and inculcation of scientific temper are included in the 'core'.

6. Minimum levels of learning

Minimum levels of learning of all stages will be laid down to ensure comparable standard of education. These would also serve to develop instructional materials, suitable teaching learning strategies and evaluating learners' progress.

7. Child-centered education

The mode of teaching and learning activities should be based more Upon child-centred.

8. Value education

To promote unity and integration, education should be a tool for the cultivation of eternal values. Education should help to eliminate obscurantism, religious fanaticism violence, superstition and fatalism, Honesty, truthfulness, courage, conviction, tolerance love for justice and compassion will be Sought to be promoted.

9. Evaluation process and examination reforms

Improvements in evaluation and examination processes will be purs.ued. with greater vigour. Student self-evaluation will be developed.

10. Provision of facilities

Towards the objective of promoting quality of education, basic facilities like building, teachers and School facilities will, be provided on a fuller basis through the scheme of operation Black board for primary, schools. At secondary and higher secondary level, the importance will be implied upon library reading and laboratory working,

11. Community Involvement

To reduce absenteeism, and dropouts, improve education's relevance and better management of educational institutions, involvement of parents community members and voluntary agencies are required.

12. Teacher and teacher Education

With complete faith in teachers, the Policy envisages for them freedom to innovate, and to reflect the concerns and aspirations of the community. Professional education of teachers at both pre-service and in-service levels, will be overhauled and District Institutes of Education and Training (DIET's) will be organised for the purpose as also to impart training for personnel working in adult and non-formal education. To accredit teacher education institutions. The National Council && Teacher Education NCTE has all the powers and it can provide guidance on Curriculum and method if necessary.

RECOMMENDATIONS OF NPE ON TEACHING PROFESSION, 1992

Arjun, Singh, the then Human Resource Development Minister after presenting the revised National Policy on: Education in both Houses of Parliament on May 7, 1992, stated that the policy formulated in 1986 had stood the test of time but the developments during the last few years had necessitated certain alterations. It may be recalled that the NPE 1986 had stipulated. The implementation and parameters of the New Policy must be reviewed every five years. The implementation, was reviewed by two committees Ramamurti Committee (1990) and the Janardhana Committee (1991 + 1992). The National Policy on Education, 1986 was revised accordingly in 1992.

Under the Chairmanship of Janardan Reddy, the then Chief Minister of Andhra Pradesh the Central Advisory Board of Education (CABE) was appointed a committee on National Policy of Education in July of the year 1991. Among the members of the Committee were six Education Ministers, belonging to major political parties and eight educationists. Taking into consideration the report of Acharya. Ram Murti Committee known as National Policy of Education Review Committee (NPERC) and other relevant developments since 1986. The Committee reviewed the NPE 1986 January, 1992, The Janardan-Reddy Committee submitted its report it reiterated the recommendations made in NPE, 1986 and concluded that it is no need to reformulate but little changes are to be done.

However the Programme of Action, 1986 needed to be revised considerably.

The Revised Policy formulation Report Of Janardan Reddy Committee was Considered and accepted by the Central Advisory Board of Education on 5-6th May 1992. Before the Parliament Monsoon session the Revised Policy formulations were submitted.

Twenty two, task forces were constituted on different subject, areas, comprising educationist and officials of union and State Governments. Following are those twenty two task forces:

Programme of action draft was discussed and endorsed by Central Advisory Board of Education on 8th August, 1992, after the task force were been reformulated.

RECOMMENDATIONS OF RTE ACT, 2009

In the year 2009, our Government has enacted an Act Right to Education and compulsory Education. This Act comes into force from April 1st of 2009. The high court of Andhra Pradesh has a judgment for the petitioner MR. Pal Krishnan and it is a historical one in the year 1993. Every citizen of India has fundamental Rights to Education. This Right has been given in the April 21st of Indian constitution. Therefore Every citizen should have their education up to 14 age This has been delineated in the judgment.

Our Government has constituted a commission under the head of Mr. Mukhiram Sakthiyar to find out needs of Free Education. This commission has submitted its findings to the Government with various aspects such as no Fees for Education, Free book, Free uniforms, Free, writing materials. This commission's report has been codified into bills and has been tabled in the house of parliament on 1998. Due to various reasons, and long undue delay, Finally in the year 2009 and in the months of July and August. The Right of compulsory Education to children was passed and subsequently got the president of India's consent. Financial participation of central and state Governments has delayed its implementation. Finally, Government of India has to contribute 65% and State Government has to contribute 35% towards its expenses. There is no doubt in the field of transformation of Indian Educational system. This is only the beginning in; Elementary Education. We are looking forward its rights to 12th standard in coming years.

Specificities of the Act:

1. All the children have the rights to get Education Right from the age of 6th to 14th in the nearest school from their-houses:
2. All the students can complete their elementary Education without spending money.

3. So far, the children who has not gone to school, above the: age of 6th or school drop outs can continue their Education suitable to the stags of class.
4. Both Government and panchayat institutions should strive to implementers directives of the Act. So Local bodies should establish -schools in the nearest villages, those who do not have facilities in three years time.
5. Both the central and state Governments should contribute their funds to implement this Act jointly.
6. Central Government should create a institution for National Curriculum Projects.
7. Government of India should codify the guidelines for training teachers and the some should be implemented.
8. Finding innovative methods, Research, Planning are the topics to be included, in Resource development Government to India should contribute their funds and techniques to state Government.
9. It is the duty of the Government to give free-Education to all the children in the age of 6 to 14 Government and local bodies should ensure the childrens compulsory elementary Education, avoid absentism and school drop-outs.
10. Government should pledge to give a good standard of Education to the Children.
11. It is the duty of the every parents that they should enroll their wards in the nearest school and they should help them to attain elementary Education.
12. Government school make steps to create kinder garden to the children below the age of 6.

13. The schools which has not got grants, should give an opportunity to the have noter to start their education from L.K.C. 'upto the stipulated classes they should accommodate 25% of the children in L.K.G. The entire expenses of the students should be by the Government.

14.Schools should not collect donatons. Parents should not be interviewed while admission children's Enrolment should be rejected on account of non-availability of Birth Certificate till the completion of elementary Education. The admitted students should not be sent out from Schools and the students should not be kept in same classes in succeeding academic year. Students should not be given Corporal punishment or should be given mental toture. After the enforcement' of this Act, the unrecognized School should not continual and the unrecognized schools are not start.

Teachers:

1. Teachers should, be present in schools in time before its commencement
- 2.Teachers should complete their lessons within the stipulated time.
3. Teachers should guage every students skill and give marks. An additional teaching is an apprecial one.
4. Teachings of separate method should be avoided.
5. Teachers finding any deficiency should inform to the administrator .
6. Teachers can be pressed into population enumeration, Natural calamity, Election duty where as they should not be avoided other purposes..

Norms for Provision of Teachers in the RTE, 2009

(As per the Sl. No: 1 of the Schedule read with Sections 19 and 25 of the Act)

(a) For Class 1 to V

Admitted Children	No. of Teachers
Up to.60	Two
Between 61 to 90	Three
Between 91 to120	Four
Between 121 to 200	Five
Above 150children	Five + 1 Head teacher
Above 200 children	Pupil-Teacher Ratio

shall not exceed 40excluding Head teacher

(b) For Class VI to VII

(1) At least one teacher per class so that-there shall be atleast one teacher each for-

(i) Science and Mathematics;

(ii) Social Studies;

(iii) Languages.

(2) At least one teacher for every thirty-five children.

(3) Where admission of children is above 100

(i) a full time head teacher;

(ii) part time instructors for

- a) Art Education;
- b) Health and Physical Education;
- c) Work Education.

In the concluding part, Right to Education Act 2009 is getting 'welcome from one side, in the other side the same amount of opposition is also available. Such oppositions can be corrected by bringing New Act. The act facilitates the down trodden to enrol their children in private schools regarding this issue, lot of opinion has been coming out.

RECOMMENDATIONS OF INPE, 2020

The aim of the national education policy 2020 is to create an education-system which is deeply rooted in Indian ethos and can rebuild India as a global knowledge superpower, by providing high quality education to all.

Background:

A panel headed by former is to chief K.Kasturirangan submitted a draft in December 2018, which was made public and opened for feedback after the lok sabha election in may 2019.

Highlights of the Policy:

1. Public spending on education by states, centre to be raised to 6% of the gdp.

2. Ministry of human resource-development to be renamed minister of education.

Digital Education related:

1. An autonomous body the national educational technology forum will be created for the exchange of ideas on use of technology to enhance learning assessment; planning and administration.
2. Separate technology unit to develop digital education restores. the new unit will coordinate digital infrastructure, content and capacity building.

Teacher Education-related:

1. By 2030, the minimum degree qualification for teaching will be a four year integrated B.Ed.
2. Teachers will also be given training in online educational, methods relevant to, the Indian situation in order to help bridge the digital divide.

School Education related:

1. Universalise the pre-primary education (age range. of 3-6 years) by 2025.
2. Universalization of Education from pre- school to secondary level with 100% Gross Enrolment Ratio (GER) in School education by 2030.
3. A new school curriculum with coding and vocational studies from class will be introduced.
4. A child's mother tongue will be used as the medium of instruction till class 5.

5. A new curricular frame work is to be introduced, including the preschool and Anganwadi Years.
6. A National Mission on Foundational Literacy and Numeracy will ensure basic skills at the class 3 level by 2025.
7. Board exams to be easier, redesigned. Exams will test core competencies rather than memorizing facts, with all students allowed to take the exam twice.
8. School governance is set to change, with a new accreditation framework and an independent authority to regulate both public and private Schools.

Higher Education-related:

1. Four year undergraduate degrees with multiple entry and exit options will be introduced.
2. The phil degree will-be abolished.
3. New umbrella regulator for all higher education except medical, legal courses
4. An Academic Bank of Credit will be set up to make it easier to transfer between institutions.
5. College affiliation system to be phased out in 15 years, so that every college develops into either an autonomous degree-granting institution, or a constituent college of a university.
6. It also aims to double the Gross Enrolment Ratio in higher. education, including vocational education, from 26.3% in.2018 to 50% by 2035, with an additional3.5 crore new seats.

Traditional Knowledge-related:

1. Indian Knowledge systems, including tribal and indigenous Knowledge, will be incorporated into the curriculum in an accurate and scientific manner.

Special focus:

1. Regions such as aspirational districts, which have large number of students facing economic, social or caste barriers will be designated as Special Educational Zones.
2. The Centre will also set up a gender inclusion Fund to build-the country's capacity to provide equitable equality education to all girls and transgender students.

Financial. support :

Meritorious students belonging to SC, ST, OBC and, other socially, and economically, disadvantaged groups will be given incentives.

New curricular and pedagogical Structure

The NEP proposes changing the existing' 10+2 Curricular and, Pedagogical Structure with 5+3+3+2 design covering the children in the age group 3-18 years.-

Under this.

1. Five years of the Foundational Stage 3 years of pre primary school and
Grades 1,5;
2. Three years or the Preparatory (or Latter Primary) Stage: Grades 3, 4,5;
3. Three years of the Middle (or Upper Primary) Stage Grades 6, 7, 8;

4. Three years of the High (or Secondary), Stage Grades 9, 10, 11, 12;

Challenges ahead:

Since education is a concurrent subject most states have their own school boards. Therefore, state governments would have to be brought on board for actual implementation of this decision.