TEACHING AND LEARNING ABOUT COGNITIVE PROCESSES: TEACHING CONCEPTS THROUGH-DISCOVERY, EXPOSITION AND IN DIVERSE CLASSROOMS

Introduction

Knowledge is a mental activity or process which includes the understanding and experience of information perceived from nerve cells. Knowledge is defined as a group of mental activities, qualities and mental capacities. The mental abilities includes:

- Knowledge (theoretical and behavioral understanding of any concept)
- Concentration (to focus selectively upon any one object among many available objects),
- Memory (process of receiving information and retrieving it whenever required)
- Recognition (knowledge of whether a person or object is right or wrong and its utility),
- Evaluation (to determine the usefulness and quality of an object or a person on the basis of some fixed criteria),
- Counting (a method of counting which follows an Already designed model),
- Decision making (to choose the best option among many available options)
- Language (related to attainment and use of complex system of communication)

Human cognitive processes may be conscious, Hub conscious, concrete, abstract or conceptual. Man creates new knowledge using the previous knowledge through these processos, Knowledge process is evaluated from various aspects such as psychology, philosophy, sociology, language, logical reasoning, computer science etc. This process is more related- to mind and is based on mental functions and mental processes.

Teaching and Learning about Cognitive Processes

The way and level of understanding of subject matter taught by the teacher in the teaching learning process is primarily based upon the level of the development of cognitive activities of the learner. The students whose cognitive abilities are highly developed learn very easily. His learning in not only quick but also steady. The development of cognitive abilities depends upon

our sensory organs. Neuron also helps in cognitive process by taking all the information recorded through all sensory organs. Then the information received is acted upon by the cognitive abilities of the human and are thought upon and understood accordingly.

The most important aim of education system is to make teaching and learning more effective. This can be achieved only if all the information perceived from environment is understood and implemented without any hindrance. So, this may be the reason why teachers should focus on cognitive abilities of the students, so that they could be more receptive and their abilities of understanding, memory, decision making, problem solving could be fast and they could realize how to learn, understood and think.

Meaning and Definitions

The word 'cognitive' is derived from Latin word 'cognoscere which means to know. Some educationists also consider it in the form of process:

Basically psychologists evaluate the term 'cognition' as how the human beings perceive the knowledge and how do they implement it. Cognitive development means attainment of maturity by those cognitive abilities of a person or a student by which they give any appropriate response to a provided stimulus. Some definitions are given below:

1. "Cognition process of knowing included attending, remembering and reasoning also the content of the process such as concepts and memories." -***American Psychology Association***

2. "Cognitive process is higher mental process such as perception, memory language, problem solving, and abstract thinking." -***American Psychology Association***

3 "Cognition refers to mental activities and behaviour through which knowledge of the world is attained and processed, including attention abilities, learning perception and thinking. **Agyajit Singh**

4. "Cognition refers to the mental process by which external or internal input is transformed, reduced. elaborated, stored, recovered and used. As such, it involves a variety of functions such as perception, attention, memory coding, retention and recall, decision making, reasoning, problem solving, imaging planning, and executing actions." **-Neisser (1967)**

Definition of some related words:

Cognitive Map: Mental representation of a physical object.

Cognitive Structure: The basic cognitive process used to give meaning to any received information is called cognitive structure.

Cognitive Learning: This principle explains why brain is the only network of dissemination of information.

Knowledge is considered as flow of information from sensory nerve to brain. In this way, cognitive learning means the changes perceived from the environment for the processing of information. There are definite and ordered steps to understand and rearrange the information:

1. Attention: Attention is the first and the most important step of cognitive learning. To pay attention on what we listen, watch and experience is the basis of learning a cognitive process The more attention paid towards a work results in more better understating and impressive output of the work. Based on research it has been proved by the scientists that one person can focus on two or three general tasks at one time.

2. Storage: The next step after attention is to store that information in one's own memory ay information can stay for 10 seconds, 20 sec, one day on whole ide in our memory depending upon the nature and utility of that information. For instance, if a person is something daily or that is related to important part of how her life, then he|/ she will remember it for long time. But the less practiced and less useful information is forgettable soon.

3.Retrieval : All the information is organized by our braid after attention which can be retrieved at the time it is required. This retrieval of information depends upon the completeness and proper classification of the information. The information organized and categorized properly can be retrieved in a better way and at correct time.

The teachers in cognitive teaching makes the student learn how to perceive the information, how to think upon it, and how to utilize the information. So, it is necessary for students to pay attention

Appropriate learning means to teach students how to categorize the information in memory so that they could make it useful after its retrieval

The teachers judge the ability about cognitive processes in teaching and learning process by framing some questions to make cognitive processes more impressive

1. How should I teach so that students could be intellectual?
2. Which strategies would be useful in memorizing, what I am teaching?
3. Which technique should be adopted so that children could analyze the theme?
4. How much a student can learn?
5. How to utilize information resources model appropriately?
6. Is the IQ level of the students fixed or can be enhanced through instruction?
7. How to seek the attention of the students?
8. How to develop cognitive abilities like problem solving, generalization etc.

ROLE OF TEACHER

A teacher encounters many troubles and questions during teaching. The success of a teacher depends to a great extent upon whether he focuses on the rotting of information or understanding of the same. A successful teacher is one who teaches how to solve a problem and how to learn, think and make decisions. This means an effective teacher focuses on the development of cognitive abilities because the teacher teaches the students how to use their cognitive abilities.

The world is store house of information. To be successful, the students need to memorize the information. A teacher teaches the students the methods of proper management, classification and long term storage of information so that it could help the students to solve the problems of their life.

1. Teaching about memory improvement: The scope of memory needs to be vast and large for cognitive learning. For this, teacher tells the students about techniques to memorize things along with information, which includes following ways:

(a) Rehearsal: It is mostly said that "Repetition is the secret to good memory." Following this pattern the teacher repeats the subject matter taught in the class.

(b) Elaboration: The students facing problems in memorizing the information are made to learn the concept by correlating the new information with their previous knowledge. For example-If a student has learnt about colours, all the other concepts can be related to colours like-numbers, alphabets etc. So that he could learn it in better way. Keywords can be used in higher classes which helps to summarize long contents into small words making it easy to learn the content.

(c) Organization: In this, all the information gathered is organized in structure. For its better management, a teacher teaches the student about appropriate categorization and learning of information so that students are able to store information under different titles and subtitles and could retrieve this information whenever required.

2. Teaching about reading comprehension: Meaning of teaching about reading comprehension is not only that the teacher teaches the students how to pronounce the word but also how to comprehend these words. Comprehension monitorism is a phrase related to strategies in which the students use the taught content in order to learn it. Robinson (1946) gave following examples related to cognitive strategies:

- SQ3R: Survey, Question, Read, Recite & Review
- PQ3R: Preview, Question, Read, Recite & Review

Following skills are included into cognition strategies:

(a) Setting Goals for Reading: In this students learn to question themselves that what is to be done with the content they have learnt. Example-why do I read this story?

(b) Focusing Attention: In this students get them incited with the medium of questions. Example can I think about something what I read?

(c) Self-Reinforcement: In this students learn to say, "Excellent! I understand this, do the good thing" or "this strategy is implemented in actual practice". This can be done by the students only when the students are able to understand the whole material.

(d) Coping with Problems: When the teaching is related to reading comprehension and the students fail to understand the meaning of words they learn to say, "I could not understand this, I have to read it again" or "This is a small mistake, I can correct it."

3. Teaching about problem solving: There are some strategies for the problem solving by which the cognitive learning process of students is improved. There are so many teaching strategies by which the students develop the problem solving ability.

Strategies for scientific attitude (Kuhn, 1989)

Reform based strategies for solving common problems (Berkel, Shaninder and Pressley, 1990; Mayer 1987; Sternberg 1988)

Strategies for solving mathematical problems. (Schonfeld, 1989)

It is certified that children start using the strategies for solving problems at the age of two years. Good students know how to use memory strategies for retrieval of the information, how to comprehend the words, students use more problem solving strategies while dealing with problems of mathematics and science. They use strategies at every stage for doing whole work.

4. Teaching about meta-cognition: Meta-cognition is the ability of a person to make strategy on basis of his own previous knowledge with which he can approach any learning task, make necessary efforts to solve problems, evaluate results and reflect upon them and improve his own approach as per need. It helps students to choose an appropriate knowledge tool with which they can do their task and can play critical role in learning successfully.

Meta-cognition means student's awareness towards acquired knowledge. This means he should know what kind of knowledge he has i.e., along with theoretical knowledge, What strategies should be used for solving problems. They should be taught how to select a proper strategy so as to get effective results. The way students use these strategies depends upon the way/methods of teaching used by the teacher.

Flag Well (1979) divided the Meta cognitive knowledge into three parts:

(a) Personal variable

(b) Task variable

(c) Strategy variable

(a) Personal variable: When person is able to recognize his/her strength or weaknesses in learning the information resources, it is known as personal variable.

(b) Task variables : It is the knowledge about nature of task and type of processing demands, Vor example To understand which work is more interesting and less time consuming out of two tasks. Take it takes lesser time to read and understand the contents of a novel than a technical content based book.

(c) Strategy variables: To use strategies flexibly to successfully accomplish a particular task,

Teaching Meta cognitive skills brings improvement in learning through the behavioral understanding of the cognitive strategies (such as to retrieve information from brain, analysis of pictures and sounds, comparisons, problem-solving, and improvement in memory etc.)

5. Teaching about knowledge attainments :While planning to teach any subject matter, the teacher should ask himself certain questions such as-

- Is the knowledge of whatever I will teach the students is important for them?
- What changes in the thought processes of the learners will emerge after reading the facts, assumptions, principles?
- What a learned person can do that a student with limited knowledge can't?

Conclusion: In Teaching and learning cognitive processes are closely linked to the roots of education. Our education and its aims can be successfully accomplished only if there is improvement in the cognitive processes of students. For example when the processing of computer is slow it takes much time and gives unsatisfactory output. Similarly teaching cognitive processes to the students can enhance their processing making it effective and beneficial.

Teaching Concepts Through Discovery Method

Teaching methods can be classified into instructor-centeredness and learner-centeredness. At one end of the spectrum are instructor centered expository methods such as the lecture, Those expository methods are generally regarded we highly efficient means of delivering learning content, when with somewhat unreliable levels of quality; the effectiveness of a lecture, for instance, is highly dependent on the skill of the lecturer. At the other end of the spectrum are learner-centered methods such as guided discovery and problem-based instruction. While these

methods lose something in efficiency and neatness, they gain a lot in levels of learner engagement

Research literature shows that instruction is generally more effective when:

- Learners feel accountable for their learning.
- Are actively involved in the learning experience.

Teaching concepts through discovery learning is an inquiry based, constructivist approach that takes place in problem solving situations where the learner draws his or her own past experiences and existing knowledge to discover facts and relationships and new truths to be learned.

Discovery learning can be defined simply as a learning situation in which the principal content of what is to be learned is not given, but must be independently discovered by the learner, making the student an active participant in his learning.

Discovery learning is an active learning process where students develop higher-level skills to build a deep understanding of major concepts. There are five main strategies included in discovery learning: (1) case-based learning, (i) incidental learning, (iii) learning by exploring/conversing, (iv) learning by reflection, and (v) simulation based learning. All of these strategies are based on the theories described by John Dewey, Jean Piaget (1954), and Lev Vygotsky. Discovery learning encompasses an instructional model and strategies that focus on active, hands-on learning opportunities for students, Bicknell-Holmes and Hoffman (2000) describe the three main attributes of discovery learning.

1. exploring and problem solving to create, integrate, and generalize knowledge,

2. student driven, interest-based activities in which the student determines the sequence and frequency.

3. activities to encourage integration of new knowledge into the learner's existing knowledge base.

A distinction is usually made between discovery learning, in which the students work on their own to a very great extend, and guided discovery, in which the students are provided with some

direction and instructions. Unguided discovery is appropriate for preschool children, but in typical elementary and secondary classrooms, unguided activities usually proves unmanageable and unproductive.

Jerome Bruner believes students must be active-they must identify key principles for themselves rather than simply accepting teacher's explanations. This process, he named as discovery learning. He lays out two targets for discovery learning theory:

- Discovery Learning Theory should act as a refined extension of the broad based theory constructivism by focusing on the individual.
- Discovery Learning Theory should serve as a way of defining and providing structure to the way in which individuals learn thus acting as a guide for educational research.

Bruner postulated three principles associated with Discovery Learning Theory:

- Instruction must be concerned with the experiences and contexts that make the student willing and able to learn (readiness).
- Instruction must be structured so that it can be easily grasped by the student (spiral organization).
- Instruction should be designed to facilitate extrapolation and or fill in the gaps (going beyond the information given).

Concept Discovery Model

Using the Concept Discovery Model (Drost and Todorovich, 2013) outlined below, educators walk students through the following elements, not providing the answers but instead helping students to find them on their own

- Focus Skill Activity Concept Discovery Concept and Review Focus Skill Practice
- Focus Skill-Specific fundamental movement the student must perform
- Skill Activity-Students perform the focus skill and the educator observes initial skill ability

- Concept Discovery-Educator presents a progression of questions that lead students to discover a concept of the focus skill, using their experience performing the tank to assist in discovering the answers to the questions
- Concept Review-Educator immediately captures the cognitive learning that took place in concept discovery (resulting in the students now understanding the "why"), and then again introduces the focus skill with cues, identification of common errors, and a demonstration by the educator (or capable student)
- Focus Skill Practice-Students practice the focus skill, getting feedback on performance from the educator on skill cues and the focus skill concept discovered during Concept Discovery. Students now have a deeper understanding of the focus skill, and practice with a purpose

Characteristics of Discovery Method

- Based on the principle of learning by doing
- Imply true engagement, meaningful engagement
- Reduced dropout rates
- Engage learners in the content, provide opportunity for reflection, and stress application
- Students take on an active role to create, integrate, and generalize knowledge
- Learning occurs at student's own pace
- This method contributes greatly to student motivation and ownership of their learning

In discovery learning, students are active. Learning is not defined as simply absorbing what is being said or read, but actively seeking new knowledge. Students are engaged in hands-on activities that are real problem needing solutions. The focus in discovery method is to learn how to analyze and interpret information to understand what is being learned rather than just giving the correct answer from rote memorization. Discovery learning pushes students to a deeper level of understanding. Discovery learning is not like traditional classroom learning. The five major differences between discovery learning and traditional learning are:

- Learning is active rather than passive
- Learning is process-based rather than fact-based

- Failure is important
- Feedback is necessary
- Understanding is deeper

Discovery learning can be facilitated through various strategies in the classroom. Discovery learning promotes a student-based philosophy in which the instructor takes on the non-traditional role of mentor or coach, leaving the students to discover solutions for themselves. Teachers must be trained on and understand completely the pedagogy and theories of working with young children in order to effectively embrace discovery learning. The current 21" century environment is ripe for discovery learning to take hold because of the increased capabilities of technology, the demands of an international economy, the shift in the stability of jobs in the workplace, and the increase in the number of careers people will have over a lifetime. Society is also showing signs of wanting something different. Home-schooling provides them experiences in dance, art, gymnastics, foreign language, etc. It needs to be decided whether or not discovery learning is a viable answer to making students better prepared for the adult world they will one day .

Purpose of Discovery Method

- Students learn some procedures that are necessary in figuring things out themselves
- Developing attitudes and practice strategies used in problem solving ,inquiry and research
- Increase student's ability to analyze ,synthesize and evaluate information
- Intrinsic rewards such as satisfaction when making a discovery motivate students in classroom.
- Students are actively involved.
- Learn to find patterns in abstract and concrete situation
- Develop effective ways in working in a team
- Skills and concepts learnt is discovery lessons are more meaningful to students

Advantages of Discovery Method

- Provides high motivation because students have the opportunity to experiment

- Allows learners to seek information that satisfies their natural curiosity
- Fosters curiosity
- Personalizes the learning experience
- It provides the opportunity for students to explore their desires and consequently creates a more engaging learning environment
- Discovery learning increases student achievement when the students are learning skills rather than facts
- Increase of intellectual potential and leads to self satisfaction
- Helping student learn how to learn
- Students learn the skills of problem-solving and inquiry, enabling them to arrange and use what they learn in new situations and learn further concepts
- Opportunity to learn the heuristic of discovery
- Helps the process of memorizing
- Knowledge that produced through discovery is easier to remember and more easy to recall
- Builds on the student's prior knowledge and understanding
- Supports active engagement of the student in the learning process

Limitations of Discovery Method

- Doesn't cover the course content
- Requires too much preparation and learning time
- Confuses the student if no initial framework is available
- Leads to student frustration
- Not fit to use for too big or too small class size

Despite major barriers exist, research has found some advantages in the areas of motivation, retention, and achievement. More research in the comparison of the discovery learning method versus traditional teaching on process-based content would be very beneficial. However, current school structure, in terms of class sizes, curricula and grade

levels, and accountability requirements, including standardized tests, hinder the use of the discovery learning method in the classroom.

Suggestions to Incorporate Discovery Learning Method in Classrooms

- Have specific small objectives
- Encourage the students to discuss with one another
- Direct discussions towards useful outcomes
- Monitor the flow of ideas and activities in the classroom
- Answer student's questions
- Ask leading questions
- Provide some useful resources when students need help
- After a discovery has been made, the teacher should help in formulating an understandable statement and to test its reliability and validity.

TEACHING CONCEPTS THROUGH EXPOSITION METHOD

One important aim of education is to foster the full development of an individual to enable full contribution to the well-being of the society. There are basically two types of teaching approaches:

- Direct Approach
- Indirect Approach

Expository method of teaching comes under the domain of direct approach. Unlike Bruner's approach of directional teaching; David Paul Ausubel, an American Psychologist believed that understanding concepts, principles, and ideas are achieved through deductive reasoning. He also emphasized the idea of meaningful learning and advance organizers as compared to rote memorization.

Characteristics of Exposition Method

- Content oriented
- Teacher-centered
- One-way process
- Provides factual information
- Similar information is directly available. No effort is required to look for the information
- Is used for dealing with the whole unit of teaching in detail from beginning to its end
- Clear and concise information is presented before students in a purposeful way
- Helpful for students to focus on the topic at hand

Cantrell (2004) reported the characteristics of exposition method to include the following:

- Leader-centered
- Leader-active
- Learner passive and
- Content emphasis

Exposition can take place in the context of an event, such as a lecture, a seminar or a presentation, and both face-to-face and online, using web, video or tele-conferencing software etc. Exposition can also take the form of content, using text, images, animation, audio and video. Historically this content was delivered using offline media, such as books, tapes, CDs and DVDs, although now it is as likely to be consumed online or downloaded for delivery on portable platforms such as iPods and e-book readers.

Advantages of Expository Method

- Teacher is completely in charge and guides the lesson
- Instructors can cover materials within a shorter time
- Helps develop the listening skills among the students
- Widely used and conventional method of teaching
- Beneficial for the auditory learner who does best when listening to instruction
- It is very successful in teaching concepts and principles
- Being an active member, teacher can correct the errors omitted by students

- Communicate large amounts of information in short period of time
- Expository teaching is more popular because it is more efficient and takes less time than discovery learning
- Encourage and allows deductive reasoning

Limitations of Expository Method

- Students are not been able to take an active part in their education
- Teacher dominated
- Not beneficial for slow learners as they get lost
- Generally most students lose interest listening to long lectures
- Students indulge in lots of daydreaming
- Students don't learn to interact in discussion type of activities
- Attempt to cover too much material in given time

Guidelines to use Expository Method in Classrooms

Teacher as the major information provider in the classroom should focus on the following suggestions to incorporate the

- Making clear what is the most important information and what is just nice to know
- Using story-telling and anecdotes to bring abstract concepts to life
- Making the most appropriate use of media elements- text, images, animation, audio and video
- Paring down the volume of content to reduce wasted time and minimize the risk of overload
- Modularizing the content so it can be easily random: accessed and reviewed

Teaching Concepts in Diverse Classrooms

Diversity in the law of nature, it has made this world wonderful and worth living. Amongst school children, it too is a natural phenomena, Diversity is found in their physical, intellectual, and social characteristics. Because of their these differences, their personal and educational needs are different from one another.

Surely a diverse classroom is the ideal laboratory in which to learn the multiple perspectives required by a global society and to put to use information concerning diverse cultural patterns. Students who learn to work and play collaboratively with classmates from various cultures are better prepared for the world they face now-and the world they will face in the future. Teaching and learning strategies that draw on the social history and the everyday lives of students and their cultures can only assist this learning process.

Teachers must plan very carefully to ensure that all students participate in high-interest educational activities that are personally relevant. To create enthusiastic, lifelong learners, effective teachers show students that what they are learning in school will equip them with the knowledge, confidence, and skills necessary to have fulfilling lives.

A culturally inclusive classroom is one where students and staff alike recognise, appreciate and capitalise on diversity so as to enrich the overall learning experience. Fostering a culturally inclusive learning environment encourages all individuals regardless of age, gender, ethnicity, religious affiliation, socioeconomic status, sexual orientation or political beliefs to develop personal contacts and effective intercultural skills.

Strategies in a Diverse Classroom

Engage in Positive Interactions with Students

- Establish an introduction system or "meet-and-greet" process that enables students and staff to gain information about the cultural backgrounds of others, and the diversity of experience in the classroom (e.g. ice-breaker activities in the first week of class), This can help to encourage interaction between students, as well as opening up discussion about diversity.
- It is important to celebrate similarities, as well as discovering differences between students.
- Promote computer and information technologies as an easily accessible method of student-lecturer interaction, particularly electronic bulletin boards, course mailing lists, and other online mediums.

- At the start of each semester, provide students with some information about your teaching style and instructional methods. Include details of your cultural background and any cross-cultural teaching, learning or research experiences you have had.
- Communicate to your students that you are committed to understanding individual differences and understanding your own assumptions, values and beliefs associated with diversity. This sends a message to students that culture is valued and respected in the classroom.
- Provide opportunities for your students to interact with you informally. Before and after lecturers or tutorials is an ideal time.
- Make an effort to learn something unique about each student. While this is challenging in large tutorials, exercises such as the "name activity" mentioned earlier can help in this regard.
- Display positive nonverbal behaviours (e.g., inviting facial expressions, eye contact, posture, hand gestures, physical distance) to ensure you appear approachable to students.

Eliminate Classroom Incivilities

- Establish explicit ground-rules for appropriate classroom conduct to protect against cultural exclusion and insensitivity.
- Communicate, verbally and non-verbally, high expectations for displaying mutual respect toward all students
- Encourage students to negotiate an accepted "code of conduct and set of disciplinary measures for inappropriate classroom behaviour
- Respond promptly to any behaviour (verbal or non- verbal) that could be considered prejudiced, biased or discriminatory in nature. Do not tolerate racist, sexists or culturally insensitive comments made by students.
- Avoid ignoring or neglecting the needs of individual students. For example, ensure you do not have a tendency to favour one group over another when answering questions.
- Avoid stereotypes and preconceived assumptions in your teaching practices and course content.
- When presenting information on cultural and clearly cite published literature and research findings, rather than expressing your personal opinion.

- Similarly, encourage students to draw on diverse date sources/evidence to develop their arguments and critique opinions.

Encourage Open Classroom Discussion

- Prompt students to ask questions by using open-ended statements, such as "Would anyone like to share a different opinion or perspective?"
- Avoid singling out individual students or putting anyone "on the spot", particularly when discussing culturally or personally sensitive issues,
- Promote turn-taking when discussing controversial issues. For example, ensure students take turns expressing their own opinions while also listening to(and genuinely considering) the views of others.
- Ask students how they prefer to learn, and, where possible, examine how you might adapt your teaching and learning activities accordingly.

Suggestions for Teaching in Diverse Environment

Our students are diverse in their cultures and ethnicity, their experiences, their learning styles, and many other dimensions. And all of these dimensions shape who they are and how they learn. Effective teachers understand this and use a variety of teaching methods to promote student learning. Below are some basic suggestions on how to teach effectively in a diverse learning environment:

- Following the principle of 'zero rejection policy', according to which everyone should be welcomed in the class.
- It is preferable to use strategies that recognize and capitalize on this diversity.
- Appreciating the individuality of each student is important. While generalizations sensitize us to important differences between groups, each individual student has unique values, perspectives, experiences and needs.
- Helping the child to grow his potentiality to the maximum.
- Make all students understand and accept human differences.
- Helping parents, voluntary organizations and educational planners in understanding the problems of diverse learners.

- As teachers, it is important that we recognize our own learning styles and cultural assumptions, because these styles and assumptions influence how we teach and what we expect from our students. Being aware of them allows us to develop a more inclusive teaching style.
- As you plan your course, and each class, prepare multiple examples to illustrate your points. Try to have these examples reflect different cultures, experiences, sexual orientations, genders, etc., to include all students in learning.
- Help students move between abstract, theoretical knowledge and concrete, specific experiences, to expand everyone's learning.
- Use different teaching methods (lectures, small groups, discussions, collaborative learning) to meet the variety of learning needs.
- Establishing appropriate goals for the diverse learners. The goals should be realistic, measurable and also give opportunity for optimum development of potentials of all learners.
- Designing appropriate curricula, assigning work geared towards each student's needs and abilities, and grading papers and homework assignment according to their specific abilities and capacities.
- Working closely with parents to inform them of their child's progress and support techniques to promote learning at home.

CONCLUSION

Educational psychologists became interested in how people think, learn concepts and solve-problems. Interest in concept learning and problem-solving soon gave way, however, to interest in how knowledge is represented in the mind and particularly how it is remembered. Now there is renewed interest in learning, thinking and problem-solving. The cognitive view of learning is a general approach that views learning as an active mental process of acquiring, remembering and using knowledge. So cognitive psychologists assume that mental processes exist, that they can be studied scientifically and that humans are active participants in their own acts of cognition.