#### **EDU201 MIDTERM PAST QUESTIONS**

#### BY NIMRA KHALID

# Q1: Role teacher according to Dewey?2

According to Dewey, teachers have a responsibility to structure educational environments in ways that promote educative learning experiences, those that change the learner in such a way as to promote continued learning and growth. Dewey argues that the role of the teacher is to inculcate the artistic ideal of harmonizing the two and the success of the teacher is measured by his or her ability to achieve this.

# Q2: When humanistic approach become popular?2

The approach emphasizes individual's natural motivation towards creativity and self-actualization. Humanistic approach became popular during 1950s and 1960 after the WWII and the cold war.

# Q3: Three components of cognitive theory?3

There are three basic components to Cognitive Theory:

- Schemas: building blocks of knowledge
- Adaptation processes: enabling the transition from one stage to another
- Stages of development

#### **Q4:** Sumarize importance of learning styles in your own words?3

Simply students can learn in lots of different ways known as "learning styles". Understanding learning styles can make it easier to create, modify, and develop more efficient curriculum and educational programs. It can also encourage students' participation in these programs and motivate them to gain professional knowledge.

- Maximize success within the classroom by understanding that various learning styles and preferences exist and vary among students.
- In corporate activities that will maximize students preference. This will make learning more enjoyable, also faster and easier for students to learn the material.
- Creation of diverse lesson plans help: Students to be comfortable in an optimal learning environment, Students to grow and develop beyond their learning preferences
- Motivates the pupils and increases the teaching.
- Stimulates the learner's learning process
- Eases the teaching process with different aids and provides each lesson with the proper tool.

# Q5: Uses paradigm of learning in classroom?5

Behaviorists Paradigm of Learning Uses in the classroom

Teacher perspective:

• Reward systems (reinforcement) to promote learning

- Positive reinforcement
- Have consequences for negative behavior
- Teachers models and students imitate

Student perspective:

- Motivated to learn because they can get a reward
- Wants to do well because others are receiving rewards
- Criticism and Strengths
- One dimensional approach to understanding human behavior.
- Does not account for free will and internal influences such as moods, thoughts and feeling.
- Does not account for other types of learning, especially learning that occurs without the use of reinforcement and punishment.

# **Q6: Situated cognition relate with education?5**

Situated cognition is a theory that posits that knowing is inseparable from doing by arguing that all knowledge is situated in activity bound to social, cultural and physical contexts. Situated cognition is the study of human learning that takes place when someone is doing something in both the real and virtual world, and therefore learning occurs in a situated activity that has social, cultural, and physical contexts.

#### **Situated Cognition in Education**

- Knowing how to participate in social practices has a large role in schools.
- Much of students' identities are formed by the groups they participate in at school, e.g. sports, debates, journalism, music.
- A push for "authentic learning" where students learn content matter that is situated in a real world context.
- Students are encouraged to think and work like scientists, historians, mathematicians, etc.

Q7: Argument on "Learning is active†• (3)

# Q8: Write three reasons on why some educationists think that "Learning is not discover†• (3)

#### **Q9: Evolution of Behaviorism? (5)**

The development of behaviorism, the first domain psychologists carried out experiments in laboratories under strict conditions and thus observe behavior as never before. Behaviorism is a learning theory that concentrates only on behaviors that rae readily observable and disregards mental actions. It has a high impact on education, objectives/outcomes in curriculum, such as the importance of feedback, skills development and training, and pre-alignment of content, teaching methods and assessment.

#### Q10: Social Interaction of Cognitive Development (2)

Teachers provide scaffolds so that the learner can accomplish certain tasks they would otherwise not be able to accomplish on their own. The goal of the educator is for the student to become an independent learner and problem solver.

According to Vygotsky (1978), much important learning by the child occurs through social interaction with a skillful tutor. The tutor may model behaviors and/or provide verbal instructions for the child. Vygotsky refers to this as cooperative or collaborative dialogue.

# Q11: Self actualization (5)

According to humanistic psychologists, we are motivated not merely to survive, but to become better and better. This process is called self-actualization.

Self-actualization is the complete realization of one's potential, and the full development of one's abilities and appreciation for life. This concept is at the top of the Maslow hierarchy of needs, so not every human being reaches it.

#### Q12: Define self-esteem.

Self-esteem is to develop new knowledge based on background knowledge so as to help to ensure success. Self-esteem is your overall opinion of yourself — how you feel about your abilities and limitations. When you have healthy self-esteem, you feel good about yourself and see yourself as deserving the respect of others.

#### Q13: What are two information styles?

There are two information styles

- 1. Analytic prefer details
- 2. Global prefer the big picture

# Q14: what are activities included in thinking?

The process of thinking includes the activities of:

- Perception of external stimuli.
- Encoding it, and
- Storing the perceived and encoded data in one's brain.

#### Q15: Explain Eureka Effect

The eureka effect (also known as the Aha! moment or eureka moment) refers to the common human experience of suddenly understanding a previously incomprehensible problem or concept.

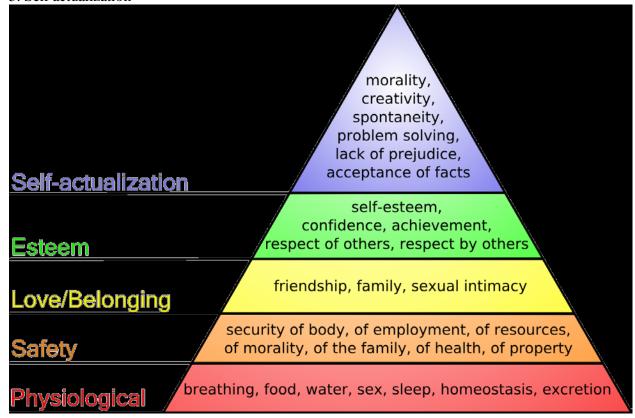
Hiero II asked Archimedes to find a method for determining whether a crown was pure gold or mixed with silver. While taking a bath in bath tub he realized that a given weight of silver would displace more water than an equal weight of gold. At this point the shouted, "EUREKA" (I have found it!) Discovery learning is based on this "Aha!" method. This Aha! Moment occurs when a learner finally comes across the answer to a problem on their own and when things suddenly begin to make sense. Although in some of our classrooms, "Aha!" sounds more like, Aaaaaahhhhh!

#### Q16: Explain Maria Montessori work

The Montessori Method was developed by Dr. Maria Montessori in the early 1900s. It's a specific child-centered method of education that involves child-led activities (referred to as "work"), classrooms with children of varying ages and teachers who encourage independence among their pupils. Montessori is a method of education that is based on self-directed activity, hands-on learning and collaborative play. In Montessori classrooms children make creative choices in their learning, while the classroom and the highly trained teacher offer age-appropriate activities to guide the process. The main purpose of a Montessori school is to provide a carefully planned, stimulating environment which will help the child develop an excellent foundation for creative learning. The specific goals for the children who attend a Montessori school are: Developing a positive attitude toward school!

# Q17: Write steps of Maslow's need Hierarchy

- 1. Physiological needs
- 2. Safety needs
- 3. Affiliation and affection
- 4. Esteem needs
- 5. Self actualization



#### Q18: Differnciate b/w Accomodator and Diverge OR Assimilator and Converge Theories

**Accommodator-CE/AE** (**feeling and doing**) these learners exhibit strong preferences for Concrete Experience and Active Experimentation.

- Is a hands-on learner
- Likes to take new challenges
- Is a team worker relies more on intuition than logic
- Is target oriented depends on others for problem solving

**Diverger-CE/RO** This type of learner is excellent at seeing the "big picture" and compiling smaller pieces of knowledge into a comprehensible totality. Divergers frequently possess creative, emotional, and idea-rich qualities. This learning method is more common in musicians, painters, psychologists, and people who have a strong interest in the fine arts, humanities, and liberal arts.

- Likes to watch more than do
- Is sensitive, emotional and creative
- Prefers group work
- Uses own imagination for problem solving
- Shows open mind and accepts personal feedback

**Assimilator-AC/RO** (thinking and watching) Reflective Observation and Abstract Conceptualization are preferred by assimilators. One of their major skills is analyzing and creating theoretical models/scenarios rather than acting unwisely on emotion.

- A thinker; needs time to think
- Prefers a to the point, logical approach to learning
- Likes to have clear explanation instead of practical opportunity
- Creates abstract ideas and theories

**Converge-AC/AE** (thinking and doing) you seek to convergences to make theories and concepts a reality. This learning style is characterized by a combination of abstract conceptualization and active experimentation skills. They specialize at putting ideas into practise and perform best when there is an issue that needs a single, perfect answer.

- Technical minded, likes technical tasks
- Likes experimentation, test new ideas
- Applies learning to find solutions to practical situations

#### **O19: reflective observation**

In this stage of the learning cycle, people understand ideas and situations from different points of view. In a learning situation the learner would rely on patience, objectivity and careful judgment but would not necessarily take any action. The learners would rely on their own thoughts and feelings in forming opinions. In the example, after finishing tutorial, the students reflects on what they did, makes observations and discusses how they went with their teacher.

Q20: dual coding theory

Dual coding is the idea of using different types of stimuli to help learners encode information in their brains more effectively, enabling it to be more easily retrieved later on. In the classroom, the main two types of stimuli that are used are visual and verbal.

When both visual and verbal representations are used, people both process and remember the information more effectively. Paivio's work has implications in many areas including human factors, interface design as well as the development of educational materials.

# Q21: instructor role

Instructor's role is to Move away from providing and structuring information. Focus on modeling, coaching and scaffolding. Create knowledge to solve contextual real-life problems.

# Q22: concrete and abstract learner difference

#### Concrete Learners:

Like to learn through their physical sense,

- What they can touch, see, hear, taste and smell.
- They like to deal with things that exists in the physical world.

#### Abstract learners:

- Prefer the world of ideas and feelings.
- Abstract learners use intuitions and imaginations.

# O23: affiliation affection relation between teacher and student

- Provide positive comments and feedback rather than negative.
- Teacher personality: empathetic, considerate and interested in the individual, patient, fair, positive attitude, good listener.
- Use one-on-one instruction.
- Get to know students (like, dislikes, concern)
- Be available for students in need.
- Listen to student.

#### **Q24:** 3 basic concepts of culture

- Cultures create mental tools which transform our mental work just like physical tools transform our physical work
- As we internalize these tools we became smarter
- Language is the mother of all mental tools
- We internalize these tools as we work in our zone of proximal development

#### O25: constructivism

Constructivism is the theory that says learners construct knowledge rather than just passively take in information. As people experience the world and reflect upon those experiences, they build their own representations and incorporate new information into their pre-existing knowledge (schemas). Constructivism is based on the idea that people actively construct or make their own knowledge, and that reality is determined by your experiences as a learner. Basically, learners use their previous knowledge as a foundation and build on it with new things that they learn.

#### **Q26:** cognitive thory of development

Jean Piaget's theory of cognitive development suggests that intelligence changes as children grow. A child's cognitive development is not just about acquiring knowledge, the child has to develop or construct a mental model of the world. Learners must construct their own knowledge, they build their knowledge through experience. Experiences enable them to create schemas — metal models of the world. These schemas are changed, enlarged, and made more sophisticated through two complementary processes: assimilation and accommodation. Four stages of cognitive theory of development are;

- Sensorimotor stage (0–2 years old)
- Preoperational stage (2–7 years old)
- Concrete operational stage (7–11 years old)
- Formal operational stage (11 years old through adulthood)

#### **Q27: situated learning**

The idea of learning information and skills in situations that are similar to how they will be applied in real life. This idea urges teachers to position their students in settings that are as close as possible to the real-world situations in which their lessons will be applied. Situated learning gives students the chance to engage with real-life, problem-solving contexts. This means that when designing instruction, one must remember: The best learning occurs when students are presented with a problem themselves and must think through and act on like the experts.

#### **Q28: Self Actualization**

Self-actualization is the complete realization of one's potential, and the full development of one's abilities and appreciation for life. This concept is at the top of the Maslow hierarchy of needs, so not every human being reaches it.

According to humanistic psychologists, we are motivated not merely to survive, but to become better and better. This process is called self-actualization. Personal growth and fulfillment moving towards bigger goal.

#### **O29:** left brain functions

The left brain handles reading, writing, and calculations. Some call it the logical side of the brain. The right brain is more visual and deals in images more than words. It processes information in an intuitive and simultaneous manner.

#### O30: evolution of constructivism

- The concept of constructivism has roots in classical antiquity.
- Goes back to Socrates's dialogue asked his followers directed questions that led students to realize for themselves the weaknesses in their thinking.
- Socrates claimed that basic conditions for learning exist in the cognition of the individual (Kanuka & Anderson, 1998)
- It was Piaget's theory of intellectual growth that had the primary influence on the development of current positions.

- Specifically, Piaget first emphasized the processes of conceptual change as interactions between existing cognitive structures and new experiences.
- In recent times, John Dewey and Jean Piaget developed theories of childhood development and education (what we now call progressive education) that led to the evolution of constructivism.

#### **EDU201 MIDTERM RECENT QUESTIONS**

#### BY NIMRA KHALID

# Q1: constructivism

(Constructivism is the theory that says learners construct knowledge rather than just passively take in information. As people experience the world and reflect upon those experiences, they build their own representations and incorporate new information into their pre-existing knowledge (schemas).)

# **Q2:** behaviorism

(Behaviorism is a theory of learning based on the idea that all behaviors are acquired through conditioning, and conditioning occurs through interaction with the environment. Behaviorists believe that our actions are shaped by environmental stimuli. An example of behaviorism is when teachers reward their class or certain students with a party or special treat at the end of the week for good behavior throughout the week. The same concept is used with punishments. The teacher can take away certain privileges if the student misbehaves.)

# Q3: situated notification affialtion effect on learners

#### Q4: work of central executive in long term memory

(The central executive is responsible for controlled processing in working memory, including but not limited to, directing attention, maintaining task goals, decision making, and memory retrieval.)

#### **Q5:** humanistic approach

(The humanistic approach emphasizes the personal worth of the individual, the centrality of human values, and the creative, active nature of human beings. The approach is optimistic and focuses on the noble human capacity to overcome hardship, pain and despair. Group therapy for families is an example of a humanistic approach. This type of therapy allows families to talk about their relationships with one another to encourage and strengthen those relationships, especially when families are going through difficult times, such as periods of substance abuse or divorce.)

# **Q6: Types of conditioning**

(There are two types of conditioning .Classical conditioning involves associating an involuntary response and a stimulus, while operant conditioning is about associating a voluntary behavior and a consequence.)

# Q7: Implication of maslows hierarchy safety and security in the class room

(Teachers and leaders tend to primarily handle the four deprivation needs (self-esteem, sense of belonging, safety, and physiological). Every step an educator makes toward contributing to those fundamental needs will enhance their students' capacity for learning and achievement in the classroom. Safety needs in Maslow's hierarchy refer to the need for security and protection. When we have our physiological needs for food and water met, our safety needs dominate our behavior. These needs have to do with our natural desire for a predictable, orderly world that is somewhat within our control.)

# **Q8: Difference between accomodator and diverger (repeated)**

#### **O9:** Core concept of constructive paradigm

(Constructivism implies that reality is constructed through human interaction. Knowledge is a human product and is socially and culturally constructed. Individuals create meaning through their interactions with each other and with the environment in which they live. Constructivism sees the world, and what we can know about the world, as socially constructed. This view refers to the nature of reality and the nature of knowledge that are also called ontology and epistemology in research language.)

#### Q10: Characteristics of three year old child(pre opernational) in paigets theory

(Major Characteristics Piaget noted that children in this stage do not yet understand concrete logic, cannot mentally manipulate information, and are unable to take the point of view of other people, which he termed egocentrism. The preoperational stage (2–7 years) during this stage, children build on object permanence and continue to develop abstract mental processes. This means they can think about things beyond the physical world,

#### Q17: function of left brain.

(The left brain handles reading, writing, and calculations. Some call it the logical side of the brain. The right brain is more visual and deals in images more than words. It processes information in an intuitive and simultaneous manner.)

# Q18: nature of learning. (topic # 2)

The depth or nature of the changes involved are likely to be different:

- 1. Learning as a quantitative increase in knowledge: Knowing a lot
- 2. Learning as memorizing: storing information to reproduce.
- 3. Learning as acquiring facts, skills and methods to retain and use.
- 4. Learning as making sense or abstracting meanings.
- 5. Learning as interpreting and understanding reality in a different ways.

#### Q19: evolution of behaviourism. (topic 10)

#### **Behaviorism:**

- The development of behaviorism, the first domain psychologists carried out experiments in laboratories under strict conditions and thus observe behavior as never before.
- Behaviorism is a learning theory that concentrates only on behaviors that rae readily observable and disregards mental actions.
- It has a high impact on education, objectives/outcomes in curriculum, such as the importance of feedback, skills development and training, and pre-alignment of content, teaching methods and assessment.

#### Q20: koi kolbs ka cycle tha.

(The learning cycle that David Kolb analyzed in his model published in 1984 basically involves four stages, namely: concrete learning, reflective observation, abstract conceptualization and active experimentation. Effective learning can be seen when the learner progresses through the cycle.)

# **Q21:** pre-operational stage.

(The preoperational stage is the second stage in Piaget's theory of cognitive development. This stage begins around age two and lasts until approximately age seven. During this period, children are thinking at a symbolic level but are not yet using cognitive operations.)

## **Q22: situated cognitive**

(Situated cognition is a theoretical approach to human learning that supports the idea that learning takes place when an individual is doing something. Situated cognition has been positioned as an alternative to information processing theory.)

#### Q23: What are the Two Components of LTM?

It has two components

- Explicit memory: information you have to consciously work to remember.
- Implicit memory: information remembered by you unconsciously and effortlessly.

# Q24: Rote learning AND learning through understanding

#### **Rote Learning**

- Learning through repetition.
- Mechanical and requires little understanding (e.g. learning multiplication tables)

#### **Learning through Understanding**

- Learning and remembering by understanding the relationships among ideas and information.
- Both types of learning and memory are useful and often are used together.

# Q25: Define the importance of learning theories?

Key Value 1

- Gives language and a conceptual framework for understanding the examples of learning that we observe.

Key value 2

- ♣ Suggests where to look for solutions to practical problems. Importance of Learning theories.
- A Provides better idea of purpose behind teaching and learning.
- ♣ Equips the teacher to meet the learning needs of learners effectively.
- ♣ Enhances teaching and learning by providing guidelines to different methods of teaching and use of instructional resources including technology.

# Q26: Define reflective observations?

In this stage of the learning cycle, people understand ideas and situations from different points of view.

- In a learning situation the learner would rely on patience, objectivity and careful judgment but would not necessarily take any action.
- The learners would rely on their own thoughts and feelings in forming opinions.
- In the example, after finishing tutorial, the students reflects on what they did, makes observations and discusses how they went with their teacher

### Q27: Explain Fleming VAK VARK Model?

Perceptual strength relates to auditory, visual, tactual or kinesthetic learning.

- Fleming (1987) developed a list of perceptual factors designed to help students learn more about their individual learning preferences.
- Neil Fleming's VARK model is one of the most popular representations.
- Identifies 4 learning preferences:
- 1. Visual
- 2. Auditory
- 3. Read/write
- 4. Kinesthetic

# Q28: Explain Schema yours own words?

"A cognitive framework or concept that helps organize and interpret information".

In the psychology of learning, schemas refer to how you develop what you know about a topic or concept and how you integrate new information.

A schema is a cognitive structure that serves as a framework for one's knowledge about people, places, objects, and events. Schemas help people organize their knowledge of the world and understand new information.

#### **Q29: dual coding theory** (Allan Paivio)

He proposed that presenting information both visually and verbally enhances recognition and recall. We have two keys of processing information:

- 1. Visual Channel
- 2. Verbal Channel
- When both visual and verbal representations are used, people both process and remember the information more effectively.

- Paivio's work has implications in many areas including human factors, interface design as well as the development of educational materials.

#### Q30: instructor role

Move away from providing and structuring information.

- Focus on modeling, coaching and scaffolding.
- Create knowledge to solve contextual real-life problems.

# Q32: affiliation affected relation between teacher and student

- Provide positive comments and feedback rather than negative.
- Teacher personality: empathetic, considerate and interested in the individual, patient, fair, positive attitude, good listener.
- Use one-on-one instruction.
- Get to know students (like, dislikes, concern)
- Be available for students in need.
- Listen to student

#### Q33: Left brain function

The left brain handles reading, writing, and calculations. Some call it the logical side of the brain. The right brain is more visual and deals in images more than words. It processes information in an intuitive and simultaneous manner.

#### **Q34: sitauted learning**

Situated learning is a theory that explains an individual's acquisition of professional skills and includes research on apprenticeship into how legitimate peripheral participation leads to membership in a community of practice.

# Four concepts:

- Context (environment, setting)
- Content (concepts, activities, situations)
- Facilitation (internalize, information)
- Assessment (cognitive growth)

#### **Q35: Self Actaulaization**

According to humanistic psychologists, we are motivated not merely to survive, but to become better and better.

- This process is called self-actualization.
- Personal growth and fulfillment moving towards bigger goal.

According to Huitt (2001) people act with intentionality and values

#### O36: evalution of constructivism

**Evolution of Constructivism** 

- The concept of constructivism has roots in classical antiquity.
- Goes back to Socrates's dialogue asked his followers directed questions that led students to realize for themselves the weaknesses in their thinking.
- Socrates claimed that basic conditions for learning exist in the cognition of the individual (Kanuka & Anderson, 1998)

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- Specifically, Piaget first emphasized the processes of conceptual change as interactions between existing cognitive structures and new experience
- In recent times, John Dewey and Jean Piaget developed theories of childhood development and education (what we now call progressive education) that led to the evolution of constructivism.

#### Q37: Define self esteem

- . Self-esteem is confidence in one's own worth or abilities;
  - Develop new knowledge based on background knowledge so as to help to ensure success
  - Pace instruction to fit individual need
  - Focus on strengths and assets
  - Respect from others
    - Develop a classroom environment where students are positive and nonjudgmental.
    - Develop and carry out a curriculum to encourage children to be emphatic and good listeners.
    - Employ cooperative learning in such a way as to develop trust between group members.
    - Involve students in activities of importance and worthiness.
    - For instance, cleaning up the environment, carrying out a clothes drive for the needy.

# Q38: What are two information styles?

There are two information styles

- a) Analytic prefer details
- b) Global prefer the big picture

# Q39: what are activities included in thinking?

The key critical thinking skills are: analysis, interpretation, inference, explanation, self-regulation, open-mindedness, and problem-solving.

# Q40: Maslow theory levels

- 1. Physiological needs
- 2. Safety needs
- 3. Affiliation and affection
- 4. Esteem needs
- 5. Self-actualization

# Q41: Fleming Model explain

Perceptual strength relates to auditory, visual, tactual or kinesthetic learning.

- Fleming (1987) developed a list of perceptual factors designed to help students learn more about their individual learning preferences.
- Neil Fleming's VARK model is one of the most popular representations.

### Identifies 4 learning preferences:

- 1. Visual
- 2. Auditory
- 3. Read/write
- 4 Kinesthetic

# Q42: When Humanistic approach developed

The approach emphasizes individual's natural motivation towards creativity and self actualization

1350 and 1650 by moslow

# Q43: Advantage of visual style

Visual learning also helps students to develop visual thinking, which is a learning style whereby the learner comes better to understand and retain information better by associating ideas, words and concepts with images.

# Q44: benefits of situated cognition

In theory, situated learning has the potential advantage of (a) placing learners in realistic settings where socially acquired ways of knowing are often valued, (b) increasing the likelihood of application within similar contexts, and (c) strategically applying the learner's prior knowledge on a given subject.

# Q45: information processing?

The first factor involved in learning styles is information processing.

Information processing styles refer to the way in which the child concentrates, absorbs and retains information.

There are two information styles

- a) Analytic prefer details
- b) Global prefer the big picture

Sometimes also called right-brain and left-brain.

# Left Brain Functions Output Analytic thought Output Output

# Q46: preoperation characteristics?

#### Begins to use language

- Egocentric thinking: difficulty seeing things from other viewpoints
- Classifies objects by single features example, color.
- Develops capability of symbolic thought- however thinking still quite different from adults.

# Q47: thinking characteristics?

The process of thinking includes the activities of:

- Perception of external stimuli.
- Encoding it, and
- Storing the perceived and encoded data in one's brain.

# **Q48: LTM two Components**

#### It has two components

- Explicit memory: information you have to consciously work to remember.
- Implicit memory: information remembered by you unconsciously and effortlessly.

#### **IMPORTANT QUIZES**

- 6. Situated cogitation emphasis on ......

  "Perception"
- 7. There are components of Maslow's hierarchy needs: "Five"
- 8. In ...... The first intelligence test was developed. "1904"
- 9. "Students environmental preference for learning" referred as: "Multidimensional and instructional theories"
- 10. In the .....learning involves using theories, logic and ideas rather than feelings, to understand problems or situations.

  "Abstract conceptualization"