# GOGNITIVISM LEARNING THEORY

Learning is a lasting change in mental representations or associations resulting from experience. It entails the formation of connections within schemas through assimilation and accomodation. While learning leads to changes in mental structures, these changes may not always manigest in observable behaviors.

## THEORIST

#### <u>Edward Tolman</u>

- Learning is explained through internal mental processes, not just observable behavior.
- Learning can occur without reinforcement or a visible change in behavior.
- Behavior is purposive and goal-directed.
- Learning results in the formation of organized cognitive maps.

#### <u>Gestalt Psychology</u>

- Perception is distinct from reality, emphasizing that what we perceive is not always a direct reflection of the external world.
- The whole is greater than the sum of its parts, with organisms naturally organizing and structuring experiences in specific ways.
- Organisms are predisposed to organize experiences through principles like the law of proximity, law of closure, and law of Pragnanz.
- Learning involves the formation of memory traces, and problem-solving is achieved through restructuring and insight.

#### <u>Jean Piaget</u>

- Cognitive development occurs in stages (sensorimotor, preoperational, concrete operational, formal operational) and precedes learning, as suggested by Piaget.
- Learning involves interaction with the environment, where assimilation modifies perceptions to fit schemas, and accommodation adjusts schemas for new information.
- Learners are intrinsically motivated to make sense of the world, and instruction should relate prior knowledge to new material.
- Cognitive growth is promoted by providing challenges and tracking development through individual assessments.

### <u>Lev Vygotsky</u>

- Learning precedes development, with learning driving cognitive growth according to Vygotsky.
- Learning occurs within the Zone of Proximal Development (ZPD), just beyond the learner's current abilities.
- Scaffolding provides guidance to help learners progress within the ZPD and develop new skills.
- Complex mental processes originate as social activities and are internalized by the learner through interaction and mediation.

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## Key Principles

- Active Mental Processes: Learners are active processors of information. Learning involves attention, perception, memory, and problem-solving, with a focus on how information is processed, organized, and stored.
- Schema Theory: Knowledge is organized into mental frameworks or schemas. Learning involves the assimilation of new information into existing schemas or accommodation by modifying schemas when new information doesn't fit.
- **Prior Knowledge:** Learning builds on what the learner already knows. Prior knowledge is critical for understanding new information, and effective instruction connects new material to existing knowledge structures.
- Information Processing Model: Learning is viewed as an information processing activity, where
  information moves through stages such as sensory memory, working memory, and long-term memory.
  Effective encoding and retrieval are key to successful learning.
- Constructive Learning: Learners construct their own understanding and knowledge of the world through experiences and reflection. Cognitivism emphasizes the role of the learner in organizing and structuring the material being learned.
- Focus on Internal Mental States: Cognitivism considers learning as involving internal mental states and processes, such as beliefs, motivations, and cognitive strategies, rather than focusing solely on observable behaviors.
- **Metacognition:** Learners use metacognitive skills—such as planning, monitoring, and evaluating their own learning process—to enhance understanding and control over their learning.







