COGNITIVISM
LEARNING THEORIES

THEORY DEFINITION & MECHANISM

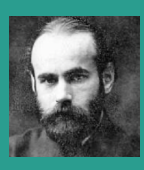
- Learning is a change in mental representations.
- Learners actively process information.
- Prior knowledge shapes new understanding.
- Knowledge is stored in organized mental structures (schemas).
- Information moves through encoding → storage → retrieval.

KEY THEORISTS

Edward Tolman

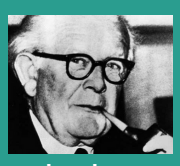
- Learning forms cognitive maps
- Latent learning occurs without reinforcement.

Gestalt Psychologists



- We perceive patterns as unified wholes.
- Guided by proximity, similarity, closure, and pragnanz.

Jean Piaget



- Learning through schema adaptation (assimilation & accommodation).
- Four developmental stages shape how children think.

Lev Vygotsky

- Social interaction drives cognitive development.
- ZPD & scaffolding support tasks beyond current ability.

Atkinson & Shiffrin

- Information Processing Model: sensory → STM → LTM.
- Learning depends on encoding, rehearsal, retrieval.

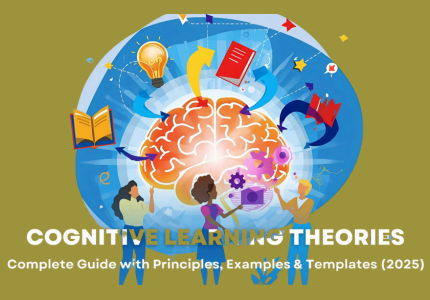
Jerome Bruner

- Learning is active sense-making.
- Discovery learning and the spiral curriculum build conceptual understanding.

CORE ASSUMPTIONS

1. Learning requires connecting new ideas to prior knowledge.
2. Learners interpret and organize information actively.
3. Cognitive conflict drives schema change.
4. Memory involves multiple systems (sensory, working, long-term).
5. Knowledge becomes durable when deeply processed.
6. Social and developmental factors influence cognition.

KEY PRINCIPLES



- New ideas link to existing knowledge.
- Learners actively organize and interpret information.
- Cognitive conflict prompts deeper understanding.
- Memory improves with rehearsal, organization, and meaning.
- Deep processing strengthens retention.

KEY TERMS

1. Schema
Mental framework for organizing knowledge.

2. Assimilation
Fitting new information into existing schemas.

3. Accommodation
Adjusting schemas to incorporate new information.

4. Encoding
Transforming information for memory storage.

5. Retrieval
Accessing stored information when needed.

6. Working Memory
Short-term holding space for active processing.

7. Long-Term Memory
Durable store for consolidated knowledge.

8. Metacognition
Awareness and regulation of one's thinking.

9. Cognitive Load
Mental effort required to process informatio

INSTRUCTIONAL IMPLICATIONS

Start from what learners already know
Use quick questions, simple examples, or a short review to help them connect new ideas to familiar ones.

Support memory by using different ways of learning
Combine visuals, explanations, hands-on activities, and spaced practice to help information stick.

Help learners organize information clearly
Provide outlines, break content into smaller parts, or use charts and visuals to make things easier to follow.

Encourage learners to think more deeply
Ask them to explain ideas, give examples, compare concepts, or summarize in their own words.

Use comparisons or surprisie to spark thinking
Show a contrast or something unexpected to encourage learners to rethink their ideas.

Let learners learn through interaction and support
Use discussion, peer work, guiding questions, and helpful hints to move their thinking forward.