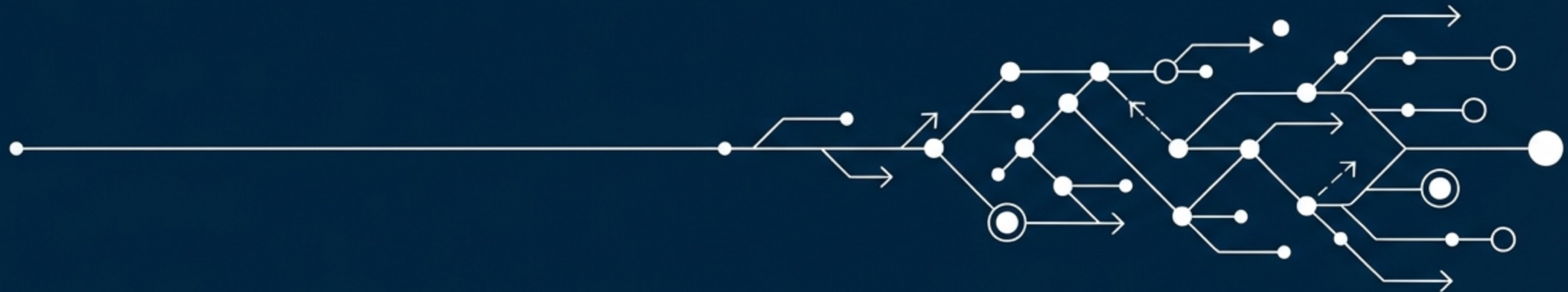


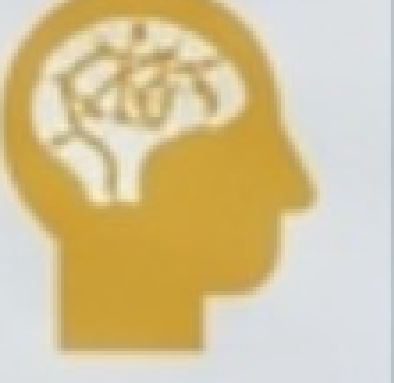
Pedagogy, Andragogy & Assessment Frameworks

A Critical Analysis of Teaching-Learning Dynamics for JRF Aspirants



Hierarchy of Learning | Behaviorism vs. Constructivism | Instructional Design | Evaluation Systems (NRT vs. CRT)

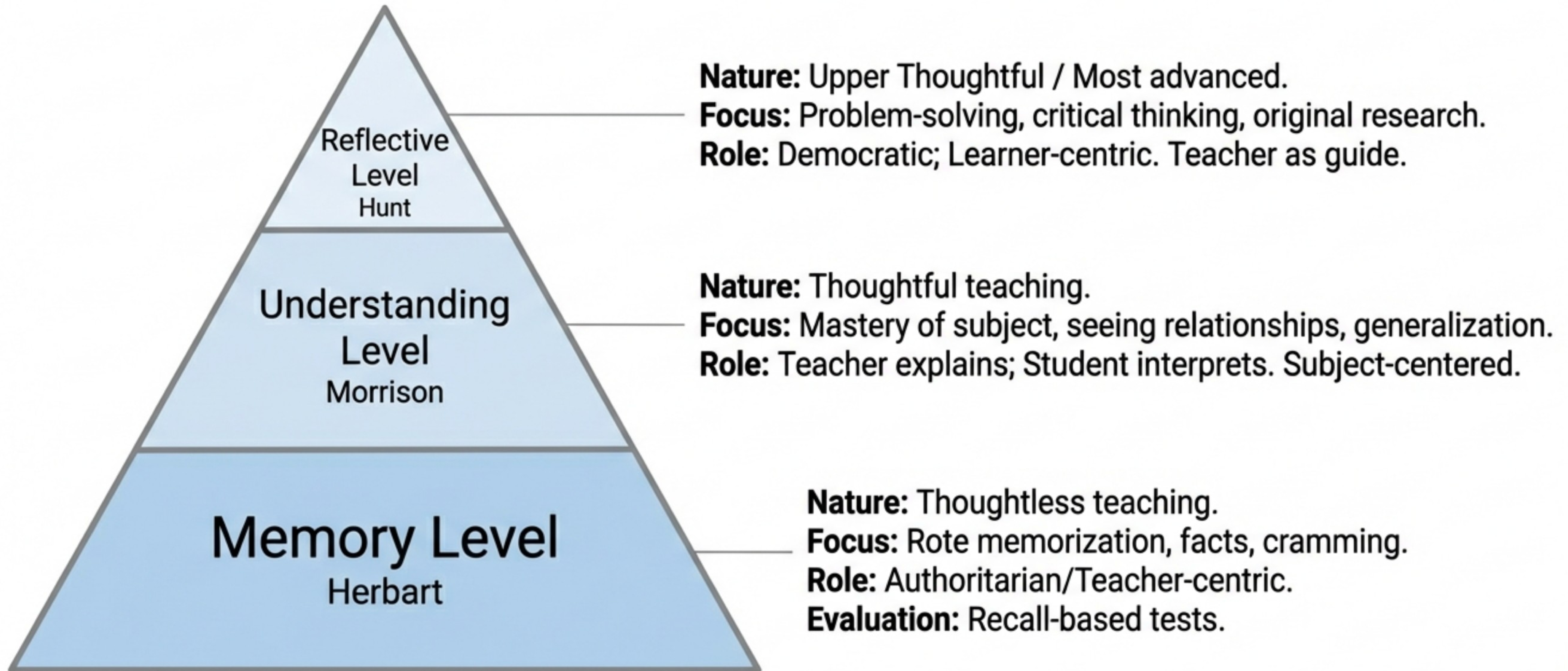
The Continuum of Instruction: Pedagogy to Heutagogy

	 Pedagogy (Child-Learning) 	Andragogy (Adult-Learning) 	Heutagogy (Self-Determined) 
Focus	Subject-centered. "The Art and Science of Teaching Children."	Problem-centered. "Helping Adults Learn."	Process-centered. "Learning how to learn."
Dynamic	Teacher is dominant; Learner is dependent/passive.	Teacher as Facilitator/Guide . Learner is self-directed.	Teacher sets context, then steps back. Learner is autonomous.
Method	Transmissive (Lectures, Drill).	Participatory (Discussion, Cooperative).	Research, Innovation, Self-reflection.

High Teacher Control /
Low Learner Maturity

Low Teacher Control /
High Learner Maturity

The Three Levels of Teaching (Morris L. Bigge Classification)

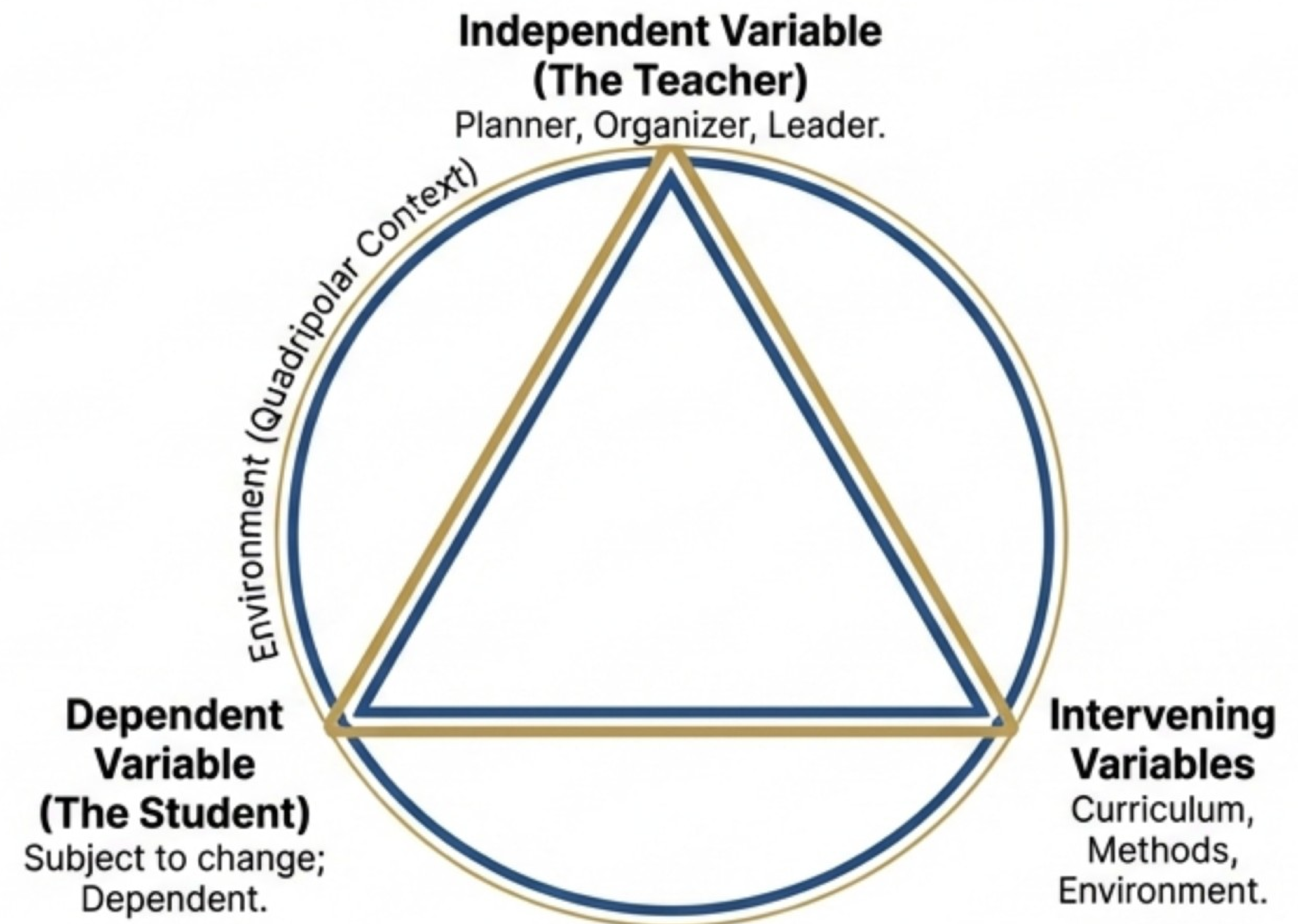


Variables & Structure of the Teaching Process

Evolution of Scope

- Bipolar (Adams): Teacher $\leftrightarrow$ Student (Narrow definition).
- Tripolar (John Dewey): Teacher $\leftrightarrow$ Student $\leftrightarrow$ Curriculum (Society).
- Quadripolar (Modern): Teacher $\leftrightarrow$ Student $\leftrightarrow$ Curriculum $\leftrightarrow$ Environment.

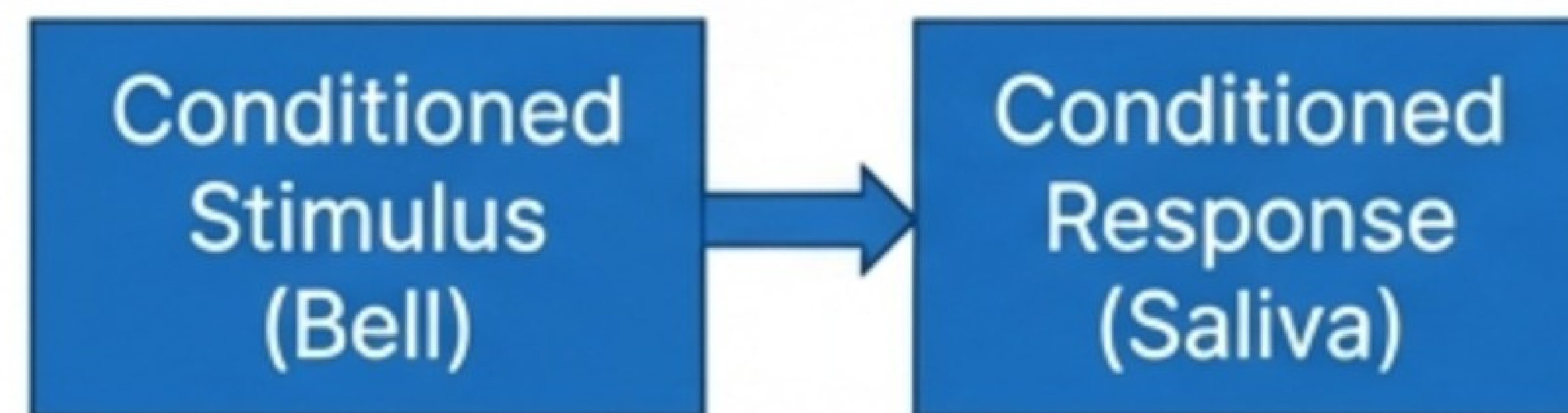
The Key Variables



Behaviorist Learning Theories: S-R & Reinforcement

Ivan Pavlov: Classical Conditioning

Passive Association
(S-R Theory)



Learning occurs through association.

E.L. Thorndike: Connectionism

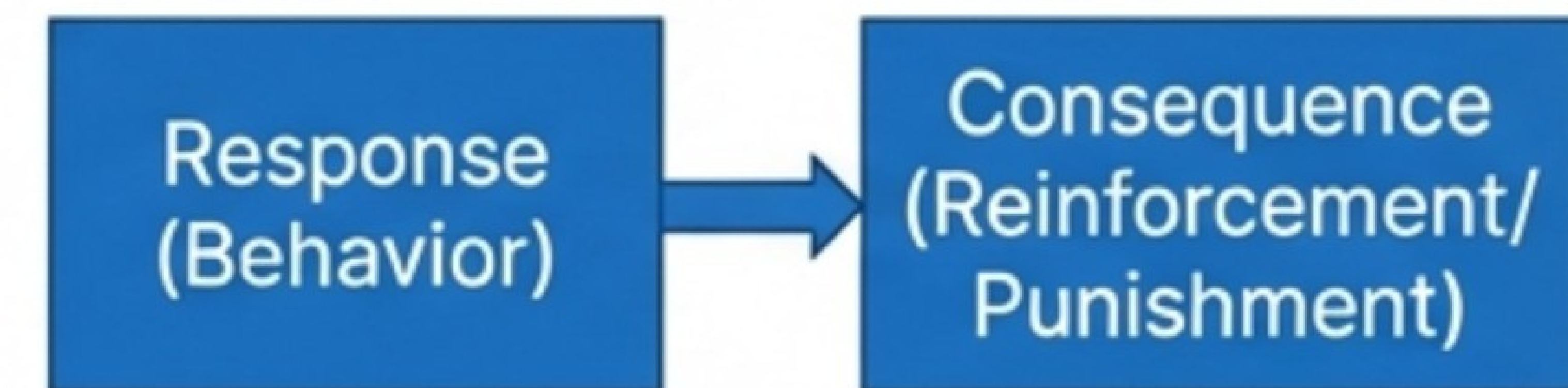
Trial & Error Learning

3 Major Laws:

1. Law of Readiness: Willingness/Motivation.
2. Law of Exercise: Practice strengthens connections.
3. Law of Effect: Satisfaction (Reward) strengthens; Discomfort weakens.

B.F. Skinner: Operant Conditioning

Active Learning via Consequences



Reinforcement increases behavior. Punishment decreases behavior.

Constructivism & Social Learning Frameworks

Constructivism (Piaget & Vygotsky)

Core Principle: Learners actively “construct” knowledge based on experience.

Jean Piaget (Cognitive)

- Schema, Assimilation, Accommodation.

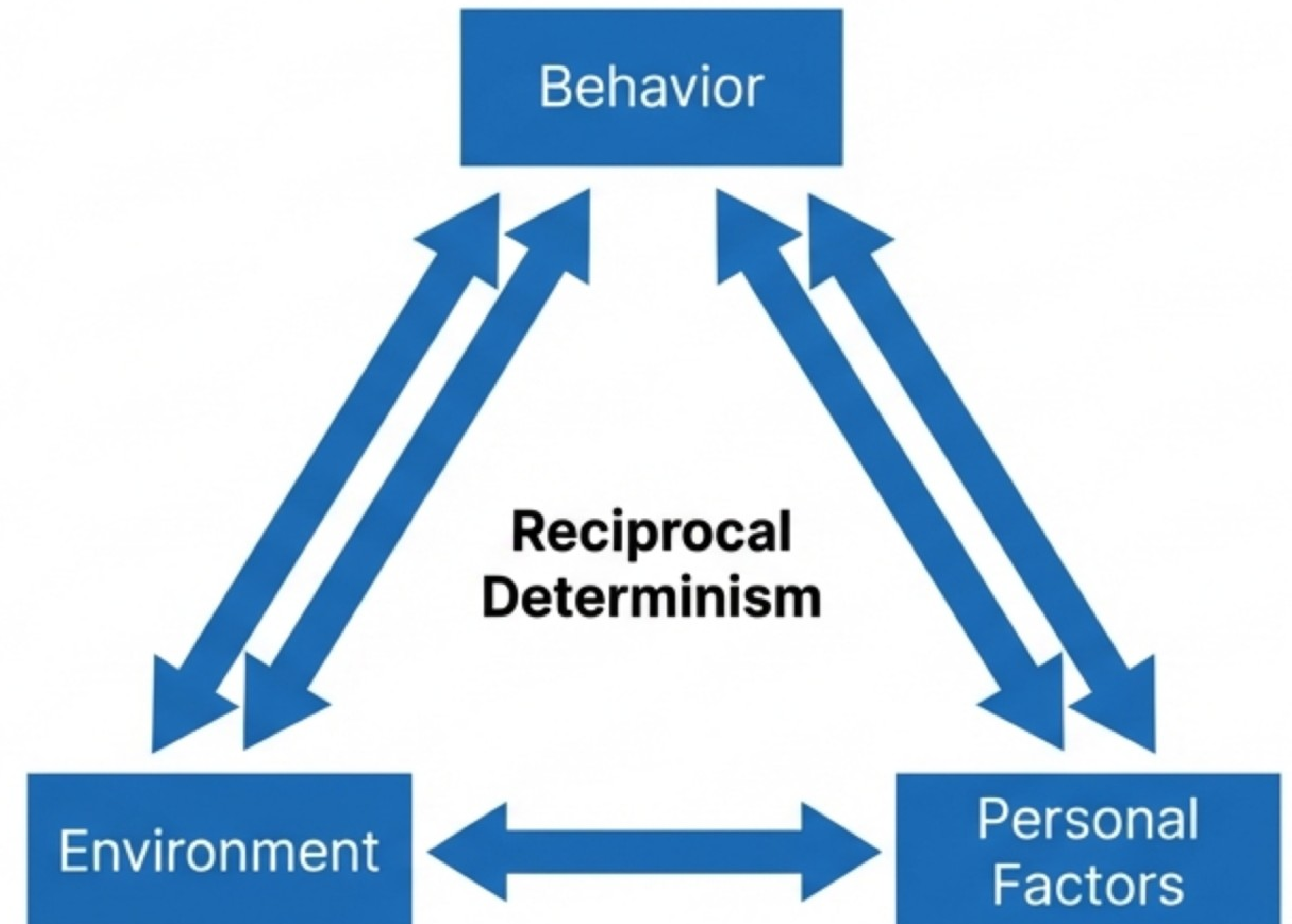
Lev Vygotsky (Social)

- **ZPD** (Zone of Proximal Development): Gap between what a learner can do alone vs. with help.
- **Scaffolding:** Support from MKO (More Knowledgeable Other).



Social Learning Theory (Albert Bandura)

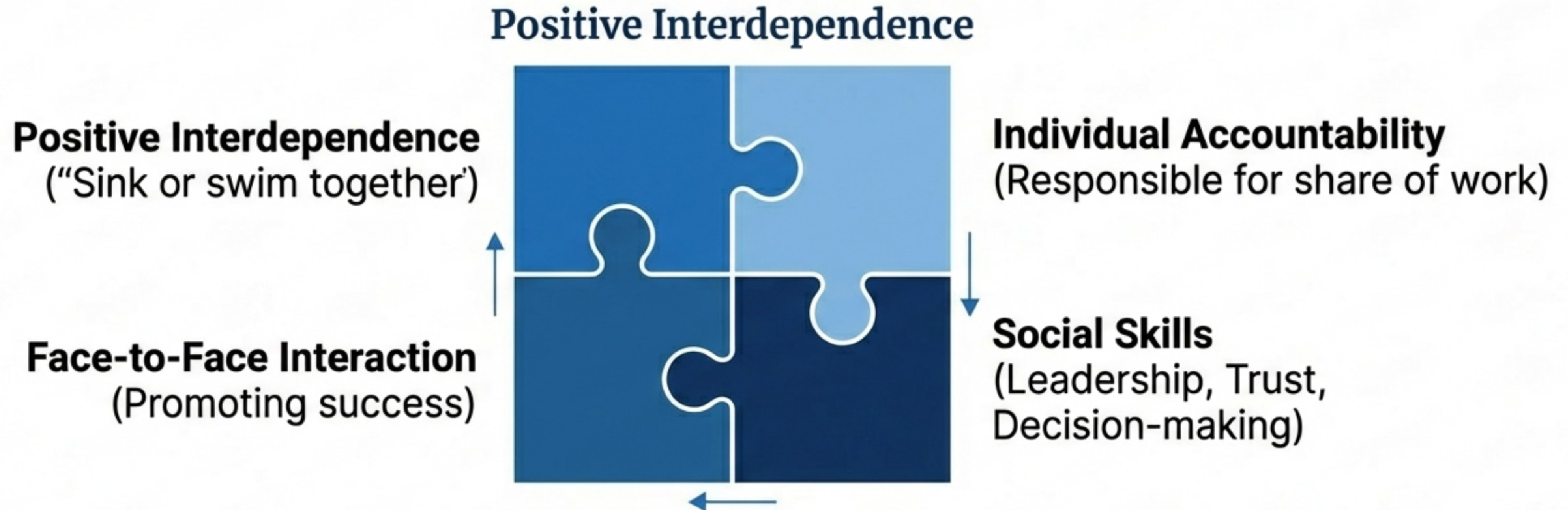
Mechanism: Observation, Imitation, Modeling.



Cooperative Learning Theory (John Dewey)

Definition: Instructional use of small groups where students work together to maximize own and each other's learning.

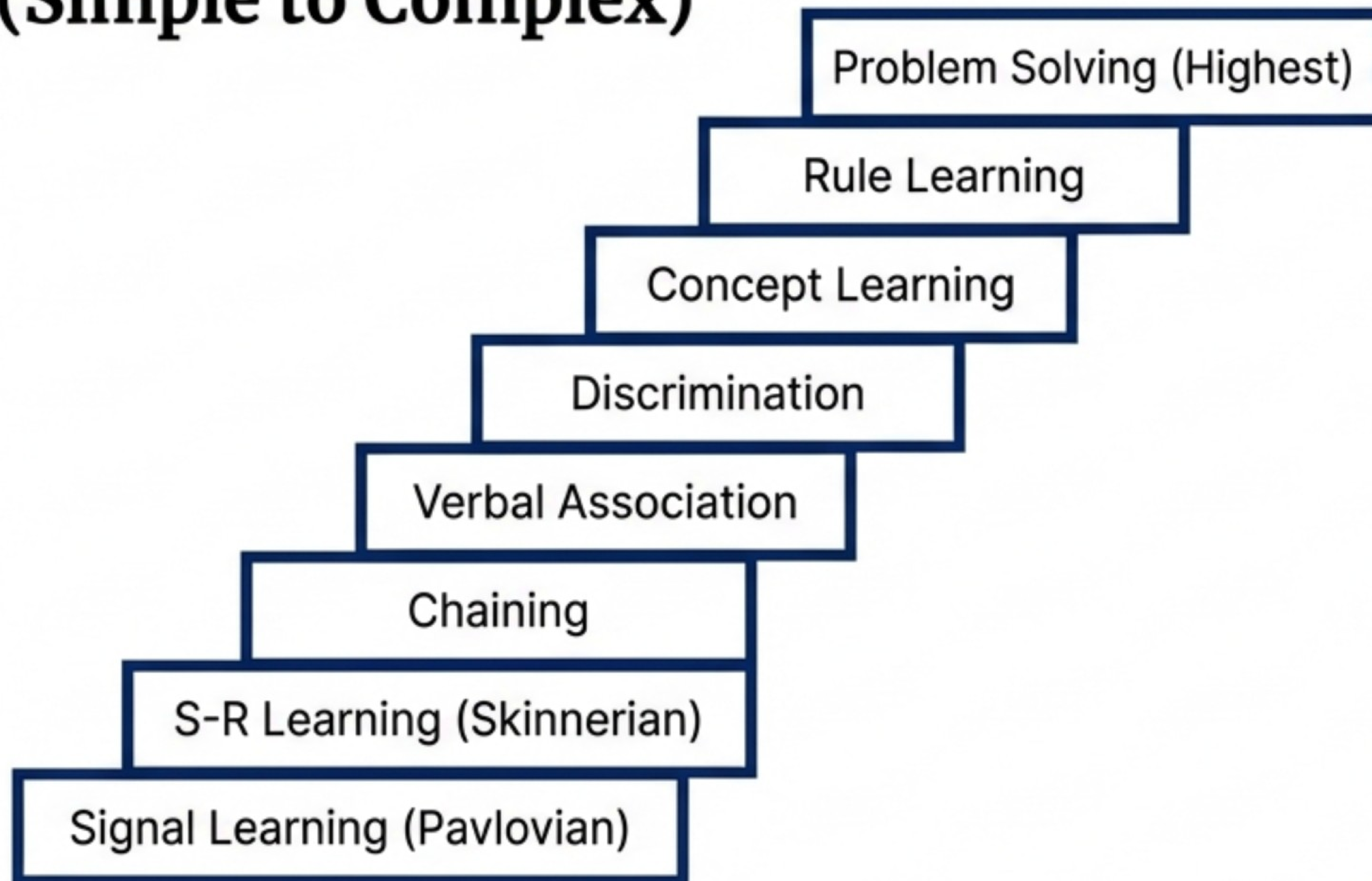
Core Philosophy: Learning is a social, community-based activity.



Contrast: Distinct from simple "Group Work" due to structured interdependence.

Gagne's Conditions of Learning & Instruction

The Hierarchy of Learning (Simple to Complex)



The 9 Events of Instruction

Phase: Preparation

1. Gain Attention
2. Inform Objectives
3. Stimulate Recall

Phase: Instruction

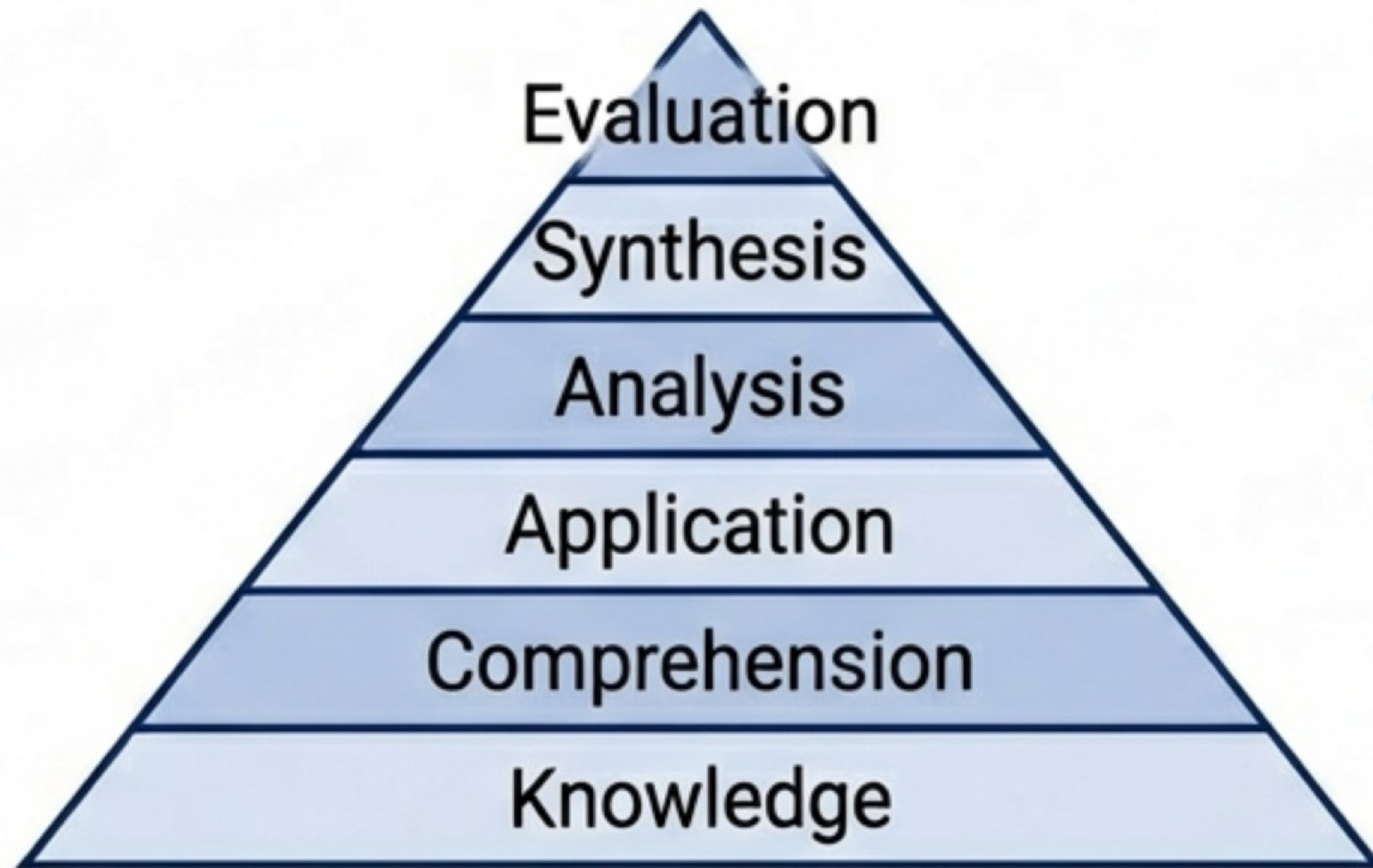
4. Present Stimulus
5. Provide Guidance (Semantic Encoding)
6. Elicit Performance
7. Provide Feedback

Phase: Assessment

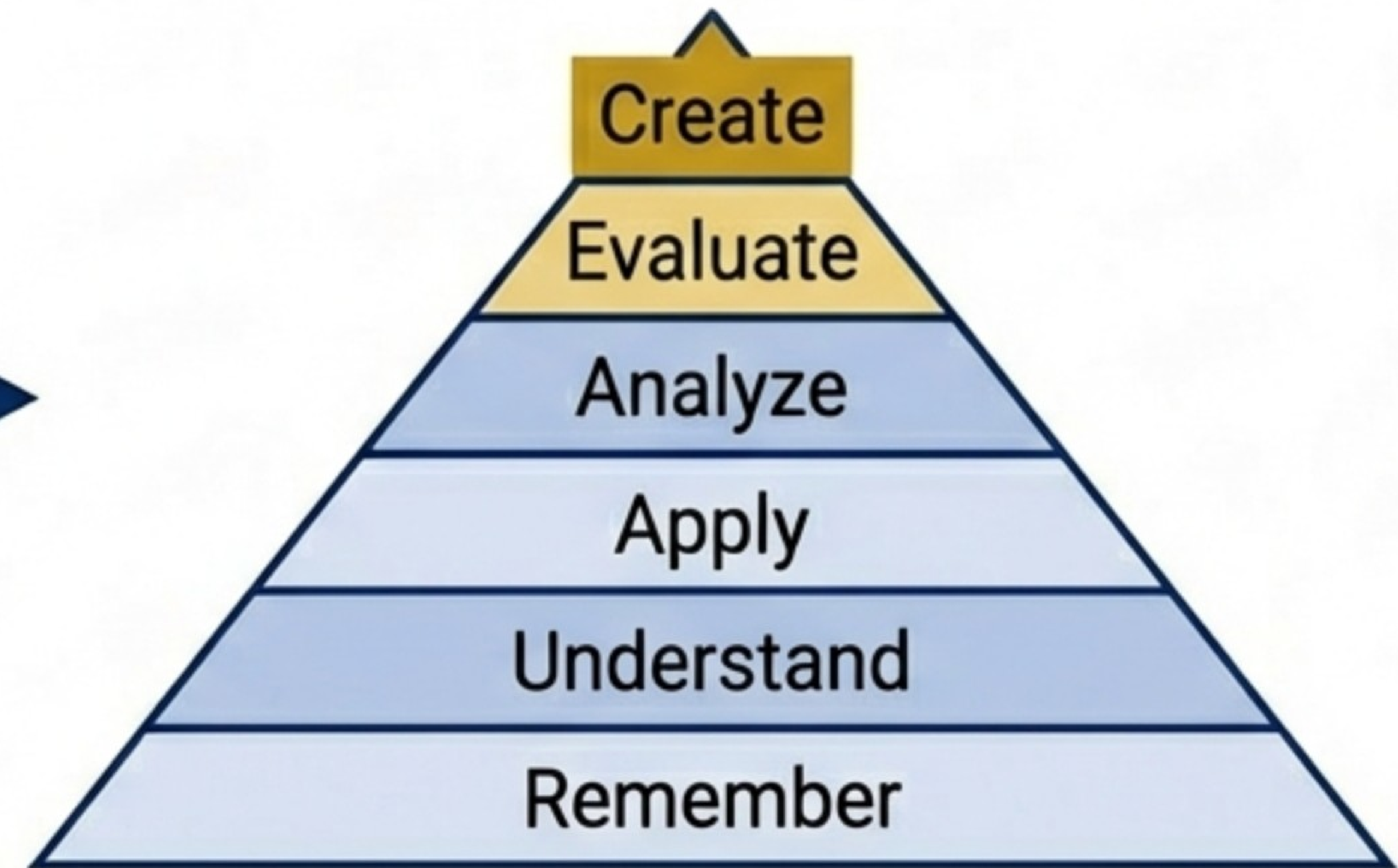
8. Assess Performance
9. Enhance Retention & Transfer

Bloom's Taxonomy: Cognitive Domain Revision

1956 (Bloom - Nouns)



2001 (Anderson & Krathwohl - Verbs)



Other Domains

Affective (Heart/Attitude)

Hierarchy: Receiving -> Responding -> Valuing
Valuing -> Organization -> Characterization.

Mnemonic: R²VOC

Psychomotor (Hand/Skills)

Dave's Hierarchy: Imitation -> Manipulation ->
Precision -> Articulation -> Naturalization.

Teacher Effectiveness: Key vs. Helper Behaviors

Key Behaviors (Direct Impact)

LIGHTS

L - Lesson Clarity (Step-by-step delivery)

I - Instructional Variety
(Tools, voice modulation)

T - Teacher Task Orientation
(Time on content)

E - Engagement in Learning
(Student involvement)

S - Student Success Rate
(High understanding)

Helper Behaviors (Supportive)

- **Structuring:** Summarizing past/future content (Advance Organizers).
- **Probing:** Deep questioning to elicit critical thinking.
- **Teacher Affect:** Enthusiasm and relationship building.
- **Questioning:** Using content and process questions.

Evaluation by Function & Timing

Placement Evaluation

Purpose: Assess entry behavior/prior knowledge (Exams).

Timing: Before instruction.

Purpose: Assess entry behavior/prior knowledge (e.g., Entrance Exams).

Formative & Diagnostic

Timing: During instruction.

- **Formative:** Feedback, Improvement, Non-graded (Quizzes).
- **Diagnostic:** Identify root causes of learning gaps.

Summative Evaluation

Purpose: Assign grades, certification, judgment (e.g., Board Exams).

Timing: After instruction (Terminal).

Purpose: Assign grades, certification, judgment (e.g., Board Exams).

Assessment Paradigms: For, Of, and As Learning

Assessment FOR Learning

Type: Formative

Focus: Feedback & Improvement.

When: During the process.

Lead: Teacher investigates learning needs.

Assessment OF Learning

Type: Summative

Focus: Judgment & Grading.

When: End of the process.

Lead: System reports against standards.

Assessment AS Learning

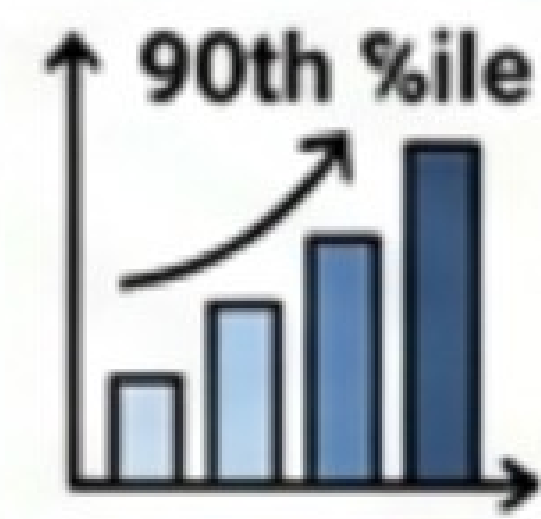
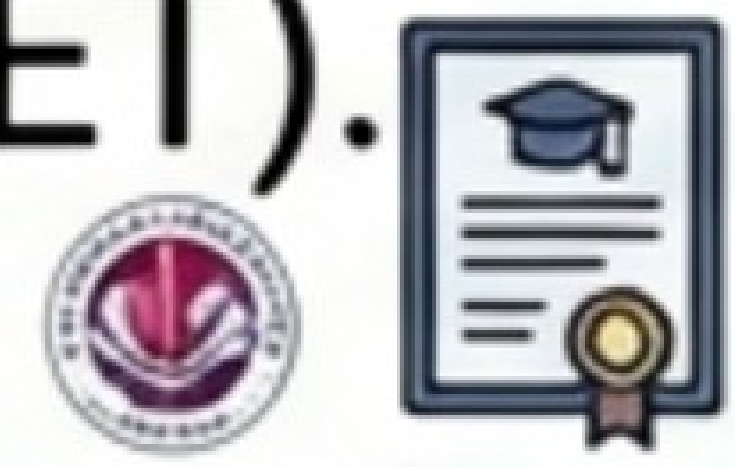
Type: Self/Peer Assessment

Focus: Metacognition & Self-regulation.

When: Throughout process.

Lead: Student reflects on own work.

Norm-Referenced (NRT) vs. Criterion-Referenced (CRT)

Norm-Referenced Test (NRT)	Criterion-Referenced Test (CRT)
Comparison Basis	
Student vs. Student (Relative Ranking). 	Student vs. Fixed Standard (Absolute). 
Goal	
To rank and distinguish high/low performers (Percentile). 	To measure mastery of skill/knowledge (Percentage). 
Examples	
Competitive Exams (JRF, GATE, NET). "You are in the top 10%". 	Board Exams, Driving Tests. "You scored 80%". 
Utility	
Selection purposes. 	Diagnostic & Remedial teaching. 

Qualities of Standardized Assessment Tools



Validity (Accuracy)

- Does the test measure what it intends to measure?
- **Example:** A math test should not measure reading speed.



Reliability (Consistency)

- Does the test yield stable results upon repetition?
- **Concept:** Reproducibility of scores.



Objectivity (Bias-Free)

- Is scoring independent of the examiner's judgment?
- **Concept:** Multiple examiners give the exact same score.

Non-Standardized Tools: Portfolios, Anecdotal Records, Rubrics.

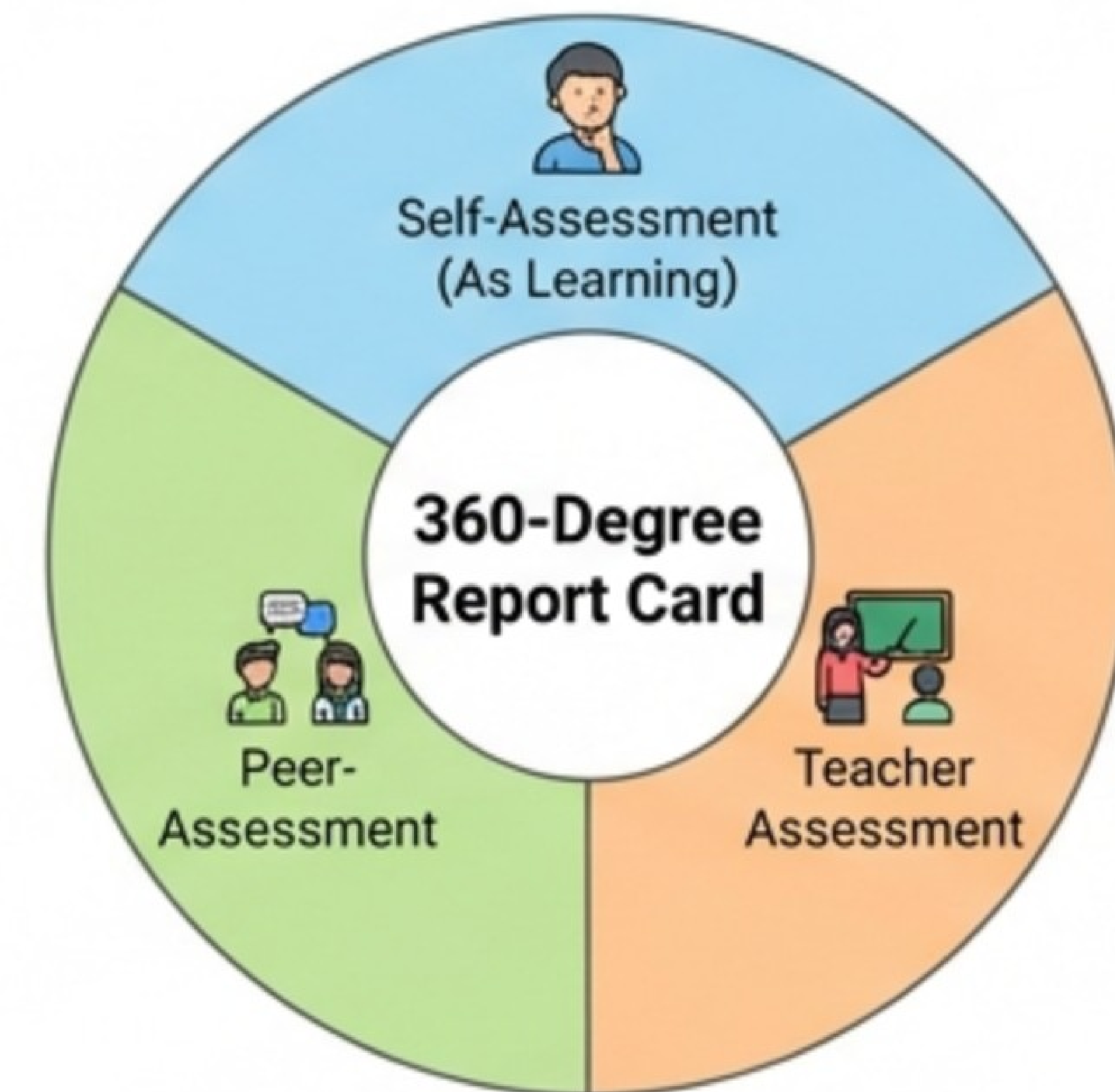
Holistic Assessment: CCE & NEP 2020 Vision

Continuous & Comprehensive Evaluation (CCE)

- **Continuous:** Regularity of assessment.
- **Comprehensive:** Scholastic (Academic) + Co-Scholastic (Life skills, sports, attitudes).

NEP 2020 Assessment Reforms

The Shift: From Summative (Rote) -> Formative (Competency-based).



Goal: Eliminate 'Coaching Culture' and focus on critical thinking and analysis.