

A Brief Comparison of Prominent Learning Theories

Major Elements	Behavioral	Developmental	Cognitive Constructivism	Social Constructivism
Theorists	Skinner, Bandura	Piaget, Bruner	Vico, Piaget, Vygotsky, Sternberg	Friere, Vygotsky, Cummins
Focus	Environment	Student-Environment Match	Information Processing	Social and cultural factors
Student's Role	Passive recipient; responder	Active seeker of information	Information processor	Active learners who bring wealth of constructions from home and community environments
Teacher's Role	Environmental Engineer	Facilitator	Processing engineer	Cultural broker; bridges students' present knowledge and experience with new
Mechanism for Learning and Development	Practicing small steps with reinforcement to increase appropriate and decrease inappropriate responses	Progression through universal sensorimotor, preoperational, concrete operational, and formal operational stages through continual processes of organization and adaptation, stimulated by disequilibrium	Application of universal cognitive processes (metacognition, executive control); early roots in computer analogy to describe how information is perceived, transformed, organized, stored, and recalled	Cognitive processes (perceiving, organizing, etc.) are acts of construction; what we know is closely related to the social and physical circumstances in which we come to know it. Broader social context (e.g., poverty, social oppression) also affects learning.
Methods	Manipulate the environment through reinforcers and analysis of the task to be learned; model appropriate behavior; break task into smaller steps. Determine objective, select reinforcer, chart behavior, implement program, measure change.	Guide student to acquire new structures (schema) through interaction with the material to be learned. Introduce material by presenting a "puzzle" or discrepant event to be solved or explained.	Support self-regulated learning through teaching that encourages learners to engage metacognitive processes (e.g., rehearsal, categorization) to acquire knowledge and skills that can be transferred to new situations.	Support learner's construction of new meaning by applying knowledge of previous concepts to the new information. Learning is enhanced when it occurs in contexts that are socioculturally, linguistically, and cognitively meaningful for the learner. Community of learners; pedagogy of empowerment; culturally responsive pedagogy.

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Specific Techniques	Behavior modification, mastery learning; task analysis, criterion-referenced and curriculum-based assessment. Deductive learning: given rule, student applies to problems.	Guided discovery; inferential techniques Inductive learning: given many examples and data, student derives rule.	Cognitive behavior modification; advanced organizers	Cooperative learning; problem-based learning; whole language
Motivation	External manipulation of reinforcers	Optimal match; challenge. Learner has innate drive for curiosity and competence		Innate drive for competence enhanced by culturally, linguistically, and cognitively supportive environment
Advantages	Step-by-step procedures for application; abundant evidence of effectiveness; easy to evaluate progress	Holistic in approach; considers complex learning that cannot be explained by behavioral theory. Better retention, generalization, and transfer hypothesized.	Step-by-step procedures; evidence of effectiveness; optimism that "intelligence" (cognitive processing) can be improved through effective instruction	Presents comprehensive view of teaching and learning as influenced by complex interactions of individual, family, community, institutional, social factors
Disadvantages	Reductionist and mechanistic; can be misused; difficulty with transfer and generalization	Less research has been conducted, though some evidence supports inductive methods (Taba).	Little attention to social context	Politicized; range of methods make approach difficult to evaluate