

<p style="text-align: center;">Behaviorism</p> <ul style="list-style-type: none"> • Learning occurs through stimulus/response • Observable behavior as a measure of learning level • Positive/Negative reinforcement of behaviors used as a catalyst • Operant conditioning: controlling outcome or consequence of a specific response to a stimulus. • Strengths: observable behavior, controlled stimulus to illicit particular responses, rote memorization simplicity of prediction. • Weaknesses: Does not encourage creative and active thinking/problem-solving, involves little to no higher-level cognitive function, not all stimulus/response situations generalize • Associated theorists: B.F. Skinner, John B. Watson, <u>Ivan Pavlov</u>, E. L. Thorndike, Albert Bandura 	<p style="text-align: center;">Cognitivism</p> <ul style="list-style-type: none"> • A response to Behaviorism • Learning goes beyond programmed responses • Thought processes centered around information processing and retention • Behavior comes from cognition • Less focus on outward learning and behavior, more focus on internal thoughts processes involving learning • Active thought processes involved in understanding information not merely reacting to it • Strengths: organized/critical thinking, information transfer to other purposes, longer retention of meaningful information • Weaknesses: information must be connected by thoughts in order to retain in memory and be useful, slightly weaker rote memorization, requires making high-level cognitive investment • Associated theorists: Jean Piaget, Marriner David Merrill, Charles Reigeluth, Robert Mills Gagné, Jerome Bruner, Roger Schank
<p style="text-align: center;">Constructivism</p> <ul style="list-style-type: none"> • Individual and social experiences lead to constructed meaning of raw information in the environment • Prior knowledge and experience gives groundwork for new knowledge and experience • Mental models (or schemata) created from knowledge and experience • Learning is a matter of adjusting mental models to accommodate new information 	<p style="text-align: center;">Connectivism</p> <ul style="list-style-type: none"> • Learning is accomplished through diverse, interconnected networks or nodes • Knowledge exists and is created outside the individual experience • Vast array of connections between ever-changing information sources • Emphasis placed on connections made between a multitude of source types and fields to advance new knowledge • Strengths: Highly adaptable to ever-changing modern world,

Four Learning Theories Explored

<ul style="list-style-type: none">• Strengths: social influence, free construction of information through experience, works at and just above the level or prior learning• Weaknesses: learning outcomes not always predictable, considerable prep needed to work properly, adjustments have to be made when learners are not all on the same level• Associated theorists: Jean Piaget, Lev Vygotsky, Mikhail Bakhtin, Jean Lave, Etienne Wenger, Barabara Rogoff	<p>accommodates internet and technological advance as part of learning, utilizes a variety of information sources as a core goal to learning</p> <ul style="list-style-type: none">• Weaknesses: system is still in development, highly controversial, much criticized for lack of complete and coherent structure, focus shifted away from individual experiences, may not be applicable in less-connected contexts• Associated theorists: George Siemens, Stephen Downes
---	---