Creativity:

An Executive-Level Cognitive Process



Creativity (n): an over-arching process that orchestrates how we learn, think, and respond and that generates new insights, original products, and transforms the ways that we structure the world. Specifically, it is an executive cognitive process that coordinates metacognitive strategies, higher-order thinking skills and affective responses over extended durations of open-ended imagination, speculative inquiry, and the rigorous forging of an idiosyncratic worldview.



Meta-Cognition (n): thought processes that enhance learning by monitoring why, how, and what we learn. These processes are based in self-reflection and include self-observation, self-assessment, and self-regulation. They develop essential intellectual habits, such as objectivity, intellectual courage, empathy, integrity, perseverance, fair-mindedness, and introspection. Metacognitive strategies also employ affective domain skills (see below). Together, these orchestrate higher-order thinking and basic reasoning skills.



Affective Domain Skills (n): These skills include the emotional and social skills necessary for persevering in the creative process and for success in life. The affective skills developed in the arts include: being open to experience (receiving), engaging in life (responding), cultivating values (valuing), managing oneself (organizing), and developing oneself (internalization). Examples of specific affective skills developed by the arts include: managing emotions, valuing the self, refining personal values, facilitating personal development, challenging the self, and committing beyond the self.



Higher-Order Thinking Skills (n): Higher-order thinking skills are complex combinations of basic reasoning skills and form more complex kinds of problem solving. They include: **Knowledge**, or those skills involved in gathering information; **Comprehension**, or those skills involved with confirming or understanding; **Application**, or those skills involved with making use of knowledge; **Analysis**, or those skills involved with putting ideas and information together; and **Evaluation**, or those skills involved with judging the outcome.



Basic Reasoning Skills (n): Basic reasoning skills are those processes that are fundamental to cognition of all forms. Basic reasoning skills include: Storage and information retrieval skills; matching skills; and categorization skills. Problem-solving aimed at finding an answer that will be judged by predetermined criteria is also a form of basic reasoning, as is constructing or reconstructing non-speculative information to achieve a predetermined goal. Elaboration, or inferring information that is not explicitly stated, is another form of basic reasoning.



Psychomotor Skills (n): Psychomotor skills include physical coordination; fine motor skills; kinesthetic, visual, auditory and tactile discrimination and coordinated abilities; locomotor movements, nonlocomotor movements, manipulative movements; simple, compound, and complex adaptive skills; expressive and interpretive movement.