#### 5. CREATIVITY

Creativity is a phenomenon whereby something new and valuable is created (such as an idea, a joke, a literary work, a painting or musical composition, etc.) through abstract thought, which yields new and innovative thoughts, designs, and actions. Creative thought is a mental process involving creative problem-solving techniques and the discovery of new ideas or concepts, or the formation of new associations of existing ideas or concepts. This process is fueled by both either conscious or unconscious insight.

## Creative Thought

Creativity has been associated with right-brain or fore-brain activity, as well as specifically with <u>lateral thinking</u>. Creative ideas are often generated when one discards his or her preconceived assumptions and attempts a new approach, or method, that might seem unusual to others. This approach uses one's imagination to conceive of new ideas and methods in order to solve problems. It also allows a person to <u>think up</u> something that does not exist, or think about something that does exist and portray it in various mediums, such as painting, sculpture, or other kinds of art.

Studies of creativity cover everyday creativity or daily creativity that we all experience; exceptional creativitysuch as those with talents in music, art, literature, etc.; and artificial creativitysuch as creating programs and computer-based technologies that can 'think' on their own. Unlike many observations made in science, however, there is not a single authoritative perspective or definition of creativity, and there is also no standardized measurement technique to discern its strength and impact.

### **Creative Thought Processes**

In everyday thought, people often spontaneously imagine alternatives to reality when they think. Counterfactual thinkings viewed as an example of everyday creative processes. It has been proposed that the creation of counterfactual alternatives to reality depends on similar cognitive processes, such as rational thought. There are three proposed processes through which it is theorized that we engage in creative thought: Wallas' five stage modeldivergent thinking, and the Geneplore Model.

## Graham Wallas (1858-1932)

Graham Walla (1858 - 1932) presented one of the first models of the creative process in 1926. In Wallas' stage model, creative insights and illuminations may be explained by a creative process consisting of five stages:

- a. Preparation, where preparatory work on a problem focuses the individual's mind on that problem and explores the problem's dimensions;
- b. Incubation, where the problem is internalized into the unconscious mind and nothing appears, externally, to be happening;
- c. Intimation, where the creative person gets a 'feeling' that a solution is on its way;
- d. Illumination or Insight, where the creative idea bursts forth from its preconscious processing into conscious awareness; and
- e. Verification, where the idea is consciously verified, elaborated, and then applied.
- f. Wallas considered creativity to be an aspect of the evolutionary process, which allowed humans to quickly adapt to rapidly changing environments.

# J.P. Guilford (1897-1987)

J.P. Guilford(1897 - 1987) pioneered the distinction between convergent and divergent thinking as it applies to creative thinking. Convergent thinking involves aiming for a single, correct solution to a problem, whereas divergent thinking involves the creative generation of multiple answers to a problem. Divergent thinking has often been used as a synonym for creativity in many psychology texts and literature.

### Geneplore Model

A modern model of creativity, proposed in 1992 by Finkænd his colleagues, is the Geneplore Modelwhich states that creativity takes place in two phases:

- a. The Generative Phase, where an individual constructs mental representations called pre-inventive structuresand
- b. The Exploratory Phase, where those structures are used to come up with creative ideas.