Synectics is an approach to problem-solving that focuses on cultivating creative thinking, often among small groups of individuals with diverse experience and skills. Often used by [cross-functional teams](https://searchcio.techtarget.com/definition/crossfunctional), the approach can help group members explore problems; retain new, often abstract, information; and develop creative solutions by breaking from existing mindsets. The term "synectics" is derived from the Greek word "synectikos," which means to bring different things into unified connection.

Synectics was co-developed in the 1950s by George M. Prince and William J.J. Gordon, while they were working in the Arthur D. Little Invention Design Unit, a consulting practice for helping companies develop new-product concepts. Prince and Gordon wondered why some meetings were more productive than others and believed that it had less to do with the participants than with some unknown dynamics. To understand the dynamics, they taped thousands of hours of product development meetings and turned their observations into methods that mirrored the techniques of successful entrepreneurs and inventors.

Gordon established three maxims of synectics theory: when people become aware of the psychological processes that affect their behavior, creative output increases; the emotional part of creative behavior overshadows the intellectual component; and the emotional and irrational components should be understood and employed as tools to boost creative output.

Like [design thinking](https://whatis.techtarget.com/definition/design-thinking), synectics draws on both right brain (the dreamer) and left brain (the reasoner) strengths and requires team members to be comfortable living with complexity and apparent contradiction. The approach involves mentally taking things apart and reassembling them to gain new insight and seeking to discover the links that connect seemingly unrelated elements through analogy and metaphor; this helps make something that is strange familiar and vice versa.

To ensure that a planning session is productive, the facilitators prepare by identifying the problem owners, defining their expectations and ensuring they have the power to implement new solutions. Various [brainstorming](https://whatis.techtarget.com/definition/brainstorming) techniques or exercises may be used in the solution-generating process. For example, the problem owner may be asked to depict the problem in terms of wishes; that is, expressed as, "I wish..." The group would then generate as many solution approaches, or springboards, as possible and the problem owner would select the most promising springboards to explore. During the idea-generation session, the facilitator is responsible for cultivating and maintaining an atmosphere of speculative thinking and open-ended contribution to draw out diverse ideas and shield participants from criticism.

**Synectics as a Creative Problem Solving System**

Synectics is one of the creative problem-solving techniques. It emphasizes metaphor, imagery, emotion, energy, and procedural approaches that focus on private listings. Like brainstorming, synectics suspends judgment; while synectics widens and deepens the process of suspending judgment in more different ways than brainstorming does. Some characteristics are introduced below.

**First**, synectics allows judgment of the problem description to be suspended.

**Second**, synectics encourages alternative perceptions of the problem, again expressed without challenge.

**Third**, synectics uses obvious irrelevant thoughts and images as clues to new ideas.

**Fourth**, synectics allows absurd ideas.

**Last**, synectics uses excursions to reproduce the phenomenon of getting new ideas apparently from nowhere.

The methods mentioned above form a series of connections, which reconstruct concepts and ideas and can bring two unrelated ideas together.

Synectics has another function called *idea development*. This process takes new approaches that are not practical and modifies them into feasible courses of action.

Synectics has three dimensions: *creative thinking, creative action, and creative behavior*.

**Creative thinking** is a technique to generate new ideas.

**Creative action** is the implementation of these ideas, and

**Creative behavior** is the behavioral skills required to build a supportive atmosphere, which is important for both the two preceding dimensions.

Above all, creative thinking includes and transcends brainstorming, but the creative action and creative behavior are mostly missing in brainstorming.

To sum up, synectics is a creative problem-solving technique much more complex than brainstorming, which misses out some processes that synectics embed.

Reference:

Nolan, V. (2010).“Synectics as a creative problem-solving technique.” http://synecticsworld.com/synectics-as-a-creative-problem-solving-technique/#. (Feb. 1st, 2016)