

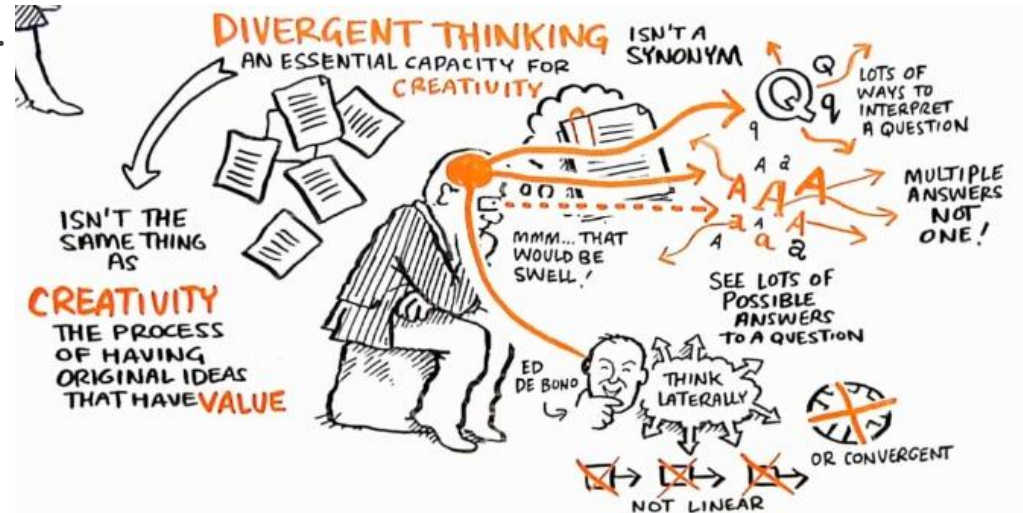
Convergent & Divergent Thinking

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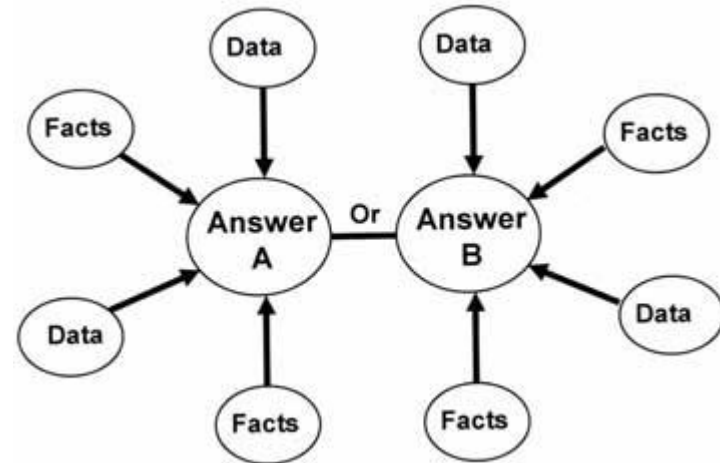
What is Divergent Thinking?

- Divergent: The goal is to create as many different ideas about one topic as possible.
 - Innovative ideas
 - New solutions.
 - “Eureka” moment



What is Convergent Thinking?

- Convergent: The goal is to arrive at a concise and attainable solution to the problem
 - Linear Thinking (Step one, step two, etc)
 - Logical Problem Solving
 - If > Then Rationale



When to Use Either

Convergent Thinking

- Logistics and rational solutions are needed
- Many options that need to be narrow down to one
- One question needs to be answered

DIVERGENT THINKING

- Creative solutions are needed
- Open ended questions are being asked
- The goal is to find multiple solutions





How to Use Both

- Crystallized Intelligence: Using information you learned in the past to solve current problems.
 - Trivia
 - Facts
 - Logic
- Fluid Intelligence: Ability to look at a current problem and find new solutions.
 - Identifying a pattern
 - Adapting to new information
 - Unfamiliar territories
- This is not to say that the different types of intelligence are mutually exclusive to divergent or convergent thinking. Both are used in the different forms of thinking



Why You Need Both and How to Master Both

- Divergent thinking is vital for discovering the “Big Idea”.
 - Must remain open minded and non-judgemental of ideas that are created
 - Open to having new experiences so that you can draw from them when brainstorming.
- Convergent thinking is very important in understanding how the ideas can be implemented in the most efficient way
 - Do as much research as possible on the problem that needs to be solved to understand the nuances of the process
 - Use analytical reasoning to come to the conclusion rather than instinct or feelings.



How to Implement Both in the Real World

- The most important thing to do when using divergent and convergent thinking is keeping them separate.
 - Because doing one hinders the other
 - It is like hitting the gas and brakes at the same time so it's counter intuitive.



Citations

<http://study.com/academy/lesson/two-types-of-intelligence-fluid-and-crystallized-intelligence.html>

<https://www.youtube.com/watch?v=xjE2RV6IQzo>