Build Creative Thinking into Your Lean Practice to Drive Innovation!

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Learning objectives

- You will learn:
  - Why lean thinking benefits from creative thinking
  - How Creative Problem Solving is defined
  - How to distinguish the two types of creative thinking
  - 2 handy tools for each type of creative thinking
  - Practice using the two types of creative thinking
  - When to use each type of creative thinking with a PDCA cycle
DEEP THINKING

is Lean Thinking

plus Creative Thinking
Have you ever heard this (or said this) in a meeting?

“Let’s brainstorm on this.”
Brainstorming is a tool created for and used in Creative Problem Solving (CPS)

- Initiated in the US advertising industry
- Key thought leaders: Alex Faickney Osborn and Sid Parnes
- Moved beyond advertising
- Influenced design thinking
- Spurred academic research into creativity
What’s essential to being creative?

A balance of two types of thinking

- Divergent thinking
- Convergent thinking
Divergent thinking

- “Ideation”
- Coming up with multiple options
- Thinking broadly and expansively
- “the writer’s mind”
Convergent thinking

- Selecting and strengthening ideas or options
- Making choices
- “the editor’s mind”
CPS is a learning cycle approach to solving problems

• In each step, divergent and convergent thinking are deliberately used separately –

--- because each takes place in a different part of the brain

“This is the creative rhythm”

“What are all the....?”

“Which do we choose?”
Guidelines

• Divergent Thinking
  • Defer Judgment
  • Combine and Build
  • Seek Wild Ideas
  • Go for Quantity

• Convergent Thinking
  • Be Deliberate
  • Check your Objectives
  • Improve your Ideas
  • Be Affirmative
  • Consider Novelty
Two tools for divergent thinking (ALL divergent thinking tools are based on brainstorming)

**Forced connections**
Consider the attributes of an object or picture. Then force a mental connection between those attributes and topic you are working on.

**Brainwriting**
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<th>Brainwriting Sheet</th>
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<td>Fill in a row and pass it on!</td>
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So now you have a LOT of ideas and options

- No need to worry – there are tools to select and strengthen ideas or options
POI NT

• P luses: What is good about this idea?
• O pportunities: What might it lead to?
• I ssues: How might we... ?
• N ew t hinking to address issues:
  Brainstorming solutions, A3, kaizen activity, improvement kata.

Creators: Miller, Vehar, Firestien, 2001
Here is an idea: Ban PowerPoint in Your Organization
Pluses
Opportunities
Issues
New thinking
POINT

- **Pluses:** What is good about this idea?
- **Opportunities:** What might it lead to?
- **Issues:** How might we...?
- **New thinking to address issues:**
  Brainstorming solutions, A3, kaizen activity, improvement kata.

Creators: Miller, Vehar, Firestien, 2001
The creative rhythm and PDCA

Divergent thinking

“What are all the...?”

Convergent thinking

“Which do we choose?”

The creative rhythm
The creative rhythm and PDCA

Plan

Check

Act

Do

WHAT ARE ALL THE OPTIONS?

WHICH IS THE ONE TO MOVE FORWARD?
The creative rhythm and PDCA

• Pay attention to where you are in the creative rhythm: should you be thinking divergently or convergently?
• Build a toolbox of creative problem solving tools
• Have fun!
DEEP THINKING

is Lean Thinking
plus Creative Thinking
Questions and Opinions