

## Use Cognitive Tools to Develop Creative & Critical Thinking Capacities Becoming An Explorer, Artist, Judge & Warrior

Roger von Oech, author of the bestselling book *A whack on the side of the head: How you can be more creative* (2008) suggests that creative people take on four key roles in the creative process: **explorer, artist, judge, warrior**. Employing cognitive tools can enhance these roles.

### Be an EXPLORER

#### Expand & Deepen Your Understanding: Engage, Envision, Excavate

##### **Engage Affectively**

What is the emotional significance of the issue/topic? What transcendent quality defines the topic? Think like a reporter— *What's the story?*

##### **Engage Rhythmically**

What patterns contribute to the meaning of the topic? What are the general causal chains, networks or systems that can be seen with in the topic? How does everything work together?

##### **Engage Extremely**

What are the extremes or limits of the issue or topic? In how many settings and contexts can we apply an idea/ what is the idea good for?

##### **Engage Differently**

How might someone else understand this topic? Approach the topic from a radically different point of view.

##### **Envision**

What vivid mental image exemplifies what you know and feel about the issue/topic? What "comes to mind"? What is missing—what more do you need to learn? What alternate ideas can be imported to a topic or situation in order to shed light on thinking and make it more productive?

##### **Excavate**

What biases, perspectives, or values does your understanding reflect?

## Be an Artist: Generate New Ideas

### Story-shape

What is the typical narrative or "story" on this topic? Reframe it: What other unusual & effective narrative might be possible? How might features of the topic be combined in unusual ways or reconfigured?

### Make Meaningful Metaphors

What metaphors are typically used in the topic? How do these metaphors define or constrain what is possible? What new metaphors might open up possibility?

### Play: Humor

What is unexpected, playful, or incongruous in the topic/issue? How might rethinking something open up possibilities?

### Play: Practice "What If'ing"

What do you wonder about? Use your sense of wonder to create a new ideational space. Set practicalities aside—engage in some *extreme* "what if'ing" about the topic/issue. Which of your questions might be explored in more detail?

### Play: Change The Context & Perspective

How can examining your issue/topic from a different context or perspective illuminate it? E.g. consider the issue/topic from different stakeholders' perspectives? What might x person do/say suggest? Mash different ideas together—what happens?

### Visualize The Topic/Issue

What vivid mental image exemplifies what you know and feel about an issue/topic? What would your ideal mental image for this issue/topic be?

### Puzzle

What is puzzling about the issue/topic? Why? What ideas/concepts/examples don't fit into your understanding of the issue/topic? What do these anomalies reveal?

### Engage Your Inner Rebel

What limitations do you face when dealing with this issue/topic? Which would you, ideally, like to surpass? Which rules are "breakable"?

### Challenge "Right" Answers

What is the "best practice" in relation to this issue/topic? How might combining different ideas or perspectives create another "right" answer?

### Pull The Thread

How far can the idea be pulled before it snaps back or becomes absurd? What conceptual/practical limitations surround the enactment of the idea?

## Be a Judge & Warrior: Take Ideas From Vision to Action

### Map It

Visually represent a process that can translate the idea into real-world action or impact. Be sure to identify possible challenges and list possible resolutions.

### Make Choices

Weigh the relative merits of ideas vis à vis different situations—weight possible, probable, and unexpected outcomes (create a graphic, if helpful). What makes most/least sense for your actionable next steps?

### Apply It

Consider how applying the idea in context may change the idea, alter perception or generate new pathways for understanding. How do you respond to these possible challenges as you consider enactment? How does this new knowledge impact the implementation or creation process?

### Make It Happen

How can you be an agent in the dissemination of this idea or the articulation of the process to transform this idea to action? How does this idea/product/process contribute to your identity?

### What's the story?

How can you emotionally and imaginatively engage others in the *new story* your creative idea conveys?

## Reference

von Oech, R. (2008). *A whack on the side of the head: How you can be more creative*. New York: Business Plan.

## Learn more about Imaginative Education, Cognitive Tools & CIRCE

the imaginED blog [www.educationthatinspires.ca](http://www.educationthatinspires.ca)

the CIRCE website [www.circesfu.ca](http://www.circesfu.ca)

Egan, K. (1997). *The educated mind: How cognitive tools shape our understanding*. University of Chicago Press: Chicago.

Egan, K. & Judson, G. (2015). *Imagination and the engaged learner: Cognitive tools for the classroom*. (New York: Teachers' College Press).