

1. Creative Thinking

Over his past several books, British scholars David Gauntlett has been asking researchers to think more deeply about the nature of “creativity” and its place in our everyday lives. Gauntlett’s exploration is central to his most recent book, *Making is Connecting: The Social Meaning of Creativity*, from DIY and Knitting to YouTube and Web 2.0, which I read recently with a sense of encountering a kindred spirit with whom one can have productive disagreements (as surface later in this exchange) and from whom one can draw core insights. Part of the richness of this book is its expansion well beyond the sphere of things digital to place grassroots creativity and DIY tinkering in a larger historical and philosophical context, one which will be valuable in helping to further clarify the core point that Web 2.0 is simply one model for thinking about what happens when more people have the capacity to produce and circulate media and other cultural materials.

http://henryjenkins.org/2011/08/studying_creativity_in_the_age.html

Making is Connecting: The 4-minute presentation (2012)

This is a concise video version of a Prezi presentation highlighting some key themes of the book 'Making is Connecting', by David Gauntlett. <https://youtu.be/nA-IYHM7u6A>

David Gauntlett full-length Inaugural 2008: Participation Culture, Creativity, and Social Change

'Participation Culture, Creativity, and Social Change': David Gauntlett's full-length Inaugural Lecture at the University of Westminster, November 2008 <https://youtu.be/3Ydz888lUmQ>

2. Overcoming Barriers

Making planning open to many people.

“The idea of actively coordinating plans is strong enough that even people who don't have particularly outstanding personalities often have busy social lives, just because they're constantly arranging one outing or another. Meanwhile, someone who is technically more fun or interesting, but more lazy about making plans, may not get to go out as much as they'd like.”

- Proposing a skeletal/outline plan to people, then working out the details if they accept.
- Figuring out what other peoples' plans are and then getting on board.
- Plans can take some work at times.
- Avoid rejection.
- Figuring out what to do – be practical.
- Build-in research time.
- Time spent asking people is time well spent.
- Adjusting the plan so it works for everybody.
- Spend time convincing people to attend.

- Set up things necessary for the plan to happen.
- Come up with an original plan or build on someone else's idea.
- Have a semi-solid plan in mind before asking people.
- Once people have accepted your plan, be open to it changing in any way.
- For larger activities, don't get too hung up on certain people attending.
- If no one can come, try again later.
- Be in the loop technology-wise.
- Plant the seeds for future plans.
- Different people can be good at different roles in making plans.

<http://www.succeedsocially.com/plans>

3. Oblique Strategies

Breaking creative blocks - Lateral thinking

Lateral thinking is solving problems through an indirect and creative approach, using reasoning that is not immediately obvious and involving ideas that may not be obtainable by using only traditional step-by-step logic. The term was promulgated in 1967 by Edward de Bono. He cites as an example the Judgment of Solomon, where King Solomon resolves a dispute over the parentage of a child by calling for the child to be cut in half, and making his judgment according to the reactions that this order receives. https://en.wikipedia.org/wiki/Lateral_thinking

Prompts and counter-intuitive thinking.

Innovation doesn't happen by thinking the same way everyday. Innovation happens when we think different. The challenge however is that thinking different is counter intuitive. A good way to get your mind thinking in a counter intuitive style is to think of the opposites. To get you in the mindset I'd like you to think of the opposites to each word:

- Black.....White
- Up.....Down
- Big.....Small
- North.....South
- Love.....Hate
- Peace.....War
- Fast.....Slow
- Start.....Stop

<http://www.innovationblueprint.com.au/blog/2015/12/9/innovation-is-counter-intuitive>

Oblique Strategies

"These cards evolved from our separate observations of the principles underlying what we are doing. Sometimes they were recognized in retrospect (intellect catching up with intuition),

sometimes they were identified as they were happening, sometimes they were formulated. They can be used as a pack (a set of possibilities being continuously reviewed in the mind) or by drawing a single card from a shuffled pack when a dilemma occurs in a working situation. In this case the card is trusted even if its appropriateness is quite unclear. They are not final, as new ideas will present themselves, and others will become self-evident."

http://music.hyperreal.org/artists/brian_eno/oblique/oblique.html

4. Creative Expression

Trying out different techniques

Creative thinking and reasoning have been identified and highlighted as an essential twenty-first-century skill by many business, education, community and government leaders. As our children grow and develop, introducing them to the idea that the arts involve creative problem solving will teach them how to manage frustration, uncertainty and ambiguity with innovative ideas and solutions. Through the arts, our children can learn how to express their unique identities, while simultaneously developing habits of mind that will help them succeed anywhere, from the playground to the workplace. <http://www.pbs.org/parents/education/music-arts/the-arts-and-creative-problem-solving/>

5. Having Fun

Creativity is also an intellectual process, a way of thinking, an approach to solving problems. Psychologists have always had trouble determining which intellectual skills are necessary for creativity, although most would agree that these include a tendency to form unusual associations, to relax conscious thought to gain access to more "primitive" modes of cognition, to use analogies and metaphors in reasoning, to form rich visual images, and to ask original questions (Barron & Harrington, 1981). An aspect of the creative process that has been studied frequently in research on the play of preschool children is the ability to engage in what are called convergent and divergent problem solving. <https://www.education.com/reference/article/play-creativity-problem-solving/>

Play & Problem Solving

"Bruce (1991) argues that 'free-flow play' is the purest form of play where play is freely chosen by the child and without the confines of external expectation. During this 'pure' play, children will:

- initiate the activity in a meaningful context
- have control and ownership of the activity by imagining, making decisions and predictions
- experiment with strategies and take risks in this 'safe' context
- show curiosity
- repeat, rehearse and refine observed social behaviours and skills
- seek pleasure from the essence of the activity.
- All of these processes, integral to play, are also essential for mathematical thinking
- and problem solving.

https://www.corwin.com/sites/default/files/upm-binaries/58992_Tucker.pdf

6. Mind Mapping & Visualisation

Brainstorming

In briefest possible terms, brainstorming is a two-person (or small group) way to come up with lots and lots of ideas, some impractical and a few useful, in a short period of time.

The goal is to build on each others' notions (left), quickly and without editing.

- **Rule One:** No editing while the session is in play: anything is okay – weird ideas must be added to or built on, not critiqued or killed.
- **Rule Two:** Set a time – 15 minutes, or a half hour – in which the goal is to write down as many ideas as you can.
- **Rule Three:** Editing ideas comes after the end of the play session – and the crazier ones can then be turned over for usability. <https://alexanderwhite.wordpress.com/designer/type-design/brainstorming-and-creative-problem-solving/>

Creative Problem Solving (CPS)

A. Understand and define the problem

- Step 1 Objective Finding (identify the goal, wish or challenge)
- Step 2 Fact Finding (gather the relevant data)
- Step 3 Problem Finding (clarify the problems that need to be solved in order to achieve the goal)

B. Generate ideas about the problem

- Step 4 Idea Finding (generate ideas to solve the identified problem) (ways of thinking about the problem from different angles and perspectives)

C. Find, define, and act on best solutions

- Step 5 Solution Finding (move from idea to implementable solution)
- Step 6 Acceptance Finding (plan for action)

CPS is flexible, and its use depends on the situation. The steps can be (and often are) used in a linear fashion, from start to finish, but it is not necessary to use all the steps. For example, if one already has a clearly defined problem, the process could begin at Step 4) Idea Finding.

How to Brainstorm

Osborn claimed that two principles contribute to “ideative efficacy”: deferring judgment and reaching for quantity. A brainstorming session does not allow for any judging or denigrating anyone else’s ideas, and requires producing the largest number of ideas you possibly can in a set time.

Following these principles were his five rules of brainstorming:

1. Have a single specific question to work on.
2. Focus on quantity of ideas – more is better, most is best – in a set amount of time.
3. Withhold criticism – build on each others’ ideas, especially the ones that seem impractical. Rather than comment on their viability, use these ideas to create another idea.
4. Weird is good – creativity requires freshness and the unfamiliar, so being uncomfortable or

forced to work with wild or unexpected ideas is absolutely part of the process.

5. Combine and improve ideas – good ideas may be combined to form a single better idea. This is a separate step in which you edit and rebuild.

There are three measurable outcomes of a brainstorming session, according to Emily Callaghan, author “Personalities of Design Thinking.” They are:

- Involvement The number of contributions a team member offers. Quantity leads to quality and each participant having a range of ideas provides several that may work.
- Satisfaction How much fun the brainstorming session is, which is a wholly subjective assessment. It should be fun because having fun is relaxing and new ideas come from play. Participants often claim brainstorming is one of the most fun parts of their work responsibilities.
- Actionable Ideas How many ideas are generated that are worthy of further development. Generate ideas that can develop into strong solutions. Actionability is an editing process done after the completion of the brainstorming session.

<https://alexanderwwhite.wordpress.com/designer/type-design/brainstorming-and-creative-problem-solving/>

MS Visio

There are two popular ways to create brainstorming diagrams. The first is to begin with a main idea and then generate related topics and subtopics hierarchically. However, during a brainstorming meeting where people are contributing ideas in rapid succession, hierarchies aren't always apparent, and you need to capture ideas quickly. The second way, then, is to capture all of those ideas as they're expressed, and later to organize, revise, refine, and share the results.

<https://support.office.com/en-gb/article/Create-a-brainstorming-diagram-9c5d5d66-f226-487d-a8b0-7f992649d522>

You can download a free version of MS Vision at:

<https://e5.onthehub.com/WebStore/ProductsByMajorVersionList.aspx?ws=2b61c1e6-8a6f-e011-971f-0030487d8897>

Flipped Problem-Solving

“In problem solving it’s common for people to follow the 20/80 rule: They spend 20 percent of their time understanding the problem effectively, and 80 percent of their time generating and debating solutions. It’s far more time efficient and effective to flip that ratio and follow the 80/20 rule instead.

The 20/80 approach generally rule looks like the funnel at the near right, where the top end represents the beginning of problem solving and the amount of time on each typical problem solving stage is represented by the width of the funnel at that stage. I’ve emphasized in larger lettering the way many problem solvers spend their time and energy and put in parentheses steps that are often skipped entirely.



A better problem solving funnel

The 80/20 approach yields a funnel like the one below, which conveys two important ideas: Problems often start (top of the funnel) with wide divergence of perspective and ideas for resolution and end (bottom of the funnel), when handled well, with a narrow set of ideas or solutions that you believe can work and are prepared to commit to. The top of the funnel, the wide end, represents the amount of time on each stage. Understanding should be the bulk of the time spent and, done well, the time required for each subsequent step decreases. <http://lenski.com/for-better-problem-solving-flip-the-funnel/>

Nothing is wasted or too stupid.

Using problems against themselves.

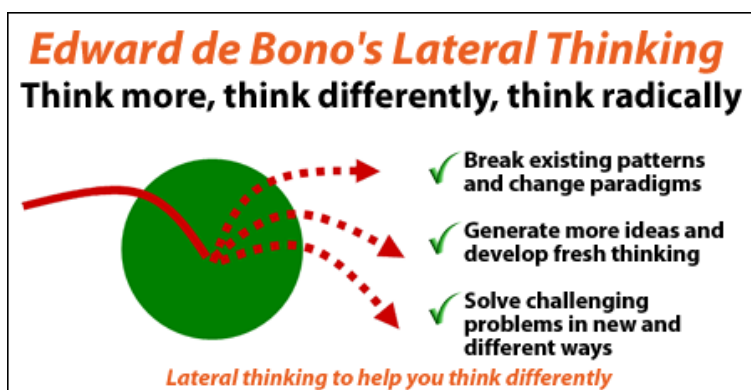
7. Edward De Bono – Lateral Thinking

Lateral thinking... is the process of using information to bring about creativity and insight restructuring. Lateral thinking can be learned, practiced and used. It is possible to acquire skill in it just as it is possible to acquire skill in mathematics. <https://www.edwdebono.com/lateral-thinking>

Lateral Thinking with Edward de Bono

One of the world's most influential thinkers Edward de Bono and the father of 'lateral thinking' tells Bloomberg UTV's Hindol Sengupta why the recession was a 'thought problem'!

<https://youtu.be/NTMnEs8BwnY>



Edward de Bono's Lateral Thinking

Overview of Lateral Thinking Training: Lateral Thinking™ tools and techniques are the classic “out of the box” thinking that every business strives for nowadays. Lateral Thinking seeks a solution to a stubborn problem through unorthodox methods that would normally be ignored by logical thinking. Lateral thinking techniques encourage thinkers to disrupt logical thought and arrive at the solutions from another angle.

Benefits of Lateral Thinking

- Develop better idea generation and problem solving

- Gain competitive advantage by being vastly more innovative.
- Constructively challenge current thinking and see new opportunities

Who is Lateral Thinking For?

- Those seeking to greatly improve and increase their creativity and innovative potential
- Those responsible for radically improving operational processes, procedures and designs
- Those who wish to move beyond problem-solving to new opportunities and fresh thinking

What You Will Learn

- How to think differently, to arrive at innovative ideas in a structured way
- How to challenge accepted ways of thinking and explore new approaches and alternatives
- How to use random stimuli to open up completely new lines of thinking.

<http://www.personalconsultancysolutions.co.uk/Creativity-And-Innovation/Lateral-Thinking-Training.html>