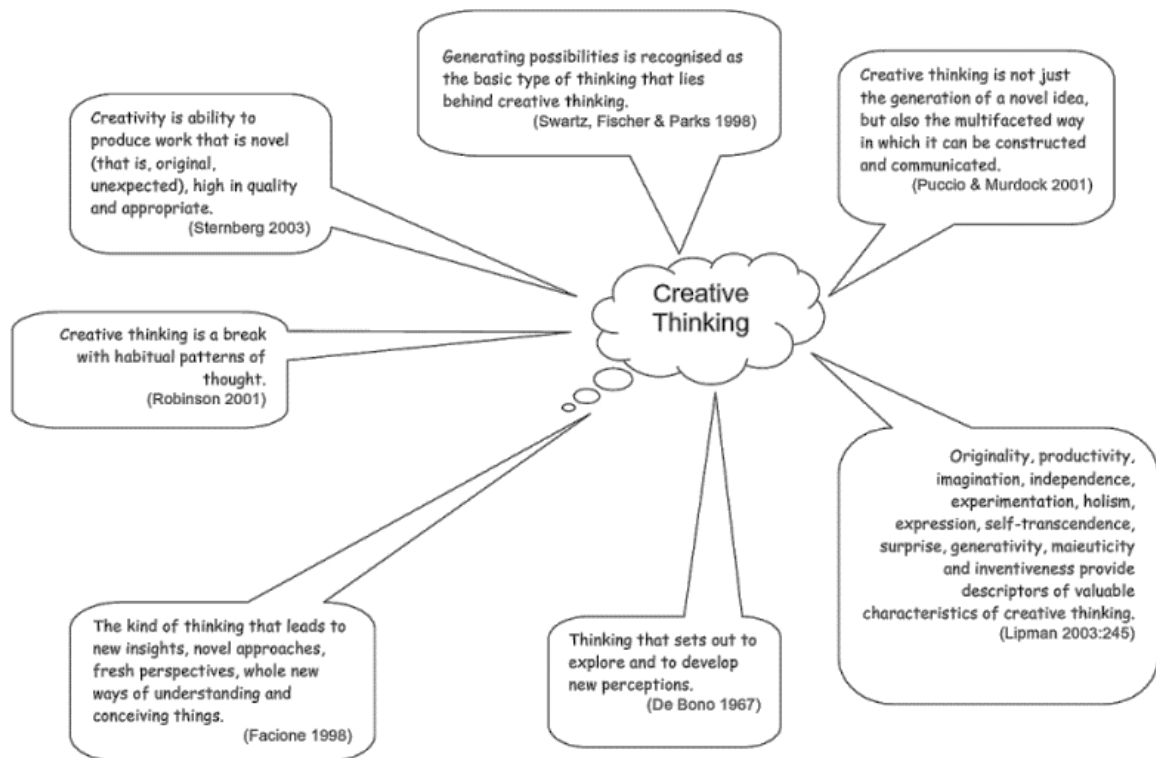


### CREATIVE THINKING

When it comes to creative thinking, the most common phrase that pops in our mind *is to think the unthinkable or think outside the box.*

This phrases can lead us to assumption that creative thinking is all about finding new ideas, which it is, but creative thinking can also be about processing existing ideas but linking and connecting them in a different way.

In the field of numerus definitions for creative thinking, Debra McGregor (2007., pp.169) illustrates several good ones:



For better understanding of creative thinking and concepts that follow it, we will use some of the M. Lipman's characterization of creative thinking:

„a. *Originality*. Thinking for which there are no clear precedents. Originality alone is not sufficient to establish the merit of a passage of creative thinking. Some such passages may be highly original but otherwise eccentric or irrational. This is one reason why a quorum of criteria generally needs to be invoked.

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b. *Productivity*. Productive thinking is thinking that, when applied in problematic situations, generally brings forth successful results. This is a value-concept that is heavily reliant upon consequentialist considerations.

c. *Imagination*. To imagine is to envisage a possible world, or the details of such a world, or the journey one may take to reach such a world. To have other worlds in which to dwell – and to make them available to others to dwell in also – is no mean feat. What matters is that those who explore the realms of possibility must retain as much as possible their sense of fact, just as those who explore the perceivable world must keep their imagination about them.

d. *Independence*. Creative thinkers are those who, as we say, “think for themselves,” and who are not stampeded into thinking the way the crowd thinks. Independent thinkers are inclined to ask questions where others are content to proceed without further reflection. And independent thinkers, when it is their turn to answer, do not do so mechanically and thoughtlessly, but study the question thoroughly before they respond to it.

e. *Experimentation*. Creative thinking is hypothesis-guided rather than rule-guided thinking. The hypotheses, moreover, need not be fully formed: They may be inchoate or rudimentary. There are trial plans, provisional schemes for proceeding; there are “trial facts.” Creative thinking involves a constant trying out, or testing, as well as a searching for firm support, which makes it probative.

f. *Holism*. The emerging character of the whole, in creative thinking, plays an important role in determining the progressive selection of additional parts. The finished product is therefore always a texture of part–whole relationships and means–end relationships that provide the product with its idiosyncratic meanings. What is not immediately given is the extent to which the “whole” is identical with the “primary aspect.”

g. *Expression*. Creative thinking is expressive of the thinker as well as of that which is thought about. To think creatively about a tree that one perceives reveals the character of the tree and that of the thinker. This is because creative thinking wrings the expression out of the experience in which the tree is perceived.

h. *Self-transcendence*. The restlessness of creative thinking reveals itself in a striving to go beyond its previous level. Every artist is aware that each successive work is a response to all those that were produced earlier. Not to endeavour to go beyond previous achievements is to risk engaging in a form of inquiry that lacks integrity.

i. *Surprise*. The meaning of originality lies in its consequences, and surprise is one of those consequences, when the originality is not merely novel but fresh. Although theoretical thinking seeks understanding, creative thinking defies it, thereby generating astonishment and wonder.

j. *Generativity*. Creative thinking not only is a stimulus to satisfaction, pleasure, joy, and delight in others, but it in some cases stimulates other's creativity. This must be construed cautiously, however, since it may sometimes inhibit creativity in others. For example, the teacher who thinks creatively is a precious model for her students. However, brilliant lecturers can provide their audiences with very few clues as to how this profusion of glittering ideas came into being. But if a teacher is concerned with encouraging students to think for themselves, she will seek to create the problem conditions that the students will have to think through themselves if they are to become independent and creative thinkers.

k. *Maieuticity* (from "maieutic"). Maieutic persons think and act in a manner calculated to bring forth the best in the world. Such persons are like midwives, bringing human or intellectual offspring to birth, or helping nature in its efforts to do so. Maieuticity is a way of characterizing the thinking of the teacher concerned to bring out the thought and expression of her students.

l. *Inventiveness*. An idea can be understood as a possible solution to a problem, and inventive thought contains many problems and many relevant promising ideas. Such thought can be described as inventive even though the experiments they give rise to are unsuccessful. Thus a contemporary critic (Charles Rosen) can choose to speak of the music of Vivaldi as containing "nothing but ideas," and a philosopher describes

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the work of Bertrand Russell as “merely brilliant.” In other words, a prolific flow of alternatives can be thought of as inventive, but to be considered creative it would have to satisfy other criteria. Inventiveness may be a necessary condition for creativity, but it may not be a sufficient one.

When we eliminate the fear of wrong answers, mistakes and pressure of expectations the creative thinking comes into play. Just like in Socrates dialog, it’s all about changing perspectives with a help of open ended questions or in this case – open ended tasks.

Here is an example on what happens when we eliminate the pressure for students to perform the “correct” task:

<http://www.watchknowlearn.org/Video.aspx?VideoID=55659>

Creative thinking often goes hand to hand with terms like abstract, metaphors, imagination, association, etc. All of these concepts offer open ended ideas that lift the pressure of expectations or mistakes as some of the best examples of mention terms can raise from mistakes. Creative thinking works in the field of experiments and in experiment, the mistakes are not seen as a failure but invitation to explore and opportunity to learn more. While in critical thinking we are finding sense through analysis and logic, creative thinking can lead us through the nonsense in order make some sense.

This is a place where we can be messy and unorganized in our heads, allowing our train of thoughts to go zig zag and to forget everything we know in laws of physics, convections and logic. This doesn’t mean that the workshop, task or class will go out of order stepping in to anarchy, it means that the students will be able to experience the different perspective of a problem or a tasks relating it to a fun challenge. They will also be able to think about the subject or topics that we take for granted, in a most unusual way.

There are many ways to practice creative thinking and creativity, from drawing tasks (like the one in the video), pantomime, mind games for creativity and riddle solving can be very popular method as well.

Riddles always went hand to hand with wisdom, knowledge and life as we experience it, going way back in the history all over the world (Greeks, Vikings, Babylon’s etc).

Archer Taylor, American folklorist says that the riddling is universal art. And as for this kind of art, creative thinking comes in the center.

Riddles question our perception of things as we know them, allowing us to experience them in the new way, pushing and exploring our creative thinking skills:

“Riddles make a point of playing with conceptual boundaries and crossing them for the intellectual pleasure of showing that things are not quite as stable as they seem' -- though the point of doing so may still ultimately be to 'play with boundaries, but ultimately to affirm them”

Very often psychologists use riddles to measure creative problem solving potential, teachers use riddles in classes to practice creative thinking and still in many rural areas, older people use riddles as a fun mind games that keep the oral literature and their costumes alive.

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But this time around we won't be solving, we will be creating riddles. Riddle making is a great way for students to change the perspective of problem solving skills - as we won't be finding a solution to a problem, but a problem to a solution.

You can do this exercise individually or with the group - the process is the same.