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Creative and Scientific-thinking



Dr. Mohamed Elnaggar



الجامعة المصرية للتعليم الإلكتروني الأهلية
THE EGYPTIAN E-LEARNING UNIVERSITY





Creativity

we are all creative every day because we are constantly changing the ideas which we hold about the world around us.

Creativity does not have to be about developing something new to the world, it is more to do with developing something new to ourselves.



Creativity

When we change ourselves, the world changes with us, both in the way that the world is affected by our changed actions and in the changed way that we experience the world.

Creativity is:

- Ability.
- Attitude.
- Process.



A-Creativity is an Ability

A simple definition is that creativity is the ability to imagine or invent something new.

Creativity is not the ability to create out of nothing (only Allah can do that), but the ability to generate new ideas by:

- ❖ Combining.
- ❖ Changing.
- ❖ Reapplying existing ideas.



B- Creativity is an Attitude

- The ability to accept change and newness
- a willingness to play with ideas and possibilities
- a flexibility of outlook
- the habit of enjoying the good, while looking for ways to improve it.



C- Creativity is a Process

Creative people work hard and continually to improve ideas and solutions, by making gradual alterations and refinements to their works.



Negative Attitudes That Block Creativity

Oh no, a problem:

- ❖ It can't be done:
- ❖ I can't do it or

There's nothing I can do:

- ❖ But I'm not creative:
- ❖ What will people think?



Negative Attitudes That Block Creativity

Oh no, a problem:

- The reaction to a problem is often a bigger problem than the problem itself.
- Many people **avoid or deny problems** until it's too late, largely because these people have never learned the appropriate emotional, psychological, and practical responses.
- The happiest people welcome and even seek out problems, meeting them as challenges and opportunities to improve things.



Negative Attitudes That Block Creativity

It can't be done:

- By assuming that something cannot be done or a problem cannot be solved, a person gives the problem a power or strength it didn't have before.
- And giving up before starting is, of course, self fulfilling.
- But look at the history of solutions and skeptics: man will never fly; rockets will never leave the atmosphere.
- Again, the appropriate attitude is summed up by the statement, "The difficult we do immediately; the impossible takes a little longer."



Negative Attitudes That Block Creativity

There's nothing I can do:

- Some people think “well maybe the problem can be solved by some expert, but not by me because I'm not smart enough, or an engineer.”
- Again, though, look at the history of problem solving. Who were the Wright brothers that they could invent an airplane? “Aviation engineers?” No, they were bicycle mechanics. The ball point pen was invented by a printer's proofreader, not a mechanical engineer. A good mind with a positive attitude and some good problem solving skills will go far in solving any problem.



Negative Attitudes That Block Creativity

But I'm not creative:

Everyone is creative to some extent. Most people are capable of very high levels of creativity; just look at young children when they play and imagine. The problem is that this creativity has been suppressed by education. All you need to do is let it come back to the surface. You will soon discover that you are surprisingly creative.



Negative Attitudes That Block Creativity

What will people think?

There is strong social pressure to conform and to be ordinary and not creative.



Negative Attitudes That Block Creativity

Here are some overheard examples:

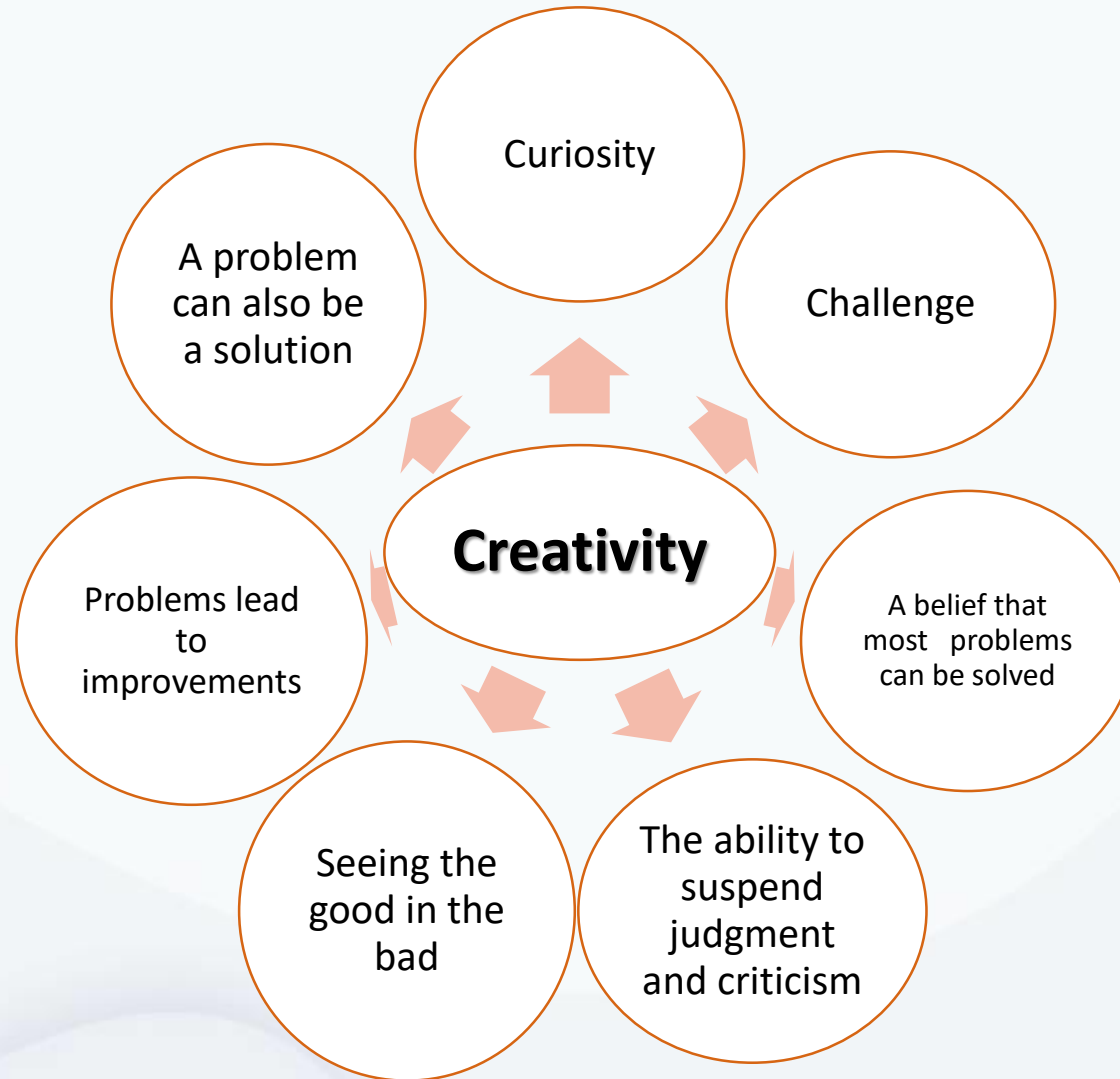
Orange Juice is so sweet

- Ordinary Person: I am annoyed, I'll drink anyway, I'll Throw it away
- Creative Person: "I like to put water in my orange juice so it's less sweet."

You are painting Your house

- Ordinary Person: "You're crazy." Ordinary Person: "Why are you going this way? It's longer."
- Ordinary Person: "You're weird, you know?" Ordinary Person: "What are you doing?"
- Creative Person: "We're painting our mailbox."

Positive Attitudes for Creativity



Positive Attitudes for Creativity

1. Curiosity

- ✓ Creative people want to know things--all kinds of things- just to know them.
- ✓ Knowledge does not require a reason.
- ✓ The question, "Why do you want to know that?" seems strange to the creative person, who is likely to respond, "Because I don't know the answer."
- ✓ Knowledge is enjoyable and often useful in strange and unexpected ways. In addition to knowing, creative people want to know why. What are the reasons behind decisions, problems, solutions, events, facts, and so forth? Why this way and not another? And why not try this or that?

Positive Attitudes for Creativity

2. Challenge

Curious people like to identify and challenge the assumptions behind ideas, proposals, problems, beliefs, and statements.

Positive Attitudes for Creativity

3. A belief that most problems can be solved

- ✓ By faith at first and by experience later on, the creative thinker believes that something can always be done to eliminate or help alleviate almost every problem.
- ✓ Problems are solved by a commitment of time and energy, and where this commitment is present, few things are impossible.

Positive Attitudes for Creativity

4. The ability to suspend judgment and criticism

Many new ideas, because they are new and unfamiliar, seem strange, it is important for the creative thinker to be able to suspend judgment when new ideas are arriving, to have an optimistic attitude toward ideas in general, and to avoid condemning them with the typical kinds of negative responses like, "That will never work; that's no good; that's impossible," and so forth.

Positive Attitudes for Creativity

5. Seeing the good in the bad

Creative thinkers, when faced with poor solutions, don't cast them away. Instead, they ask, "What's good about it?" because there may be something useful even in the worst ideas. And however little that good may be, it might be turned to good effect or made greater.

Positive Attitudes for Creativity

6. Problems lead to improvements

Such unexpected and perhaps unwanted problems are not necessarily bad, because they often permit solutions that leave the world better than before the problem arose.

Positive Attitudes for Creativity

7. A problem can also be a solution

- ✓ A fact that one person describes as a problem can sometimes be a solution for someone else.
- ✓ Above we noted that creative thinkers can find good ideas in bad solutions.
- ✓ Creative thinkers also look at problems and ask, "Is there something good about this problem?"



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**THANK
YOU** FOR WATCHING
QUESTIONS?

