

Toolkit 1 - Learning Unit 2

Pre-Intervention

Activity 3 – Cognitive biases



Training

Activity 3: Cognitive biases

Dunning-Kruger

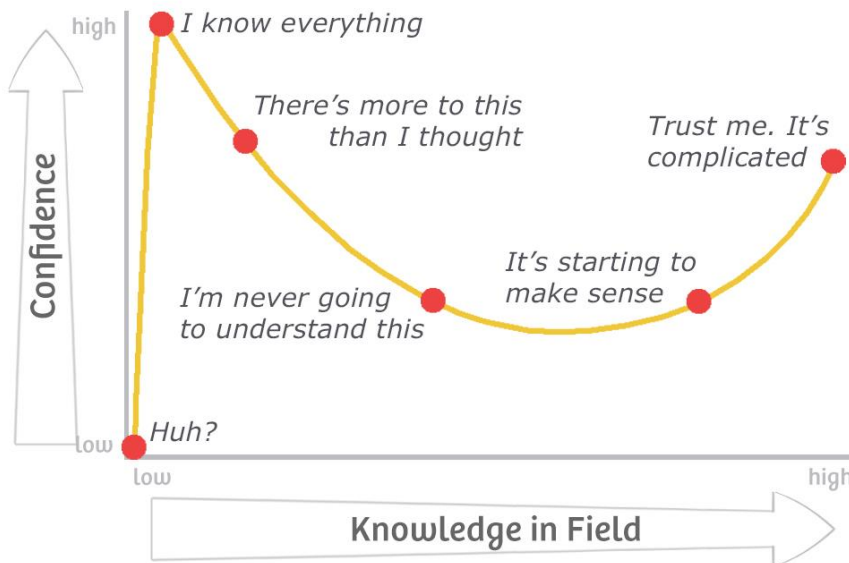
An important piece of information for understanding critical thinking is the Dunning-Kruger effect. In the study, 2 groups were formed. One group had poor spelling scores, poor logical thinking, and low humor tendencies. In contrast, the second group had these abilities strong. In the subsequent evaluation, the group that was significantly better in the variables had a very poor self-assessment and doubted that they had done well on the test. This effect was explained in the study in such a way that if we are competent in some matter, we expect that at least as competent our surroundings are and thus reduce our own competence. In contrast, the second group came to completely opposite conclusions. A group that had very poor results had a strong tendency to overestimate their abilities. When the results are published to both groups. The group in the test of successful people began to evaluate themselves realistically and their estimate was adjusted according to the results they received in the test. What is important, however, is that the second group changed their opinion and their estimates only minimally or practically not at all after the publication of their results.

On deeper examination, it turned out that if we are incompetent, it prevents us from realizing our own incompetence. It has also been found that if we are incompetent, it prevents us from recognizing competence in someone else. In this way, we can then get into communication through a circle in the arguments, which prevents us from moving forward. The only way that proved effective in changing their minds was to educate them. One of the few effective ways to prevent the Dunning-Kruger effect in yourself is to constantly educate yourself. Other research has concluded that the brain blocks information that indicates our incompetence at





a subconscious level (Vuillemier, 2004), supporting the results that Dunning-Kruger also came to.



Try complete this exercise

This exercise is designed to help you think laterally and discover new ways of looking at the world. Answer these questions using creative and constructive thinking. You can use as much detail as you like. For fun, try to think of your own "What Would Happen?" questions!

What would happen if

there were suddenly no computers, tablets, or phones of any kind anywhere on Earth?

we had to live in a world without electricity?





**Psychological
Early
Intervention**

Project Number: 2020-1-PL-KA202-082075- Strategic Partnerships for vocational education and training

... you woke up one morning to discover you had changed into a cartoon character?

... all the animals in the world could suddenly communicate with us in our own language?

... you discovered your best friend was a superhero?

Look at the Influence of Self-Fulfilling Prophecy

<https://www.youtube.com/watch?v=dkuomtYIZME>

Cognitive biases

Do you know what a cognitive bias is and how many there are to date? Are you aware that certain cognitive biases must be taken seriously in the teaching world? Do you have any idea of how to help a teacher avoid them? Can you tell a cognitive bias from a myth? Test your knowledge by answering the following five questions.

I invite you to answer the following riddle spontaneously:

“I am the sister of two Olympic athletes. But these two athletes are not my sisters. How is this possible?”

Answer here: These two Olympic athletes are my brothers! Just because I’m a girl doesn’t mean I only have sisters.”

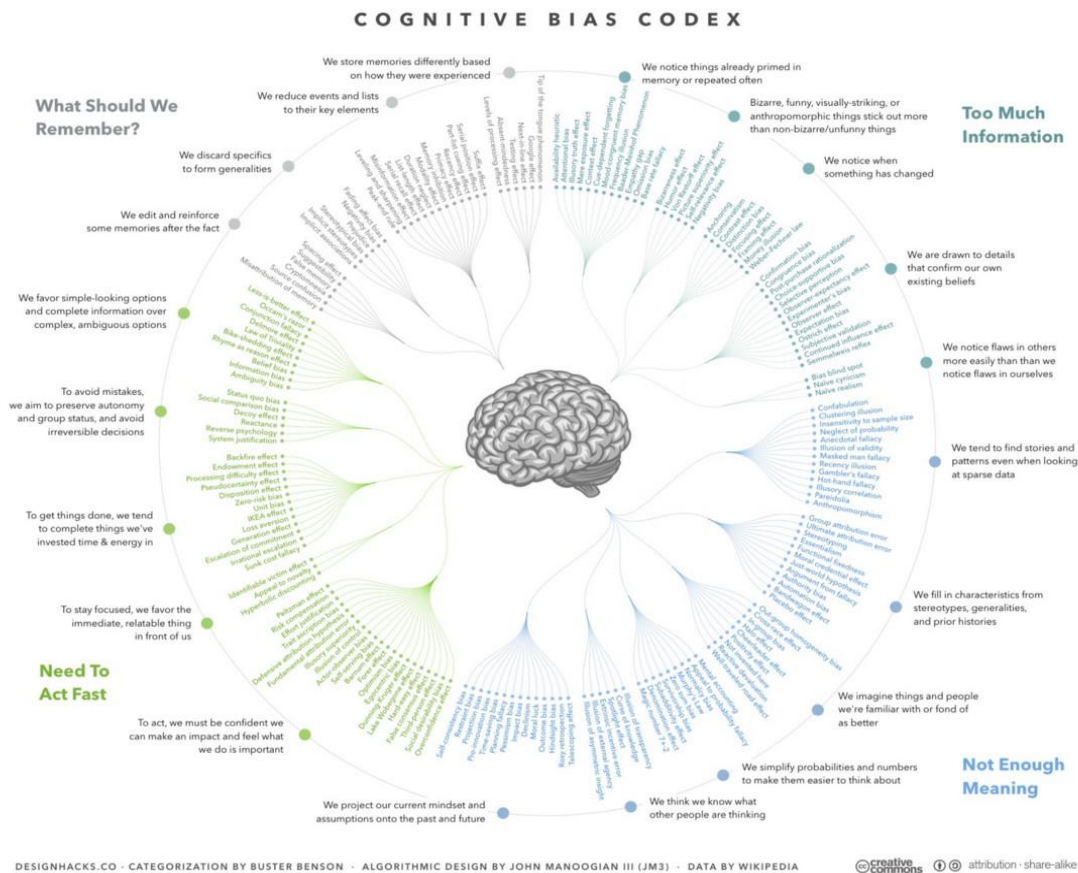


Co-funded by the
Erasmus+ Programme
of the European Union

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



Well done, if you got the correct answer! Your critical thinking skills are well trained. But chances were you got it wrong, even though you thought you were thinking logically and rationally.



True or false? Cognitive biases are perceptual distortions that can be said to be to our mind what optical illusions are to our visual system.

Answer here: True

Cognitive biases cause us to make incorrect judgments or wrong decisions in our daily lives. These shortcuts of the mind that allow the brain to simplify information processing are unavoidable, but we can learn to detect them better, starting with a better knowledge of them.

Here are two examples of common cognitive biases:



Confirmation bias. Also called hypothesis confirmation bias, this cognitive bias is the tendency to favour information that supports our assumptions or preconceived ideas and to underestimate or ignore information that does not.

Overconfidence. This cognitive bias, which affects more than half of us (!), consists of overestimating our abilities, especially compared to those of others. Many of us would therefore believe that we have an above-average intelligence...

What is the name of the cognitive bias described below?

This cognitive bias occurs when the simple fact of showing someone that you believe in their chances of success influences their performance, especially if you are in a position of authority or influence over that person.

- A) The bias blind spot
- B) The halo effect
- C) The curse of knowledge
- D) The Pygmalion effect

Right answer: D

The Pygmalion effect (or Rosenthal and Jacobson effect) was named after the Greek mythological legend in which the sculptor-king Pygmalion fell in love with Galatea, his creation; a statue brought to life. This effect can interfere with the teacher-learner relationship and significantly affect learning. This is also the case for the other three biases: the bias blind spot, the halo effect, and the curse of knowledge.

Watch the video about Cognitive bias.
<https://www.youtube.com/watch?v=hIOMYC9XI9E>

