

## Barriers to the Study of Scientific Subjects and Level of Knowledge of Basic Chemistry

### ADULT LEARNERS' CASE STUDY

#### Adult Learner's Case Study N.: 2

Name: GG, Male, Age 46, Piraeus area, Secondary school teacher of Mathematics

#### Description of the Case Study

Reasons of the decision not to continue studying scientific subjects: *Mathematics was more attractive for him. Furthermore, his science teacher did not give him the suitable stimuli for acquiring interest and continue studying scientific subjects.*

Main difficulties in scientific subject learning at school: *He had to work very hard on his own for doing his chemistry homework due to his knowledge gaps of the fundamental concepts. Teachers did not help him enough to fill in these gaps. The strong personal effort for understanding very little made him dislike the subject.*

Self evaluation of knowledge of chemistry: *Poor*

Evaluation of the scientific information provided by the media: *Scientific information provided by the media is comprehensible to him in about 50% of the cases.*

Perception of the word "Chemical": *The word "Chemical" is associated with the Chemistry course and with a monster.*

Result of the basic chemistry test: *The weight of solution is 105 grams, because 100 plus 5 equals 105.*

*The characteristic scent is made of material particles, but he cannot provide a logical explanation of the process.*

*As an example of a pure substance in the solid state, he referred to iron.*

*As an example of a pure substance in the liquid state, he referred to water.*

*As an example of a pure substance in the gaseous state, he referred to carbon dioxide.*