

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

### ADULT LEARNERS' CASE STUDY

#### Adult Learner's Case Study N.: 1

Name: *BB, Male, Age 40, Athens area, Secondary school teacher of Classics*

#### Description of the Case Study

Reasons of the decision not to continue studying scientific subjects: *Orientation for classical studies*

Main difficulties in scientific subject learning at school: *Theory did not have any connection with practice neither in the school textbooks nor in the instruction.*

Self evaluation of knowledge of chemistry: *Poor to fair*

Evaluation of the scientific information provided by the media: *In most cases, scientific information provided by the media is comprehensible. However, when it includes more scientific terms the difficulty is increased and there is a need to resort to friend-scientists for clarification.*

Perception of the word "Chemical": *The word "Chemical" is associated with something that is made in a lab and it is "pure", in contradiction to the increased complexity of the issues examined by the social sciences.*

Result of the basic chemistry test: *The weight of solution is between 100 and 105 grams, marginal more of 100, owing to dissolution. Moreover, the chemistry involves the change.*

*The characteristic scent is made of material particles, but this perception cannot be explained.*

*As an example of a pure substance in the solid state, he referred to the salt, sodium chloride, or to sulphur, or to nitric fertilizers.*

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

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