

Plants and Water

Grade 6 students of the 38 GS 'Vasil Aprilov', the city of Sofia, Bulgaria.

Sofia Botanic garden

Hello,

We are quite interested in the topic you have posted in your site. We decided to take part in the Project with our own study on it.

The first thing we decided to do was to determine to what an extent our peers, as well as adults, are aware of the topic, whether they are interested in it, to what an extent they regard it as important and problematic, and to what an extent and in what way they are ready to contribute for the resolving of this problem, if they see such.

To this end, we formed several working teams, each consisting of 5 people. We came up with questions for a survey (*Appendix 1*) via which we were to determine the initial level of awareness and interest of the people in the topic.

Each team conducted it among different people, in order for us to have more reliable outcomes. My team surveyed some 30-35 people: children from grades 2 to 7, parents in the school yard, chance passers-by walking near the school, and our parents.

We got the following results:

➤ Question 1 – most surveyed, regardless of their age, gave 'Yes' as an answer, yet, when we asked them to say a few words, they sunk into explanations of water passing through its different states. Although this answer is true, it contains only part of the truth.

➤ Question 2 – the answers were quite diverse. The students pointed out, that plants needed water to carry out the process of their feeding. The youngest ones emotionally claimed that without water the plants would be sad, dry and would finally die. One of the chance adults passing by who decided to spare some time to answer the questions turned out to be a biology teacher in a nearby school and gave an extremely precise explanation of the topic.

➤ The question that got most wrong answers was Question 3. 40% of the surveyed reached a wrong conclusion. They supposed there was no relationship between these two co-habitats in the respective ratio. Others specified the question as meaningless. The students gave answers ranging from simple yes-no to entirely wrong ones.

➤ To the last question, which, however, was not the least important one, approximately 60% gave a well grounded positive reply. They thought the plants and water could be more tolerated by us than we would be by them. Others – both children and adults, think they would take revenge on us for all we have done up till now.

We do not think our study is distinguished by great reliability because we are not specialists, yet, we think these four questions show the level of awareness of part of the Bulgarian population on this topic.

We were quite disappointed with the study. The other teams had reached the same conclusions. Together we discussed the results and decided we could change them and not just report the absence of knowledge and interest in people. For the purpose we devised a sequence of activities – theoretical and practical ones. We decided to check whether they will have an effect with the children in our school.

We placed the importance of acquiring knowledge first. We worked out a short presentation, which we were to use to reveal the link between plants and water (*Appendix 2*).

The members of the teams spread in the grades (from grade 2 to 7) and present the topic to the students. It was an extremely emotional event, and there were a lot of disputes as to what else could be done.

With the youngest students the lecture was connected with the simple explanations of the meaning of plants to our planet, of their beauty and importance to our own existence. We proposed they paint pictures on the ‘I love plants’ topic. The results were incredible! (*Appendix 3*)

A project is being carried out in the school that goes by the title ‘Green Lab in the School Yard.’ In order to include the students in both topics, we showed the little ones how to plant seeds and to grow them in order for us to then plant them in the herb spiral. The great enthusiasm they showed makes us think we will have dozens of plants by the end of April. The children promised to water them, take care of them and not pick them.

The older students (grade 5 – 7), who were aware of and knew a lot about the topic of plants and water, cleaned the dry winter leaves from the school yard and whitewashed the stems of the trees. They also made presentations on the water cycle (*Appendix 2*) by including plants, as well as a scale model to portray the process. We surely had great fun with the models!



Finally, we conducted the survey for the second time. The results were radically different, even better than we expected. The participants replied to all questions we asked them and with great pleasure, too. It would be useful if more attention is given to the topic. We tried and got specific results.