



The water that runs within us – how Geography can be learned through volcanic calderas, fumaroles and hot springs

Ana Sousa (1) and João Luís Gaspar (2)

(1) Escola Secundária Domingos Rebelo, Geography, Ponta Delgada, Azores, Portugal (ana.mbc.sousa@edu.azores.gov.pt),

(2) University of the Azores, Centre for Volcanology and Geological Risks Assessment of the Azores University, Ponta Delgada, Azores, Portugal (Joao.LR.Gaspar@azores.gov.pt)

“Look deep into nature, and then you will understand everything better.”

Albert Einstein

Teaching Geography within the classroom walls is always a challenge, especially if it is done in S. Miguel Island. Its breath-taking scenery invites us to dive into the wilderness and learn from it directly!

Located in the Atlantic Ocean, the Azorean Archipelago is a privileged volcanic region, which makes it an open and unique resource for geosciences lesson to anyone, especially for 10th grade students whose curricula is not based on Geography as the main subject. The challenge, for their Geography teacher is, therefore, greater.

Being an islander makes us sometimes forget the importance of one of the most basic resources – water. My students asked me “It’s everywhere we look, so why should we bother?” when they were told the theme of our project was water. The more obvious it is, the harder it gets – making them aware of how privileged they are by living in a region where rare natural phenomena occur, such as hot springs and geothermal spring. Moreover, water is a content of their two-year curricula.

Being a major topic on the 10th grade curricula, with me as their Geography teacher, and engaging in the poster session “Science in tomorrow’s classroom” (during the GIFT 2014 Workshop), as well as the choice of our main theme “The water that runs within us”, seem like natural stages that had to happen, as in the cycle of water.

Therefore, for two years, experimental activities will take place both inside and outside of the classroom in order to study the availability of water in lakes, streams, underwater and hydrothermal reservoirs, as well as to enhance its importance for geothermal centrals, but also to local tourism as a main income of the economy of the region. Natural hazards associated with water will be studied on the second year of this project.

Nothing of this would be possible without the cooperation of certain local agents, such as the Centre for Volcanology and Geological Risks Assessment (CVARG) of the Azores University,OMIC (Microbian Observatory of the Furnas Lake), EDA (Electricity Company from the Azores) and Ponta Delgada City Hall.

I believe that in the future some of my students will be learning and/or working in some of these organizations and will remember the two working years and the knowledge acquired in the Geography lessons. Even if they don’t, I hope they grow up maturely and respectfully, apart from getting not only amazed by this stunning nature, but also aware of their role as active citizens. My goal, as a teacher and as a human being, will be, by that time, accomplished.