

What's your soil?

Pauline Beis and Valetin Girard

16 avenue du Parc des Chaumes 89200 Avallon France (paulinebeis@gmail.com)

Soil is found on the upper layer of the Earth. It consists of a mixture of weathered rock, finely ground into powder, minerals, and a variety of living and dead life forms. This layer is very thin compare to the lithosphere (around 100 km) it extends downward a few centimetres to several meters. Its thickness and composition will depend on geology, climate, topography, biology, and time.

The first factor that we will consider examining how soils form is the geology. Before soil can develop, the landscape must first become covered with regolith, or dirt. A bare surface made of stone will not develop into a soil until it is further broken down into finer dirt particles.

Burgundy and Moldavia have very similar landscapes. How can we explain it?

With 12 students, 14 to 15 years, and a chemistry and physics teacher, Valentin Girard, we will present Avallon's soil in order to understand our landscape.

The project aims to enhance the motivation of students for learning Science. The project includes cross-curricular aspects and trans-disciplinarily with geology, geography, biology and environmental science, helping students to describe and be proud of their national country resources. During the project students will explore their surroundings and will create stories and design charts, maps with their country resources and environmental issues. On the other side the project is connected to ICT (Information, Communication and Technology) that empowers participants with necessary knowledge and skills about diverse digital tools. These are aimed to help them to develop additional, fictional educational resources that will serve as a peer-teaching resource for young science learners that are going to be introduced to chemistry subject.