Field classes: key to involve and attract students to soils

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Soil genesis is a subject taught to students of Agrarian Sciences and Geography at the Federal University of Viçosa in Minas Gerais, Brazil. Each semester 200 to 250 students inscribe for it. It is organized as the first 60 hours course on soils for 1st and 2nd year’s students. The course has a distinct pedagogical approach, which is based on Paulo Freire’s education principles, known as socio constructivism. In such approach, learning environments and materials are prepared to stimulate dialogues and exchange of knowledge between students themselves, strengthening that their role is crucial to their own learning. During the course, students have different types of practical classes: indoors, in a class room or at the Earth Sciences museum and outdoors, in the field. In the class room they have the opportunity to handle materials –minerals, rocks, soils and maps-, follow demonstrations and perform small experiments. The classes given in the museum intend a broadening of the subjects approached in theoretical and practical classes. In the field classes the students areorganized in small groups with the task to investigate soil formation by observation and description of geology, landscape, land use, soil expositions and some of the soil properties. Attracting students to soils involves looking at meanings and perceptions related to soils they bring with themselves and follow this up to sensitize and create awareness about their importance. With this aim, it is also included, as part of the evaluation, a final voluntary presentation that many of the students do. The presentation can be a song, a poem, a sketch or whatever they propose and create. Many of the presentations bring topics related to the new perception about soils they get during the semester and to ideas or questions raised in the field classes. A survey with the students showed that field classes are by far the preferred classes and they are considered more dynamic. Since students have less and less contact with soils and rural livelihoods before they enter the university, field classes are best to make the connections between their (mostly urban) life and the soils. They also play an important role in developing an integrated observation and understanding of the environment and land use.