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New strategies to strengthen the soil science knowledge of student during field activities

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Soil Science can be considered a discipline that serves as a fundamental base for other disciplines such as ecology, agronomy, plant production, etc. In order to demonstrate the relevance and connection to real world it is important to develop field and practical activities. Field activities help student to comprehend soil as part of the landscape and the natural ecosystems. These activities also help them to realize the importance of historical soil use on the quality of today's soil and landscapes. It is well known that fieldwork practices are essential to strengthen the soil science knowledge of students and their learning process. These fieldwork practices involve doing a physical activity rather than passively attending lectures or watching demonstrations. The simple visual and tactile observations in the field could be used to predict soil behavior and these direct observations are best made in the field. Students who learned in the field using an active work are more motivated, have more positive attitudes, and place more value in their work than those that learn passively. Therefore, when scheduling the coursework an important time is assigned to field work, which sometimes is not sufficiently profited from the standpoint of student learning taking into consideration the economic effort involved. We are aware that part of the students are simple spectators in the field so we encourage their participation by making them responsible for obtaining part of the information about the place and the types of soils that will be visited. On the other hand, we will invite the students to do some game based exercises, which are fun and force them to work in groups and to pay attention to explanations. Our objective is to present the information in a more attractive way, making the learning of soil profile description and easier task. The exercises that we propose are both field and problem-based learning to make sure that the knowledge is more memorable (non-stop learning). Fieldwork is amenable to different strategies for enhancing feedback and for providing assessments and this work presents several of them.