



To know, know of, or be aware for soil.

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With the development of the Soil Security concept, and the articulation of one of its five dimensions, Connectivity, it is timely to rethink approaches to soil science teaching. There is a continued need to develop those who will have expertise in soil science, i.e. 'know' soil, and are identified as discipline experts and are concerned with primarily the study of soil as an object and classically are categorised into the sub-disciplines such as; pedology, soil chemistry & physics, or taxonomy. With developments in advances in pedometrics and digital soil mapping, the derivation of remotely sourced soil data along with non-invasive techniques will focus its future disciplinary focused development.

But, with the diversification of soil science there is a need to understand what this means for those who only want to 'know of' soil. Identified as a component of knowledge that is useful in cognate disciplines, e.g. agronomy, ecosystems services, social concepts of terroir, where soil is a utility or provides a function and may be represented as a collection of indicators. This requires soil science to connect with other cognate disciplines and adopt a multidisciplinary approach to understand how non-soil scientists are connected to soil. Finally, to be inclusive soil science also needs to recognise those who see soil as part of their narrative, the artist, poet, citizen scientist, or advocates of social media. This group can be described as 'aware of' soil and develop connections through concepts of its care.

Frameworks such as the Teaching-Research-Industry-Learning (TRIL) nexus can enable us to think about a re-imagined curriculum to soil science that is applicable to a range of users. This paper will illustrate teaching centered on multidisciplinary approaches and the use of real-world problems and the development of materials to support this learning. Here students can tackle complex scenarios and explore how soil science knowledge is connected to other disciplines preparing them to engage with a multidisciplinary work environment.