

Modernizing soil science education producing more capable decision makers

Dr Damien Field¹, Dr Tony Koppi¹, Dr Derek Yates¹, Prof Budiman Minasny¹, Prof Alex McBratney¹

¹*The University Of Sydney*

Following consultation with a range of stakeholders, this paper refines a framework for the learning and teaching of soil science that includes the teaching-research-industry-learning (TRIL) nexus. The benefits for student learning by including work integrated learning, such as in the workplace or community and industry-based projects has framed the teaching being proposed. Published examples of the global teaching imply that soil science is generally taught from a discipline perspective with limited multidisciplinary or industry considerations. An expressed need by industry has revealed that to increase soil science knowledge amongst industry practitioners the requirements are wider than normal university teaching. The TRIL model is essential to meet such industry demands. The development of a learning framework able to meet industry needs includes authentic complex scenarios that will also benefit student learning.