Cyber Shovels in High School: An Online Soil Science Resource for Educators

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Declining enrolment in soil science courses at post-secondary institutions in Canada and around the world tells us that fewer high school students are considering a career in this discipline than ever before. This may be due to soil science programs losing visibility as they are incorporated into other, larger programs; a lack of awareness of what opportunities exist for soil science professionals; or a disinclination of high school educators to use soil science scenarios as examples in their science curriculum. In 2010, we initiated a three-year, multi-institutional project aimed at introducing soil science concepts into high school curricula across Canada. The goals of this project are to promote learning about the importance of soil as a natural resource, provide useful tools that high school educators can incorporate into their lesson plans, and encourage students to pursue soil science in their higher education. The tool (http://soilweb.landfood.ubc.ca/youth/) features five main themes: (1) descriptions of soil research projects currently undertaken by faculty at five universities across Canada; (2) links to age-appropriate soil related resources that provide exercises and examples teachers can easily use; (3) profiles of soil scientists “at work” in a diverse range of careers to motivate future soil scientists; (4) examples of recent news stories about soil to highlight its relevance in our day to day lives; and (5) a soil forum for students and teachers to ask questions. This tool will be further refined by incorporating feedback obtained from high school teachers and students.