

# Open Resource Learning Tools on Soil Formation and Classification



**Maja Krzic**

University of British Columbia, Vancouver

# **Learning goals for a 21<sup>st</sup> century college education** (*Association of American Colleges & Universities*)

- Knowledge of human cultures and the physical and natural world, focused by engagement with big questions
- Intellectual and practical skills (inquiry, analysis, critical thinking, ...)
- Personal and social responsibility, including intercultural knowledge and competence
- Interactive learning demonstrated through application of knowledge, skills, and responsibilities to new settings and complex problems

# Declining enrolments in soil and agronomy programs

- World has become increasingly urbanized
- Lack of visibility of soil science in high school education
- Traditional and often dated soil science curriculum



# Innovative educational approaches

- Development of interdisciplinary programs
- Inclusion of more active and collaborative learning approaches (e.g. PBL)
- Development of web-based teaching and learning resources



# **Virtual Soil Science of BC**

<http://soilweb.landfood.ubc.ca/promo/>

# Lessons learned

- Establish a team of content and multimedia experts
- Plan well, web-based projects take time and are not cheap
- Make sure to address the learning objectives
- Educational rewards of open learning resources are well worth the effort