UBC Teaching and Learning Enhancement Fund

Final Report – maximum 2 pages

Project Name: Multimedia Soil Map of Vancouver: An Educational Tool for Exploring our City's Environment

Date: July 14, 2014   Submitted by: Maja Krzic

Year of Funding: 2013/14

Summary of Work Accomplished

The project has been successfully completed and the web-based teaching tool entitled "**Vancouver Soil Map**" can be found at www.vancouversoils.ca. The project was initiated in April 2013 with an objective to develop an interactive web-based educational tool focused around a multimedia soil map of Vancouver. The project timeline was as follows:

April – August 2013: Project initiation and planning, instructional design and development. Collection of detailed soil profile descriptions. Status – completed.

September – December 2013: Revise the original Vancouver soil map based on information gathered during previous phase (i.e., Apr-Aug 2013) of this project. Video production and editing. All videos are placed at our Virtual Soil Science Learning Resources YouTube channel (see http://www.youtube.com/user/SoilWebUBC, pls check sub-heading "Vancouver Soil Map"). Status – completed.

January – March 2014: Website design and development. Student review of the tool has been completed in APBI 200, 402 and 403 courses and tool was refined based on the feedback received. The final version of the website was completed in late June 2014. Status – completed.

In term 2 of 2013/14 academic year, the teaching tool was successfully incorporated into the curriculum of the APBI 402 / SOIL 502 – Sustainable Soil Management course as well as APBI 403 / SOIL 503 – Soil sampling, Analysis and Data Interpretation course. Due to its open access, and the educational resource that we have developed during this project will be used in 14 UBC courses (ranging from 200 to 500 level) benefiting about 800 annually.

Several promotional activities have been carried out with an aim to inform the community of learning about this educational resource. They included the following:

1) Celebrate Learning week in October 2013, where we gave a presentation in which we promoted this and other web-based educational resources developed through an on-going collaboration (Virtual Soil Science Learning Resources, http://soilweb.landfood.ubc.ca/promo/) of scientists and IT experts from several Canadian universities.

2) In May 2014, we gave a presentation about this teaching tool at the conference organized by the Canadian Society of Soil Science in Banff, AB. The tool has generated substantial interest among the soil scientists in Canada who confirmed the need for such educational resources. Several colleagues from non-BC postsecondary institutions (e.g., University of Saskatchewan, University of Alberta, Laurentian University) were excited to learn that this open access resource and expressed interest in developing similar multimedia soil maps for their cities.

3) We have submitted an abstract about this project to the American Society of Soil Science that will have its annual conference in early November 2015.

4) On July 14, 2014 we have heard that our paper about assessments of urban soils in Vancouver for reclaiming them into food production has been accepted by the Journal of Agriculture, Food Systems and Community Development. Multimedia, online map of soils of Vancouver is an integral and important part of the assessment process and reviewers commented very favorably on usefulness of such tool.

Evaluation of Project's Success *(Include evidence of rigorous evaluation)*

Evaluation was done by using the quality check-list (shown below) based on eCampus Alberta and quality rubrics of UBC.

Writing

√ The level of language used is appropriate for the intended audience.

√ The writing is free of bias relative to age, culture or ethnicity, gender, and sexual preference.

Technical Standards

√ The learning resource is formatted so that it is accessible to learners from home or school with common operating platforms.

√ The learning resource multimedia has been optimized for size and use with standard computer graphics and systems.

√ Multimedia elements do not exceed minimum hardware/software requirements.

√ All links work.

Layout (Visual Design) Standards

√ The learning resource uses consistent navigational menus, icons or cues (i.e. photo icons) and is consistent in style and function.

√ The web design displays content in a clear, concise, easy to navigate manner utilizing text, graphics, and hyperlinks.

√ A simple, consistent, and accessible structure for navigation if learning resource materials is provided.

√ Learning resource provides learners the opportunity to proceed at their own pace and revisit sections as required.

Instructional Design and Pedagogy Standards

√ The learning resource is academically rigorous, relevant, current and has open access.

√ A variety of instructional strategies are used to ensure compatibility with learners' different interests, abilities and learning styles.

√ Access to appropriate information resources is provided through web links (URLs).

√ The learning resource meets universal design principles.

√ Information presented in the learning resource is accurate.

√ Content is presented in a logical sequence based on the learning objectives.

Assessment Standards

√ Content activates prior knowledge of the learner.

√ The learning resource provides opportunities for practice and transfer of learning in a variety of ways.

√ The learning resource provides background information required by the learner for successful understanding of the material covered.