a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

TLEF Small Projects – Final Report

To be completed for Small Projects upon completion of the project.
Please limit this report to a maximum of 2 pages.

Project Title:

Integration of the Questogo© platform to enhance soil science and forest ecology courses

Principal Investigator:

Dr. Maja Krzic

Report Submitted By:

Dr. Maja Krzic

Report Submission Date:

(2015/08/27)

Project Initiation Date:

(2014/04/01)

Project Completion Date:

(2015/08/27)

Summary of Work Accomplished

Describe if and how the project has significantly contributed to the enhancement of teaching and learning, as well as if and how the project outcomes constitute sustainable benefits to students.

The project has been successfully completed and a game-style educational quest, based on the Questogo© platform (website and mobile App), for the APBI 200 & FRST 201 courses has been developed and evaluated. The quest focuses on soil classification, specifically forest floor classification and was designed as a self-study resource that supports field-based, hands-on laboratory sections of APBI 200 & FRST 201 courses. The project's timeline was as follows:

● **April – August 2014**: Project initiation. Instructional design and preparation of material needed for production of the quest. Start development. Student recruitment for review team. Status – completed.

● **September-December 2014**: Development and student review team feedback. Status – completed.

● **January – March 2015**: Refine mobile quest based on feedback. Pilot testing in term 2 of 2014/15 academic year and follow-up improvements based on the feedback received. Status – completed.

Several promotional activities (i.e., 5 presentations at national and international conferences and 3 outreach articles) have been carried out to inform the community of learning about this educational resource.

●Hoffman, D., M. Krzic, M. Schmidt, S. Nashon, and L. Lavkulich. 2015. Web-based educational tool and mobile quest for forest floor description and humus form classification. Proceedings of the Annual Conference of the Canadian Society of Soil Science. Montreal, QC. July 5-10, 2015. p. 38.

●Krzic M., Hoffman, D., J. Wilson, M. Schmidt, and L. Lavkulich. 2014. Bringing forest floor and humus forms classification to life using multimedia and mobile-based learning. Abstract no. 155-1 in Proceedings of the 2014 Annual Conference of the Soil Science Society of America. Nov 2-5, 2014. Long Beach, CA.

●Hoffman, D., M. Krzic, M. Schmidt, S. Nashon, and L. Lavkulich. 2014. Development of a web-based educational tool for forest floor description and humus form classification. Proceedings of the Annual Conference of the Canadian Society of Soil Science. Banff, AB. May 4-8, 2014. p. 35.

●Hoffman, D., M. Krzic, M. Schmidt, S. Nashon, and L. Lavkulich. 2014. From forest to classroom: a web-based educational tool on forest floor description and humus form classification. Abstract no. 155-2 in Proceedings of the 2014 Annual Conference of the Soil Science Society of America. Nov 2-5, 2014. Long Beach, CA.

●Krzic, M., D. Hoffman, and J. Wilson. 2015. Using web-based learning and mobile gaming to learn about forest floor. Faculty of Forestry, University of British Columbia. Branchlines 26 (1):8-9.

●King, C., J. Dordel, M. Krzic, and S. Simard. 2014. Mobile gaming application to enhance a forest ecology course. CSA News Magazine 59:38.

• Students dig deep into soil science with mobile game. UBC News, Public Affairs, August 11, 2015 (http://news.ubc.ca/2015/08/11/students-dig-deep-into-soil-science-with-mobile-game/)

Evaluation of Project Outcomes

Describe the outcome-based criteria used to evaluate the project's success or performance.

Evaluation was according quality check-list (shown below) based on eCampus Alberta & UBC's quality rubrics.

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 multimedia has been optimized for size and use with standard computer systems.
√   Multimedia elements do not exceed minimum hardware/software requirements.

Layout (Visual Design) Standards
√   The learning mobile quest uses consistent navigational questions, content questions and photo icons, and is consistent in style and function.
√   The mobile app design displays content in a clear, concise, easy to navigate.
√   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.

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' learning styles.
√   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.