Small TLEF Project – 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: Developing Geotechnical Laboratory Web-based Instructional Materials for Second- and Third-Year Civil Engineering Students – CIVL210 & CIVL311

Report Submission Date: (2016/04/07)

Principal Investigator: Yahya Nazhat

Project Initiation Date: (2016-04-07)

Report Submitted By: Yahya Nazhat

Project Completion Date: (2016/03/15)

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.

A series of web-based instructional materials (videos) for geotechnical engineering undergraduate CIVL210 and CIVL311 courses were produced. Videos displaying six different soil tests were made available via the connect websites of these courses.

The videos provided instructions related to testing procedures, as well as safety and proper use of the instrumentation during the laboratory sessions.

Evaluation of Project Outcomes
Describe the outcome-based criteria used to evaluate the project’s success or performance.

The produced web-based instructional materials (videos) improved student learning outcomes by:

1. The videos allowed the students reviewing testing procedures and laboratory instructions prior to laboratory sessions. Therefore, students came to their lab sessions better prepared about the testing procedures, the use of the instrumentation, and safety issues.
2. The video provided better quality assurance (the videos were carefully reviewed for technical contents and language) by eliminating instructional ambiguity.
3. Better dedicated lab time for actual hands-on elements and interaction with teaching assistants (TAs).

Feedbacks from the students implied that most students found watching the created videos via Connect was very useful, both beforehand the labs and/or during the writing of their reports.