Geotechnical Engineering Education 2020

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Table of Contents

Preface
Organization

2nd John Burland Honor Lecture
Reflections on Some Contemporary Aspects of Geotechnical Engineering Education - From Critical State to Virtual Immersion
M. Jaksa

Invited papers
Common Instructional Practices Grounded in Evidence
S.A. Ambrose

When Graphs are more than "Pictures": Visual Literacy as a Challenge for STEM Education
V. Christidou

Developing Soft Soil Engineering Skills Using "Class B" and "Class C" Predictions
M. Karstunen, G. Birmpilis & J. Dijkstra

Forks in the Road: Rethinking Modeling Decisions that Defined the Teaching and Practice of Geotechnical Engineering
R. Salgado

Curricula: Undergraduate, (Post)Graduate, Doctoral
Assessment of Graduate Attributes Development in Two Foundation Engineering Design Courses
Y. Nazhat

Coursework: Laboratory, Field, Project-based, Numerical Methods
Development of an Advanced Field and Laboratory Testing Course for Geotechnical Engineering Students
N. Derbidge & G. Fiegel

A Project Based Assessment of the Foundation Engineering Course for Large Class Sizes
G.C. Fanourakis

In Search of Approaches to Embed Teaching of Geosynthetics within the Curriculum: Filling an Educational Gap
M. Ferentinou & Z. Simpson

Highlighting Links among Geology, Index Properties and Mechanical Behaviour at the Beginning of a First Course in Soil Mechanics
M. Matos Fernandes & J. Couto Marques
Student Centred Learning Approach in the Development of Social Skills: Implementation in an Experimental Soil Mechanics Course
P. Kallioglou & S. Vairamidou

Laboratory Experiments in Soil Mechanics by Means of Digital Twins and Low-Cost Equipment
A. Ledesma, P.C. Prat, A. Lloret, R. Chacon & M. Sondon

Supervised Professional Practices: Research as Option to Strengthening Knowledge in Geotechnical Practice
S. Orlandi & D. Manzanal

A Study Evaluating Students' Long term Understanding of Effective Stress and Suggestions for its Improvement
D.T. Phillips

Engineering Geology and Soil Mechanics: The Need to Develop Educational Material that Captures their Relationship
C. Saroglou & M. Pantazidou

Open Resource Educational Material
Producing a Case-Study Webinar for Geotechnical Engineering Education
M. Calvello

Teaching the Big Ideas of the Disciplines: Online Educational Material Accessible to Everyone for Soil Mechanics' Effective Stress
M. Pantazidou

Links to Research on Learning and on Engineering Education
The Effect of Attending or Missing Lectures on Soil Mechanics Examination Performance
G.C. Fanourakis

Introduction of Cooperative and Competition-Driven Learning in Geotechnical Engineering Education
E.S. Ieronymaki, M. Omidvar & D. Rabadi

Feedback to Students on Soil Mechanics Laboratory Reports - Why Use Virtual Technology if you Can Have a Productive Real Dialogue?
M. Pinho-Lopes & W. Powrie

Potentials for Social Semiotics in Geotechnical Engineering Education
Z. Simpson

Lessons Learned about Engineering Reasoning through Project-Based Learning: An Ongoing Action Research Investigation
Z. Simpson & M. Ferentinou

Priority Theme 2: Incentives and Opportunities for Industry-Academia Collaboration
The Role of International Exchange Visits in the Geotechnical Education of Undergraduate Students
V.E. Dimitriadi & K.G. Kliesch

Master's Degree on Soil Mechanics at CEDEX: An Example of Collaboration among Government, Academia and Industry
F. Pardo de Santayana, E. Asanza, J.A. Diez & M. Muniz
Let's Bring into the Classroom the Reality of Estimating Soil-Engineering Properties  
A.D. Platis, V.E. Dimitriadi & K.T. Malliou

Graduate Student Perceptions of Mentoring: A Pilot Case Study in the Geotechnical Graduate Student Society at UC Davis  
K. Ziotopoulou, C.E. Bronner & D.M. Moug

Educate the Educators: An International Initiative on Geosynthetics Education  
J.G. Zornberg, N. Touze & E.M. Palmeira
Preface

The international conference on Geotechnical Engineering Education, GEE 2020, was organized by the technical committee TC306 of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) under the auspices of the School of Civil Engineering of the National Technical University of Athens, the Hellenic and the International Societies for Soil Mechanics and Geotechnical Engineering, and the City of Athens. It was an online conference, streamed on June 23-25, 2020.

The conference brought together education researchers and geotechnical engineering professors, researchers and practitioners. The conference was designed to serve as a blueprint for a discipline to organize its own education and create education funded projects, in addition to disseminate scholarly practices and research results. Specific objectives included the following:

1) to promote adoption of results from research on education in engineering instruction;
2) to disseminate educational collaborations between engineering schools and engineering consulting firms;
3) to sponsor the training of young engineering academics in evidenced-based practices for effective teaching;
4) to stimulate future activities and collaborations in support of geotechnical engineering education, with the help of two panel discussions on “Geo-engineering education papers: scope, characteristics and use” (Panel 1) and “Building a community of scholarly education practice” (Panel 2), which are available at TC306’s YouTube channel.

In addition to typical education theme topics, such as Curricula, Coursework, Open Resource Educational Material and Links to Research on Learning and on Engineering Education, GEE 2020 had two priority themes: “Training for Geotechnical Engineering Instructors” (Priority Theme 1) and “Incentives and Opportunities for Industry-Academia Collaboration” (Priority Theme 2). Unfortunately, Priority Theme 1 was not represented with any paper; this lack was partly offset by the discussion in Panel 2 and by awarding a competitive prize to a young geotechnical engineering educator to attend a conference on engineering education.

These proceedings are mostly a record of what the conference leaves behind. As to the future directions, discussions pointed to the need for a) including the Critical State Soil Mechanics Framework in undergraduate instruction, b) compiling a collection of open access images and graphs, c) creating a repository of peer-reviewed educational material and d) developing refresher courses for geotechnical instructors with the broader aim to revitalize geotechnical engineering teaching.

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Organization

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