Measuring the impact of online discourse in undergraduate STEM courses:  
Semi-automatic assessment of large discussion board corpora  
(PedEval)

PURPOSE OF THE STUDY

A large amount of data is collected from virtual learning environments about online student activities. The goals of this study, called PedEval for Pedagogical Evaluation, are:

1. To develop new natural language processing (NLP) techniques for better understanding student discussions.
2. To collect new student survey data from specific USC courses and analyze it with respect to discussion data and student data.
3. To collect retrospective discussion data from specific USC engineering courses and statistically analyze them in relation to student data, including academic and demographic data.

The PedEval study is sponsored by the National Science Foundation and will run two years. Each semester we will collect data from student questionnaires and from the USC student Registrar from students in selected courses. We will analyze the data using new language processing techniques to identify patterns of use across student levels of study, demographics and course performance.

PARTICIPANT INVOLVEMENT

Students in participating courses (your course is a participating course) will be asked to fill out a questionnaire. You participation is voluntary. You may decline to respond to specific questions or to all questions. Your instructor will not be told whether or not you choose to participate. The study investigators will apply for permission through the USC Institutional Review Board and the USC Viterbi School of Engineering to receive Registrar data.

PAYMENT/COMPENSATION FOR PARTICIPATION

If you choose to fully fill out and submit the study questionnaire, you will be eligible for entry into a raffle. There will be one gift card raffled for every 25 students who participate fully in the raffle. Gift cards will be picked up from staff at the office of the Dept. of Computer Science.
CONFIDENTIALITY

Identifiable information will be obtained in connection with this study. Information about your use of the discussion board will be collected. This information contains your name and email address. Information about your level of study, gender, ethnicity and course grade will be collected from the USC Registrar’s Office. The members of the research team and the University of Southern California’s Human Subjects Protection Program (HSPP) are the only ones who will have access to your data. The HSPP reviews and monitors research studies to protect the rights and welfare of research subjects.

Identifiable information is used only for keying data, so that data from different sources can be merged. After merging, data codes are used in place of identifiable keys. All information resides on a secure project server at the Information Sciences Institute. Data access is password-protected and accessible only by study personnel who have been approved by the USC’s Institutional Review Board to work on the project. Human Subjects training is required for IRB approval.

INVESTIGATOR CONTACT INFORMATION

If you have any questions or concerns about the research, please feel free to contact the following people.

Jihie Kim, Ph.D. Principal Investigator
University of Southern California
Information Sciences Institute
jihie@isi.edu (310) 448-8769

Gisele Ragusa, Ph.D. Co-Principal Investigator
University of Southern California
Rossier School of Education
ragusa@usc.edu (213) 821-3147

Erin Shaw, M.S. Co-Principal Investigator
University of Southern California
Information Sciences Institute
jihie@isi.edu (310) 448-9196

IRB CONTACT INFORMATION

University Park IRB, Office of the Vice Provost for Research Advancement, Stonier Hall, Room 224a, Los Angeles, CA 90089-1146, (213) 821-5272 or upirb@usc.edu

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