GC 2012-5646: A CASE STUDY FOR PROBLEM-BASED LEARNING COURSE IN ENVIRONMENTAL ENGINEERING PROGRAM

Hyun-sang Shin

A Case study for Problem-based Learning Course in Environmental Engineering Program

Hyun-sang Shin

hyuns@seoultech.ac.kr

Dept. of Environmental Engineering, Seoul National University of Science and Technology, Seoul, 139-743, Republic of Korea

The purpose of this study was to identify the effect of problem-based learning(PBL) in Environmental Engineering program. Participants were 81 undergraduate students who enrolled in 'Environmental Instruments Analysis' course. First, based on problem-based learning model, PBL procedures of the course were introduced. Second, PBL scenarios and design principles were provided. Third, the learning effects of PBL instruction on students' teamwork, lifelong learning ability and problem-solving ability are analyzed. Teaching tips for promoting students' teamwork, lifelong-learning ability and problem-solving ability in PBL were provided.