A model for improvement of knowledge application at the engineering: School of Ferdowsi University of Mashhad

Rezvan Hosseinigholizadeh
Educational Management
Kamal Kharrazi, Abbas Bazargan & Khodayar Abili
University of Tehran

Abstract

The main goal of this study was to provide a model for improvement of knowledge application (KA) in the Engineering School of Ferdowsi University (ESFUM). To achieve this, exploratory mixed method design was used. In the qualitative research phase, a sample size of 31 (29 men, 2 women) was chosen for interview which were members of the Faculty of Engineering and industry. A sample size of 100 (98 men, 2 women) full time faculty members of ESFUM answered the questionnaire too. The exploratory interviews, document analysis and researcher-constructed Improvement of Knowledge Application questionnaire (IKNQ) were used in order to collect required data in both sections of qualitative and quantitative research. According to the qualitative results, eight main categories of perceived usefulness and perceived necessity, goal setting and coherence of knowledge, valuation of knowledge, action learning, academic culture, structure and management, relevance of research and experts and University economy were extracted as the main categories bearing on improvement of knowledge application. Then, these categories were surveyed and tested in ESFUM. Based on the results of fitting the model, the impact of perceived usefulness and perceived necessity, goal setting and coherence of knowledge, action learning, and structure and management on the application of knowledge was significant. Based on findings from qualitative and quantitative data analysis, the main requirements of implementation KA model in ESFUM were classified as technical requirements, cultural requirements, structural requirements, and economic requirements.

Keywords: knowledge management, knowledge application, higher education