

PENGESAHAN INSTRUMEN KEMAHIRAN GENERIK: ANALISIS FAKTOR PENGESAHAN

(Generic Skills Instrument Validation: Confirmatory Factor Analysis)

SERI BUNIAN MOKHTAR, SAEMAH RAHMAN & MOHD YUSOF HUSAIN

ABSTRAK

Kajian ini dilakukan bagi mengesahkan instrumen untuk mengukur kemahiran generik dalam kalangan pelajar kejuruteraan. Seramai 527 responden daripada pelajar kejuruteraan terlibat dalam kajian ini. Terdapat sepuluh komponen untuk mengukur kemahiran generik, iaitu mengumpul dan menganalisis maklumat, kemahiran komunikasi, kemahiran bekerja dalam pasukan, kemahiran menyelesaikan masalah, kemahiran pembelajaran berterusan, kemahiran menggunakan teknologi, keusahawanan, pemikiran kritis dan kreatif, kepimpinan serta kualiti peribadi. Analisis faktor pengesahan (CFA) dijalankan untuk memperoleh penyelesaian 10 faktor menggunakan perisian AMOS. Hasil analisis menunjukkan nilai alfa Cronbach adalah melebihi 0.70. Hasil analisis CFA peringkat kedua mengesahkan bahawa data adalah sepadan dengan model. Adalah dicadangkan bahawa instrumen 40 item berasaskan model 10 faktor ini boleh digunakan untuk mengukur kemahiran generik pelajar kejuruteraan.

Kata kunci: Kemahiran generik; analisis faktor pengesahan; instrumen; AMOS

ABSTRACT

This study was carried out to validate an instrument used to measure generic skills of engineering students. A total of 527 respondents were involved in this study. Ten components were included to measure the generic skills namely: gathering and analysing information, communication skill, working in team skill, problem solving skill, lifelong learning skill, technology competency, critical and creative thinking, entrepreneurship, leadership and personal qualities. Confirmatory factor analysis (CFA) was conducted to obtain 10 factor solutions using AMOS software. The results show that the value of Cronbach alpha is higher than 0.70. The results of the second order CFA confirm that the data fits with the model. It is suggested that the instrument with 40 items based on 10 factor model can be used to measure the generic skills of engineering students.

Keywords: Generic skills; confirmatory factor analysis; instrument; AMOS

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Jabatan Kejuruteraan Awam
Politeknik Sultan Azlan Shah
35950 Behrang, Perak DR, MALAYSIA
E-mail: mseribunian@yahoo.com*

Fakulti Pendidikan
Universiti Kebangsaan Malaysia,
43650 Bangi, Selangor DE, MALAYSIA
E-mail: saemahukm@yahoo.com

Jabatan Kejuruteraan Elektrik
Politeknik Sultan Azlan Shah
35950 Behrang, Perak DR, MALAYSIA
E-mail: myhbsm74@yahoo.com

* Penulis untuk dihubungi