Abstract

Educational Data Mining (EDM) mainly focuses on educational objectives like students’ academic performance analysis based on personality and informal learning in formal learning environment. The primary objective is to identify the outcome of informal learning style (library and ICT) in formal learning environment. The secondary objectives are analyzing the students’
personalities and purpose of resource utilization, identifying the resource usage level and etc. Eynseck Personality Questionnaire (EPQ) is used to classify the students' personality. Resource Utilization scale and Likert scale are used to measure the utilization of resource usage. Criterion Reference Model is used to classify the students' academic performance. Association rule is used to identify the frequent patterns among the set of attributes based on interesting measures. Multilayer perception technique provides the classification of confusion matrix result by applying cross-validation. This experiment can be used to improve the students' intellectual capability and understanding the subjects. This analysis can be used to predict the students' academic performance and the recommender system for students and management to improve the educative style of informal learning in formal learning environment and resource facilities.

Reference

- Jiawei Han and Micheline Kamber, “Data Mining: concepts and techniques”, Morgan Kaufmann Publishers, San Francisco, 2006.
- Richard B. Lamptey, “Promoting Effective Use of Library Resources and Services at Kwame Nkrumah University of Science and Technology Library”, 2010.

Index Terms
Computer Science
Data Mining

Key words
Personality
Impact of library and ICT
Academic performance

Association rule
Multilayer perception.