APPLICATION OF MULTIPLE DEPENDENT STATE SAMPLING IN IMPROVING BENCHMARKING FOR STUDENTS LEARNING OUTCOMES

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Abstract: Quality enhancement has become a buzz word in KSA with the expansion of the educational network throughout Kingdom of Saudia Arabia. Evaluation of educational programs acts as the lynch-pin for quality enhancement. For objective analysis of educational evaluation many statistical tools have been applied in recent years of which of Shewhart control charts is considerably a new entry. These control charts and their variants provide the educational management with a clear picture of the process under study and pinpoint the latent areas which need adjustment or improvement. Current research proposes control charts using multiple dependent state sampling techniques applied on a secondary data from Weber State University, which uses the Associate Constructor Level 1 exam as an assessment tool. For application of the proposed technique a code has been developed and a comparison of the same with the traditional charts is carried out. Present study focuses on the application and interpretation of the proposed technique. The results show that the MDS is comparatively more effective than the traditional control charts in the assessment of educational program and the same has been discussed threadbare at the end. Easy approach has been adopted so that pedagogical staff engaged in educational assessment can adopt the technique with ease.

Keywords: Quality enhancement, Shewhart charts, Multi Dependent State, Benchmark, Pedagogical