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Learning Management System Valid Test Generator Trends at Par/Above National Performance

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Abstract

This study explores the trends of valid test generator (VTIG) application within the Learning Management System (LMS) and their alignment with national performance benchmarks in the context of preboard test assessment for Bachelor of Science in Accountancy (BSA) graduates. It focuses on integrating a comprehensive assessment module that encompasses preboard test creation, scoring mechanisms, test item analysis, and predictive analytics for Certified Public Accountant Licensure Exam (CPALE) outcomes. By employing advanced statistical methodologies and data analytics, the study examines how the VTIG framework enhances the reliability and validity of assessments, thereby providing insights into students' readiness for CPALE. Six subject matter experts in the university prepared 50 multiple choice questions per subject that covered the CPALE topics in Financial Accounting and Reporting, Advanced Financial Accounting and Reporting, Auditing, Taxation, and Regulatory Framework for Business Transactions. The valid test generator analyzed the students' preboard scores in Taxation and the simulation result showed 18 items or 36% were incorrectly answered while 32 or 64% were correctly answered. There was an anomaly on Items 7, 10, 13, 22, and 34 in terms of point-biserial Correlation (Rpbi) and p-values (P); hence should be reteached or removed from the test. Once the system analyzed the preboard multiple choice questions (MCQs), using SPSS linear regression, the average preboard scores of the BSA graduates in the six major fields included in the CPALE had a 96% impact on the result of their CPA board exam, with a p-value of less than 0.001, which indicates that the results of the predictive model are highly statistically significant. These results indicate substantial correlations between LMS-generated test outcomes and predicted CPALE Scores, suggesting that effective utilization of technology in assessment can elevate educational performance standards.

Keywords: Learning Management System, Point-biserial Correlation, Item Analysis, Regression Analysis, CPALE