A Tool Model Group (TMG) Development to Enhance Student Performance

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Abstract— Educational institutions in different contexts of the world are increasingly working on exploring the potential of educational development and challenges that might enhance student performance. Still, there are missing benefits of using applications that directly impact the enhancement of student performance in Oman. This paper aims to create a "Tool Model Group" (TMG) model to improve student performance using technological learning techniques in modified evaluation to enhance academic performance. In the first phase of this study, a systematic review of the existing literature was conducted to determine the degree of acceptability and effectiveness of existing applications in e-learning. The second stage involved designing a model for the hybrid e-learning tools. It is followed by a system efficiency check that can measure the technology's suitability for academic performance. The findings of this paper show a significant result of TMG impact on student performance in Oman.

Keywords— E-learning, TEL, Assessment Method, Academic Performance.

I. Introduction

The whole world keeps searching for new development in using technologies especially in educational area [1]. This development should be enhanced and developed from time to time to be fitted with the new upgrades in technologies. According to this point, the current applications work individually without collaboration with educational sector. This study is necessary by identifying the critical factors that can enhance learning and give beneficial results of application models and platforms. Also, this paper works on validating the collected survey and the questionnaire related used for this model to provide the needed statistics and to show Cronbach's results [1, 2]. Finally, this study shows the ANOVA test of all questionnaire items discussed in the discussion section. This study tries to find a simple model development with high related factors that impacts on student performance in higher educational institutions. Furthermore, this research tries to handle the factors that all are active impression to the use of online learning to develop the student confidence and performance.

This study is divided into several parts. They started using computer technology in the TMG model to develop

student learning and the assessment method description. Secondly, the research questions. Third, the literature review of some of the related work shows how the Wiki chat program can help develop the learning process. Forth, the methodology of creating a TMG model with all necessary factors to identify the relationships and the influences among factors [3]. Fifth, the discussion of the achievement and how all survey items were tested using the SPSS program to validate the proposed model. Finally, a conclusion of the study and the used references.

The link between university and external evaluation or self-evaluation is also different in each folder. Official comments believe that evaluation and performance represent opportunities to encourage improvement for quality assurance that depends on accreditation results [4]. It becomes evident that the relationship between these two main phases of evaluation and performance processes is diverse. Still, they linked to the historical development of the universities in each higher educational institution context [5, 6]. The referents from different academic programs that have undergone accreditation processes and quality assurance processes have confirmed that academic program assessments have consolidated essential practices. Therefore, the need for more studies that focus on using technology-enhanced learning is required to develop learning objectives, methods, and results in evidence.

II. USING COMPUTER TECHNOLOGY IN TMG FOR DEVELOPING STUDENT LEARNING AND ASSESSMENT MECHANISM

The technology-enhanced learning circumstances identified as efficient and effective services to support all student learning needs [6]. There are many technologies and applications available online, but they have some differences among them when they are accessed and activated by undergraduates at universities. This different use could directly or indirectly enhance the student academic performance and the whole of the assessment process [2, 5, 9]. The TEL techniques are divided into three different perceptions of TMG in educations. These perceptions include (1) student interest in TEL; (2) the faculty's familiarity with TEL; then (3) the effect of TEL in improving student academic performance (AP). Besides, the