The combination of sharing pattern and adapting systems through an E-learning environment and its effecton the development of achievement and personal knowledge management skills among university students

## Abstract

The research aimed to determine the combination of sharing pattern and adapting systems through an E-learning environment and its effect on the development of achievement and personal knowledge management skills among UQU female students. The research sample consisted of 44 students (they were divided into four experimental groups, the first group: students who learned according to adaptation to students knowledge In a participatory E-learning environment with a sequential pattern, the second group: students who learned according to adapt to the educational learning styles in an E-learning environment Participatory sequential pattern, and the third group: students who learned according to adaptation to student knowledge in a participatory Elearning environment of a parallel pattern, and the fourth group: students who learned according to adaptation to educational styles in a participatory Elearning environment of a parallel pattern. In order to achieve the objectives of the research, a systemic development approach based on educational design was used, which views educational technology as a process not just products. The researcher prepared the measuring tools represented in an achievement test to measure the cognitive aspect of the merging of pattern of participation and adapting systems through an E-learning environment, and a scale of personal knowledge management skills of Umm Al-Qura University female students. The researcher followed the developed model of Abdul Latif Al-Jazzar (2013) for educational design. The results reached the effectiveness of the combination of pattern of participation and adaptation systems through an E-learning environment on developing achievement and personal knowledge management skills among a sample of Umm Al-Qura University female students, and there is also a statistically significant impact of the combination of the pattern Parallel sharing and adaptating to student knowledge in the E-learning environment in the development of achievement, as well as there is a statistically significant effect of merging between the pattern of serial participation and adaptation to the patterns of education on the development of achievement among students of Umm Al-Qura University, and the level of significance tended towards the upper average for the merging of the pattern of parallel participation and adapt to student knowledge. The results also found a statistically significant effect of the merging of parallel pattern of participation and adaptation to student knowledge in the E-learning environment in developing personal knowledge management skills. There is also a statistically significant effect of merging of the pattern of sequential participation and adaptation to educational patterns in developing the personal knowledge management skills of Umm Al-Qura University female students, and the level of significance of the effect has shifted towards the upper average of the merging between the pattern of parallel participation and adaptation to student knowledge. The research also recommended a number of recommendations, including increasing interest in integrating adapting systems and patterns of participation in E-learning environments in various levels of education, and with different courses, as well as working on determining priorities in designing of educational contents.

أثر العلاقة بين أنماط المحاكاة ثلاثية الأبعاد في الواقع المعزز واستخدام البيان العملي على تنمية الأداء المهارى لطالبات الدراسات العليا