

Abstract

This study aimed to investigate The Impact of Interaction of E-learning Environments with Learning Styles to Develop E-tivities Design Skills Based on Gamification and Usability for Teachers of Technology in Gaza. To achieve the aim, the researcher adopted the mixed approach that depends on a mixture of quantitative and qualitative approaches in data collection in which the researcher got as a result of applying six tools as followed: Felder & Soloman Index of Learning Styles (ILS), observation card for using E-tivities design tools skills, product design assessment card for E-tivities based on gamification, and in-depth interview, to identify the level of study sample ownership of E-tivities design skills based on gamification, as well as the scale of the usability of the e-learning environment, and the focused discussion to identify the usability of the study sample for those environments. The quasi-experimental method was used in the study which was applied to a sample of (60) of technology teachers. The first experimental group used Edmodo, the second experimental used WordPress, as well as the classification of the study sample according to their learning styles to (Sequential / Global) as a classification variable in both environments. The study concluded that there were no statistically significant differences between the means of the two experimental study group scores in the observation card for using E-tivities design tools skills attributed to the interaction between the E-learning environments and the learning styles. Also, the absence of statistically significant differences between the means of the two experimental study group scores in the product design assessment card for E-tivities based on gamification attributed to the interaction between the E-learning environments and the learning styles. In addition to a very large impact of the two E-learning environments in the development of E-tivities design skills based on gamification. While there were statistically significant differences between the means of the interaction between the two experimental groups in the usability of the E-learning environment is due to the interaction between the learning environments and the learning styles. The researcher recommended that there is a need to develop teachers' skills in designing E-tivities depends on the principles of active online learning, support them with tools and elements of gamification while designing it, digitally empowering them.

Keywords:

E-tivities - Gamification - Learning Styles - Usability - E-Learning Environments - Salmon Model - Active Online Learning - Felder and Soloman Index of Learning Styles