

The effect of the interaction between the two types of support (human and smart) and the personal e-learning environment (individual and participatory) on developing the educational infographic design skills of university students.

Abstract

The research aimed to determine the effect of the interaction between the two types of support (human and intelligent) and the personal e-learning environment (individual and participatory) on developing the educational infographic design skills of university students. The research sample consisted of (60) female students, and the sample was divided into four experimental groups by a number of (15) A female student for each group, the first experimental group: female students studying in the human support mode in an individual personal e-learning environment, the second experimental group: female students studying in the smart support pattern in an individual personal e-learning environment, group The third experimental: female students studying using the type of human support in an e-learning environment, the participatory personality, the fourth experimental group: students studying using the smart support pattern in the personal participatory e-learning environment, and to achieve the research objectives, the descriptive approach was used: to describe and define the research problem, prepare the theoretical framework and prepare a skills list Standards for designing educational infographic, through reviewing and reviewing educational literature and educational research that dealt with educational infographic design skills, interpretation and discussion of research results, and the quasi-experimental approach: To measure the effect of the independent variables: support patterns (human-smart) and the personal e-learning environment (individual and participatory) on the dependent variable (educational infographic skills). The results of the research found that there is a positive effect between the two types of support (human and intelligent) and the personal e-learning environment (individual). And participatory) in developing the skills of educational infographic design among female students. The research sample had the support patterns used in the research a positive effect and great effectiveness. It was found that this positive effect was found on the development of the cognitive and performance skills of the female students. The research in the four groups that studied the human support pattern in the individual personal e-learning environment for the first group, and the students studied the smart support pattern in the individual personal e-learning environment in the second group, the third group studied the human support

pattern in the participatory electronic learning environment, and the fourth experimental group studied With the pattern of smart support in the e-learning environment, the participatory personality in favor of the post application. The research also recommended a number of recommendations, including the employment of various types of support in developing the technological skills of the tenth level students of the Computer Department of the University College of Adham Umm Al-Qura University.