

The effect of the interaction between the pattern of E-Mentoring (individual-group) and its source (teacher-peer) in the e-learning environment on the development of some programming skills and self-efficacy among educational technology specialists.

Abstract:

The current research aims to measure the effect of the interaction between the pattern of E-Mentoring (individual - group) and its source (teacher - peer) in the e-learning environment on the development of some programming skills and self-efficacy among educational technology specialists. More than one educational research method was used, which includes the descriptive method, the systems development method and the experimental method. The research was applied to a sample of (76) second-year students in the Department of Educational Technology at the Faculty of Specific Education, Fayoum University. They were divided equally into four experimental groups.

The results with regard to Cognitive achievement indicated that the pattern of E-Mentoring, whether done individually or collectively, in the e-learning environment does not affect On post-Cognitive achievement, also, E-Mentoring, whether done through the teacher or a peer in the e-learning environment, has the same effect on post- Cognitive achievement, and there is no effect of the interaction between the pattern of E-Mentoring and its source in the e-learning environment on post-Cognitive achievement.

As for programming skills, the results indicated that the group E-Mentoring pattern in the e-learning environment is more effective than the individual E-Mentoring pattern in developing the skill performance of programming skills. Providing E-Mentoring through the teacher has a greater positive impact than peer-directed E-Mentoring when developing the skill performance of programming skills. The results also indicate that the effect of providing E-Mentoring through the teacher or through peers is equal for students who used the group E-Mentoring pattern, and that there is a significant difference between the students who used the individual E-Mentoring pattern due to the source of the E-Mentoring pattern, and that the average grades of the initial group that received individual E-Mentoring from the teacher Better than the third group that received individual E-Mentoring from peers.

Regarding self-efficacy in programming, the results indicated that the pattern of E-Mentoring, whether done individually or collectively in the e-learning environment, has the same effect on raising the level of self-efficacy in programming. Also, E-Mentoring, whether provided by a teacher or a peer in the e-learning environment, has the same effect on the level of self-efficacy in programming. There is no effect of the interaction between the pattern of E-Mentoring and its source in the e-learning environment on the post-application of the self-efficacy scale in programming..

Keywords: Individual E-Mentoring Pattern - Group E-Mentoring Pattern - Source of teacher mentoring - Source of peer mentoring - Programming skills - Self-efficacy.