

# **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 students.**

## **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 students. 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 indicated that the pattern of E-Mentoring, whether individual or group, in the e-learning environment does not effect on post-Cognitive achievement, also, E-Mentoring source whether the teacher or a peer, 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 on post-Cognitive achievement. The results indicated that the group E-Mentoring pattern 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 the peer. The results indicated that the pattern of E-Mentoring, whether individual or group, 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. In light of that, the researchers presented appropriate recommendations and proposals.

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