Developing an e-learning environment is based on activating two types of strategies: (a) the audio examples strategy (b) textual examples with solutions strategy and their impact on the development of the academic achievement and learning engagement of educational technology students.

Abstract:

This research aims to develop an e-learning environment based on employing two types of strategies, audio and text solved examples and their impact on developing the cognitive aspect and engaging in learning among educational technology students. To reach this goal, the required tasks related to the educational needs of educational technology students were identified in the descriptive indexing course. The production of special tasks for descriptive indexing in the form of solved examples, where two designs were produced for two different styles for the solved example, the first type is to use the solved example accompanied by a voice, and the second style is to use the solved example accompanied by a text without sound, and a list of criteria for designing an e-learning environment that employs two examples strategy was defined Solved (audio, text), And defining a list of cognitive skills that need to be developed among students of educational technology, in addition to applying the measure of engagement in learning, and designing and developing experimental treatment material in its two forms, following the model of Abd al-Latif al-Jazzar (2014) for educational design.

The research used the experimental design based on two experimental groups for one independent variable presented in two styles, and the research sample consisted of 150 students for the basic research experiment, from students of the second year education technology, were randomly divided into two groups according to the style of presenting the solved example, and the first group consisted of 75 students And the second group of 75 students, and the two researchers prepared the following research tools: An achievement test (before / after) to measure the cognitive aspect of the descriptive indexing tasks for students of the second year, Division of Education Technology, and the Scale of Engagement in Learning (before / after), and it has been verified that these are valid. The tools, their stability and validity, and (12) hypotheses were formulated to answer the research questions.

The research reached the following results. The presence of statistically significant differences between the group of students who studied using the strategy of examples solved in its two modes (auditory - verbal) in favor of the first experimental group, which was studied using the first type of the solved examples strategy, which is the use of the solved example accompanied by sound in the collection of scientific concepts and solving examples for descriptive indexing in index cards And engage in learning among educational technology students. This result is consistent with many, and in light of this, the researchers presented appropriate proposals and recommendations.

Keywords: Effectiveness - Solved Examples Strategy - - The Solved Example Pattern With Voice - The Solved Example Pattern With Text - Development - Academic Achievement - Engaging In Learning.