The pattern of collaborative e-learning activities (free/directed) in an e-learning environment via the digital wall platform and its impact on developing podcast production skills, reducing cognitive failure, and motivation for digital learning among educational technology students.

This research aims to design an e-learning environment with two types of collaborative e-learning activities (free and guided) using the Digital Wall platform, and their impact on developing podcast production skills, reducing cognitive failure, and motivating students for digital learning. Tasks were developed for the course: Digital Audio Learning Resources, by designing collaborative e-learning activities (free and guided) based on the Digital Wall platform, in the form of electronic activities uploaded to the Padlet digital wall environment. The research used an experimental design based on two groups, one of which was experimental. The research group consisted of (200) male and female students in the first level of the Educational Technology Specialist Preparation Program. They were divided into two experimental groups. The researcher prepared research tools, which included: a product evaluation card for podcast production skills and a scale for cognitive failure and motivation for digital learning. The validity, reliability, and suitability of these tools were verified. The research tools were applied and pre-tested on the two experimental groups, followed by the implementation of the experiment and the post-test of the research tools. The scores were then statistically analyzed.

The research results showed that the impact of collaborative (free and directed) electronic activities in an electronic learning environment based on the digital wall platform was on developing podcast production skills and reducing cognitive failure and motivation for digital learning among students of the Educational Technology Specialist Preparation Program in favor of the experimental group. This result is consistent with many studies. In light of this, the researcher recommended the use of electronic activities in the diverse digital wall environment due to their positive impact on achieving learning outcomes.