

## **The pattern of interactive video summary (textual – graphical) in a micro e-learning environment and its effect on developing educational infographic production skills and digital fluency among professional bachelor's students in the Digital Learning Technology program.**

This research aims to develop an electronic learning environment based on interactive video summaries in two formats—textual and graphical—within a micro e-learning environment, and to investigate its impact on developing both educational infographics production skills and digital fluency among undergraduate vocational bachelor's students in the Digital Educational Technology program. To achieve this goal, specific tasks were identified that align with the educational needs of these students in the Graphic Design course. The graphic design tasks were designed and developed using the two formats of interactive video summaries (textual and graphical) within a micro e-learning environment. The research adopted an experimental design involving two experimental groups exposed to one independent variable presented in two modes: the first group received textual interactive video summaries within a micro e-learning environment, while the second group received graphical interactive video summaries within the same type of environment. The research sample consisted of 80 students from the first academic level (second semester), randomly divided into two equal groups according to the format of interactive video summary used. The researchers developed the following research instruments: a pre-post achievement test, an assessment checklist for educational infographics production skills, and a digital fluency scale. Validity, reliability, and appropriateness of these tools were confirmed. The results revealed that employing the two formats of interactive video summaries within a micro e-learning environment had a significant positive effect on the development of both educational infographics production skills and digital fluency, with greater improvement observed in the second experimental group—the one taught

using graphical interactive video summaries—compared to the group that used textual interactive video summaries. These findings are consistent with those of several previous studies. Based on these results, the researchers provided appropriate recommendations and suggestions.