



Fayoum University
Faculty of Specific Education

**Interaction Between the Intensity Of Visual stimuli And Support
Pattern (Compact – Detailed) In The Mobile Learning Environment And
Its Effects on Cognitive Load And the Development of Some Visual
Thinking Skills Among Educational Technology Students**

**A Research Proposal as Part of The Requirements for An MA
Degree in Specific Education**

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2023

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(Abstract)

The current research aimed to identify the effect of the interaction between the intensity of stimuli (low - high) and the support pattern (Compact - detailed) in the mobile learning environment on the development of some visual thinking skills and cognitive load among students of educational technology. The research sample consisted of (132) male and female students from Students of the second level, Department of Educational Technology, Faculty of Specific Education, Fayoum University, were randomly selected and distributed into four experimental groups in a 2×2 factorial Experimental design with pre/ post test, The Developmental Research Method was implemented. The research tools were: a test of achievement of cognitive aspects, a measure of visual thinking, and a measure of the cognitive load. Statistically significant differences between the intensity of visual stimuli (low-high) in each of the cognitive test and the cognitive load scale, While there are statistically significant differences in the visual thinking scale, in favor of the high intensity pattern. The results also revealed the preference of treatment for the interaction between the high intensity of visual stimuli and the pattern of detailed support, with the rest of the experimental treatments in the cognitive test and the visual thinking scale, and the preference of treatment for the interaction between the low intensity of visual stimuli and the pattern of detailed support, with the rest of the experimental treatments in the cognitive load scale.

Key Words: Mobile Learning environment, Intensity of Visual stimuli, Support Compact, Support Detailed, Visual Thinking, Cognitive Load.