

**Measuring the effectiveness of the implementation of animation in  
designing educational content to improve the efficiency of visual  
communication among students with learning disabilities at the  
elementary school**

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**Abstract**

This study aimed to measure the effectiveness of employing animated designing in educational content to improve the visual communication efficiency of elementary school students with learning disabilities in Jordan. An electronic application was designed for the national curriculum lessons in the Arabic language for elementary school grades from first grade to six<sup>th</sup> grade. Current study followed an experimental and analytical design, as well as a descriptive one for data collection and analysis.

The study population included students with learning disabilities at the Princess Tharwat Center, with a sample size of 174 students stratified and quatably selected, consisting of 72 males and 102 females. Data was collected using noted cards for each elementary stage, in addition to conducting interviews with learning disabilities as a study tool. The data were analyzed using the statistical analysis program SPSS.

The study revealed many results; the most important was the possibility of examining how students interacted differently with educational tools such as animated graphics. It also showed an increase in the average level of communication and participation, as well as an increase in comprehension and understanding averages for student with learning disabilities. Moreover, there was an increase in the average saving and remembering after the application of animated graphics in educational content. Based on our results, the study showed the importance of converting the educational content from traditional to interactive using animated graphics. It also recommended the focusing on multisensory learning, training teachers in the application of modern teaching methods, and collaboration between graphic designers and learning disabilities specialists to develop educational content using animated graphics that align with the needs of these students.

**Keywords:** Graphic Design, Visual Communication, Animation, Educational Content, Learning disabilities.