



Cyprus
University of
Technology

Faculty of
Communication and
Media

Bachelor's Thesis

**Digital Games for Learning and Social Change: A Case Study using a Game for a
Science Museum**

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Limassol, May 2024

CYPRUS UNIVERSITY OF TECHNOLOGY
SCHOOL OF COMMUNICATION AND MEDIA
DEPARTMENT OF COMMUNICATION AND INTERNET STUDIES

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ABSTRACT

The research area this thesis focused on is “Digital games for learning and social change”. It examines the topic of digital games and how a specific game designed for the Water Museum in Limassol can affect children’s learning. The study involved 99 4th to 6th grade elementary school children. The study attempted to answer two research questions: Research Question 1: “To what extent is the digital game designed for the Limassol Water Museum effective in terms of increasing the knowledge of primary school children in topics related to water quality?”, and Research Question 2: “How do 4th-6th grade elementary school students evaluate the usability of the game after their interaction with it?”. Children interacted with the museum environment through the game application and this study examined their knowledge and their evaluation of the usability of the game using a pre-test, post-test research design to examine if this interactive way of learning helps students learn more effectively. The main result for the 1st research question was that the game significantly improved children’s knowledge on museum exhibits. The main result for the 2nd research question was that students evaluated usability positively, the experience was helpful for children, and they found the game useful and understandable while playing. The game was found to increase children’s knowledge of water quality issues and make their visit to the museum more interactive and engaging. Using games in museums can be both educational and interactive for children but also effective and fun.

Keywords: digital games, usability, social change, water quality, knowledge

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