Visualizing knowledge in the era of instructional software and gamification. Challenges in design, method and practical use

Published: Accepted as poster / poster paper (2 pages).

Category: Conference paper
Series: ###
Publisher: ###
DOI: ###

Authors: Eva-Maria Ternblad (1), Agneta Gulz (1)

(1) LUCS (Lund University Cognitive Science), Lund University, Lund, Sweden

---

Abstract

At present, improving metacognition by the use of visible learning techniques is on the educational agenda for many schools. However, in the current new era of digitalization, the impact from gamification trends on metacognitive processes is rarely discussed. To address this issue, the present study examines the practical use and behavioral effect of visualizing acquired knowledge in instructional software. Thus, a visualizing function – consisting of a diary were tokens with knowledge related content were received as proofs of achievement – were designed and implemented in an educational game (Guardians of History). The software was evaluated by letting 117 Swedish students in grade 5 and 6 use two varieties of the game – one with and one without the diary. Although no significant positive impact of the diary was found, the study reveals several interesting findings regarding the challenges of visualizing knowledge in digital game-like learning material.

Keywords
###