Revisiting an engaging experience to identify metacognitive strategies towards developing a multimedia design model

ABSTRACT

Looking at metacognitive strategies on the way children think when playing an engaging computer game could help designers design educational game courseware that engages children to learn. This paper will analyze the strategies children use in their thinking to overcome problems whilst still remains engaged when interacting with an engaging multimedia application, The Sims. The Sims is an Edutainment Multimedia CD chosen as a vehicle to discover more about engagement under varying interactive conditions and experiments. The CD was found to have features of what children want in a multimedia design for them. A theoretical model ñAn Engaging Multimedia Design Modelò [1] renamed, after an extended research, The NEMD Model (NormaÊ Engagement Multimedia Design Model) [2] was developed from this study using this application. This paper is a result of revisiting the recorded engaging experience the children encountered whilst doing the experiments to design, test, redesign, and retest the final form of the engagement model. A number of metacognitive strategies were detected during the interaction. Analysis of the metacognitive strategies used will help designers design multimedia game courseware that is engaging as well as educational for children.

Keyword: Multimedia; Game design; Metacognitive; Educational courseware