

A Human Centered-Design Approach to a Serious Game in Health Training for the Open University of the Unified Health System (UNA-SUS/UFMA) In Brazil

Luciane Maria Fadel¹; Daniella Rosito Michella Munhoz²; Carla Galvão Spinillo³; Ana Emília Figueiredo de Oliveira⁴; Katherine Marjorie Mendonça de Assis⁵; Dilson José Lins Rabêlo Júnior⁶

The Federal University of Santa Catarina¹
The Federal University of Paraná^{2, 3}
The Federal University of Maranhão^{4, 5, 6}

Abstract

A serious game is a media based on the narrative of a game focused on learning. The narrative of a game brings elements and mechanics that motivate the participation and engagement of the players. This is because games are a constant in human development as they formalize cultural activities with social function, being full of meanings. Moreover, the possibilities found in the game narratives contribute to the construction of more participatory plots, since the player can act actively in the course of the story. The narrative and engagement of serious games are of prime importance to distance learning in the health field. In Brazil, the Open University of the Unified Health System (UNA-SUS/UFMA) develops serious games as educational resources to train health professionals. This paper presents the design process of the Clinical Case Game, a serious game for diagnosis and treatment of medical conditions, addressed to doctors in Brazil. A multidisciplinary and user-centered design approach was adopted to develop the game. It involved medical doctors, educators, IT professionals, information designers and game designers, who coordinated the team and acted on the balance of the dynamics involved, that is, the narrative and playful pleasure. The methodology employed consisted of a workshop; content and prototype production; prototype testing with users; and refinements for the final version of the game. The results suggested that narrative unity must be coherent for serious games on health and highlight the relevance of serious games as high potential resources in the educational process.

Keywords: narrative; multidisciplinary; user-experience; design process; design interface