

Title: Gamification of care teams: modifying a manufacturing game for use in a health care setting

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Abstract:

Serious games are simulations of real-world events or processes. Although they can be entertaining, their main purpose is to train or educate its players. The Paper Lantern Factory is an educational simulation game which allows players to experience differences in productivity, flexibility and job quality between functionally specialized and multifunctional team-based production structures. The game has been played many times in Flanders (Belgium) and in the Netherlands, across different societal and economic sectors, by managers and employees of all levels and categories. However, since the game simulates a manufacturing process, it is less easy for players from service sectors, such as health care, to translate their game experiences to their own organizations and processes. The paper presents and discusses three possible modifications of the Paper Lantern Factory game. In all three, patients or residents are represented by toy dolls, which must be given a series of treatments. The basic structure of each of the modifications is similar to the Paper Lantern Factory game: the first half consists of a functionally specialized setting, while the second part encompasses a multifunctional team-based setting. (1) The first modification simulates a hospital setting, in which each patient has an individual treatment plan. Players need to ensure that every patient gets the correct treatments in a prescribed order. (2) The second modification simulates a nursing home, in which players are responsible for letting each resident do his exercises, get washed, have dinner, relax and go to bed. (3) The third modification also simulates a nursing home, only this time each resident needs washing, his room needs cleaning, the resident needs to get a meal, and medication needs to be administered. Another difference compared to the second modification is that, in the functionally specialized setting, the employees visit the rooms of the residents to administer the services, while in the second modification the residents are transported between specialized departments to receive their treatments. It should be noted that the main purpose of these modifications is not to simulate a hospital or a nursing home as realistically as possible, but to let players experience differences between different organizational structures in a setting that relates to their own field of work. The modifications will be tested by groups of students during the coming months. The aim is to select one modification for further use in training and research activities with health care professionals.