MULTIPLAYER EDUCATIONAL GAMES WITH INTELLIGENT TUTOR: PROGRESS REPORT

B1

András Dudás, Zoltán Tősér
Faculty of Informatics, Eötvös Loránd University

Keywords: multi-player game; Handorino, artificial agents; intelligent tutor, facial expressions

According to Ryan Robson, leader of the Educational Failure Working Group of the Conservative Party of UK, „The failure of our educational system to meet the needs of our nation's most disadvantaged children is disturbing. ... We can no longer tolerate the underachievement and frustrated potential of disadvantaged children." However, it is an open question how to reach those disadvantaged children sufficiently early. Our goal is to develop a multi-player game that can be used over the Internet, hides personal information, has room for human or intelligent artificial tutors, „who" assess development and can adjust the task level by providing help if it is necessary to maintain success, motivation, and interest. The present state of the Handorino game is reviewed here and we briefly sketch our plans for the near future.

Handorino is a game frame with embedded mini games. It supports collaboration in a competitive environment. Characters in the game can be retargeted avatars of the children, the teacher, parents, or they can be artificial agents, who also play the game. The teacher, parents, or the artificial agents can, in principle, modulate the level of the actual challenge. Mini games, on the other hand may aim to improve inductive reasoning, mathematics, or English, or a mixture of these. Missing components of the intelligent tutor are under development and will be detailed.