Summary

Technology is having increasing influence on modern education. One of such educational technologies are pedagogical agents, which concept crystallized at the turn of the XXI century. Initially those were meant to serve solely as guides in multimedia learning environments, along with pedagogical thought and technological advancement in those areas, those became gradually used for other educational purposes, also therapeutic ones. Interdisciplinary and multilayer analysis of interaction with pedagogical agents and description of types of relations established with those are attempted in the following thesis. To present educational context of pedagogical agents emergence and use, development and application of educational technologies is comparatively traced in Japan, the United States, the Great Britain and Poland. Current state of the science and art regarding pedagogical agents is presented on representative examples. Effects fundamental for pedagogical agents are described (persona and Tamagotchi effects) as well as typical functions and roles of pedagogical agents are overviewed. Attempt to determine causes behind pedagogical agents emergence and specialization is made. Special attention is given to interaction with agents in context of a doll effect and concepts of a *basho* 場所 — *mise-en-scène*. Two approaches towards agents are highlighted: instrumental and subjective. In this regard further analysis is conducted in consideration of a wider anthropocultural context of interaction with pedagogical agents in the Western and Asian cultures. Through comparison need of a subjective approach towards agents is advocated as an answer to dangers of those instrumental treatment. Necessity of promoting building a subjective relation with agents is stated and a typical approach used in agent technologies for such purposes is presented, that is: agent adapting to its user. As an alternative, different approach towards building relation with agents is proposed, together with details of research conduced to validate it. Pedagogical experiment conducted in a group of students (N = 63), that had been separated into experimental and control groups, proven that there is

relation between personalization of robotic agent avatar by participants (dependent variable) and course of their later interaction with the agent. Nonetheless, the results were insufficient to unequivocally confirm all the considered aspects. Research procedure included personalizing avatar of a talking commercial pedagogical agent "Super Doc" by the experiment participants in two situations: task situation (game with the robot) and "free-play" situation (unrestricted design). Based on the results, potential applications are proposed and need for further research on the proposed approach as well as other approaches towards building relations with agents are accentuated — along with call for those active inclusion to a current educational practice.

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