

I play, therefore I learn

Digital Game Based Learning Fourth Symposium for Information Design, 2. June 2005 Stuttgart Media University

A report

On the 2nd of June, modestly and without any extravagant publicity, the fourth symposium for information design nests itself for eight hours in a lecture hall of the Stuttgart Media University. The topic of the meeting, "Game Based Learning", is enticing. Nine lectures deal with game based learning from different theoretical and practical points of view, in quiet agreement that this is the new way of e-learning. The symposium was organized by the course of studies information design of the Stuttgart Media University and the SIG GLUE project consortium. 106 participants visit the symposium and listen to the presentations.

About heroes and myths

Game based learning facilitates the learning process and increases the motivation and effectiveness while learning. Besides it fulfills the fun-factor and thus increases the incentive for seeing learning as something positive and exciting. "Education is boring, learning is exciting", Hamish Macleod of the University of Edinburgh expresses it appropriately. At the symposium he makes the beginning and creates a theoretical basis out of realizations of several researchers and experts at game based learning. Philip Bonanno from University of Malta presents the neuro-cognitive basics of game based learning and points out that there are gender differences in playing games. In the design of learning games this must be taken more and more into account.

In order to transform a task of learning into a play, according to Macleod only a minimum requirement is necessary: a story. Digital storytelling, a method, which supports the dramaturgic e-learning, exactly deals with this. The corresponding lectures are about heroes, myths and fairy tales and lead to the question whether better successes in learning can be proven in dramaturgic e-learning on the basis of a story or in a classical form of e-learning. According to this, Michael Burmester and Frank Thissen, both professors in the course of studies information design at the Stuttgart Media University, and Daniela Edinger, researcher in the SIG GLUE project, present a still running study, which examines differences between classical and dramaturgic e-learning. Result: seminar content presented in the frame work of a story is well accepted by students on university level. Babak Aghajani is a Master student of the Stuttgart Media University and presents a prototype computer game on media marketing. The story is about a girl called Lara inheriting the small cinema from her died father. Now, she has to learn to manage a cinema and to survive against a big cinema chain. This is only possible by learning and applying marketing knowledge and methods. Ulrike Spierling, professor at University of Applied Sciences Erfurt, and Anja Hoffmann of the ZGDV Darmstadt, researcher of digitally storytelling, present different hypermedia projects, in which told stories are the basis. The presentations concern interactive applications, on which people learn by avatars or virtual humans. A quotation of a 16 years old boy shows the fact that playing and interactivity affect the learning effectiveness strongly. Anja Hoffmann purposefully put it into her lecture: "I don't want to study Rome in high school. Hell, I build Rome every day in my online game!"

Collaboration develops spontaneously

Learning is self organization and social communication. Chris Brannigan, CEO and founder of the company Caspian Learning in UK, speaks about the kind of co-operation between pupils using his e-learning-applications. "Collaboration develops spontaneously", so Brannigan. Since the establishment of Caspian Learning he leads a developer and researcher team, who develops tools for integrating research results into interactive computer game technologies. An important goal of Brannigan is to

measure the effects of game based learning directly. "The real advantages that game engines offer to learning are engagement, attractivity, measuring, collaboration and competition." All these factors support the learning process and consider the needs of young and old users. According to Brannigan gaming must not presuppose special abilities. It must be as simple and understandable as possible. Even 8-years-old should be able to master the tasks of the learning game.

Collaboration among the users of the learning play is a central point in Game Based Learning. Co-operation between peers motivates and promotes a more productive learning result. But it is important that the people involved protect transparency and openness and everyone can see the results of the others. On this Lotte Krisper-Ullyett, business developer working in the field of collaborative knowledge management and e-Learning applications at factline Web services GmbH and teacher at the FH Burgenland in Austria insists. At the symposium she impresses by a lively, interesting and marvelously personal lecture. Krisper-Ullyett instructed her students to write a story about their last job and to load it into the prepared discussion forum. She visualized the accesses to the forum in a diagram and thereby showed an outstanding result. The accesses to the forum snapped up fivefold in connection with the story. Krisper-Ullyett is one of the winners of the SIG-GLUE game contest.

Fabian Kempf of the Fraunhofer Institut in Stuttgart presented a finished project called YoungNet, a collaborative learning platform, which is based on methods and models of edutainment. Different games, either quiz games or memory games, and both synchronous and asynchronous communication and collaboration software help to lead the young user into a small world of educational games. Pupils can arrange it as desired, choose an avatar and play alone or in groups. A small video from the field studies of the YoungNet project demonstrates that pupils love to co-operate and play with others via the edutainment platform.

The future of playing

No question, many people already work on game-based learning applications and ever more pupil and students, teachers and professors, private people and enterprises show interest in this trend. Many people see a large economical potential in game-based e-learning. Ari Närhi, game designer from University of Tampere in Finland and SIG GLUE partner, is convinced that "game based learning is a trendy area, so I think it's the next step in e-learning". Learning by playing and learning to play: one causes the other and achieves, that adults handle with Cinderella and Dracula, create virtual humans and worlds, and run development projects complex and evaluation studies. Playing is the most natural kind of learning. Just think of small children or animals, it's the play that makes them learn. Learning has to be fun. There are many people, who would not sign this motto, also among teachers and professors, also among parents. Asking Maja Pivec, professor at the FH Joanneum in Graz and project manager of SIG-GLUE, how she argues against the opponents of game-based learning, she answers: "I smile at them." In the end there's only one thing left to say: "Let's play a game!"

Discuss with us

The presentations of the Fourth Symposium for Information Design on Digital Game Based Learning can be discussed in a special discussion forum called "4th Symposium for Information Design". You are invited to do so. Visit www.sig-glue.net/modules.php?name=Forums&file=viewforum&f=12.