Let's Play Together with the Camera of Your Mobile Device

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Currently mobile games for educational purposes are a rapidly developing area. In this work we focus on multiplayer mobile games and its specific aspects such as communication and collaboration between players and learners. Therefore, it is important to understand how the communication and collaboration takes place in this type of games. This knowledge is valuable not only for further game development with an educational purpose (serious games) but in any type of mobile games. However, during our search we have observed that there is not enough analysis done in this topic.

The first step, towards this research, was a literature overview of several authors' implementations of different communication types between players in educational mobile games. We analyzed those papers in the view of collaboration support. Also, this overview showed that some types of media are almost not used or not used for this purpose.

Based on the outcomes of this literature overview, we decided to implement an educational mobile game, which promotes the collaboration in its core. Hence, choosing the technology for the development we put special attention to the types of communication that might support the collaboration in a specific game design. Furthermore, the proper decision on the communication types should support and keep in harmony the game-play in the educational context.

This paper presents the concept of a multiplayer mobile game. As a technology for the player's communication and collaboration we have selected the one which are often used by mobile users but mostly not supported in mobile games – photo exchange. We call our game "PiX (Picture eXchange)". PiX is designed for attracting players to communication and collaboration by increasing their interest in an other persons' vision of the environment. The game enables players to see how different people interpret similar objects of the surroundings, what attracts people attention, and what kind of emotions they have.

Keywords: educational multiplayer mobile game, collaboration, communication

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