

this aspect can also be used during the design phase, to test and evaluate the design with.

Finally, there was a need for being able to set up a game with e.g. number of players, teams, time-limit, etc. or the need to change parameters between games. Also, during play it could be handy for the scout leaders to monitor the game, i.e. see some game parameters in real-time (e.g. scores, time left to play etc.) During one of the testing sessions there was definitely a need to adjust settings for one game, as it was becoming boring for the children.

4.2 Reflections on the Method Used

In general we think that the method used in this study worked well with our target group, the scout leaders. The scout leaders designed two games that both they and the children liked to play. As the scout leaders did not have experience programming the RaPIDO devices, we have done this for them. We did implement some details of games that were not specifically designed by the scout leaders – in particular details that, when not implemented, would make a game totally unplayable. However, we kept this ‘interference’ to a minimum; the general design of the game originated from the scout leaders. As such, this process gave us a good insight in how the scout leaders would engage in the design process and what kind of designs they are capable of.

Compared to using co-design, where the user is given the position of ‘expert of his/her experience’ by providing tools for ideation and expression” [11], as a method for this research, we believe that our approach was more suitable for this specific study. If we had co-designed the games with the scout leaders, we could have assumed the role as technology and game design experts and would have had more influence on the game design, which would have given a distorted image of how scout leaders would have designed games without our presence.

5. CONCLUSION

Adults, such as scout leaders, often have a good insight on what kind of games the children like and may therefore be good, and perhaps even better than interaction designers, at designing the game concepts for these kind of games. However, these people rarely have experience in interaction design or programming, which we argue is needed for being able to design interactive games with a good game flow and which match with the game concept. Therefore we strongly believe that there is a need for a toolkit that supports and structures the creation of interactive outdoor games. The main idea of such a toolkit would be to give non-programmers and people who do not have experience in interaction design a chance to design and/or tweak interactive outdoor games.

Even though the target group in this research was very specific, we believe that the findings in this research could also be transferred to other Tangible and Embodied Interfaces. As (embedded) technology is becoming more and more established in everyday life, it becomes important that users are able to adapt functionality to their preferences, to encourage adoption of said technology. Especially professionals, who are not educated in technology, taking up technology in their work context, could benefit from tools to adapt technology. For example, a toolkit, tailored to the capabilities of a teacher, would enable the teacher to use technology in a meaningful way. This research is a first step in showing how the development of such toolkits could be executed.

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