

H.H. NAP, U. DIAZ-ORUETA, I. BIERHOFF, H. VAN DEN HEUVEL, K. LOZAR MAFREDA, V. DOLNICAR. **The design of a digital learning game for seniors.** *Gerontechnology* 2012;11(2):190; doi:10.4017/gt.2012.11.02.363.00 **Purpose** For the design of a digital learning for seniors, a framework for serious game design, pimi¹, is used which emphasizes player-centered and iterative design, the involvement of a multidisciplinary team and full integration of play and learning. The initial design of the learning game is based on existing literature on senior gamers²⁻⁴ and a mixed method approach combining quantitative (questionnaires) and qualitative (focus groups) methods ($N = 86$) performed in three European (EU) countries⁵: Spain, Greece, and The Netherlands. A variety of educational goals have been identified from the focus groups. Seniors reported on the need to obtain information on e.g., culture, travel, and geography. **Method** To support the educational goals, a preliminary storyboard was developed consisting of a road trip through Europe where players have to play mini-games that focus on the aforementioned learning goals. Furthermore, the essential ingredients for seniors engaging in digital learning games are included²⁻⁴: fun, co-located co-play, challenges based on flow, avoiding a childish appearance, providing learning opportunities, and contributing to escape from daily routine. The preliminary storyboard was presented and reflected with a subset of seniors. The plans were perceived positively and the participants provided additional ideas to enhance the game design, e.g. visit specific popular sites in a country, answer questions on the history of these sites, and learn country specific dances and recipes. **Results & Discussion** In the initial design of the digital learning game, players can travel and visit popular sites in the EU where they receive background information and multiple choice questions on the information that is provided. Furthermore, players can engage in a variety of embodied gaming challenges like a dance or cooking a recipe. As advocated by the pimi framework¹, players should be iteratively involved throughout the game design phase. Therefore, additional focus group and co-design sessions are planned with seniors to reflect and enhance the game design and storyboards. The preliminary results of these sessions will be discussed and used to develop low- to mid-fidelity prototypes which again will be evaluated with potential end-users. Finally, the game will be studied extensively at the three EU pilot sites, for three months, with a focus on usability, playability, game experience, educational goals, attitude toward technology and actual transfer of knowledge.

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Keywords: learning games, seniors, game design

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Full paper: No