

A.J. ASTELL. *Developing computer games for people with dementia. Gerontechnology 2010;9(2):189; doi:10.4017/gt.2010.09.02.289.00* **Purpose** This presentation explores the challenge of developing computer games responsive to the cognitive needs of people with a diagnosis of dementia. Using evidence from the Living in the Moment project, the presentation will examine ways to provide prompts, make activities engaging, as well as looking at the potential for people with dementia to learn new skills. **Method** Progressive impairments in memory and concentration make it difficult for people with dementia to carry out activities and occupy themselves. Computer games could provide engaging and stimulating activity for people with dementia if the system could provide the right level of difficulty and support. Drawing on principles of gaming development, cognitive prosthetics, and the psychology of dementia the Living in the Moment project has been working with people with dementia to sensitively develop engaging and meaningful computerized activities. Using a touch screen computer the content and presentation of a wide variety of games and activities has been investigated. Video recording was used to capture participants' reactions to the games and to inform the iterative development process. The video recordings, along with information collected from the profile of 'touches' on the screen, also yielded data on the strategies participants used to play the games. **Results & Discussion** The findings revealed that people with dementia can learn to interact with and play computerised activities on a touch screen. Participants were able to use the system and interact with the computer independently in the absence of a caregiver. There was also evidence of learning as people improved in accuracy or speed, depending on the demands of the game. The findings suggest that there is great potential for developing stimulating and absorbing activities for people with dementia. In addition, the finding that people with dementia can learn new activities has implications beyond the development of games to the broader application of creating technological solutions to the difficulties faced by people with a dementia diagnosis.

References

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Address: University of St. Andrews, UK; E: Aja3@st-and.ac.uk