Designing Learning Games for Multiple Stakeholders

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Abstract

The design of computer games for learning is a difficult process when a single learner group, with similar ages, backgrounds and abilities, is considered. It becomes far more complex and problematic when there are multiple stakeholders. The Auditing the Sustainability of Public Spaces (ASPIS) project aims to work with three distinct learner groups: school pupils, university students, and work-based professionals. It will use a game-based methodology, complemented with other online interactive and communication tools, to encourage active learning through discovery, negotiation and problem-solving. This paper will highlight the issues associated with designing a digital game for multiple stakeholder groups, and explore possible solutions. It will first present and discuss considerations such as age appropriateness of language and game mechanics, differing gaming literacies, motivations and expectations of users, range of contexts of use in both formal and informal settings, and levels of autonomy and independence. Second, the paper will focus on possible ways in which to address the development of learning games for multiple stakeholders, such as the development of different game versions, creations of customisable game platforms, or the use of associated learning activities. Finally, the paper will present the learning methodology adopted by the ASPIS project as a way of meeting the needs of multiple stakeholders, and describe the game that was developed. It will discuss the impact on game design, the challenges encountered, lessons learned from the project, and results of the ongoing evaluation.