

A Serious Game for Romanic Bathhouse:

Citation for published version (APA):

Qi, W. (2013). A Serious Game for Romanic Bathhouse: the Combination of Learning and fun for Cultural Heritage. In P. Escudeiro, & C. Vaz de Carvalho (Eds.), *Abstracts of Papers Presented at the 7th European Conference on Games-Based Learning (ECGBL'13): Hosted by Instituto Superior de Engenharia do Porto (ISEP), Porto, Portugal, 3-4 October 2013* (1 ed.). Article 102 Academic Conferences and Publishing International Ltd..

Document status and date:

Published: 03/10/2013

Document Version:

Peer reviewed version

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

<https://www.ou.nl/taverne-agreement>

Take down policy

If you believe that this document breaches copyright please contact us at:

pure-support@ou.nl

providing details and we will investigate your claim.

Downloaded from <https://research.ou.nl/> on date: 07 Feb. 2025

Open Universiteit
www.ou.nl



velopment of the games. Students have developed 2 games resources through the project - Curveball and Roll With It which are designed to be used in the classroom during research methods teaching. The games assist students to develop good research questions for undergraduate dissertations by encouraging them to become more reflexive during the research design process through helping them to identify, explore and overcome typical ethical and methodological dilemmas that emerge during the research process. Game-based learning may be particularly useful in this context as it has the potential to liven up research methods and ethics teaching which can sometimes be seen by students as boring or dry . The use of the Apprentice style format proved very popular and helped foster very strong student engagement with the project brief, whilst putting students at the heart of the project also facilitated strong student ownership of the project and the games. The project has highlighted the potential benefits of games-based learning in this area, the value of deeper tutor/student collaboration on curriculum design and the benefits that accrue from student peer collaboration across years. However, it has also produced unexpected benefits. Some students involved in the project were so struck by the value of peer-to-peer teaching in research methods that they have independently begun to explore ways by which they can further embed this at Leeds Metropolitan by developing student-led peer-teaching/mentoring groups or by leading discussion and game playing sessions next year! I suppose we ll have to Roll With It!

Keywords: research methods, ethics, problem-solving, reflexivity, students-as-collaborators

A Serious Game for Romanic Bathhouse; the Combination of Learning and fun for Cultural Heritage

Wen Qi

Open University Nederland, Heerlen, The Netherlands

Abstract: Current cultural heritages often make use of images, sounds and video together, aiming to complement existing presentations and to create a memorable exhibition. In addition to this, modern culture heritages' identities have shifted from simple holders of cultural objects to an educational institution. The advance of computer games has shown their potentials for the development of entertainment content and services for their visitors. A visit to heritage is structured around motion and can be supported and mediated by a computer game that can activate the visitors' motivation by stimulating their imagination and engagement. Computer games can support visitors during and just after or before the visit. It can also provide opportunities to reorganize and conceptualize historical, cultural and technological facts about the exhibits in a constructive and meaningful way.

To demonstrate the advantages of computer games in terms of facilitating the learning activities of culture heritages, we design a serious game with UNITY3D game engine. The game allows players to navigate the virtual Romanic Bathhouse based on the remains from Heerlen. Players can observe the architectural details inside as well. Another important characteristic is that artifacts in the virtual Romanic bathhouse become tangible: distant heritage exhibits can be virtually touched, manipulated. The third feature is that a specific educational scenario is embedded into the game where the players are challenged to act a role and complete carefully designed pedagogical tasks. We have invited several players to experience this game. An enriched interaction with the heritage exhibits was observed: players interacted with the exhibits, used their information in order to play the games and searched for relevant exhibits. It enhances the learning process by supplying multimedia and context-related content. Finally, the educational game has been designed so as to offer a context where the exhibit information became meaningful and useful, i.e: players used this information in order to play the games and achieve their goals. The experience of designing the presented games helped us draw some general remarks with respect to using games for cultural heritage. The study has indicated that gaming technology provides the key to the user to get familiar with a cultural heritage, explore it and construct an experience out of it. Secondly, the design process of a serious game should take into account the specific context of use, social and constructivist aspects of learning and pedagogical approaches. Hands-on virtual cultural heritage in form of a serious game allow their visitors acting as players, to interact with artifacts and to learn while they play with them. Future work aims to add a social dimension in the virtual bathhouse because it supported and invoked interaction and collaboration between the visitors of the museum.

Keywords: cultural heritage, Romanic Bathhouse, artifacts, pedagogy, Serious Game
