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International Journal of Computer Applications  
© 2014 by IJCA Journal

Volume 86 - Number 13

Year of Publication: 2014

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10.5120/15042-3404

{bibtex}pxc3893404.bib{/bibtex}

## Abstract

Serious games have become an indispensable part of the training compared to traditional online training that is often seen as restrictive and boring sometimes by learners. However, despite the contribution and potential of serious games in the education, their integration in the learning process is limited, this is due to the lack of tools and features of tracking and assessment of the learner/Player. For this and after a study of existing standards for describing learning resources we find that they are incomplete when it comes to describe the serious games. This article explains how we can effectively deliver serious game for our students through LMS with a metadata schema to describe serious game as learning resources. This new metadata schema it is an application profile of IEEE LOM entitled "SG-LOM" which takes into account different evaluation studies and classifications of serious games. This metadata allows one hand to the serious games take advantage of features of tracking and assessments offered by these systems. On the other hand the LMS to complete their educational offer and reach a certain maturity.

**Refer**

**ences**

- Maureen T. Hallinan 1994. "Tracking: From theory to practice". *Sociology of Education*, 67 (2): 79-84.
- Breuer, J. & Feletti, G. Why so serious? On the Relation of Serious Games and Learning. *Eludamos. Journal for Computer Game Culture*. 2010; 4 (1), pp. 7-24
- LOM, Standard for Learning Object Metadata. , IEEE 1484. 12. 1, 2002.
- Wilson, S and Currier, S. , (2002), "What is IMS Content Packaging", CETIS Briefing Paper, CETIS, November 2002.
- Advanced Distributed Learning. (2004). SCORM 2004 (4th edition version 1. 1 Documentation).
- D. Djaout, J. Alvarez, J. P. Jessel, "Classifying Serious Games : the G / P / S model," *Medicine*, 2008.
- M. Prensky, "Digital Game-Based Learning," McGraw-Hill, 2001.
- M. Pivec and M. Moretti, *Game-based learning\_ : discover the pleasure of learning*. Lengerich: Pabst-Science- Publishers, 2008.
- S. De Freitas and M. Oliver, "A four dimensional framework for the evaluation and assessment of educational games," *Computer Assisted Learning*, 2005.
- M. Hendrix, A. Protopsaltis, C. Rolland, I. Dunwell, S. de Freitas, S. Arnab, P. Petridis, and J. LLanas, &apos;Defining a Metadata Schema for Serious Games as Learning Objects&apos;;, in *eLmL 2012, The Fourth International Conference on Mobile, Hybrid, and On-line Learning*, 2012, pp. 14–19.
- I. Marfisi-Schottman, S George, F Tarpin-Bernard, Un profil d&apos;application de LOM pour les Serious Games, *Environnements Informatiques pour l&apos;Apprentissage Humain, Conférence EIAH&apos;2011* (2011) 81-94
- M. Hendrix, P. Backlund, M. Lebram, H. Lundqvist, *Sharing Experiences with Serious Games*,2013.
- Duval E. , Hodgins W. , Sutton S. , Weibel S. L. , "Metadata Principles and Practicalities";, *D-Lib Magazine*, 8, 2002.
- Guidelines and support for building application profiles in e-learning: CWA 15555. Brussels: European Committee for Standardization, June 2006.

## Index Terms

Computer Science

Information Sciences

## Keywords

Serious Games LMS LOM Application profile

