

Video games in art education

Under the supervision of Monique Richard of the *UQAM École des arts visuels et médiatiques* [school of visual and media arts, <http://www.eavm.uqam.ca/>], **René St-Pierre** is observing and documenting the emerging practices in arts education that use information technologies, specifically gaming applications and educational video games. This research also led him to explore similar practices in higher education and professional development using serious gaming. For *Le Lien MULTIMÉDIA*, he talked about the use of educational video games in art classes, or "how to develop creativity while having fun."



René Saint-Pierre has been developing and applying a research/design methodology involving digital technologies for more than twenty years. His early explorations involved computer-assisted musical orchestration (MIDI), theatre, performance and other multimedia events. He then offered his services to the cultural and corporate sectors by participating in the design and production of audiovisual documents, media arts installations, interactive terminals, CD-ROMs and websites. In 1999, he completed his Masters in Communications at UQAM with an interactive multimedia project on the life and work of sculptor Armand Vaillancourt. In 2007, he obtained a Doctorate in Art Studies and Practices from the UQAM School of Visual and Media Arts. His thesis proposed a research/design methodology for the design and writing of educational video games. René Saint-Pierre has also taught design and multimedia development and production techniques at the college and university level for 8 years. He is currently involved in post-doctoral studies to further develop and share his research hypotheses with the international community of researchers and practitioners working in the emerging field of serious games.

Le Lien MULTIMÉDIA (Le Lien): **What is an educational video game?**

Rene St-Pierre (R.S.-P.): An educational video game can be defined as any computer application that includes aspects that are both playful and educational. Some games are presented as themed or temporal maps to explore, others make it possible to

manipulate, create or simulate complex environments in which the player has an active role in a quest to accomplish, a problem to solve or learning to assimilate. Educational video games are targeted for various clients: children, adolescents and adults. They can be used both for basic education (French, math, history, geography, physics, chemistry, ecology, etc.) and for professional development using serious gaming (resource management, simulation, scientific visualization, social and medical science etc.).

Le Lien: **How can video games be used specifically for teaching art?**

R.S.-P.: Ever since information technologies came on the scene, many teachers have been including computers in their pedagogical practices. Whether PowerPoint slide presentations, cyber-quests, media education, or audiovisual workshops that include capturing, editing, compositing and broadcasting media projects, all of these tools, approaches and methodologies prepare tomorrow's citizens to interact more effectively in an information-saturated world. They guide them to a place where their senses take precedence over the superficiality of image and sound. Arts teachers are not immune to this new wave. They are exploring new ways of discovering, appropriating and challenging art. And all forms of art can integrate educational video games into teaching: music, dance, theatre, cinema, literature, sculpture, painting, etc. The virtual world gives a new view, a new context for living and expressing aesthetic experience or even for exploring and interpreting the visual language and its variety of forms of artistic expression. In the era of social networks and collaborative platforms, the entire context of artistic and cultural dissemination is called into question.

Le Lien: **At what levels of teaching and with which client groups can they be used?**

R.S.-P.: Generally speaking, educational video games can be used in the context of teaching art in the first and second years of secondary education. They are intended for students taking courses mainly in the plastic arts, but can also be applied to those registered in arts and communications program, wherein the communication and media components are more of a focus. Students taking literature, dance, music, theatre or cinema courses can also use these fun applications to document and explore certain specs of artistic creation.

A few examples of educational games:

Cybermuse

http://cybermuse.gallery.ca/cybermuse/mycyber/index_f.jsp



CyberMuse is the Web storefront for the permanent collection at the National Gallery of Canada. This portal presents several ludopedagogical applications for a variety of audiences, from the young to the not-so-young. For higher education, the search engine is one of the most interesting functionalities offered by the site.

In addition, with the "My CyberMuse" section, you can collect works in a personalized portfolio which you can then share with others.

Le Musée McCord

<http://www.musee-mccord.qc.ca/fr/clefs/jeux/>



The **McCord Museum** is devoted to the preservation, study, distribution and enhancement of Canadian history. The "Games" section of the Web site allows you to test your knowledge of Canadian history with four games: role playing, association, observation and questionnaires. Teaching activities and scenarios for primary and secondary students are available for download and are models for all students interested in a career in either teaching or art history.

Universal Leonardo

<http://www.universalleonardo.org/>



Universal Leonardo is a ludopedagogical application for deeper understanding of the technical, scientific and artistic work of Leonardo da Vinci. The site exhibits works (drawings, paintings and manuscripts) as well as the results of the research related to his creations. A series of educational games also allows playful engagement with the vision of this talented artist and inventor.

A more exhaustive list of examples of games used in the context of art education (under *Video games for teaching art*) is available at:

http://www.clikmedia.ca/CM/CM_FR/swf/exemples.html

Article written in collaboration with Sophie Bernard
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René St-Pierre's web-based thesis (educational video game design method) can be viewed at <http://www.clikmedia.ca/CM/>.

