EDUCATIONAL TECHNOLOGIES IN ART AND DESIGN HIGHER EDUCATION OF GREAT BRITAIN

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Annotation

The article provides an overview of different types educational technologies used for learning and teaching in Art and Design higher education of Great Britain. In particular, special attention is paid to the use of 3D visualization technology for educational purposes.

Key words: educational technologies, Virtual Learning Environments, immersive learning environments, social 3D worlds, Second Life.

The potential of technology to support learning and teaching processes in science, art and humanities, social sciences and other areas has been investigated by different researchers, while the issue of educational technologies in art and design is still rather unexplored. Most researchers believe that studio-based learning and teaching which require face-to-face communication and hands-on experience can hardly be replicated by the technology. But there is a range of e-learning and teaching technologies used in higher education of Great Britain. Some of them are:

– computer-based/-assisted/-aided learning/training: these forms of teaching emphasise the use of a computer as the platform for delivery and may be intended to educate or train depending on the focus of the material;

– courseware: a form of computer-based learning, typically learning materials delivered through a computer;

– m-learning: a form of e-learning where the delivery platform is a mobile device –a laptop, smartphone or tablet;

– virtual learning environments: portals to provide access to learning support, including course information, communication (forums, messaging, announcements), course content (lecture notes and sources), and assessment and feedback;

– immersive learning environments: models (typically 3D) where participants can explore and learn in a simulated environment or virtual world;

– computer-based assessment/ e-assessment: utilising computer technology to assess students. These can incorporate multiple-choice testing, parsing of language or comparison of symbolic (mathematical) expressions. They may be diagnostic, formative or summative;

– open learning: sharing of learning resources through open licensing and

agreements, eg massive open online courses (MOOCs);

– collaborative technologies: Web 2.0 offers community and user involvement that maps well onto many learning activities [3].

In recent years there has been a sudden spark of interest in investigating the potential of Virtual Learning Environments (VLE). The term Virtual Learning Environments (VLE) was defined by the Joint Information Systems Committee in the UK as a system that provides access to "online interactions of various kinds which take place between learners and tutors". According to a survey that examined the use of the UK's e-learning environment in the field of art, design and media education in UK, 42% of respondents used Blackboard, 26% used WebCT, while 26% reported lack of experience with the use of VNS [2, 13].

Nevertheless, some educators argue that VLE have their disadvantages in terms of flexibility and usability [4, 720]. Teachers and students expressed concern about the utility and suitability of Blackboard in the field of art and design because they felt that the design of the interface does not provide a comfortable and aesthetically pleasing virtual environment. Moreover, they believed that this was not the best environment for online communication and collaboration. For these reasons many VLEs are being used mainly for administration purposes. Most Art and Design higher education institutions have adopted a blended learning approach, which means that some subjects are taught in the studio, whereas those suitable for online delivery are offered via the VLE.

Today, the advances in software and hardware technology have eased the creation of interactive audio-visual applications, web-based or media-based suitable for teaching art and design courses. The ability to create and explore 3D objects and environments online presents many interesting opportunities for Art and Design education, especially in courses that deal with three-dimensional forms (Ashdown, 1996). In Fashion and Textiles design, some advanced 3D modelling software packages can be used to design, construct and simulate cloth/clothing accurately [6].

The use of social 3D worlds such as Second Life and Active Worlds has been one of the latest trends in educational technology. These are online 3D virtual worlds created and populated by their users. These computer simulated environments are known as 'social' or 'shared' by virtue of being located on the internet, thus enabling any number of users, from many remote locations to use them simultaneously.

A number of higher education institutions have created virtual universities in Second Life. According to a report that reviewed the participation of UK higher and further education in Second Life, some Art and Design schools were present in the world: Goldsmiths, University of London; Leeds Metropolitan University; London College of Fashion; Leeds College of Art and Design and School of Arts and New Media, University of Hull [5]. The 3D world has been used to hold vir-

tual degree shows and exhibitions and to have online meetings between staff and students (especially with learners who might not be located on-campus). Some 3D animation and computer game design courses have used these worlds to upload and test 3D models they have created as part of the course. This provides them with a way to share their work and get feedback from other users.

From an institutional perspective, e-learning can offer new opportunities for flexibility in learning and teaching Art and Design in Great Britain, with potential for new markets such as distant and part-time learners, and for more flexible schemes to accumulate credits before, during and after a traditional programme of study.

Literature

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