INTERACTIVE POSTER FOR EXPLORING & TESTING

Márta Turcsány-Szabó[1)]

Abstract
ELTE University Faculty of Informatics campus is converted into a student-centered enjoyment-based learning space as a live demo spot for ideas to explore, raise motivation, enjoy, and attract partnerships with museums for interdisciplinary project developments. IP4ET (Interactive Poster for Exploring & Testing) use QR/AR technologies that could be well spread as cheap exhibits for learning in schools, museums, or open & closed community spaces.

Keywords interaction technologies, poster, augmented reality, QR codes

1. Introduction

Technology is spreading quickly, and mobiles are becoming smarter than ever, there is a real challenge in how to harvest the emerging technological possibilities to enrich the learning process. Possession of such technology produces fluency in use, enhances digital literacy, knowledge of technological background and careful design of mobile edutainment could also engage learners in further formal or informal learning processes.

2. Interactive Media Development course

The Faculty of Informatics not only has to teach Computer Science in theory, but also has to use it in order to show its value in suitable applications that not only facilitate better learning processes, but also motivates learning and elevates its significance within the world of entertainment. Ideally, we should find 21st century methods to engage the Net generation in learning science, enjoy and think creatively and become a conscious entrepreneur in their own field. Interactive Media Development course is one of the courses that embeds interdisciplinary projects involving museums and bridging institutions [1] producing products in co-operation [2] and is also offered for international studies within EIT ICT labs Masters program[2]. The course just won a Tempus prize for showing good practice in STEM education[3] on higher education level.

Interactive Media course web site[4] contains several themes to choose from: Introduction, Data visualization, Interaction design, User interfaces, Multimedia design, Digital narratives, Learning media, Museum technologies, Game design, Bewildering codes, Virtual worlds, Mobile technologies. The course requires: basic understanding of three themes, user level awareness of all projects produced during the semester and a defined developer role within one of the actual projects in collaboration this other disciplines to produce interactive media for learning purposes.

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[1] ELTE University Faculty of Informatics, T@T lab, HUNGARY

[2] https://prezi.com/4mc8i6nkbwlr/

[3] http://www.tpf.hu/pages/newslist/index.php?page_id=2740

[4] http://intmedia.elte.hu/

3. IP4ET Posters

It is a custom at our faculty to display posters in the corridor that were presented at recent conferences informing students about ongoing projects (Fig1). Producing extra media to extend the pictures on the posters makes the inquiry more enjoyable, combining art with technology in form of interactions as an extra add-on dimension IP4ET (Interactive Poster for Exploring & Testing) [3].

The extra media is invoked using technological overlay through: QR codes[5], leading to links on the Internet, providing further information or media on a topic and AR (Augmented Reality[6]) markers overlaid by media elements (text, video, 3D object) using e.g. Aurasma[7] app. These posters illustrate a well applicable form of learning media, which can be produced and re-produced very cheap as an artistic poster to be used in class, in corridors, in the streets or gardens, at museums, public transportation spots, health institutions or even office spaces. Their role is to engage viewers to explore (while awaiting for others or an event to begin) aesthetics, informative content.

Fig1. IP4ET corridor at ELTE IK: http://prezi.com/xt3xcxzzaokm/elte-ik-tt-lab-ip4et-sarok/

The most recent poster produced within the Interactive Media Development course was delivered to an elementary school for use within the subject Health Education[8] and was translated by students into English and Brazilian for use in higher education and public education in Brasil.

References

[1] Marta Turcsanyi-Szabo, Peter Simon, Andor Abonyi-Toth, Nikoletta Ekker, Zsofia Ruttkay, "Augmenting experiences - A bridge between two universities," ismar-amh, pp.7-13, 2011 IEEE International Symposium on Mixed and Augmented Reality--Arts, Media, and Humanities, 2011

[2] Zs. Ruttkay, M Turcsányi-Szabó, Musea in the Digital Age, InSEA Congress proceedings (DVD, Full papers of the Research Pre-Conference and the Main Congress): Kárpáti, A , Gaul, E Eds (2011): ART – SPACE – EDUCATION. Proceedings of the 33. INSEA World Congress, Budapest, 25-30th June 2011. Congress Book. Budapest: Hungarian Art Teachers' Association, 2011

[3] Márta Turcsányi-Szabó, Augmented Edutainment on campus, In ed. Gardner, M., Garnier, F., Delgado Kloos, C., Proceedings of 2nd Immersive Education Summit, pp. 204- 209. Paris, France, Universidad Carlos III de Madrid Departamento de Ingeniería Telemática, 2012. ISBN: 978-84-695-6427-1 [Online Accessed 1 7 2014]. Available: http://jied.org/proceedings/iED_EUROPE_2012.pdf

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5 http://en.wikipedia.org/wiki/QR_code

6 http://en.wikipedia.org/wiki/Augmented_reality

7 http://www.aurasma.com/

8 http://www.youtube.com/watch?v=VR_ayNR8x3w