

Creating Transmedia Content: Augmented Reality (AR) for Information Linking and Learning

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Abstract

Augmented reality (AR) based transmedia products are emerging technologies being used in industry as well as classrooms. “Augmented reality (AR) is a live, direct or indirect, view of a physical, real-world environment whose elements are augmented (or supplemented) by computer-generated input such as sound, graphics, images, or video data” (DeMarchi, Ceruti & Liverani, 2013, p. 1) According to Ponnors transmedia is using a combination of printed traditional media to access online, 21st century media (Ponnors, 2015). The workshop gives participants the guidelines for creating their own curriculum using free or low cost technology tools. The objective of the workshop is for participants to leave with the basic skills to create AR transmedia products which can be accessed on handheld devices across platforms.

Keywords: Augmented Reality; Transmedia; interactive; emerging technology

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1 Proposal for Interaction and Engagement:

The title of the session: Creating Transmedia Content: Augmented Reality (AR) for Information Linking and Learning

1.1 Purpose and Intended Audience:

Participants will discuss the use of augmented reality and transmedia technologies for use in information storage and learning. Participants will learn background and skills to create engaging content through augmented reality applications which can be viewed using handheld devices across a variety of platforms.

1.2 Proposed Activities

The activities which are included in this session, in timeline order, are:

- discussion and demonstration of process and skills
- interaction with tools
- content creation
- brainstorming session for future research and application

Presenters will introduce themselves and open dialog concerning the definition, theoretical usage and implementation of augmented reality in schools and industry. A video demonstrating how AR is currently being used in the United States for education, industry, and social interaction will be shared with the participants. A discourse on the theoretical and potential usage of AR will be led by the presenters and used to help the presenters assess the base knowledge of each participant. Next the presentation will focus

on the process of creating augmented reality products such as business cards, newsletter, or content for teaching or training manuals. A variety of books, including Guinness Book of World Records and textbooks will be used to show how both the educational world and industry are using AR to connect to students and clients. Examples of different types of tools will be highlighted with participants using the tools in small groups to create mobile AR experiences. The presenters will highlight how the application tools are connected to pre-existing experiences created by professional designers and available to users at no cost. AR triggers will be placed around the session and greater conference area, which will allow participants to experience using the application tools.

The application tools Aurasma and Layar are the creation tools highlighted in the session. Understanding the augmented reality virtual-workspace as well as the specialized vocabulary is an important part of the process. Upon completion of the session, participants will understand the meaning of a trigger, overlay and aura and how those elements connect to create the augmented reality (AR) experience for their students/clients. The presentation will conclude with a brainstorming session for continuing research in AR and implementation in a variety of settings.

1.3 Relevance

The educational environment is changing across the globe as the digital natives bring their unique perspective and needs to the learning environment. According to Gleen, the digital native “need(s) self-directed learning opportunities, interactive environments, multiple forms of feedback and assignment choices that use different resources to create personally meaningful learning experiences” (Gleen, 2000, as cited in Barnes, Marateo, & Ferris, 2007, p.2). Teachers must adjust to the needs and characteristics of the Net Generation. “They cannot continue to deliver their educational messages in the same old analog way” (Ponnors & Asim p.63). Augmented reality is a technology which allows instructors to create lessons using user-friendly tools to enhance student engagement. “It can help learners to gain a deeper understanding, experience embedded learning content in real world overlays, or explore content driven by their current situation or environmental context.” (Specht, Ternier, & Greller, 2011, p. 121). Using augmented reality to engage students in the classroom is a relatively new tool. Events such as iConference have an obligation to introduce and equip researchers and teachers with the most current and engaging educational tools available to instructors. Per Smirnova & Bordonaro, researchers agree with the expectation that providing students with handheld devices, which support the transition from traditional lecture-based model to a more interactive, hands-on approach to intellectually active learning has a positive impact on student learning outcomes (Smirnova & Bordonaro, 2014). The session Creating Transmedia Content will give participants of the iConference the knowledge and skills needed to transition their more traditional classroom into a more engaging and interactive classroom.

2 References

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