Augmented Reality in Education

Know your ARs from your elbow
Who augments reality?

Marketing & media = hype?

"Augmented (hyper)Reality"
http://vimeo.com/8569187
In Education?
How AR from Campus Interactive Works

**Step 1**

Own branded Campus Interactive app is created in University colours, logos etc.

**Step 2**

Users (students, staff, visitors) download the app to their devices.

**Step 3**

Users launch the app and point their devices in camera view at real world objects and printed materials.

**Step 4**

Digital content is displayed as an overlay on the real world on their screens.

**Step 5**

Powerful data analytics allows meaningful campaign analysis so content can be adapted to create more engaging experiences.
Biology: Organs

This tool allows you to hold a marker in front of your chest and see your internal organs.

Choose a resource

Download marker

Marker key

Lung
Liver
Gall Bladder
Kidney
Pancreas
Bladder
Heart
Stomach
Small Intestine
Large Intestine

To purchase the LearnAR suite of tools for your school click here.

To find out more visit.
www.inestrust.org.uk/resources

http://www.learnar.org/
Blowing the dust off Special Collections

Posted on October 20, 2011 by John Hodgson

The academic year is now in full swing and JRUL Special Collections staff are busy delivering ‘close-up’ sessions and seminars for undergraduate and postgraduate students.

A close-up session typically involves a curator and an academic selecting up to a dozen items to show to a group of students. The items are generally set out on tables and everyone gathers round for a discussion. It is a real thrill for students to see Special Collections materials up close, and in some circumstances to handle the items themselves. The material might be papyri from Greco-Roman Egypt, medieval manuscripts, early printed books, eighteenth-century diaries and letters, or modern literary archives: the range of our Special Collections is vast.

From our point of view, it’s really rewarding and enlightening to work alongside enthusiastic teachers such as Guyda Armstrong, Roberta Mazza and Jerome de Groot. The ideal scenario is a close partnership between the academic and the curator. Curators know the collections well, and we can discuss with students the materiality of texts, technical aspects of books and manuscripts, the context in which texts and images were originally produced, and the afterlife of

Dr Guyda Armstrong shows her students a selection of early printed editions of Dante.
Design choices

Pedagogy & learner experience

1. Mode of use
2. Motivating interaction
3. Presenting resources
4. Facilitating learning
Mode of use

Situated learning

Dow Day
A situated documentary about two days in 1967

http://arisgames.org/featured/dow-day/
Augmented Reality Glasses in the Classroom: An Inside Look
Wall of fame

Augmenting education: Age 5 1/2

http://bit.ly/w3v8AI
Pop up books

Second Sight on a Sony PSP: http://www.youtube.com/watch?v=-6K4GPeLjsE
Augmented Stargazing
Suitable for broadcast?

"Conversation is king. Content is just something to talk about."

Cory Doctorow
Social AR

http://www.historypin.com/
Learner created AR

Postcards from Spain

Groups 7-8 ppl

Outdoor Route of learning

Topics about Murcia
20 POIs with:
QR Codes - Marker
Information (multimedia)
Tweet to do (localization)
& activities
10 Clues (in 10 POIs) for finding the treasure
A treasure in the end

Prepare
Participating
Help
Assessing

Linda Castañeda: http://slidesha.re/RT5TJz
AR as an interface

“The tidal wave of metadata streaming from the Internet of Things will provide many opportunities and some challenges - one of which is representing it in a relevant and understandable fashion.”

Howard Ogden, mobilistar (http://bit.ly/rSCI1O)
Wearable sensor/projector

Environment-sensing, content-presenting, wearable projectors

**Digits:** Freehand 3D Interactions Anywhere Using a Wrist-Worn Gloveless Sensor

David Kim¹,², Otmar Hilliges¹, Shahram Izadi¹, Alex Butler¹, Jiawen Chen¹, Iason Oikonomidis¹,³, Patrick Olivier²

Voice-over by Emily Whiting
ETH Zürich

¹Microsoft Research, UK
²Culture Lab, Newcastle University, UK
³FORTH, University of Crete, Greece

{b-davidk, otmarh, shahrami, dab, jiawen}@microsoft.com, oikonom@ics.forth.gr, p.l.olivier@ncl.ac.uk
Internet of Things

... Sensors in everything
... Monitor & broadcast data
... Agents act autonomously