

Making IT more real

BSA Chief Executive Judith Mudd and HEA Sociology Discipline Lead Helen Jones discuss a new project on augmented reality that they have initiated. In this, students point their mobile phones and tablets at objects, photographs or landscapes and see them supplemented by statistical information, video guides, case studies and more



Judith: How do you begin to understand augmented reality? When you see it, it seems like magic, and I can't begin to imagine the computer wizardry needed to construct it.

Helen: I know what you mean. Augmented reality allows users to see video, images, sound and 3-D models on top of real world images or objects by using a smartphone or tablet screen. But we don't really need to understand the computer coding, we just need to know how to use it. As we sit here talking, you could use it on your phone or I could access it using my tablet.

Judith: But isn't that just like going to a website?

Helen: No. Instead of typing in a web address the device recognises a physical image and places electronic content around it. The exciting thing about augmented reality is that it is not restricted to a computer. A website isn't even a requirement. To use it in your teaching you don't have to book a computer lab or have computer facilities in the room you are in. With a free piece of software on your smartphone or tablet, you just point and, hey presto, you can watch a video, or visualise some statistics, read through a case study or share via social media. It can be used anywhere, from the classroom, at home, on the bus, or in the middle of the city.

Judith: I've seen a number of companies who are starting to use it. For examples Mercedes, Ikea and Lego. Augmented reality is also increasingly being used for education. That is why we decided to set up this project to produce something of value to sociology.

Helen: Yes, and other partner groups are involved too, including the Higher Education Academy and the British Society of Criminology.

Judith: We looked at other examples developed by the Mimas development team, where augmented reality extends student access to historical and geographical materials. The augmented reality project we are developing will produce something that will relate to change and the city. You will be able to use it with your students, at times and places convenient to you. As our lives become increasingly mobile, this type of educational experience is becoming ever more important and it makes it easier for people to find and use relevant information.

Helen: Mobility – that is a key feature of augmented reality isn't it? One can use it anywhere you can get a wifi or network signal.

Judith: Yes. If lecturers are 'flipping' their classroom or need an exercise for students on field trips or just want to engage their students in the classroom, this will deliver something of real interest.

Helen: Will there be a fee to use it?

Judith: It will be free to use and should be available in the autumn term 2014. We really feel like this is the threshold of something new and exciting. We are developing this artefact but its use is over to our members! We can suggest some exercises but members are the ones with the imagination and, importantly, their students will be creative with it. We have designed 'augmented reality in the city' to be useful to both A level students and first year undergraduates studying sociology, criminology or cognate disciplines. The city is a diverse landscape of different people and the diversity in class, age, gender and ethnicity adds to the richness of city life. But the city is constantly changing. This is the theme of this augmented reality –

change in the city. The different elements will allow students to consider change in relation to individual identity and the structures of the surrounding society.

Helen: This is just a pilot, but we hope to produce more. Maybe individual institutions will produce their own augmented reality? Maybe students will produce their own! We are on the frontier of understanding how augmented reality can be used, but it is only limited by their imagination. Remember that a lot of inaccurate predictions have been made about technology in the past – to quote Thomas Watson, Chairman of IBM in 1943: "I think there is a world market for maybe five computers".

Judith: Yes! We aren't talking about limited application: we are foreseeing mass use, just as with the growth of personal computing. Augmented reality might seem like science fiction, but it is here now and it is a social science fact.

Further Resources

Hamilton, P. (2013) Augmented Reality in Education (video):

<http://youtu.be/hL3khV9X6yA>

Lupton, D. (2013) 'We must make the digital world central to sociological research' (blog):

<http://tinyurl.com/p7qyj06>

Mercedes-Benz Augmented Reality (video):

<http://youtu.be/1P2uAOyUkGI>

Team Scarlet (2014) Augmented Reality

(website):

<http://mimas.ac.uk/expertise/augmented-reality>

White, David S.; Le Cornu, Alison. 'Visitors and residents: a new typology for online engagement' (journal):

<http://firstmonday.org/ojs/index.php/fm/article/view/3171/3049>