Handing over the display cases

At the John Rylands Library, University of Manchester, school students were given the opportunity to act as curators and to get involved in presenting items in the display cases in Augmented Reality, adding a new dimension to the collections, says **Matt Ramirez**.



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THE Handing over the Display Cases project aimed to engage with one of the John Rylands Library's audiences, school students, giving them the chance to decide what goes in the case and act as curators. Whilst providing items and interpretation their peers can relate to, the pupils also learned about the different roles and processes involved in exhibiting items. Moving beyond merely providing understanding to the cases, it also presented an additional level of interpretation through Augmented Reality.

Augmented Reality (AR) is a technology that superimposes computer-generated information in the form of audio, video, data and 3D models on top of a device's camera view of the real world.

The finished app allows visitors to scratch beneath the surface of a traditional exhibit, delivering AR content through Junaio (an AR browser) when a user scans a recognisable image placed on the cases. The project, a collaboration between Education and learning at The John Rylands Library¹ and Mimas² builds on the successful Scarlet (Special Collections using Augmented Reality to Enhance Learning and Teaching) project.³ (See *Update*, February 2012, pp. 42-45.)

Five Year 6 pupils from Oswald Primary School in Chorlton were chosen to guest curate one of the themes in the Rylands Gallery – the faith cases. They looked at a selection of material from the collections with curators, going behind the scenes to see where it had come from, to learn about handling objects and meeting the conservator who prepared the objects and made mounts for them before they could be displayed.

When they had decided on the objects to be exhibited, the children were tasked to create object labels, research and create introductory videos for use in the AR app. They had time to play with recent AR examples to get ideas about how the technology could best bring the experience to life. Being avid Harry Potter fans, they loved the idea of holding their device over an image to uncover a magical moving newspaper or 3D model of the object.

One of the challenges of a traditional exhibit is that visitors can only see part of the object behind a case in a specific pose. The children wanted to be able to reach in and explore the fine detail and view hidden parts. AR is perfect for addressing this issue, providing high-resolution digitised images and 3D models (Prayer Wheel) that can be viewed in 360 degrees.

The AR is triggered when users hold their device over an illustrated marker situated on the display case. The app then provides contextual information about the object and engaging activities to expand learning.

Some of the features in the finished AR app include:

- 3D models of selected objects using touch gestures to rotate, scale and move.
- Users can take a photo with virtual models of the objects, uploading them for posterity on the library



AR App user interface: Harry Potter-inspired moving newspaper.



AR App user interface: 3D model of the Prayer Wheel artefact

Flickr page to share with friends and family.

- Facts about the objects, such as where they were discovered, how they are stored, their religious purpose and what they are made of.
- Introductory video commentaries from the children describing the reasons they selected the individual object to curate and how it interested them.
- Polls to record the most popular objects.
- A feedback form to inform the library about how the experience could be improved and general feedback on the objects themselves.

Early user feedback has been very positive with one user enthusing that the app was an 'amazing idea, I had a lot of fun and learnt a lot as well.'

It is hoped that the AR content can feed into wider educational activities (both in the classroom and library education centre) providing an immersive experience to visitors, bringing artefacts to life outside the physical boundaries of the library. Future plans include using the project as a template for other school-curated exhibits, expanding their reach to new audiences.

Note

- 1 John Rylands Library: www.library.manchester.ac.uk/rylands/
- 2 Mimas: http://mimas.ac.uk/
- 3 Scarlet: http://teamscarlet.wordpress.com/about/ More about the project at: bit.ly/1cFaMlk