

### 1. What's the challenge?

#### Bring archive material to life in education

The [Research & Education Space](#) (RES) is an ambitious partnership between [Jisc](#), the [BUFVC](#) and the BBC which aims to bring as much as possible of the UK's publicly-held archives, and beyond, to learners and teachers across the UK. The first phase of the project enabled access to over 800,000 BBC television and radio programmes to staff and students in subscribing Higher and Further Education institutions.

In its second phase (during 2014-15), the RES project is developing an automated data aggregation platform that consumes and indexes [Linked Open Data](#) describing archive assets, resulting in a rich index connecting a broad range of entities (people, places, events, things, concepts, collections) with a wide variety of digital assets related to them. You can learn more about the platform from the open-content book [Inside Acropolis](#), which is being produced by the project.

While the project will develop the platform, we want to be led by your expertise in how the data and media are presented. What kind of interfaces could you design and build using diverse sets of metadata and digital assets? How might you shape your application design in order to make resources particularly useful and engaging to those in education and to enhance teaching and learning? Are there particular subject areas that are under-served by technology and could benefit most from resources made available through the RES index?

### 2. Who's the audience?

There are two broad audience groups that RES is aimed at: students and staff in Further and Higher Education, and teachers in primary and secondary schools.

It's important to note that we are **not** looking for applications which provide direct access to pupils in schools: the range of potential material is such that where pupils might use your application, they must be led to material which has been selected by school teaching staff. *We recognise that these groups are very broad, and so we aren't expecting ideas that target both at once—or even all of either one!*

We know that teaching staff often find it difficult to locate suitably-licensed digital media which can be used in a teaching environment and will be available long-term, and that staff and students alike often spend far longer than they'd like trawling search engine results in order to find relevant material for the topic they're exploring.

### 3. What do we want you to do?

The range of material that will be aggregated by RES is very broad, and a particular entity may be described in considerable *domain-specific* detail. For example, while an artefact in a museum and a seaside village might both have a name and a location, further details about them would vary considerably. You should think about whether you want to focus on a particular domain, or whether it would be better to produce an interface which allows very "shallow" browsing—not presenting very much detail, but allowing exploration of everything in the RES index.

Many, but not all of the entities in the RES index will include references to digital media related to them—audio, video, pictures, documents, and so on. This media will be accessible according to a variety of terms, which will be described in the associated data.

For example, Creative Commons-licensed material will be available to everyone, whereas certain material will only be accessible to staff and students in an educational institution that has joined a particular licensing scheme. Alongside licensing conditions, the actual mechanism by which media can be presented will also vary: for some items, you will need to direct the user to a web page, for others, you will be able to use an embeddable player, while some will have direct links to media files. You will need to think about how media can best be used within your application given these constraints, and how to present entities that don't have any associated media.

### 4. Creative 'ways in' to the challenge

#### "I want audio-visual resources for the lesson I'm planning, and for them to still be there next year"

We know that teachers use a variety of sources in order to present audio-visual assets to pupils in the classroom, and often find that material uploaded was in breach of copyright and is taken down shortly after it's been found, meaning the materials that they have produced cannot be used again in the future. Part of the role of the RES platform is to increase access to material licensed for use within education, providing a "known good" set of assets that can be relied upon to be available long-term.

#### "I'm producing a presentation on the Rosetta Stone: give me everything you've got!"

The RES index works by organising data around the specific entities, rather than by publisher URL as an ordinary search engine does. This means that once you've arrived at the index entry for the thing you're looking for, you can retrieve *all* of the source data about it and present it together, including the digital media about it. Perhaps it's the photos on [Wikimedia Commons](#) that's most useful, or the [data from the British Museum](#), or perhaps the [BBC radio programme](#) about it—because the data's collected in one place, you can create a rich experience around it.

#### "I'm writing an essay about my town. What's interesting around here?"

The RES index entries can contain all kinds of information about an entity, including (for things which exist in the physical world), their geographical location. How might you present and correlate this information in a useful way? What can you do which moves beyond simply putting objects on a map?