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Deliverable D2.2 "Assessment of participatory research methodology – 1st version"

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Abstract

In this deliverable we address the first phase of this work package. The aim of this report is to give an initial idea of how the participatory research groups were established and what the initial activities and outputs were. The report starts describing the recruitment process of the participatory research groups and then continues on to explain the different sessions the groups has had over the last year. It concludes with a preliminary analysis based upon the framework for validity established at the outset of the project.



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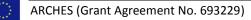




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Abbreviations

ARCHES: Accessible Resources for Cultural Heritage EcoSystems

Bath: Bath University

- **BSL**: British Sign Language
- BVI: Blind and Visually Impaired
- Coprix: Coprix Media
- **Dx.x**: Deliverable x.x
- HI: Hearing Impaired
- HoH: Hard of Hearing
- LD: Learning Disabled
- OU: Open University
- **RNIB**: Royal National Institute of Blind People
- Tx.x: Task x.x
- V&A: Victoria and Albert Museum
- VI: Visually Impaired
- VRVis: Zentrum für Virtual Reality und Visualisierung Forschungs GmbH
- WC: The Wallace Collection
- **WPx**: Work Package x



1 Introduction

The objective of this work package (WP2 "Working with participatory research groups") is to establish a series of participatory research groups which includes people with differences and difficulties associated with perception, memory, cognition and communication, who can work with the cultural heritage sites and the developers of software platforms, applications for handheld devices and multisensory activities. The purpose of the task where this deliverable is produced, i.e., task T2.2 "Participatory research methodology and approach" is:

- To provide the starting point for the design of the software platform, the applications for the handheld devices and the on-site multisensory activities addressed under WP3, WP4 and WP5, respectively.
- To enable the participatory research group to evaluate the software, applications and activities which are subsequently developed under WP3, WP4 and WP5 and to feedback in order to further modifications and developments to take place.
- To enable the participatory research group to trial final products and clarify modifications in relation to software, applications and activities emerging as final outputs of the technical WPs.

This deliverable reports on the first phase of this work package. It begins with an explanation of the establishment of the participatory research groups and then outlines the activities which have been undertaken in the past year and the outputs which have emerged. Much of this material has been touched upon in D6.1 "Pilot Stage I – Preliminary studies", since WP2 is closely allied to WP6, with its focus upon system validation and the three pilot stages.



2 Preparing for the first sessions in London

The work package began with establishment and development of the London participatory research group and participatory ways of working. In order to plan for this, a meeting was held between the research partners from the Open University and Bath University to establish a research protocol, to clarify the processes around recruitment and to lay out a structure for the initial meetings of the first participatory research group. In section 2.1 of deliverable D6.1 we outlined why we are collecting data, in 2.2 how we will collect data and in 2.3 how that data will be analysed. We identified the evaluations we were undertaking for our different audiences, how we could validate and exemplify those evaluations in ways that were both relevant and accessible. We recognised our need to use a variety of qualitative methods and multimodal representations of data and findings, as well as a range of online and offline methods of capturing and storing that data. We identified the need to create an accessible approach to analysing data too, which would not be overly complicated, involving variable processes, rooted within the participatory group's sessions, cohered within themes and supported by narratives. The potential need to provide training was also recognised, as long as it was relevant, valued and wanted. In section 2.4 of D6.1 we provide a detailed outline of the first session plans. The main aim of these first four sessions was to introduce the participants to each other, to the two museums and to the nature of the project. The initial intention was also to allow them to experience a range of research techniques across these first meetings and to ways of recording and sharing data. We also wanted to establish the reflective nature of the project and the central role played by seeking feedback and responding to it. We recognised too, the need to have a consistent pattern to the sessions, which could allow people to feel confident about what was going to be happening, though we were also aware that these sessions had to have scope for flexibility in order to adapt to the early wishes of the participants.

The list of organisations we contacted in order to identify and communicate with potential partners is presented in Table 1 within D6.1. In order to engage with these groups a range of communications were developed. We produced a video outlining the project and inviting people to join us at the initial event. This was in two formats, one signed in British Sign Language (BSL) and subtitled and the other in a shorter subtitled format. We also produced general and accessible information sheets (see D2.1). A range of communication channels were used such as emails, posting on websites and the use of our own and other organisations' social media. At this early stage we also produced a Ways of Working document (see D8.3) based upon recommendations from representative and campaigning organisations, personal guidance from those with a range of access needs and academic literature. This informed not only the activities within those early sessions but also enabled us to reflect upon our thinking and understandings as researchers and research supporters.

At our initial meetings prior to the formal launch date in January 2017 we invited participants who had expressed an interest to join us. We specifically sought out these early pioneers so that they could inform our early planning of the sessions. An information letter was sent to these participants laying out their involvement at the pre-project meetings. As a consequence of their involvement we introduced a number of practices from the outset. This included a voting system involving an online application, Answergarden; and the use of a coloured stickers on name badges to identify people's preferences in relation to photographic consent. As it transpired, the five pioneers who joined us did not all continue with the project on a regular basis for a range of different reasons. Two had work commitments which meant that a regular Friday meeting was not possible, one had a supporter who felt that involvement in the project was not in her job description



and another decided he would rather remain in an advisory role. Two of these four have however remained in contact and attended a few sessions since; the fifth continued to have a more direct involvement.

The nature of the contact with the potential participants varied according to their wishes and also as a result of the gatekeepers involved. A number of support agencies did not wish us to speak to participants directly but presumed to speak on their behalf; other individuals were in direct contact with the Research coordinator from the outset. Everyone's personal access needs were asked about as well as more general support needs, including those associated with diet and travel. Detailed information was kept as a result of these discussions and informed preparations for the sessions. Consequently, taxis were arranged for those attending if necessary and supporters were waiting at local stations to guide those who wished to be guided. Contact details were also shared so that people could speak to the research associate at any time should they need to. Travel expenses were provided to all those attending, including supporters and lunch was also provided. At the first meeting, all presentations were in plain English and supported by images; there was also an experienced Level 6 BSL signer in attendance. This information was sent to the participants in advance as per their request to prepare themselves.



3 Sessions 1-9

In this section, sessions 1 to 9 are described.

3.1 Session 1

The first session on the 6th of January was an opportunity to begin our collective communications. We gathered at the meeting point at the Victoria and Albert Museum (V&A) and then moved as a group up to the temporary Education wing. This revealed the first experience of an ongoing challenge at the museum. It is a vast series of interconnected buildings and moving around is both tiring, complicated and at times confusing. This is exacerbated by significant security restrictions and limited accessible lifts and toilets. The museum coordinators have also struggled to find suitable rooms over the first six months, partly because priority is given to other projects (which perhaps says something about attitudes towards access) and partly because there has been an ongoing building programme to create a new exhibition space. During this building construction the original learning centre was closed, limiting the education spaces even further. There were 35 people in attendance, seated in cabaret style.

The group were briefly introduced to the project (supported by a plain English and picture enhanced PowerPoint) and invited to introduce themselves to those they were sharing a table with. As an ice-breaker they were asked to talk about and vote on the best and worst presents they had ever received and then share this with the other tables. People were then invited to visit the European Galleries and identify their 3 favourite objects and any objects they did not like. They were encouraged to take pictures of these objects to share later, or to get someone else to take a picture or write a note about it or talk to someone about them. Having spent an hour looking around the gallery, people reconvened for lunch. Again, the size of the museum meant people were late back and many were starting to feel tired. During lunch individuals were asked to share their picture via email with the research team and these pictures were then uploaded to a Power Point so that people could see the photos of objects which people had taken.

After lunch the research team explained what it was hoped the Exploration groups would be involved in doing. The recruitment video was shown and the aims of the project outlined. The issue of consent (discussed in more depth in D6.1) was introduced and an initial consent to participate was sought from all attending who were interested in continuing to be involved. Once this process was completed people were asked to vote via AnswerGarden for their favourite object from those which had been shown and audio described on the PowerPoint. The session finished with a brief outline of the plans for the next week.

3.2 Session 2

The second session was at the Wallace Collection (WC). As at the previous meeting (and all subsequent meetings) transport and food was arranged, but navigation around this space was far easier due to the size and layout of the building. The session began with brief presentation on how the exploration group would collect and analyse data and share findings. It was suggested that we would work together by learning ways of research, creating news ways of researching, being as accessible as possible and find ways of working which suited each of us. The first activity involved the participants running a version of a focus group, with one person asking questions and the other scribing their ideas. They were asked to talk for 10 minutes about what they had enjoyed about the last week's session, what had not gone so well and what they would have liked to have done. They then had to analyse what had been said and identify the most important points and



then share this with the other groups. These points were collated and brought together with ideas emerging from the third session. The issues identified in relation to the first two sessions at the V&A and WC were:

- People like control-simple instructions
- People like to use their own devices
- People do not like having collective voting (for Wallace objects)
- We had to give time
- But people are patient and understand
- The wiki is not accessible without support
- The wiki is not screen reader friendly
- When we use pictures we must describe them
- Text needs to be enlargeable
- We need to take time to explain the project
- Text needs to be simplified
- Could you have a WhatsApp/Collective/Virtual visit?
- An app that enlarges text?
- An app that reads text?
- How do you direct the phone to capture text?
- How do you direct phone in the right direction?
- We must not overcrowd sessions
- Keep session aims 'simple'
- How do you trigger atmosphere with low production costs?
- Assuming no prior knowledge
- How do you make each bit of information 'come alive' in some way?
- We need more volunteers for the V&A and Wallace to sustain effort
- 15 is good as a number of participants but where are the people with learning difficulties today?
- Not everyone likes one kind of operating system (Android vs iOS)
- Opportunities for social contact are important

Session 2 continued with a presentation of the previous week's findings about the favourite object at the V&A (see the bottom image in Figure 2 of D6.1). It was then explained that the technology partners in ARCHES wished to have five objects from each museum in order to develop their technologies for testing. The Wallace Collection felt it made sense for their two most famous and popular paintings to be part of their five and so the group was asked if they would seek out these two paintings and decide if they could agree to this. The participants were invited to visit the museum. They were asked to make a record of things they looked at,



people they talked too and what worked and did not work for them. They were also asked to identify and record their three favourite objects. When the participants returned from the gallery an hour later we had lunch. Again pictures were collated and put onto a PowerPoint to enable sharing and voting. On the basis of a participant suggestion at the previous session we also included a slide with the email address to send pictures to and a QR code enabled link which enabled people who could not read the address to still send their pictures by email with ease.

After lunch, the participants were introduced to interviewing. They were asked to collect data in groups of two or three, interviewing each other over a five minute period. They were give five guide questions to find out the person's name, experience of museums, technologies they liked to use, and hopes and expectation in relation to ARCHES. The interviews were audio recorded or written notes were taken. The intention was/is to return to these interviews after a year and to analyse them with participants and evaluate how things have developed. There were some highly successful interviews and some people revealed themselves to be particularly adept at being interviewers. Issues which were raised included one participant having her stick removed by security at various museums, another participant said that she hoped that ARCHES would enable her to be able to experience museums in the fully immersive way that she could as a sighted person. Another participant explained how joining ARCHES the week before was her first museum experience.

"From my own experience and from listening to the experiences of my ARCHES colleagues it is clear that it is currently quite confusing and difficult to identify what accessible material is available and how and where it can be accessed. Many of us discovered that there were useful accessible materials and downloads, which we learned of after the event."

"It would be great if when all visitors arrive at the front desk/reception, it was standard practice that they were asked if they or any of their party required any access (support). They could then either be given what they needed or directed to another point, where they could collect."

We then introduced the RixWiki, which was intended to serve as both an individually secure repository for people's data and an accessible means of representing our findings and experiences. At this point the second session became somewhat chaotic. We had anticipated being able to enable a couple of people on each table to join the wiki system and so demonstrate its efficacy, however problems with the WiFi coping with too much data as well as confusion over logging in and use of passwords meant that most people failed to access the site. This caused a delay which meant we had to drop the next activity in which we wanted people to interview each other about the technologies they had been using on the first two sessions. It also meant we rushed the final activity which was a vote on the favourite three objects. In order to squeeze this in we made this a collective vote for each table, which just confused matters and made people feel they were being excluded. The fundamental error of the day, seemed to have been that we just tried to do far too much.

3.3 Session 3

Session 3 was again at the V&A. Once more the logistics of navigating the museum meant that we had a later start than when we had wished. After an introduction, we asked people to vote on whether the two favourite paintings at the Wallace, 'The laughing cavalier' and 'The swing' could be part of our selected five. Again AnswerGarden was used and each person in the room was given the opportunity to vote using one of 10 iPads (see Figure 1 and Figure 2).



nswerGarden 🛲		 • •	٩	۲	?
Shall we use The Laughing Cavalier? Yes or No					
Type your answer here					Submit
0 characters remaining					
16	ady on swing.				
yes					
	S				
	S				

Figure 1: Voting screen for 'The laughing cavalier' (note an incorrect form of voting where someone wrote 'Lady on swing' rather than 'Yes' or 'No' which suggested we had not properly explained the process).

AnswerGarden 🛲		+	٩	•	? 🧕
Should we choose Fragonard's Swing? Please	e choose Yes or No.				
Type your answer here					Submit
20 choracters remaining					
11/	es				
9					

Figure 2: Voting screen for 'The swing'.

The next activity was a second opportunity for people to get access to the RixWiki. Detailed plain English instructions were provided with a QR code link to the wiki as well as a 'how-to-access' video guide and written guide. A few more participants accessed the site and others now felt capable of making the attempt later or at home. In preparation for the gallery visit we had identified ten objects from the European Galleries for people to look for and find out about. We asked them to consider how they found the objects, things about them, if they want to know more about them and if they had a favourite. We told them they could record their visit and thoughts by taking photos, a video, talking to each other, taking notes or using an audio recorder. As on all occasions iPads and audio recorders were available for individuals to use. The intention of this activity was to familiarise the participants with the museum and the challenges for visitors without overwhelming them whilst also giving us common points of reference.

During a long lunch break we asked people to discuss their experience in the gallery. We then introduced the findings from the first week at the V&A where a large bedchamber was voted as the favourite item, and asked people to select their favourite from the ten they had seen earlier. Again, AnswerGarden was used. We then returned to the challenges for the project. Building on their experiences of the visits to the museums over the past three weeks we asked people to form into focus groups and spend half an hour discussing their knowledge of applications and how these might assist with museum activities. One person was to take notes, one to summarise as they went along and one to present the summary at the end to the wider groups. As with all activities people could choose who to work with, producing 2 groups who according to impairment



categories would be deemed to be a mix and one group which was predominantly from the d/Deaf community. These were the ideas which emerged are outlined in the following sub-sections.

3.3.1 Group 1

Apps used:

- TFL Journey Planner
- Google Maps
- Translator App
- Evernote
- YouTube to watch videos to learn how to make something
- Unroll me

Specific problems/issues:

- Need help to actual use some apps/instructions
- Apps freeze + stop working + clog up with advertisements
- Lots of emails/junk emails (data sold to this parties)
- Constantly being asked if you want to upgrade
- Misleading information regarding app content

Museum related:

• Better signage

3.3.2 Group 2

Apps used:

- Camera on phone/iPad
- P uses Facebook/camera/email/maps (Nokia smartphone)
- M uses Maps app (Apple maps with voice direction iOS for bus times)
 - Moveit (train + bus information) alerts for stops
 - Tube + Bus mate net national rail
 - Prismo Ranfb Reader best one but TV anywhere
- N uses: Gmail
 - Smart call (connected to landline)
 - Saytext (take a picture says back to you))
 - Facebook mobile app is better than desktop
 - o iBooks



• Kindle app very good Braille on the move – over drive by the Royal National Institute of Blind People (RNIB)

3.3.3 Group 3

Apps used:

- Text Fairy
- Nectar cards + things to see receipts.
- Facebook
- Whatsapp (create a group for participants?)
- Imessage
- Skype
- Wayfinder
- TFL
- Google
- Banking app
- Speech selection
- Listens to emails
- Insta + live
- Snapchat
- Tiny scanner pro
- Alter shade time, makes line drawings etc.

Specific issues/problems:

- Cannot access audio guide without support
- Short term memory- needs/doesn't always know story/history for context

We concluded the session by reminding people about how to access the wiki and outlining the next week's activities.

3.4 Session 4

Between session 3 and 4, participants had undertaken activity involving the RixWiki, but it had emerged that it did not work with screen readers as had been anticipated. We recognised therefore that we had a challenge to resolve in relation to online storage and sharing of data. Since we were using shared iPads and Android devices and logging in, there was not a simple solution which did not create a raft of additional complications, and so session 4 began with an explanation of the problem and a request for people to consider a possible solution. It was suggested that we have a collective file stored in the cloud for each week's activity. We asked people to reflect on this over the next week. To consider the limited level of individual privacy and if happy



with this to consider online storage service they would prefer to use Google Drive, Dropbox, OneDrive or some other particularly in regards to screen reader friendliness. Feedback during the meeting suggested that Google Drive was perhaps slightly more reliable with screen readers and so it was agreed we try to use that.

The next activity was around social media. There was a wish expressed by some members of the Exploration group and the research associate to develop a coherent online presence. Types of social media were introduced and then people were asked to form small groups and discuss their use of social media, the platforms they used and the various advantages and disadvantages of these. At the end of the discussion, people were invited to take a lead in establishing an ARCHES London social media presence. The following is a summary from the feedback of that discussion.

Social media apps people use:

- Facebook
- Twitter
- Instagram
- Blogging
- Whatsapp
- Insta + live
- Snapchat
- Skype
- Youtube

Issues raised:

- We have to consider the accessibility of social media, its appropriateness and how information is used.
- There is a time issue: it always takes more time for people with visual impairment to do certain things.
- It is worth considering the use of voice memos.
- Mobile Facebook platform is better
- Facebook and Twitter allow captioning and it would be good for the community to use it.
- Social media is good to find out about events and good for family events.
- Social media can be impersonal and could cause arguments.
- It would be good to have one account for everything, but need help to set it up
- We need to describe things in simple words.
- Social media is good to deliver messages directly.
- Sometimes social media can be impersonal.
- Sometimes it can cause conflict.
- Some would like to have a social media account but do not know how to set it up.



- Older generation are unaware of what Instagram is or the difference between social media platforms.
- YouTube is mainly used for watching rather than uploading or posting.
- It is good to find out about family events and family pictures.
- P does not like it and thinks it is dangerous. It can be used for bad pictures, dad stories. It can be overwhelming.

The next activity involved recapping on the five objects which had been chosen at the V&A and the four from the WC and people were asked to select the final object to be used by the technology partners. The groups were given five objects from the ground floor of the Wallace to seek out and choose from. Again, they were asked if they could find them, how they found out about them, whether they wanted to know more and what their favourite was and that they could record their visit in the various ways described above. Here is an example of the kinds of notes that were taken during the visit:

- Some of the information plaques were a bit 'dry'. We did not really learn anything about them.
- The commode was not easily identified there was a bit of confusion over what a commode actually was, i.e., it was easy to match the armchair plaque with the armchair.
- A few wanted to know the stories behind object, to 'experience' them through audio dramatisations/poetry etc. that will let the object 'come to life'.
- To have a bit more context would be good. Also to know how objects were acquired, and how they were transported, e.g., the staircase from France.

Following this trip around the museum we had lunch. After lunch the vote was taken. We then moved onto discussing the next phase of the project and how people hoped to take it forward.

During the week between the two meetings, members of the OU and Bath research teams had gone through the notes from the various discussions related to people's experiences at the museums. Three main themes had emerged: Creating a Personal Connection, Accessing Ideas and Navigating the museum environment. We called these our key issues. The full list of issues is in section 3.1 of D6.1. We provided this list to each group and also produced a shorter PowerPoint summary to facilitate discussion. The participants were then asked to discuss in small groups, their understanding of Accessing Ideas and Navigating the museum and to discuss which they would like to explore first. A vote was then held using AnswerGarden. By a very narrow majority the focus was to Accessing Ideas. The session closed with a discussion of the next week's activities. Following the end of the session we had our first planning session involving the wider membership of the group. At this after-session planning meeting it was agreed that we needed to establish a collective set of values and an agreed approach to working together.

3.5 Session 5

Session 5 began with an explanation of how people could access our shared Google Drive and an announcement about a participant who was going to be a social media pioneer for the group. This gave rise to a lengthy debate led by some of the members of the group with a visual impairment who were unhappy about the use of visual images in the sessions and the lack of accompanying audio description. To some degree, this had been voiced in earlier sessions and been responded to in the materials that were being sent out prior to the sessions so that people could use screen readers at home to prepare for the sessions. But this had been exacerbated by the use of visual images to support understanding of text. These supportive



images were not being read by screen readers at home and so it seemed as if this was excluding screen reader users. A solution was identified, involving captioning the text support images so that it was evident what they were, rather than having to describe their content. This discussion however was both verbal and at times combative and it caused some distress amongst some members of the group, particularly those who suffer from anxiety. It also highlighted the very different communication styles between the diverse groups of participants. For example, because many of the visually impaired speakers do not see visual cues within conversation, they jump into the first silence with their views. This makes it very easy for them to dominate the discussion. As discussed in the debrief session at the end of the day, these experiences highlighted the need for use to establish communication rules.

Our first 'formal' discussion of the day was about our role as researchers. This built on the suggestion that we establish a set of agreed values and ways of working (see Table 1):

1	We need to enjoy ourselves	
2	We need to feel secure	
3	We need to feel in control	
4	We need to be informed	
5	We need to feel involved	
6	We work at different speeds	
7	We need to share our ideas	
8	We need to be as accessible as possible	

Table 1: Our values and ways of working.



9	We need to plan together	
10	For each activity: - Can we feel it? Can we hear it? Can we see it? Is there a shared understanding?	4
11	We can all play enabling roles for others	

The group then moved into the museum to explore an exhibition called 'You say you want a revolution?; *Records and Rebels 1966-1970*'. This was a hugely popular exhibition with the general public and included much music and memorabilia from the 1960s. Our museum partners anticipated this being very popular with the Exploration group and everyone was very much looking forward to the experience. Prior to going down, they were asked to make a record of their experience as they had on previous occasions and to identify what worked for them and what does not work for them. This visit was greeted with a very mixed response. For some participants the experiences was terrible. They found it too crowded, too loud, too intense an experience. It created anxiety attacks for a number of people of the Exploration group, who had to leave and find a quiet space to recuperate. Other members of the group, found it crowded and had concerns about the nature of the layout of the exhibition and nature of its exhibits, but found it enjoyable and stimulating. There was a general sense that we had not prepared ourselves properly for the experience, but also that the museum publicity and signage had also not prepared any of us for the intensity of the exhibition and the access challenges it might create. As one participant put it: "I found that the new gallery we went to was not right for the project because we didn't get to know what was going to be happening on that day."

After lunch the group moved on to next part of developing a forward plan (see Figure 3). The groups were asked to consider the existing apps, activities and offers (see section 3.1 of D6.1), which ones might help with the key issue of 'Accessing Ideas' and how we might test that.

Given the slightly disruptive nature of the start of the session and the complexity of the task, this activity was begun rather than finished. It was agreed to continue with the discussion the next week. We had however begun to identity functionalities which we would like to see in any application which might be developed by our partners. This discussion continued the following week.



The Next phase-The plan

- 1. Choose our first key issue
- 2. Consider the existing apps, activities & offers
- 3. Choose which apps, activities & offers might help with a part of the key issue
- 4. Decide how to test the app or activity & offers
- 5. Test the app, activities & offers
- 6. Report back to each other
- 7. Identify issues which still need to be resolved
- 8. Ask our partners for their ideas





Figure 3: The slide used across the weeks to guide and remind us about activities.

At the end of this session there was another planning meeting involving some of the volunteers, research staff and museum organisers. The challenges of the morning were discussed in particular and as well as the need for communication rules to be established there was also a number of other suggestions (see Figure 4). There were suggestions about improving the seating so that people could better see each other and about the curating of discussions so that who was speaking was better controlled and the need for this to be led by all the participants. There were suggestions too about the better use of name tags and a welcome introduction from everyone at the start of meetings. There was a call for a less intense start to the day and a suggestion to identify tech pioneers who could test things for the whole group. Issues of access were also raised around the how we could caption images in the PowerPoints (see earlier discussion) and how we might better resolve the support of those best supported by speech to text (see section 2.3 in D6.1 for fuller discussion).

Changes

- Seating
- Curating
- Name tags and introductions
- Gentle intro
- Captioning images in powerpoint presentation
- Tech pioneers
- Searching and testing Speech-to-text solutions



Picture: Four people sitting around a boardroom table with a woman at the front standing and presenting.



Picture: Woman assisting a man with hearing-aid accessing the laptop infront of them on a table.

Figure 4: Changes suggested at the post-session 5 meeting.



3.6 Session 6

The next session began with group introductions, followed by an outline of the changes which had been identified at the last post-session planning meeting. The participants picked up on the discussion from the previous session about the apps and which ones would help us with accessing ideas and how we might test their efficacy. One suggestion was to create a matrix and systematically test each app, but it was felt that this might create a lot of unnecessary work as many of the applications which people used would not serve a relevant function. More specifically the following suggestions were made:

- Apple & Google travel can have link to audio-guide and provide pre-visits information.
- YouTube is good for cheap information. We could upload info for pre, during and post visit. It was suggested we could try Vimeo as an alternative as YouTube is associated with advertising. Link these to QR code sheets.
- Facebook could be a source for prior knowledge + Discussion groups & Building community links.
- Consider Periscope live broadcasting create a live trail something to help people look at things at random?
- Using Siri or Cortina to search online guides.
- Using Be My Eyes random element is who is being your eyes and their knowledge.

It was agreed that development sessions should be short (an hour or so) and should involve a mixture of people – unless it is a very specific issue. There was also a suggestion that we should explore creating a volunteer arts community and the volunteers become the tour 'device'.

This discussion and the one in session 5 also allowed us to cohere the views which had been expressed across the first six weeks. The suggestions for an ARCHES app were:

- A directional app both to and within a space and to direct where one looks and can find information or objects.
- An app that enlarges text.
- An app that enlarges an object or aspects of an object.
- An app that reads text or simplifies text.
- An app that acts as a torch (even if it is not shining a bright light on delicate objects?) to make dark objects more visible.
- An app that 'plays' a short dramatization of the information about an object (.e. it might show it being used, show 'historical' people doing something with it, or give indicate the historical period i.e how long ago it was created).
- Some kind of app that would be able to tell the user the height and width of an object and then encourage them to inspect in more detail the bits that are easily missed e.g the ornate carvings on the tops and bottom of objects.
- An app that shows images in photonegative.
- An app that can read a code or is GPS friendly, and can verbally image.



- An app to show touch objects/brightly coloured (VI friendly) images particularly given last week's feedback.
- An app that gives changes to routes due to building or roadworks important for wheelchair users too.
- An app to caption descriptions of tactile images that they also enjoyed and made comments on.

These suggestions were already included in deliverable D4.1 "Report on system requirements for handheld devices" and have been considered to design both the architecture and functionalities of the ARCHES app.

Lunch followed this lengthy discussion and then there was an opportunity for people to visit the galleries or stay and discuss the overall session plans up until the summer break. On the basis of this discussion a programme was put together to experience a range of museum activities, meet with some of the technology partners and begin the process of developing our own projects. At the end of this session we presented the initial design concepts for the Our Story application. The group was divided: seven people did not like it, feeling it was childish and patronising; five people did like it and twelve people had mixed feelings.

3.7 Session 7

This session began with a change to the structure of the day¹. It was decided that we should reduce the need for moving between parts of the museum by beginning with a visit to one part of the V&A. A member of the group acted as a guard for people's possessions. The group visited the Ceramic Galleries. Ten objects had been identified within the gallery and information from the website had been provided on those objects. In addition, one group took a sensory backpack with them. The backpack included a range of sensory activities (e.g., look at pottery objects and feel different types of clay inside a bag; look at an object and use magnetic string to create its outline) linked to a trail around a specific part of the museum. As previously, people were provided with recording equipment to make note of their experiences. The following notes were taken by participants in relation to the sensory back packs:

- Sensory bags in the ceramics gallery. Pieces included a ceramic piece that looked like a building. For holding and displaying flowers including ceramic flowers. A pagoda / flower pyramid.
- Enjoyed the sensory bags which included exercises. However, the reading element was difficult.
- Others had bags inside bags, which was enjoyable. That was interesting.
- Yellow booklet that came with the bag was difficult or impossible to read.
- Learnt how to feel things from the ceramics. Learnt about the materials that ceramics are made of. Textures different. The participants felt different textures. Learnt clay comes from the ground.
- Activity number 1 is examined: What clay is. Different textured pieces, and different making processes.
- Most memorable bags were bags 3, 4 & 5: China and Holland. Journey part was fun from China to Holland. Lots of pieces from Holland. Building the pagoda from blocks was the most memorable and fun activity. Making was enjoyable, also feeling textures.

¹ Please refer to the different session modules in Deliverable 6.1, section 3.5.



- The bag is designed for families. Set in family activities.
- Advertised on the website. Family's section advertise the bags. Also newspapers. Staff advertising directly. You can get a backpack from the learning centre. They are taken out a great deal. Eight to ten bags with the same objects available for each gallery. Cart at main entrance during holidays. Related and themed to galleries. Ten bags with the same for ceramics. Loaned for an hour at a time.

After this visit, people convened at the meeting room for lunch. Following lunch, we recapped the changes which had been agreed a couple of weeks before and the plan to develop projects for the group to undertake. Some members preferred not to join in this large group experience and chose instead to focus upon their morning experience in the Ceramics Gallery. In order to move forward on the overall plan a discussion was chaired by a participant, so we could decide priorities and who would work upon them. This began with a recap of our values and ways of working document. During this discussion, it was suggested that we should include bullet points about what to do when communicating as a group. The initial suggestions were:

- 1. We speak one at a time.
- 2. We put our hand up to speak.
- 3. We do not cover our faces when we speak.
- 4. We try to look at people who are speaking to.
- 5. In a group of more than eight, each time we speak we introduce ourselves.
- 6. Speak clearly and slowly.
- 7. Think about the language so that it is as simple as possible.
- 8. At the start of entering a new space it would be helpful to give a visual description of the room and the numbers of people and layout.

It was again recognised that there needs to be a chair who is applying these rules. The discussion then considered what the rules are for designing a research project. The following were agreed as a starting point:

Question to keep asking:

- Are there decisions we must make now and some we can leave for later?
- How do we ensure that what are doing is not overly complicated?
- Who is doing what?
- What is our timetable?
- How do we involve latecomers or absentees?
- How are we organising our ways of working, decision making and communication so it fits with our values?

Questions to small groups developing the output:

- What issues are we trying to solve?
- What ideas do we have already about what we could do?
- What will our output be?



- How are we going to produce it?
- What will it look like?
- Will we make changes to the output based on the results of the research?
- Will we test changes if we make them?

It was recognised that greater discussion needed to happen in relation to how we might 'test' outputs, but that we should wait until those outputs were in place. It was also recognised that we needed to capture demographic data and so would need to design a structure in order to achieve this.

There were then small group discussions about the projects that people were interested in undertaking. Three projects were identified. One group wanted to make a short film about their museum experience, one group wanted to examine the museum and ARCHES website and one group wished to develop a QR code based information sheet. The film group agreed they needed to begin with a storyboard and so began work on that. The website group made preliminary visits to websites to decide which they would focus upon first and the QR code group discussed what might be on the sheet. This last group decided to produce a single sheet (or book of sheets) that use QR codes to link to:

- An introductory/outline text
- Additional information
- Signed information
- Spoken information

We could consider:

- Use of audio and video files on Vimeo and/or You Tube
- Use of information websites (including the museum's)
- Using AR codes instead of QR codes
- Recognising the risk associated with QR codes (which can link to unwelcome sites)

3.8 Session 8

This next session was at the Wallace Collection. At the start of the session the communication rules from the previous week were introduced and space made for people to comment. Consequently, an additional rule was suggested:

• Give an accessible, brief summary of a discussion every few minutes.

The group then joined the 'Open Furniture Trail' which was on that day and allowed visitors to have a handson experience with a variety of items around the museum. As before, groups were asked to record their experience in a manner they felt comfortable with and then were encouraged to discuss what worked for them and what did not work for them during that tour. Lunch was then held and then groups began to work on their small group projects. Early attempts were made at filming, there was another discussion about content for the QR code document. The website analysis group visited the Wallace Website. Their early conclusions can be seen in Figure 5.



egy/visually impaired group feedback re: wallace collection website	
The ARCHES research questions)	
•What works for you? - The BSL video is great-clear + interesting info, - Excellent that it involves how to accern further support / BSL events etc. Good length-not to short. - Liked the colour homepage. - Visibility of letter was good. - Simplicity of website good for learning dypiculties • What does not work for you? - Accerning events is difficult - we couldn't find the "accernible" events.	km
- "False" hyperlinkes. Hyperlinkes are usually different colorus - the different colorued headings /subheadings caused conjussion to most people. • What would you like it to do? - To provide an easy/clear way of accessing information regarding "Access"+ "Accessible Events" on the homepage. This is of utmost importance for those in our group.	15,735 15,735, 124.02.
• How would you improve it? - Make separate timetable / calendar for BSL events / access events, + make it very	2017 by 2017 by 2017 wit
easy to find. - Add subtitles to the Archive videos. - More hyperlinko - possibly Colour coded? I.E. Blue for BSL / Yellow for Blind.	
	-

Figure 5: First analysis of the WC's website.

Two other activities were also undertaken during this session. Firstly, there was feedback on a redesigned Our Story application. This was well received but it was suggested that an additional pair of hands could be used to add to diversity. Additionally, individuals began to test the prototype Coprix game with the research associate (see D6.1 for details). At the end of the session, people shared their progress.

3.9 Session 9

The ninth session began with a discussion about what had been achieved the previous week. The group then joined an audio descriptive tour around the Wallace. This focussed upon work associated with dance and was supported by an audio describer and allowed for touching objects. It was enjoyed by all of the participants who had a wide range of access preferences and included only one for whom such an event would typically be targeted. The participants recorded their experiences and shared these when they returned for lunch. After lunch we broke into small groups to discuss collecting demographics. The types of data we would need were explained and then groups suggested the kinds of information they would like collected about themselves to best represent who they were (see Figure 6).



Collecting demographics

Demographic data is information on a group. E.g: How old are you? Are you a woman? Where were you born?

We are hoping to collect two different types of demographic data:

- Quantitative data: Information using numbers
- Qualitative data: Information using stories and feelings



to supp

What will we do this afternoon?

- We would like some of us to design how we collect the quantitative data.
- We would like some of us to work on our other projects
 - The film project
 - The QR code project
 - The website testing project



Figure 6: Slides used to explain the demographic data task.

The possible questions were presented by the various groups at the end of the discussion and it was agreed that the OU researchers would cohere these different ideas into a form for consideration the next week. A key decision at this point was that people wished to identify people by forms of access support rather than by impairment categories. There was a feeling that the categories could not effectively capture the support requirements of people.

Following on from this discussion the project groups began to work up their ideas until the end of the session. As part of this discussion they were asked to plan what they would do on this project the following week.



4 Sessions 10-24

Once the group projects became part of the established pattern, the structure of the sessions became more settled and the activities produced fewer outputs for us to evidence in this report or output which are reported in D6.1. It is therefore not appropriate for this next section to be as lengthy as those which explained Sessions 1-9.

4.1 Session 10

Session 10 followed a fairly typical pattern of a museum visit, an introduction to activities occurring the following week, and feeding back on the demographics' discussion the previous week. People were asked to review the survey and make suggested additions. After this there was a recap about the projects and people began to work upon them until the session ended.

4.2 Session 11

Session 11 was given over to working with VRVis (see D6.1, section 6.1). This included completing the demographics survey which we had created (see D6.1, section 5). Some people also did some work on their projects and visited a gallery in the V&A once they had finished working on the three sensory activities which VRVis had brought with them.

4.3 Session 12

Session 12 involved attending an exhibition at the V&A. Again, a small but significant number of the participants were not enamoured with the experience. This was partly because of the crowded nature of the exhibit with narrow spaces between exhibits, but also because of the lack of multi-sensory objects and accessible texts. Due to the narrow spaces the organiser decided to divide the groups into two. One being led by the curator of the exhibition and the other being led by a supposedly prepared BSL interpreter. Participants did not like the fact that they were separated like this and there were tensions with the BSL interpreter who wasn't prepared to answer the participant's questions. Given the nature of the d/Deaf group what struck them the most was the 'accent' the BSL interpreter had and therefore some were unable to follow her as well. We were also visited by staff working on the RixWiki who were seeking feedback on the issues we had experienced with the wiki and to help people to access it if they still wished. After lunch people worked on the three projects, the video production, the website analysis, and the QR code resource.

4.4 Session 13

Session 13 was undertaken at the Wallace Collection. This session began with a brief introductory discussion about whether people still wanted to visit other museums and how we should manage the process. As well as how we should arrange such visits, we were also interested to find out what people should be looking at, how they should record and feedback their ideas and whether the four ARCHES questions – What works for you? What does not work for you? What would you like it to do? How would you improve it? – could be useful. The group then went on a StageText supported tour of the armoury. This proved a very effective experience, despite some intermittent problems with the WiFi. As one participant explained:

"I thought it was very good. The subject matter was not my thing. Occasionally the Wi-Fi dropped out. Captioning is the option for me. I felt far less tired. I just give up if I am trying to listen. My first language will



always be English even if I learn BSL. I would not bother going to a talk if it does not have a captioning system. I have had so many [poor] experiences of the loop system."

It led to suggestions that we explore how we might include this technology within an ARCHES application.

After lunch the QR code group interviewed a curator in order to get background information on our chosen object, the Bell of St Mura. The questions for the curator were:

• How would you describe the object?

- How did it get to the museum?
- Why did it come to England?
- Where did they get the information from about the object?

• Why & how was it made?

- When was it made?
- Who made it?
- What is it made of?
- Where was it made?
- What was it made for?
- How long did it take to make?
- What was the process of making it?
- How many people involved?
- Why does it not have clapper/donger?
- How much does it weigh?
- What's its value? Or what was its value?
- Is it the only one of its kind?
- How did it end up in the Wallace collection?
 - Where was it before the Wallace collection?
- Why is it in that gallery and in that place in the gallery?
 - What was the response of people to it over the years?
- Could you give us some background information about its historical context?
 - What was happening at the time it was made?
 - Link to Irish history?
 - Link to pilgrimage?
 - Was this bell made for the church?
 - What sort of things did the church have before the bell?
 - What sort of others did the church have?



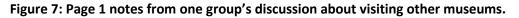
- Are there unanswered questions about the bell?
- Has this object inspired other works or activities?
 - We should get someone to describe feeling the touch object version?
 - We should get people to describe their response to the object?

The interview was undertaken as a small group with each member asking a question.

4.5 Session 14

In this session we picked up on discussion about visiting other museums (see Figure 7).

Museum visit Questions to ask Having support during visit • Issue of costs? • Could this replace Friday session support?
Possible impact on Friday sessions Shaheere - down't want. to cherse ARCHES not continuis. shul to miclauge at the group
 Should we have a trial? (For example: During one of our V&A sessions two groups could go to the Science and Natural History museum and then come and report back) come here e see once pregete. talk what a grown. Mave a choice.
Whilechoped Galley - nea Tover, Project. Look aand, take pictures, The history, make some notes. Third of questions, discuss inthe each other, chat. talk to you have about what you see, what you Like.



This small group discussion was followed by a second, looking at people's experiences of museum activities over the previous three months. People were asked to compare and feedback upon these activities (see Figure 8). In particular we asked each other:

At the beginning of the year you chose museum offers and activities.

• Which ones did you enjoy?



- Which ones did you not enjoy?
- What would you have liked to see/do?
- What would you improve about them?

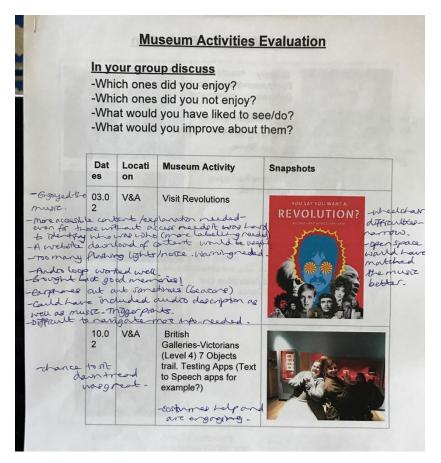


Figure 8: Example of a museum activities discussion group feedback form.

Then, the groups had lunch and began to work on their projects.

4.6 Session 15

Session 15 was seen as an opportunity to reflect upon the participatory nature of the overall project and whether we needed to enhance what we were doing. Over the weeks a couple of participants had consistently felt that their access was not being fully catered for. There had been regular discussions about these issues and a variety of solutions had been sought. The best solution had been to provide a note taker working alongside these individuals, but this had only been a partial success. It had been suggested at the previous post-session planning meeting that perhaps we should open these issues up to the wider group to discuss. Consequently the following questions were asked:

- How can we be more 'in control' of the project?
- How can we be more 'involved' in the project?
- How can we better 'plan together?



• How can we better 'play an enabling role for others'?

As for all discussions, notes were taken prior to a discussion which synthesised our thinking. Here are the notes from one small group discussion:

- How can we be more 'in control' of the project?
 - You can have more than one laptop writing the notes so that everyone who needs to read it can.
 - We can have colour cards instead of putting up your hands to speak as people who cannot see properly can see who wants to speak:
 - P feels that she is in control.
 - P feels that if you feed back when things are not going right the people that help run the project cannot change it.
 - S: The communication rules did work when they were being used probably, I also think that the rules needs to be outlined every week.
- How can we be more 'involved' in the project?
 - P & P: We are very involved and do not need to be more involved.
 - \circ J thinks that we need to know what jobs need doing each week, so people can do them.
 - S: Why to be involved is getting more help to work with new people?
- How can we better 'plan together'?
 - P: If you can have information about what the planning meeting will be about.
 - J: Those who cannot come to the planning meeting could write down what they would like to be talked about at the planning meeting.
- How can we better 'play an enabling role for others'?
 - Communication, know more about each people on the project, asking how can we support each other and new people, including people, not to exclude people.

This group gave the following feedback during the synthesis discussion:

- 1. We need to have different cards, not hands and remind us of the communication rules.
- 2. We know the different jobs that need doing and different people do them each week.
- 3. If we know what you are planning in the planning meeting before we can feed in.
- 4. Communication, know more about each other on the project, asking how we can support each other and new people, including people, not to exclude people.

After lunch, the groups worked on their projects. As part of this, and in response to recommendations earlier on in the project, that interpretation of museum objects should include a creative and emotive response, the QR code group produced a poem about the Bell of St Mura.

<u>The Bell</u>

Abbey in the green land.





Where rural buildings hear the music from across the water.

A line of kings stretch strong across the green.

An old dark place where you feel the history.

Into the old musty room.

Where the dust hides armour under its sheets.

And between drinking horn and virgin with child,

An intense experience awaits you.

4.7 Session 16

Session 16 returned to the topic of visits to other museums. This was slightly oddly named as the 'Mystery Shopper' activity, but the name continues to appeal to the participants and is understood as a concept. The synthesis of the earlier discussions had led to the following list. People were asked to consider the list and feedback on it and the mystery shopper process. The list was as follows:

When visiting a museum you could think about:

- Is it easy to get to the museum?
- Are they helpful at ticket/information desk?
- How friendly is the staff?
- Do the staff help?
- How easy is it to move around the space?
- How easy is it to find the toilets?
- How easy is it to find and use the shop and cafe?
- Are the signs easy to use?
- Are there sensory objects?
- Is there seating to use?
- Are things at a good height?
- What is the light like?
- Is there information that is useful?
- What did you enjoy?
- What did you not enjoy?
- How would you improve it?



After lunch the groups were reminded of the forthcoming visit from our partners. In small groups we discussed how we wanted to represent their projects and the Exploration group more widely.

4.8 Session 17

Session 17 began with a further opportunity for groups to prepare their presentations to partners. After lunch, people were given two options (see Figure 9). For those who wished to practice a mystery shopping exercise they were able to go around the V&A and approach staff about various issues. For those who wished to stay in the group room there was an experiential sharing activity. This was in response to suggestions from participants that they would like to better understand each other's issues of access.



Figure 9: Options for the afternoon of session 17.

4.9 Session 18

Session 18 involved the participants presenting on their projects to the ARCHES partners. The QR code project presented their Poem and plans for the interpretation, the video project showed a short edited film demonstrating their work in progress and the website project presented the findings using a PowerPoint presentation (see Figure 10).



Accessing Websites: Our findings

Hello and welcome to our presentation...

- We are all from the Ealing Deaf Womens' Group
- We meet every Wednesday for friendship, learning and activities
- We got involved in Arches because we want to help improve access for Deaf people visiting museums
- Our presentation is going to focus on our experiences using the V&A and Wallace Collection websites

Introduction

- We have decided on a sign for ARCHES (Angela to demonstrate)
- It is based on the design logo
- We think this sign should be used in future videos about ARCHES
- We will now present our feedback based on our experiences on the V and A and Wallace Collection websites
- We will present our ideas through how we would improve the websites



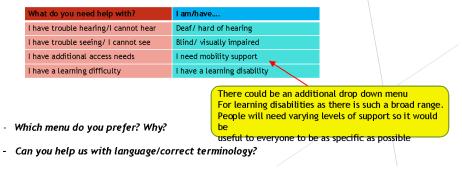


Idea: Clicking Access Tab leads to an 'alternative' homepage with all access information there

- How to access museum
- What accessible events are on
- Access information
- Trigger warnings related to exhibitions. E.G <u>This exhibition contains</u> <u>loud music, visual effects and small rooms</u>
- How to arrange support before/during your visit
- The alternative homepage should be very user friendly- simplified language/information/clear and bright layout/ BSL videos

<u>Alternative Access Homepage: Using the</u> correct language and filtering information

Information could be filtered depending on peoples' access needs or disability. Once they have clicked on the access button and reached the 'alternative' homepage, there could be an additional options menu that filters information so people only see information that is relevant to them.





However rather than listing 'disabilities' list access options

- You should explain everything you have on offer, rather than list the people that will use it. This enables people to make their own choices about what services/ utilities they are going to use.
- People should easily be able to find out what events you have on, which services you provide, what access options you have; by doing this you give the <u>agency back to your visitors</u> and <u>stop them having to</u> <u>define themselves</u> by what they cannot do.
- Some people may need additional assistance but would never class themselves as disabled.
- Many of the deaf Community do not view themselves as disabled- it is a language barrier and this should be treated as such. BSL should be offered as an alternative language on the museum website.

Idea: To have short BSL Videos accompanying the information is essential

- This is because too much writing is not accessible for Deaf people. BSL is the first language of many Deaf people so to have important information relayed in BSL is very important.
- Videos should only be a few minutes long, with real signer (not avatar), with a clear background. Certain videos should be updated regularly to keep information up to date

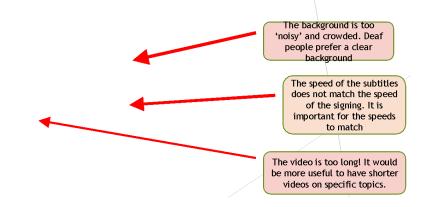
Video content examples:

- Video about how to get to museum (2 mins)
- How to arrange support before visiting (3
- mins)
- Brief history of the museum (3 mins)

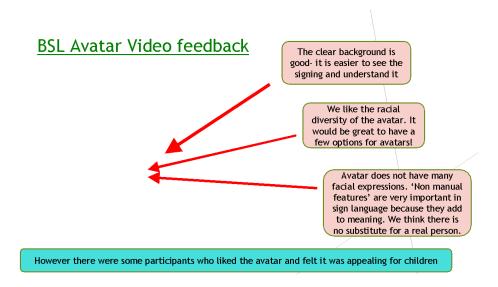
- Special events coming up (2 mins)



Ideas on how the BSL videos on the Wallace Collection and V&A Museum websites need to be improved







<u>Thank you for listening to our</u> <u>presentation!</u>

- We hope you have found our feedback informative, valuable and helpful.
- Thank you for inviting us to be a part of ARCHES.

Figure 10: Ten slides from the accessing websites PowerPoint presentation.

4.10 Session 19

Session 19 was organised entirely by one of the participants who wished to try out some new ideas that might enhance the accessibility of the London Exploration Group sessions. There were two points which some participants were particularly eager to focus upon. One was the development of activities which enhanced the social connection between participants and worked against the tendency for people to stay in the groups they were used to working in. The second was to enhance communication so that people had less need to have access 'supported' and for it to emerge as part of the everyday practices of the sessions. People were asked to work in small groups, to identify our collective access needs and then to develop a presentation which took all of those needs into account. Our search for practice which enhances the participation of everyone has been ongoing from the outset of the project and so it is essential that we continue to seek out ways of working which enhance the overall experience. This session highlighted the need for multisensory approaches to be taken into consideration at all stages of planning, for us all to be creative in responding to



access challenges and to learn from each other about how we can all support each other. It also highlighted the need to have more activities which enabled us to share our experiences.

4.11 Session 20

Session 20 began with a discussion about our visit to another museum in session 21, an introduction to partners who would be visiting from Madrid and a discussion about our application to the Vertigo project. During the hour before lunch we picked up on the shared-experience activities highlighted in session 19. One group of people were asked to go in pairs around the museum and share their access experiences. The other group picked upon the desire to enhance our social media presence. After lunch the groups swapped and undertook the other activity. This was followed by a debrief session.

4.12 Session 21

Session 21 involved one group visiting the Natural History Museum and the other visiting the Science Museum.

4.13 Session 22

Session 22 began with a feedback session so people could share their experiences of the two other museums. The participants then either continued with their projects or visited the museum. The QR code group finished the write up of the interview. Their text was:

The Bell of St Mura

Description of where the bell is

The gallery is a place for metal objects. They are usually quite small and beautifully decorated. People are intrigued by this object. A woman even had a copy of the bell made.

We believe these hand bells were used in Monasteries and Abbeys. They were rung to call Monks to prayer. They might also be used during services and processions. Many bells became associated with a saint. They became relics. There are two types of relics. One type of relic is part of the saint's body, such as a bone or fingernail. The second type of relics was something that belonged to a saint, such as a book or a bell. This bell is linked to St Mura. We do not really know if it was his bell though, or if it just belonged to the Monastery he started. When something became a relic, a shrine was built for it. Often this was a box that was decorated. But with this bell, the bell itself was decorated. Decorating the bell was an act of worship.

Description of the bell

The Bell of St Mura is a bronze bell. It is heavy. There are three layers to the bells. The inside of the bell is cast bronze. A mould was made and melted bronze was poured into the mould. The two layers on the outside were maybe cast, but they were also hammered. There are two layers of ornaments, that were applied to the bell at the front and top. One piece detached; it came away so we can see the second layer with its patterns. This bottom layer was made of bronze. And then later on another layer was added of silver. There is a cross on the front of the bell. In the middle the cross there is a hole. In the hole there was a rock crystal. At each end of the cross there was a piece of red amber. Three pieces of amber in total. But there is only one piece of amber left. The silver parts use filigree. This is twisted fine wire formed into delicate patterns. The rock crystal is perhaps from Ireland, but we don't really know where the stones are from.



Inside the bell there is no clapper. That means there is nothing to make the bell ring. It is a silent bell.

Description of the history of the bell

The bell was bought by Sir Richard Wallace in 1879. He owned some land in Northern Ireland. The Bell was made in Ireland. It was used at the Monastery of St Mura in Fahan. At some point the Monastery was closed. The bell was kept by a family and stayed with them for a few generations. The last keeper sold it in the 1840's. Then there were several owners before it was sold to Sir Richard Wallace. He bought it for £6. At the time of there was a famine in Ireland. The family who sold the Bell were poor, so £6 would have seemed a lot to them. There were many bells in Ireland that were sold at this time.

Bells were also made in other countries, such as Scotland and Rome. But they are particularly associated with Ireland. There are about 60 bells that we know of. Many are made of iron, and this is one of the most beautifully decorated. When monasteries closed families looked after the bells. Often they were families of one of the monks. They stayed with the families for many years. They were not a secret. The bells could be very popular with local people. People believed the Bell of St Mura had healing powers. Women believed that if they drunk water from the bell it would help them when they gave birth to a baby. People might also make a pilgrimage to visit the bell. They might travel long distances to see the bell.



Figure 11: Map of Fahan.

Description of how it was made

We are not sure how old the bell is. It took a long time to make, across many centuries. St Mura lived in the 6 and 7th Centuries, about 1500 years ago. But we do not think the bell is that old. The oldest brass layer of the bell was added in the 11th Century, over 1100 years ago. The upper, silver layer, was probably added in the 13th Century, about 900 years ago. The cross and the stones were probably added in the 16th century, about 600 years ago. We do not know who did all this work either. We only know that it was made by craftsmen.

No one really know why there is not clapper inside the bell. Maybe, because the bell was used, the clapper just broke off. But after this happened a story arose about the bell. The story was that the bell came down from heaven. When it came down to earth the clapper returned to heaven. They said the bell was only meant to be heard in heaven.



4.14 Session 23

Session 23 involved visiting the two groups who had visited the Natural History Museum and the Science Museum swapping over, so they could both have had experienced the settings.

4.15 Session 24

Session 24 involved a long synthesis discussion about our combined experiences visiting the two other museums. The recordings of this discussion were then analysed by two of the participants who produced the following initial findings:



ARCHES Museum Feedback

This is a summary of the ARCHES visits to the Natural History Museum and the Science Museum and comes from the feedback provided by the ARCHES Team. The group decided amongst themselves which museum they would visit first and then visit second. This would allow for everyone to experience both museums and compare them with each other according to a previously agreed set of criteria. These were as follows:

We have collated everyone's feedback and then highlighted the agreed/universal actions, which would help to improve everyone's experience.

- 1. Navigation
- 2. Access Options
- 3. Attitude of the Staff and volunteers

1. Navigation

- Easy to read signs
- Colour coded areas
- High contrast to ease navigation for those with sight loss
- Staff should be helpful supporting people to navigate the museum
- Access options must be well displayed
- Need to make safety options clear and available Flashing fire alarms, fire exits, panic alarms in toilets etc.
- Include more seating areas to be able to pause
- Make sure staff are easily identifiable coloured of uniform
- Toilets should be easy to find
- Better lighting light and shade
- Lifts should be clearly marked
- Maps need to very clear and easy to use

2. Access Options

- Films should be captioned and audio described
- Warnings should be clear for example the earthquake exhibition
- Accessible toilets, changing places



- BSL should be available for videos
- App for audio description
- Noise levels should be considered so all can have the best opportunity to communicate
- Audio should be interpreted/explained for Deaf/HoH
- Audio guide automatic as you travel around
- Headphone points should be clear
- All interactive exhibits should be working
- Information in Easy Read format

3. Staff Attitudes

- Staff taught basic BSL
- Disability awareness training? Look at the person they are talking to, offer to write things down, walk the person to the space, provide basic audio description? demonstrate a level care, ask how they can best help
- Staff should explain exhibits clearly so everyone can understand

Conclusions:

The experience of group members is hugely enhanced by many of the small efforts made. There is a need to provide consistent staff training so all staff are aware and reflect the same values – these values should be reflected throughout the organisation from top to bottom. Perhaps a skills map to identify skills? E.g. BSL, languages, physical support etc. We also noted there was a difference in experience based on the type of disability. We also feel there is a need to improve design and technology to improve the experiences of disabled people visiting the museums.

Session 24 concluded with a discussion about our rules for presenting our ideas to partners inside the project and to the wider audience beyond the project. These rules are still in development.

5 Discussion

In D6.1 we outline our approaches to data collection, analysis and storage, as well as our six literature reviews (the last of which will be particularly useful in developing future participatory research group activities). In this discussion we will focus upon the practical issues which have emerged in the last year.

During this year we have worked with 57 participants. Some of the participants filled out the form more than once. 37 participants filled out the standard form and 20 participants have filled out the accessible consent form. 5 participants did not give us consent to take their photographs and use them for educational purposes and/or media outlets. Recruitment has been an on-going process that has brought up some issues discussed in D6.1. At the time of collecting the consent material we did not collect any demographic data in addition to it. Demographic data is also discussed in D6.1.

The most important organisational issue for the London Exploration Groups has been developing effective communications. This has led us to provide PowerPoints for every session, which use plain English and are image supported. All images within are screen reader friendly described. The presentation is provided as Microsoft PowerPoint format, PDF format (for participants who do not have the newest Microsoft version) as well as in a Microsoft Word format (as screen readers do not work with PowerPoint). The PowerPoint presentation has speakers' script in the speaker's notes. This is to give participants who are missing an idea of what will be said. It is also in case the note taker is unable to attend the session. Participants also tend to call the research associate during the week to have a verbal run through. Lastly, a flowchart is provided with a summary of the day and participants wishing to have a one-to-one warm-up meet the research associate 15 minutes in advance. In addition, worksheets are provided with the same features and a QR code for the audio instructions. All of this material is sent to the participants 3 days in advance of the sessions to prepare themselves. If the files are too large participants are able to download the material from the share Google Drive prior to the sessions.

In D6.1 we explore the ongoing challenge for the project of enabling access for people who use communication systems other than the spoken word. The project meetings have regularly included individuals who use British Sign Language (BSL), and a signing support has been provided by the ARCHES project and by a member of one of the participant groups. For those who benefit from a textual support we have been using a note taker. However, the informal nature in which this has been undertaken has meant that it has been harder for it to be effective. Firstly, it has meant that someone is not always on hand but has to have their attention gained. Secondly, it has meant that criticism of that person's note taking has been harder as they are involved in other ways with the project. We have therefore employed a note taker to work across the project solely in that role. We have experimented with various forms of delivering that note taking, but now use 10 iPads spread around the table, some showing the typed text summarising the discussion and some showing the PowerPoint for the session.

The following issues have been identified in relation to the practical organisation of the Exploration group sessions:

Recruitment issues:

- To improve the recruitment, museums should have involved in recruitment process from the beginning. Recruitment in London was led by the university Need for both museums in London to go to outside to organisations or invite organisations in.
- Recruiting from the d/Deaf community was very difficult.



- Recruiting groups with Learning difficulties was very difficult because they require going through gate-keeper organisations – who schedule everything more in advance than the project was sometimes capable of doing.
- The sooner the other museums start recruiting the better.
- Timing of recruitment has to be considered (in December most organisations close-up and/or are too busy to prepare in advance; different countries may have different national holidays that give people longer bank holidays as in Spain during November).
- It would be good to have a video that is audio described. Several versions of each video are therefore required.
- The Taster day is successful.
- We should suggest partner museums adopt a mixed strategy contact their current lists, but then to encourage snowball sampling. So part of the communication is to ask for people to move beyond the current group.
- We should aim to find the key figures in each country or key organisations in relation to recruitment.
- So should we not ask more people to bring a friend to join the group? Some people will but others do not want to bring one for many reasons.

Seeking volunteer supporters:

- Advertising and asking through museum's typical networks have not produced results. People can be put off by the length of the project.
- Do we need to create key volunteer roles using volunteer organisations? (NADFAS, etc.).
- Our advertising should be for "people with an interest in access needs" and avoid the come and help idea. We will need to revisit recruitment wording. Our 'Hook' is that an insider's view is appreciated rather than we are seeking people of particular labels. We should avoid the differences and difficulties label wherever possible.
- Avoid finding people with the charity model in their head.
- Volunteer opportunities should be sent out to wider membership.
- Museums should give volunteers an option to be involved in a particular way (e.g.: an artist or note-taker).
- We need to ensure to keep a welcoming atmosphere.
- Museums need to identify volunteers who have knowledge of behind the scenes activities.
- It is suggested that having four volunteers a session is a good number.
- We should consider short term intern roles.

Technology and accommodation issues:

- We cannot provide iPads for individuals though a few people would like this.
- Many people do not like to use equipment they like pen and paper.



- Need to incorporate the technology into the sessions.
- Need to build in an alternative to the RixWiki.
- The loop is not a reliable solution particularly in large spaces or with multiple voices.
- There are WiFi reliability issues in both museums.
- There is an ongoing challenge around finding rooms and room availability.
- We need a touch typist.
- We need a signer could use a note-taker?
- Voice to text is perfect in a single place but does not work in noisy room. The technology is nearly there.
- We need to provide people with appropriate seating arrangement "Power of the table".
- Seating arrangements create barriers and facilitate communication.
- We need to ensure ease of access into the galleries so we can be flexible in how we use the space.
- We need to have a break-out space.
- Need for a space that is quiet does not have a loud echo.
- We need to ensure wheelchair access to the museum and the rooms that are being used.
- Need to consider where are the rooms in relation to the galleries.
- Need to consider where are accessible toilets in relation to the meeting rooms.
- Room lighting needs to consider flashing lights and brightness.

Food and transport issues:

- We say a limit of £20 per person per day based on the budget calculated for each session, but some claim more and some less.
- Not everyone is putting in for travel expenses.
- Constantly having to balance the books.
- Many people are using Freedom pass (need to be able to make use of equivalent in other cities).
- As yet we do not have any participants with Profound and Multiple Learning Difficulties or Disabilities despite many effort this would add to the costs, but could be a useful outreach opportunity?
- Need to explore value of using different car/taxi companies and car pool.
- Need to consider additional costs of taxis for wheelchairs.
- We should share the size of travel budget in some way so we can collectively take responsibility.
- Explain we have said you have £20 per person per week. We have x amount outside this which we could discuss.
- We should not make things sound better than they are or make promises we will struggle to deliver.



- We should just be honest about our weekly budgets generally.
- In meeting special diets and preferences there is always a challenge balancing diets and numbers of meals available.

6 Conclusions

This report has outlined the initial activities the London Exploration group has gone through. It showed the need for flexibility the organisers have to have to adapt to the participants needs. Furthermore, the report shows the handing-over process of giving the participants control over the project. From the researchers leading the session to the participants working autonomously on their projects. At the outset of the project we identified a framework constructed from six notions of validity (intersubjective, contextual, ethical, catalytic, participatory and empathetic) by which we could explore the validity of the research and its participatory nature. The following summary is situated within this framework.

In relation to intersubjective validity, the research has to be credible and meaningful for the stakeholders. However, there have been clear moments where they have felt that the process has been top down rather than bottom up. This is not a view that was shared by all the participants, but it was one which was important both to voice and to share. As a consequence of the discussions which followed, we instituted significant changes to our practices (for instance within our communication rules or procedures and in identifying research activities). An early example of significant intersubjective validity was the extensive debate which took place around the use of visual images and forms of captioning. For many of the participants the experience of barriers to access within an access project was a profound contradiction and it was not good enough for others to say they were seeking to develop best practice in the context of such a diverse group. A second example, occurred when working with an external partner (as discussed in D6.1), where the partner chose to completely reconceptualise their output in response to the expressed views of the London Exploration Group. This created a genuine sense of ownership of the project and an underlined the meaningful role which the participants were all playing.

In many ways the situated nature of this work, within the museum environment, provides its own contextual validity, as does the participants' engagement with a range of activities that the museums typically undertake. The identification of materials for partners situated within these museums, the analysis of the V&A and WC websites, the films about experiences within the settings all enhance this sense of situatedness. Future plans to help in the development of exhibitions, as well as mystery shopper activities also bring together both the intersubjective and contextual, providing meaning for the individual participants in terms of their own identity and in relation to the identity of the museums.

As a group we have sought at all points to ensure ethical validity. Our starting point is to ensure that all decisions emerge from a collective process. Practices have also been introduced so that people can easily express their feelings without having to open themselves to critique. For example the use of different coloured cards (so someone can show they are struggling with or enjoying an activity) emerged from activities created by the participants and in response to concerns raised by participants about the welfare of both themselves and others. The need to 'police' our own practices and not to rely upon others to manage difficult moments has been voiced by various members of the exploration groups. There is a shared sense of communal responsibility to ensure access for ourselves and each other. The values document produced at the suggestion of Exploration group volunteers and by the group exemplifies this shared ethical commitment.

As a group we have still to fully test our catalytic validity. We have begun to consider how we might create new possibilities for social action but as yet have not been able to see such validity to a meaningful fruition. We are a work in progress. Nonetheless, the unique group of mixed access needs and preferences working together within the museum environment has not been explored by any project prior to ARCHES. This has not only been evident from the Literature Reviews (discussed in deliverable D6.1) but also during the recruitment process. It was telling that some organisations deliberately declined sending members to the session as they feared to mix the different 'disability' groups. The results from this group have helped with the design of digital resources and also has led to a journal article. Together with VRVis the group tested the Interactive Audio Guide (originally intended for BVI – Blind and Visually Impaired – participants) and as a result VRVis will be implementing both captioning and creative outputs (such as music or poetry) with their interactive audio-guides. This study showed that this device could be enjoyed by non-BVI museum goers.

By participatory validity we mean the extent to which all stakeholders are able to take an active part in the research process to the full extent possible. The group has been visited by partners such as Coprix and VRVis where they have exchanged ideas to the fullest. Participants have had the opportunity to collect data and write a journal article with the university partners and a technological partner. Participants have themselves offered to analyse data like the Mystery Shopper data and are hoping to present the data back to the group. This not only shows the active part in the research process for everyone but also highlights again the handing-over of autonomy to the participants. The range of rules and procedures that have governed our ways of working have emerged from processes guided by the participants. From the outset, people with diverse access requirements have participated in our planning and our weekly meetings and meetings to evaluate progress and forward plan have been open to all participants if they wish to attend. Our activities and projects have all emerged from our collective working, with sessions being run by a variety of different members of the group and in response to requests from across the group.

Lastly, Empathetic validity is perhaps the area in which most has been learned by the Exploration group volunteers and university partners. As the group got to know each other and got to know each other's needs and access preferences the group as a whole identity grew leading to discussions around 'Our Values and Ways of Working' which continued to discussions about 'Communication Rules'. It became clearer that participants wanted to enable and empower each other through getting to know each other. It was suggested to allow participants to simply get into smaller groups and explore with different people an object. This activity was very much enjoyed and people demanded to keep exploring this. What has also been evident is the tendency of the research team not to introduce enough activities at the outset which enabled people to understand each other's access requirements and life experiences. It has been the Exploration group volunteers who have pushed for, created and fully engaged in activities which specifically focus upon enabling them to understand other people's experiences. Where they have led the university researchers have followed.

The first year of establishing the London Exploration group has clearly provided many challenges for all those involved, but the ongoing commitment of a core of volunteers demonstrates not only their enjoyment of the project but its validity to them, to our partners and to the aims of overall project.