

Museum of London

Video-conferencing

Research Report

'It engages the children... They always pay attention... It's captivating' (teacher comment)

'... it's pie in the sky to expect teachers who are harassed to death with lesson planning, marking and discipline, and trying to get students through major exams in periods of preparation time that are too short, to be trying to fiddle around with technological gadgets that take a lot of time and which aren't going to teach them anything directly relevant to passing their AS/A2 syllabus requirements. We just don't have time during the already overcrowded academic year!' (teacher comment)

Nicky Boyd, Helen O'Riain and Alison James

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Contents	Page
1.0 Introduction	3
2.0 Methodology	4
3.0 Summary of findings	5
4.0 Conclusions and recommendations	19
Appendix A: Blank teacher questionnaire	25
Appendix B: Teacher interview guide	27
Appendix C: Pupil interview guide	29
Appendix D: Observation grid	30
Appendix E: ICT advisers, etc. interview guide	32
Appendix F: Museums/related organisations interview guide	33
Appendix G: Teacher questionnaire data	34
Appendix H: Report on video-conferencing sessions	54
Appendix I: Report on research with ICT advisers, etc.	79
Appendix J: Report on research with museums and related organisations	92

1.0 Introduction

This report summarises the results of four smaller pieces of research relating to schools' views on and use of video-conferencing, in particular secondary schools. The reason for focusing on secondary schools is that their take up of sessions has been low over the two years the Renaissance-funded programme has been operating at the Museum of London.

The aims of the research, as identified in the original brief, were to:

- 1. evaluate the impact of video conferencing with the museum on pupils, using Generic Learning Outcomes as appropriate. We are particularly interested in the pros and cons of video conferencing compared to face to face sessions (eg object handling, storytelling or drama sessions) in the museum or in school*
- 2. identify the strengths and weaknesses of the programme, through consultation with users and potential users, in terms of range of sessions, marketing, booking, pre-conference support, quality of delivery, technical aspects etc*
- 3. consult secondary schools, both users and non-users, to identify why take-up is low and how the programme could be developed to improve this. We would also like the consultant(s) to consult other museums to find out to what extent their video conferencing programmes are being used by secondary schools and to identify the strategies they are using to engage them.*

The four pieces of research undertaken were as follows:

- consultation with teachers and pupils video-conferencing with the Museum
- consultation with teachers who may or may not have used the video-conferencing programme
- consultation with ICT advisers about take-up of video-conferencing in general

- consultation with museums and related organisations about take-up of video-conferencing.

This research took place between February and April 2008.

2.0 Methodology

The approach taken to the research was as follows:

- Observation of video-conferencing sessions held in January and March 2008 (x 4)
- Follow-up interviews with teachers (x 3) and focus groups with pupils (x 2)
- Telephone interviews with a selection of ICT advisers/consultants/e-learning officers as well as key staff from JANET and Global Leap (x 12)
- Telephone interviews with a selection of museums and other organisations offering video-conferencing to schools (x 11)
- E-mail questionnaire to all teachers on the Museum's network as well as all those who had used video-conferencing over the last two years (x 41)

The interview guides and questionnaires can be found at Appendices A-F.

Four mini reports were compiled and are attached as Appendices G-J.

For further data on all of the topics covered in the main body of the report, please refer to Appendices G - J

3.0 Summary of findings

3.1 Feedback from teachers' e-mail questionnaire

Forty one teachers completed the e-mail questionnaires. Of those who returned the questionnaire, thirty three taught primary and twenty six taught secondary/16+.

13	Key Stage 1
20	Key Stage 2
14	Key Stage 3
5	Key Stage 4
7	Key Stage 5.

(For this and other related data please see Appendix G)

Most of the specialists were History teachers. Fourteen of the 41 were London-based with a further eight in the South East. Primary teachers taught all subjects.

3.1.1 Access to video-conferencing equipment

Thirty two of the 41 said their school had equipment. Five did not and four didn't know.

3.1.2 Use of video-conferencing

Thirty two had used video-conferencing, 27 with museums, but also with overseas schools and other organisations. The museums that schools had video-conferenced with included the Museum of London, National Portrait Gallery, National Maritime Museum, the National Archives, the Imperial War Museum, the Science Museum, Natural History Museum and the National Army Museum.

For those who had not, the main reasons given were lack of knowledge, experience or equipment. Some said they preferred to visit the museum. Others were unaware of the possibility of video-conferencing and of what sessions were available.

3.1.3 Benefits of video-conferencing

Nearly half of those consulted identified access to experts and remote resources as the main benefit. They also recognised that there were fewer health and safety concerns than on a school trip. They valued the interactive opportunities and exciting new experiences video-conferencing could offer and felt that it extended and enriched the curriculum. The benefits for MFL learners were mentioned, as well as encouraging communication, speaking and listening skills. They felt that video-

conferencing encouraged pupils to focus and was motivational in itself. Some felt it was easy to use and that it promoted inclusion and could cater for individual needs.

3.1.4 Length of video-conferencing session

There was a range of responses including 10-15 minutes (x 8) with most opting for 20-30 minutes (x 22) and several saying 30-60 minutes (x 19). They commented that it depended on the age group and the topic.

(For additional information please refer to Appendix G, Question 5)

3.1.5 Comparison to face to face museum learning

The teachers could see both the advantages and the disadvantages. One of the main advantages was in saving money and time as well as the hassle involved in organising a trip and completing the required risk assessments. Some also felt that video-conferencing offered something quite special and unique. However, most felt that direct access to the real thing would always be preferable in terms of the learning impact it has on pupils, but pointed out that they were located too far away to make a visit viable.

3.1.6 Use of real objects in the classroom or during the video-conferencing session by the Museum

Thirty six of the 41 said they would be interested in borrowing real objects to complement the video-conferencing session. However, several were concerned about the logistics and cost of organising this. Thirty eight of respondents said they would like to see objects handled as part of the video-conferencing session.

3.1.7 Interest in video-conferencing sessions currently offered by the Museum

Thirty six teachers expressed interest in the sessions currently on offer. Of those who did not, there were requests for sessions related to Geography, D&T and sessions relevant to A level students.

3.1.8 Other suggestions for sessions

A wide range of suggestions were made, including Tudors, Victorian childhood, World War II, Transatlantic Slavery, Egyptians and Vikings, as well as the use of

historical characters in costume and the teaching of historical, archaeological skills and conservation issues.

3.1.9 Interest in a package including a visit and video-conferencing

Only 15 teachers expressed an interest in this. Thirteen were definitely not interested. The main concerns expressed were distance, cost and timing.

3.1.10 Booking arrangements

Thirty five teachers said that a choice of sessions on advertised dates would be useful. They stressed the need for the Museum to be as flexible as possible since schools could not be.

3.1.11 Advertising

Teachers suggested sending direct mail shots via e-mail/post; using Global Leap; the Museum website; relevant publications and websites; JANET Collaborate; via ICT consultants/LA advisers, National Grid for Learning; seminars and events and BECTA.

3.2 Feedback from MoL video-conferencing sessions

Four separate video conferencing sessions were observed in total – two at the Museum (before the observation grid had been created) and two in schools. Three teachers were interviewed - all had recently participated in a video-conferencing session which had been observed. Two of these were primary (face to face) and one secondary (by telephone). In some cases other staff contributed their views, including the Video Conferencing Co-ordinator and the Deputy Head. Focus groups were held with the two groups of primary pupils straight after their video conferencing session. The age ranges covered were Years 3/4, 5, 7/8 and 11. The topics were: Victorian Costermonger, Roman Maidservant and the Suffragette session (x 2). Unfortunately there were insufficient bookings by secondary schools to make further investigation possible.

3.2.1 Feedback on content and approach

Comments were generally positive:

‘Yes, it was the right level and relevant to the curriculum’ (T)

'The Costermonger interacted well with the children' (T)

'It's a whole brain activity – visual and auditory – which is engaging for them'
(T)

'The actor did all the right things' (T)

The teachers felt that the content of the video-conferencing session complemented classroom teaching, adding new details and vocabulary.

From the observation there appeared to be a high level of engagement for most of the sessions and pupils responded well, particularly the younger pupils who were more familiar with video-conferencing.

The Costermonger, the Roman Maidservant and the Suffragette all built on pupils' existing knowledge and experience and valued their contributions. They helped the pupils to connect the past to the present day. All the actors managed the pupils well.

3.2.2 Pupil learning (Generic Learning Outcomes)

Teachers mentioned improvements in knowledge and understanding:

'They saw another point of view – more personal. This deepened their understanding...' (T)

There were also changes in attitude and definite enjoyment and inspiration for follow up work. Skills development included looking and listening; formulating questions; problem-solving; responding appropriately; taking turns and empathising.

Pupils enjoyed being involved, asking and answering questions and one commented:

'It's a fun way of learning' (P)

'They do enjoy it' (T)

Pupils were able to give examples of factual information and new words they had learned and they all felt that it had helped their school work. They demonstrated empathy for people living tough lives in the past.

The focus group discussion helped them to remember some of the specific things they had seen and learned.

Teachers also learned from the sessions:

'I took notes and learned stacks' (T)

3.2.3 Pre-session support

Teachers found the pack useful and one had spent 20 minutes before the session preparing questions with the class. All classes had been working on a relevant topic prior to the video conference. Teachers commented that it would have been useful to know which character they would be getting in order to prepare pupils better. In the cases of both the primary classes they were familiar with video conferencing and did not need encouragement to interact.

3.2.4 Follow up work

Teachers had done follow up work.

'It reinforces class work in an interesting way. You can choose how to develop it' (T)

3.2.5 Confidence with video-conferencing technology

Both primary teachers and the secondary teacher had a specialist (technician or video-conferencing co-ordinator or both) to support them during the session.

3.2.6 Publicity

They had heard about the Museum of London session through Global Leap or through the school's video-conferencing co-ordinator.

3.2.7 Booking

Usually making the booking was easy (online through Global Leap) but in one case there had been a misunderstanding when they had tried to book sessions for two classes and only been allocated one. There had been communication problems relating to the bookings for the other schools.

3.2.8 Length of session

One teacher said they would have preferred a little more time for questions at the end. This was echoed by some of the pupils. Another pointed out that 50 minutes would be too long for a KS1 class. Around 30 minutes was considered to be about right for both primary and secondary.

3.2.9 Technical problems

One school had trouble connecting. The time delay caused some problems with people talking over each other. Pupils didn't pick up on all the new words due to poor sound quality.

There were also problems with the picture:

'a little bit blurry' (P)

'Sometimes it goes all jerky and then it freezes' (P)

'You couldn't see the map at all' (P)

'It (the map) was probably in a glass case' (P)

Teachers commented:

'Sometimes the sound did go a bit. They found it difficult to follow at times.

And the picture was a bit grainy' (T)

'There should be technical backup (for the actor). She was left on her own to cope' (T, when the school asked for an improved camera angle)

There was a technical hitch at the beginning of one of the earlier observed sessions meaning the school couldn't hear the actor, but it was solved after a few minutes.

3.2.10 Pupils on screen

One school said they always turn it off. Pupils said:

'It is quite tempting to wave at yourself' (P)

'Some people act all silly because they can see themselves' (P)

'I'd have it off because if you're looking at it all the time then you can't see what they're showing you' (P)

However, teachers and the observer did not seem to think it was a problem and in one class the pupils said they saw the little screen then forgot about it.

3.2.11 Teacher role

One teacher said:

'I take a back seat role and interject if I need to. I'm not seen – just a voice' (T)

The observer noted that it was useful for the teacher to choose which pupil should speak, to repeat questions and answers (more clearly) when necessary and to manage the group if necessary. In another session (Year 3/4) the observer commented:

'The teacher sat on a table and was very visible to the children and very clearly in control of them' (O)

Of the four sessions observed it seemed that the primary school teachers played a more active role. The secondary school teachers seemed to give more control to the actor or expect pupils to take their own initiative – the results of this approach varied depending on the group.

3.2.12 Advantages of video-conferencing

Teachers were very positive:

'It engages the children... They always pay attention... It's captivating. They (MoL) have the resources and the costume we wouldn't get...' (T)

'You get more from video-conferencing – it's more alive' (T)

'They love the video conferencing. It's someone else telling them – it reinforces what we've done when they hear things from other people' (T)

'It was good for the pupils to get another perspective' (T)

Most pupils said they would prefer to have a real person (in costume) coming into school, but some preferred video-conferencing and pointed out that:

'... if he comes and starts talking to us then it's just like Mr F talking to us' (P)

'It was better than someone coming into school and just talking' (P)

However, pupils said they would prefer to visit a museum than to have a video-conference:

'It's much better going on a school trip than going on a video conference because you can see bits for real and not just in a photo' (P)

3.2.13 Logistics, eg. group size

A smaller group size was not an option (*'it has to be a class'*) and one teacher felt that a larger number was an advantage:

'the larger number helps – it reduces self-consciousness' (T)

3.2.14 Understanding what is going on at the museum end

One child had a fear that:

'It worries me because they could have a video camera and take pictures and print them off and then come and find you and take you away.'

3.2.15 Interest in borrowing objects to complement session

Two teachers were interested in doing so and felt there would be more choice than from the local museum. The other said he would borrow objects from the local museum rather than MoL. There was some concern about the logistics of collecting and returning objects.

3.2.16 Feedback on sessions available

Teachers were positive about the sessions with characters in costume and *'anything that fits with the curriculum'*.

One teacher requested a session on Victorian childhood, eg. a child or family living in poverty. The feeling was that they would like more choice. They suggested storytelling and working with artefacts for KS1.

The Deputy Head commented:

'We need some to be a bit more wacky, like the woman with wacky glasses on who made the children giggle. They love the video conferencing. It's someone else telling them – it reinforces what we've done when they hear things from other people' (T)

3.2.17 Use of other MoL sessions

Teachers were positive about using other sessions in the future.

One Video Conferencing Co-ordinator was not aware whether it was possible to make bookings directly with the Museum.

3.2.18 Interest in visiting MoL

One teacher intends to do so. For the others the cost and length of the journey is prohibitive. Pupils were confused about which museum had delivered the video conferencing session, but when this was cleared up some said they would like to go.

3.3 Feedback from ICT advisers, etc.

Twelve people were consulted (seven by telephone and five by e-mail) including ICT advisers, e-learning officers, members of regional broadband consortia as well as contacts from JANET and Global Leap. For most of them video-conferencing was only part of their brief but they were very familiar with using it.

3.3.1 Use of video-conferencing

According to respondents, a large proportion of schools, primary and secondary, seem to have video-conferencing equipment, however not all make regular use of it. The general feeling was that the use of video-conferencing was likely to increase.

3.3.2 Benefits of video-conferencing for secondary schools

Over a quarter of those interviewed felt that the main benefit was access to experts and resources that would otherwise not be available because of location. Several mentioned the ability to link with other schools (locally and internationally, pupils and staff). There are also fewer health and safety issues in comparison to organising a school trip. Video conferencing enables remote teaching if there is no specialist teacher in the school or if it is a minority subject and means other subjects can be offered. Video conferencing can support 14-19 diplomas and provides access to native speakers for those studying modern foreign languages as well as supporting ESL learners. It also provides an opportunity for teachers' CPD.

3.3.3 Barriers to secondary schools using video-conferencing

The main perceived problem is the limited access to equipment (often it is based in one place and has to be booked), followed closely by timetabling issues and technical problems relating to bandwidth and connectivity. Lack of staff training is a barrier, linked to lack of confidence and fear of the technology. The costs of video-conferencing are another disincentive – the equipment, the calls, set up costs, etc. Teacher time is also a problem and the fact that staff lack vision and original ideas about the potential of video-conferencing. Exam pressures mean that some teachers do not want to do anything that may distract students from this priority. There may also be a lack of on-site technical support and a lack of information about what is available through video-conferencing, as well as a lack of suitable spaces in which to work. Video-conferencing does not have the same status as, for example, sporting fixtures, so teachers who wish to use it are not supported. Some schools may have bought the equipment as part of a PR exercise to impress governors and/or potential students but they are not then committed to using it.

3.3.4 *Vision for future development*

The ICT advisers, etc, consulted would like to have access to experts and remote activities extended, to include international liaison. They would like teachers to share their expertise and experience to help build confidence and familiarity. They would like video-conferencing to be embedded into the curriculum. They would also like providers to be more innovative and to use it in tandem with the internet. They think video-conferencing could be used more to inform students in transition of course opportunities and to support 14-19 diplomas. It could also be better used to support ESL and MFL students and there should be more inter-school discussion. Video-conferencing should be part of teachers' standard training as well as CPD. They would like to see a greater range of subjects offered through shared delivery using video-conferencing.

3.3.5 *Awareness of video conferencing providers*

Only one ICT adviser consulted mentioned the Museum of London. The organisation most mentioned was the National Archives, followed by the Natural History Museum, the National Maritime Museum and the National Portrait Gallery. Several also mentioned the National Space Centre. The Natural History Museum was particularly praised for its good use of auxiliary equipment, different camera angles and use of a secondary moveable camera.

3.3.6 *How to promote video-conferencing to secondary schools*

Advisers felt that the best way to promote video-conferencing was through JVCS or JANET Collaborate. They also suggested holding seminars and events which included taster video-conferencing sessions and demonstrations. It is also important to ensure that video-conferencing has a high profile on the Museum website and in the newsletter sent out to schools. Direct mail shots are also worthwhile, either by e-mail or post. Global Leap should also be used, as well as ICT advisers and consultants, subject advisers and local authority websites. Regional broadband consortia can be useful, as well as BETT. One adviser suggested developing case studies based on successful projects and another suggested using teachers' TV.

3.3.7 *Ideal format of video-conferencing sessions for secondary schools*

There was no clear agreement reached between those consulted. In terms of timing they suggested sessions ranging from 20 to 45 minutes, ideally with preparation having been done in advance. They suggested that the Museum be as flexible as possible regarding the timing of bookings and consider different ways of delivering, eg. multiple inputs throughout a half day/day interspersed with activities.

In terms of subjects there is a need to offer more for Geography, English, PSE and vocational subjects. It was felt that drama was an effective medium, and that it was essential to maximise the potential of the technology available. Obviously the video-conferencing sessions need to tie in well to the curriculum and programmes of study and include extension activities. They should also encourage team skills and problem solving. Regarding age groups, there is a lack of provision for post 16. They suggested a short introduction, with lots of visual resources, followed by opportunities for questions. The sessions need to be lively, interactive and interesting with tasks for the students to complete. Access to experts, eg. scientists, archaeologists, is something to push, especially with secondary schools.

3.4 Feedback from museums and other organisations

Eleven organisations were successfully contacted (three by e-mail and eight by telephone). They had been using video-conferencing for anything between six months and seven years. One museum no longer offered it as they felt some schools were using it as a way of avoiding trips to the museum and they considered the time incurred to be uneconomic. Another was currently cutting back and focusing on onsite programmes due to staff shortages. Eight of the eleven offered video-conferencing to secondary schools, but in several cases the take up was limited. One service offers it only to secondary schools as they are unable to accommodate their larger numbers on site. The three who do not currently offer video-conferencing to secondary schools all have plans to extend their service and two are currently piloting sessions with secondary schools.

3.4.1 *Charging for video-conferencing*

Most services do not charge and several receive external funding to support the programme. Of the three which do charge the prices vary greatly from £30 a session

to £150-£250. Several museums expect the school to pay for the cost of the connecting call.

3.4.2 Stand alone sessions, pre-visit or post-visit

All the video-conferencing sessions offered are stand alone and most do not expect schools to be able to visit as they are often some distance away. They see it as a form of outreach. However, they find that some local schools do visit. Others hope that schools who have visited (or had a video conference) may use video-conferencing as a way of presenting their follow-up work.

3.4.3 Format of session

The video-conferencing sessions offered vary in length from 30 to 90 minutes. Most are 40-45 minutes long. In some cases the video conference is part of a longer unit of work. Several use characters in costume and most use objects, artworks or images as part of the session. Most include an interactive element, either discussion or an actual activity or task, sometimes role play based. Pupils are encouraged to prepare some questions in advance but have not always done so, even though the sessions are more successful when they have. The museums no longer rely on them having done any preparatory work. Most organisations provide support material for teachers on their websites.

3.4.4 Marketing

The organisations advertise their video-conferencing sessions as part of their general publicity, through their websites and in brochures sent out to schools. Other ways include through local teachers' group meetings, the ICT adviser, regional grids for learning, City Learning Centres and promotional shows. Several of them use Global Leap and two mentioned JANET Collaborate, though the feeling is that not enough schools and museums are using this to enable it to work effectively. Another two mentioned CLEO (based in the North West). They all hope for word of mouth publicity from satisfied users.

3.4.5 Take-up by secondary schools

Only one organisation said that secondary school take-up was good, for the History sessions they offer. The others who currently offer video conferencing to secondary

schools feel that take-up is patchy. Two museums are not worried by this as the primary school take-up is so good. The subjects covered vary, depending on the nature of the collections, and include History, Science, Art, Technology, Leisure & Tourism and Citizenship. One session also links to Mathematics and Geography.

Most of those consulted had not yet considered offering video conferencing tailored to the needs of SEN groups or pupils with specific disabilities, although the Natural History Museum and the Natural Portrait Gallery have some experience of working with such groups.

3.4.6 What works well for secondary schools?

All those consulted felt that it was important to make the sessions as interactive as possible and get the students involved: including question and answer sessions, live research and setting tasks, as well as providing access to real objects. Several found that characters in role were particularly effective. The more focused the sessions, the more effective they are. They are also better when the students have done some preparatory work. Some mentioned using video conferencing to follow up a video conferencing session a week or so later – for students to present their work or ask further questions.

3.4.7 Booking

Two organisations offer sessions on demand, but most offer specific timeslots, often because booking is done by external organisations such as Global Leap. One pointed out that there is the opportunity to offer video conferencing sessions before or after school visits to the site – particularly useful for museums with the video conferencing equipment in the teaching room. The more flexible museums can be the better.

3.4.8 Barriers to secondary schools using video-conferencing

The two main barriers identified related to timetabling (the lack of flexibility in secondary schools) and the location of the video conferencing equipment. Half of those consulted mentioned these issues. In secondary schools especially, the equipment is often in a room which has to be booked, or in a department which does not encourage others to have access. Two people mentioned the problem of the

equipment being based in the IT suite which is not ideal for video-conferencing if students are sitting behind PCs. Other barriers mentioned included lack of confidence and experience of the relevant teachers and the fact that secondary school teachers may not have time to learn about video conferencing. There are also technical issues relating to the quality of the equipment and connecting.

3.4.9 Benefits for secondary schools using video-conferencing

Half of those consulted mentioned that it saved the hassle of organising and managing a visit, pointing out that secondary school year groups were often very large and that teachers might be concerned about appropriate student behaviour on a visit.

Several people mentioned having access to experts and to museums which would otherwise be too distant to visit or are unable to host large groups. This is particularly useful for organisations with a national remit (most of the sample).

Having access to real objects was also mentioned and the National Portrait Gallery pointed out that secondary school teachers were usually more confident in the subject matter and keen on the real thing.

Four people mentioned that video conferencing could be cross-curricular and touch on other subject areas and develop key skills such as speaking and listening. IT skills were also cited as a benefit – with an opportunity for students to learn them through video-conferencing, as well being as a motivator for this age group. Tullie House suggested that the students could operate the equipment.

Two people also mentioned the benefit of video conferencing having novelty value for students.

Secondary schools were considered to be more likely to have IT support for teachers who lacked confidence in using the equipment, however, Tullie House thought that secondary school teachers were likely to be more confident with technology.

Finally, the fact that video conferencing could be in short timeslots means that it could fit into the lesson period (which a visit cannot).

4.0 Conclusions and recommendations

4.1 Conclusions

We will consider each of the three aims in turn:

4.1.1 evaluate the impact of video conferencing with the museum on pupils, using Generic Learning Outcomes as appropriate. We are particularly interested in the pros and cons of video conferencing compared to face to face sessions (eg object handling, storytelling or drama sessions) in the museum or in school

Learning Impacts

- Teachers and pupils provided evidence of improvements in knowledge and understanding; skills; changes in attitude; enjoyment, inspiration and creativity. Those based closer to London intend to visit the Museum with cost and distance being the main disincentives for others. *(For further evidence of learning impacts, please see Appendix H)*

Video Conferencing versus the museum or visits by museum staff

In favour of VC

- Most pupils would prefer having a costumed actor in the classroom but a few said they preferred video-conferencing.
- Video conferencing allows access to experts and to resources which may not be available on a visit.
- Many schools are located too far away to make a visit viable.
- There are fewer health and safety concerns with a video-conferencing session.
- Video-conferencing saves time and money.
- Video conferencing is a novelty and the use of the technology motivates pupils in itself.

In favour of visits

- The learning experience of visiting the museum is considered more beneficial by both teachers and pupils because of the direct access it provides to the real thing.

Objects – borrowing and handling

- Most of the teachers consulted said they would be keen to borrow real objects to complement the video-conferencing session, but they were concerned about how this could be arranged over large distances. It is more practical to borrow from their local museum.
- They are interested in seeing objects being handled or demonstrated as part of a video-conferencing session.

4.1.2 *identify the strengths and weaknesses of the programme, through consultation with users and potential users, in terms of range of sessions, marketing, booking, pre-conference support, quality of delivery, technical aspects etc.*

Strengths

- The teachers interviewed were very happy with the sessions they had booked in terms of content, format and level.
- They found the pack useful although not all groups had undertaken recommended preparatory activities, sometimes because the ground had already been covered in different ways.
- The teachers interviewed were positive about using other MoL video conferencing sessions in the future.

Weaknesses: Booking, communication and technology

- All the sessions had experienced some communication problems when booking through Global leap and one teacher didn't know whether it was possible to book directly with the Museum.
- All the sessions experienced some technical problems, including connecting, sound and picture quality – some images used were impossible to see. Pupils also found the time delay difficult to manage when responding or asking questions.

The pupil screen

- None considered the small class screen to be a problem and often it was turned off anyway.

Session length

- The optimum length for a video conferencing session is about 30 minutes but it depends on the content, format and age group. In some cases additional time could be allowed for questions.

The Teacher's Role

Based on the four observations carried out as part of this research we observed that

- Primary teachers took a facilitating role rather than a leading role but remained clearly in control of their class and this worked well.
- The secondary school teachers appeared to have a greater expectation that the actor and the pupils would interact without their intervention.

Teachers' comments on booking and sessions available

- Teachers are positive about the range of sessions on offer, but there were requests for sessions covering different subject areas and age groups. They particularly like costumed characters.
- The more flexible the Museum can be in terms of booking the better, however offering a choice of sessions on advertised dates would be useful.
- Some teachers based in London and the South East would be interested in a package which included video-conferencing and a visit. For those based further afield this would not be practical.
- Marketing approaches which work for teachers and other museums include: direct mail shots, Museum website, Global Leap, JANET Collaborate, using ICT consultants/LA advisers, regional grids for learning, seminars and events, teachers' group meetings and BECTA.
- A smaller group size is not an option – it has to be a whole class.

4.1.3 *consult secondary schools, both users and non-users, to identify why take-up is low and how the programme could be developed to improve this. We would also*

like the consultant(s) to consult other museums to find out to what extent their video conferencing programmes are being used by secondary schools and to identify the strategies they are using to engage them.

Reasons for not taking up VC sessions

- Reasons for not video-conferencing are teachers' lack of knowledge, experience or confidence as well as lack of time to learn. Limited access to the equipment is another problem as well as timetabling problems and technical challenges.
- The majority of schools have access to video conferencing equipment, but not all make use of it. However, this is on the increase.
- Other museums and related organisations also struggle to attract secondary schools to use video conferencing, with rare exceptions. Some have given up altogether and others have decided to focus on the primary schools market.

Ways forward

- ICT advisers think museums should be more innovative in their approach to using video-conferencing so that they offer added value.
- Teachers who use video-conferencing successfully should be encouraged to share their positive experiences with others.
- Most services do not charge for video conferencing but expect the school to pay for the cost of the call. Where video conferencing is supported by external funding this should be made clear in publicity material.
- Most video conferencing sessions are one-offs which stand alone, although some museums are trying to encourage follow up conferences for pupils to present their work.
- Other organisations agree that sessions need to be interactive and get the students involved, as well as making use of the collections and setting tasks for pupils. Video conference interventions could come several times during a lesson with pupils completing tasks in between.
- Subjects covered include History, Art, Science, Technology, Leisure & Tourism and Citizenship.

- Video conferencing can take a more cross-curricular approach and encourage the development of key skills such as problem-solving, teamwork, speaking and listening.
- There is a gap in the market for tailoring sessions to meet the needs of SEN groups or pupils with specific disabilities who may be less likely to make a visit.
- Video conferencing can be offered first thing in the morning (before the museum opens to the public) and at the end of the school day (after school groups have left).

4.2 Recommendations

4.2.1 On promoting Video conferencing

Schools still need to embed video-conferencing into the school ethos; once it is expected by school management that all teachers will use VC at regular intervals (even yearly) then it will flourish more easily. This needs modeling to other schools through INSET etc. (See notes on Netherfield Primary School, in Appendix H, where all teachers use VC). The larger numbers of participating primary school pupils will carry their familiarity with (and expectations of) VC into their secondary schools which gradually adds to this dissemination.

- Encourage teachers who have made good use of video-conferencing to share case studies through website, DVD and/or INSET sessions to build confidence and encourage others. They could talk about the learning benefits for pupils and model good preparatory and follow-up work.
- Include clips from video-conferencing sessions on the website or DVD to help to promote them.
- Send schools information about the Museum of London, including images of objects and displays. This could be in the form of a DVD which could also include other material – see below.
- Offer teacher training in video-conferencing to increase their confidence and awareness of what is available – include tasters of a variety of different sessions as well as demonstrations of how to use the equipment (this could also be on a DVD and the website).

4.2.2 On improving VC and related materials

- Make greater use of expertise from within the Museum, eg. archaeologists and other specialists, and offer to schools through video-conferencing.
- Be visionary, creative and experimental with content, format and technology.
- Suggest group discussion as a follow up activity to the video conference to consolidate learning, perhaps using objects or visual prompts.
- Write unfamiliar words up on board or screen
- Show full length view of costumed characters at some point in session
- Involve students more, eg. set tasks they have to complete and feed back in a subsequent video conferencing session or through the website.
- Develop video conferencing sessions tailored to the needs of SEN groups and pupils with specific disabilities.
- Carry out a short evaluation at the end of each VC session. This would need to be observed and recorded by a MoL staff member. A sample of schools could also be sent a large addressed envelope marked 'VC Feedback ' requesting that every pupil (and teacher) write about (or draw) something they liked and something they didn't like – to be done over the following couple of days.

Note: Sessions could be cross-curricular as long as the learning outcomes are clearly spelt out, eg a session on developing enquiry/ questioning skills could include objects from a short menu of MoL themes (eg Romans, Victorians, Science) involving pupils in a lot of looking and guessing and instructing the facilitator 'How heavy is it?' 'What is it made of? Can you measure it? This would work well with actual objects in the classroom that could be explored afterwards, along with tape measures, magnifying glasses etc. Team work, problem-solving, observational skills, thinking skills would also be covered.

Museum of London Video-conferencing Research Report

Yes
No
It depends...

If no or it depends, please explain

8. Would you like to see objects being handled at the museum as part of the session?

Yes
No
It depends...

If no or it depends, please explain

9. The Museum of London offers the following sessions: Fire of London (KS1), Mary Seacole (KS1), Roman London Alive (KS2), Victorian Costermonger (KS2), The Black Death (KS3), Countdown to Conflict (KS3), The Suffragettes (KS3/4), Votes for Women (KS5).

Would any of these be of interest to you?

Yes
No
It depends...

If no or it depends, please explain

10. Do you have any other suggestions for sessions?

11. Would you be interested in video-conferencing as part of a package which included a visit to the Museum of London/Museum in Docklands?

Yes
No
It depends...

If no or it depends, please explain

12. Would a choice of sessions (content and key stage) on advertised dates be useful?

Yes
No
It depends...

If no or it depends, please explain

13. Can you suggest where/how the museum should be advertising its video-conferencing sessions?

If you would like to find out more about what the Museum of London has to offer schools please visit www.museumoflondon.org.uk/English/Learning/

Appendix B: Teacher interview guide

A Session content

1. What did you think of the session in terms of content?
Prompt: Right level? Relevant to curriculum?
2. What did you think of the approach taken?
Prompt: variety of methods used, involving pupils, questioning, acknowledging contributions, building on prior understanding
3. Why did you choose this session?
4. What do you think the pupils got out of the session?
Prompt – GLOs
5. Pre-session support – any comments?
Did you use the pack? Y/N - explore
Was it useful? Y/N - explore
Did the pupils do any preparatory work? Y/N – explore
Did you brief pupils about interacting beforehand? Y/N – explore
6. Have you done any follow up work?

B Practical / logistical/ technical questions

7. How confident are you with the VC technology?
Explore fear / need for support
8. How did you find out about VC with the MoL?
9. How easy was it to make the booking?
10. Was the length of the session OK? Too long? Too short?
11. Were there any technical problems? Y/N
Prompt – picture/sound quality
12. Do you think it is distracting for the pupils being able to see themselves on the screen? Y/N
Did you know you could turn them off? Y/N
13. Any comments about your own role during the session?
Prompt: Were you at ease with it? Did you feel included or do you prefer to leave it to the pupils?
14. What are the main advantages and disadvantages of VC for you?
Prompt: compare face to face teaching, eg. museum staff in classroom or museum visit?

15. Do you think it would be better to have a smaller group for the VC session? Y/N
Would it be possible? Y/N - *explore*

C Looking ahead

16. Would you be interested in borrowing museum objects to use in the classroom to complement the VC session? Y/N - *explore (possible pilot project)*
17. What do you think of the range of sessions available?
The Museum of London offers the following sessions: Fire of London (KS1), Mary Seacole (KS1), Roman London Alive (KS2), Victorian Costermonger (KS2), The Black Death (KS3), Countdown to Conflict (KS3), The Suffragettes (KS3/4), Votes for Women (KS5).

Do you have any other suggestions?

18. Are you likely to use any of the other VC sessions in the future?
Y/N – *explore*
19. Are you likely to visit MoL with your group? Y/N – *explore*

Appendix C: Pupil interview guide

1. Did you enjoy the VC session? / Who enjoyed the VC session?

Explore – what did you enjoy especially?

2. Did you learn anything? / Who learned something?

Explore – what did you learn? (prompt – GLOs)

How will it help you with your coursework/ classwork/ citizenship work?

3. Did you ask or answer a question?

If not – what stopped you from joining in?

4. What didn't work so well?

5. How could the VC session be improved?

Ask re views on picture & sound quality

6. Did you see yourselves on the screen? If so, how did you feel about that?

7. How does it compare to someone coming into school? (*better/worse?*)

Explore reasons

8. How does it compare to visiting a museum? (*better/worse?*)

Explore reasons

9. What do you think is going on at the museum end?

Would you like to see/ know in advance?

10. Would you like to visit MoL?

Museum of London Video-conferencing Research Report

Appendix D

Observation guideline grid: Date

School:

VC session title/ actor

Yr gp/ KS

No of Pupils:

No of teachers/TAs

During:	Body language, levels of engagement, responsiveness to Qs, Barriers to interactivity, Reactions to actor/topic etc	Evidence of Learning/ GLOs, eg changes in attitude to topic; empathy listening skills/ K & U; enjoyment and others	Technical: Smoothness of connection Quality of sound: Cd hear All/ almost all/ > 75%/ < 75%/other Quality of images
Intro /opening			
Didactic sections Visual feedback			
Interactive sections Pupil responses including Q & A session VC facilitator delivery: acknowledging pupil contributions; questioning; building on pupils' existing knowledge; use of propos/objects; encouraging contributions/engagement.			
VC facilitator involving teachers; Teacher interventions; Teacher feedback			

Classroom setup: Class rows

Horseshoe

Other

Appendix E: ICT advisers, etc. interview guide

The Museum of London is researching how schools use video-conferencing.

1. Is VC part of your brief? Y/N – *explain*
2. How familiar are you with VC? - *details*
3. What do you think are the benefits of VC for secondary schools?
4. What do you think are the barriers to secondary schools using VC?
5. Roughly what percentage of secondary schools in your area use VC?
6. How would you like to see the use of VC in secondary schools in your area develop in the future?
7. Do you know of any museums which offer VC sessions?
8. How can museums best promote VC sessions to secondary schools?
Prompt: How do they find out what's on offer? Do they use Global Leap/JVCS/other?
9. What kind of format (ie. of sessions), subjects, timings, etc. would best suit secondary schools?
10. Any other comments

At end of project, follow up with questions to Global Leap, JVCS, etc. – eg. re flexibility re timing, questions TBC.

Appendix F: Museums/related organisations interview guide

The Museum of London is researching secondary schools' use of video-conferencing. They are happy to share their findings with any museums which assist by answering the following questions.

1. How long have you been using video-conferencing?
2. What video-conferencing sessions do you offer secondary schools?
3. Do you charge for VC sessions? Yes/No
If so, how much?
4. Are these sessions stand-alone/pre-visit or post-visit?
5. What format do you use? (*length of session? pupils do prep. work?*)
6. Do you market to secondary schools? Yes/No
If yes, how do you do this?
7. What is the take-up like?
*Prompts: KS3/4 or yrs 12 + 13 (6th form)?
subject / citizenship etc?
abilities/ disabilities and special needs?*
8. What works well for secondary schools?
Prompts: type of session, format, duration, flexibility of booking/on demand, etc.
9. What are the barriers to secondary schools using VC?
10. What are the benefits for secondary schools using VC?
11. Any other comments

Appendix G: Teacher questionnaire data

41 questionnaires were collated and used for the analysis.

Key Stages – 37 out of 41 people answered this question

13	Key Stage 1
20	Key Stage 2
14	Key Stage 3
5	Key Stage 4
7	Key Stage 5

Plus

Primary

9th Grade students (USA)

6th Form College

2 x Foundation Stage

Subject – 33 out of 41 people answered this question

9	All
3	ICT
13	History
4	Geography
2	English (incl. 1 x Lit)

Others (1 of each)

- RE
- Food Tech
- Community Groups
- Classical Civilisation
- Design & Technology
- Special Education
- Art
- MFL
- Maths
- Science
- PSHCE
- Class Teacher – Infants (all base subjects?)

School Location – 41 out of 41 people answered this question

14	London
8	South East
3	South West
1	East
4	East Midlands
3	West Midlands
2	North West

2	North East
5	Yorkshire
1	New York, USA
1	Other (unspecified)

1. Does your school have video-conferencing equipment?

41 out of 41 people answered this question.

32	Yes
5	No
4	Don't Know

Comments

- Yes - ISDN just added IP.
- Only through LGfL.
- I'm not sure.

2. Have you ever used video-conferencing?

41 out of 41 people answered this question.

32	Yes
9	No

If no, can you tell us why not?

- I do not know enough about it yet.
- Have not had the experience or technology.
- Lack of facility.
- No equipment to use this. Also haven't really considered the benefits to our pupils.
- Haven't had the opportunity yet or the reason although we intend to use it with our link school in New Zealand.
- Not sure how to or if we have the equipment.
- It seems a little scary for the technologically unadvanced! Also, I perhaps haven't been attracted by the right sort of topics / conferences available. There's also a problem at my school about ICT suites - I'm not sure whether we would need one to do video-conferencing, but if we did, that would be a major disincentive, because of the difficulties changing rooms etc.
- Because I don't know what to do.

Main barriers mentioned by teachers include lack of staff training, fear of / lack of confidence in technology, lack of information about resources/content available, staff vision and having no equipment yet.

If yes, please give details

- Video-conferences with museums. Global Leap authors, University of Cambridge and other schools.
- We access through Global Leap a variety of sources. Also some businesses and Primary Feeder schools.

- Regularly as an embedded teaching strategy.
- River watch programme - Kent and Museum of London.
- Global Leap.
- We have equipment on 'permanent' loan from our 'sister' secondary school.
- Various mainly through Global Leap. Links to schools in Russia. Business Links. Special Needs work.
- Australia - Great Barrier Reef, London - Space.
- With international link schools, local secondary school, with outside providers.
- Video conferenced world wide for educational and medical use.
- With Igfl, global leap (history, science, also with Poland)
- We've had 10 VCs over the last 3 years to museums. Trying to VC partner school in India.
- Been conferencing for approx 6 yrs - range of events.
- Museums for history / school in USA / French teaching / Maths - Camb. Uni.
- Regularly for the last 4 years to enhance the curriculum.
- We conference each week with a school in France to support our teaching of French.
- National Archives (see Teachers TV using institutions programme); National Portrait Gallery; National Maritime Museum; Motivate Maths, Museum of London, Indian School.
- We've been v-c with Global Leap for 5 years.
- To conference with an eye-witness in USA when a hurricane hit.
- Many times - conferenced with museums, other schools, Santa (!).
- Museum of London, Roman Alive, Victorian Costermonger, Global Leap, school to school etc, Fire of London.
- We used video conferencing as part of a workshop at the Tower of London.
- Links with National Portrait Gallery, Science Museum, Home Schools, Global Leap.
- We use video conferences K-12 grade. Teacher may use it to introduce, continue or end a lesson.
- Link via Balfour House N12 to Jerusalem.
- Tried to via click to meet with limited success we have to use Igfl as have no other provider.
- But only internally. External VC would require more equipment & outlay of time.
- Once only.
- We have used Global Leap to book curriculum relevant video-conf, incl. Fairtrade, HMS Belfast, Santa, Museum of London, National Portrait Gallery.
- Several sessions involving local schools.
- National Maritime Museum (various), Spanish School, Australian School, LSO, Churchill War Rooms, National Portrait Gallery, National Archives. Usually have approx 2 video-conferences per 1/2 term at least covering History, Science, Languages, Culture.
- A variety of teachers through the school have used video conferencing to enhance lessons.

Main comments from teachers relate to accessing experts, remote activities and resources (mentioned by seventeen teachers) and linking/sharing ideas with other pupils in other schools locally and internationally (mentioned by fourteen teachers).

Nine teachers mention booking conferences through Global Leap, two teachers mention the London Grid for Learning. One teacher uses VC for special needs work.

3. Have you ever video-conferenced with a museum?

41 out of 41 people answered this question.

27 Yes

14 No

If no, can you tell us why not?

- I do not know enough about it yet.
- I am not sure of how to use the equipment and think that a more kinaesthetic approach is more suited to our pupils.
- No equipment.
- We do not have the facilities.
- Have not had the experience or technology.
- Facility not well advertised.
- Always preferred to visit the museum.
- Never really occurred to us, unsure if any museum could do it. Usually would visit the museum or special event to see the item/s close up and to make an event of the trip and a focus within the course.
- Was not aware that this was a possibility.
- No time or opportunities.
- It seems a little scary for the technologically unadvanced! Also, I perhaps haven't been attracted by the right sort of topics / conferences available. There's also a problem at my school about ICT suites - I'm not sure whether we would need one to do video-conferencing, but if we did, that would be a major disincentive, because of the difficulties changing rooms etc.
- Never had the opportunity.

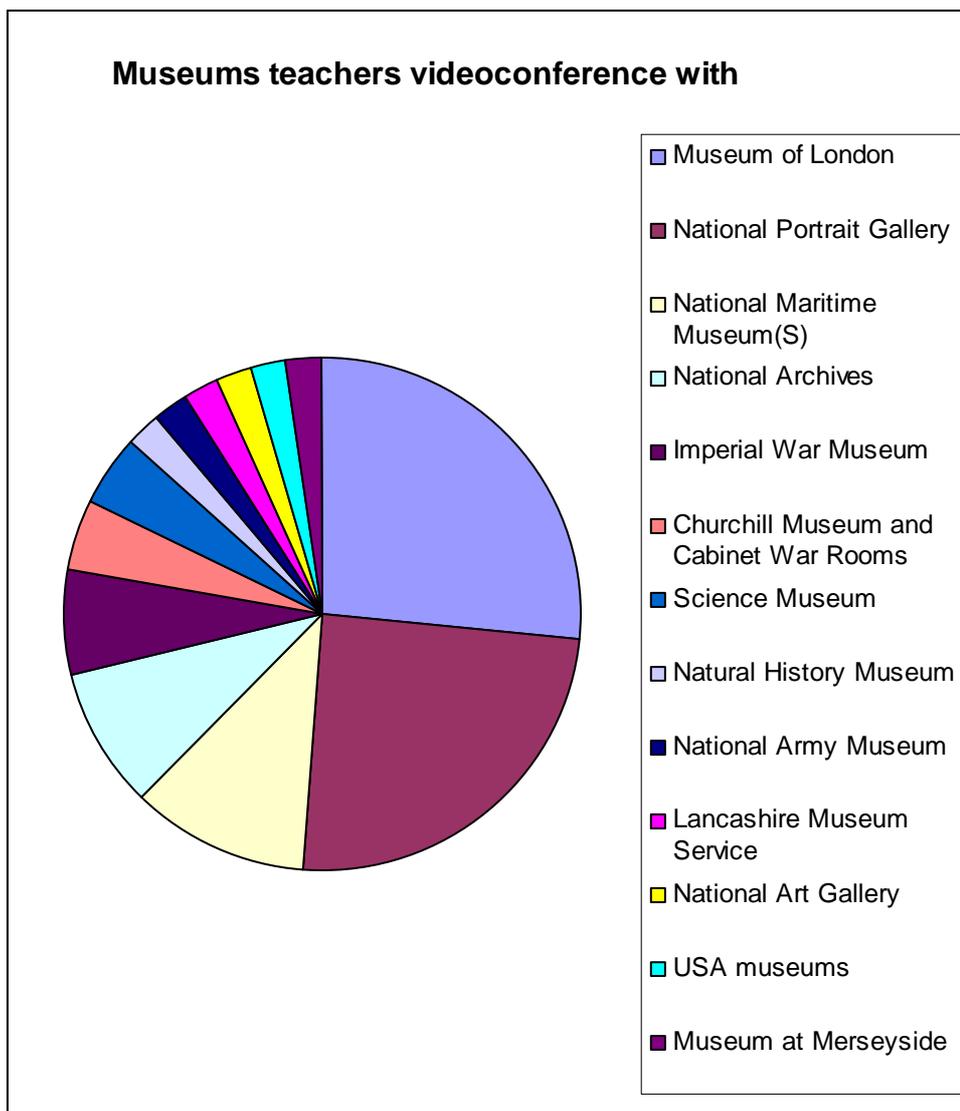
Main barriers are seen as lack of information about content/resources available (four teachers), having no equipment (three teachers), staff training (three teachers) and not having the opportunity (two teachers). One teacher said they didn't have time, one said they had a fear of the technology, one said they 'always preferred to visit the museum' and one said they 'think a more kinaesthetic approach is more suited to our pupils'.

If yes, please give details

- Museum of London, local museums within CLEO.
- Museums in London - sorry cannot remember which - certainly IWM.
- Regularly with National Portrait Gallery, National Archives, Lancashire Museum Service.
- Museum of London - Fire of London.
- Museum of London, Mary Seacole.
- We have regular VCs.
- Not for a while, but I believe we had a 1st World War soldier VC.

Museum of London Video-conferencing Research Report

- National Portrait Gallery, National Maritime Museum, Museum of London.
- National Portrait Gallery, National Army Museum, Greenwich Observatory, Museum of London.
- Natural History Museum
- Museum of London, National Portrait Gallery.
- Imperial War Museum, Exeter & Museum of London.
- Roman London Alive, National Portrait Gallery.
- National Portrait Gallery, Maritime Museum.
- National Art Gallery, London. NASA - as part of a space project.
- National Portrait Gallery; National Maritime Museum; Museum of London.
- National Archives, IWM, National Portrait Gallery.
- Science Museum / Maritime Museum / Museum of London / Portrait Gallery.
- Museum of London, Roman Alive, Victorian Costermonger, Global Leap, school to school etc, Fire of London.
- The workshop involved conferencing with the National Archives.
- Sessions with Science Museum, National Portrait Gallery.
- We video conference with several museums throughout the USA. We also visit museums in Liverpool, England - the Museum at Merseyside.
- Churchill Museum.
- Across the school linked to thematic curriculum as above.
- Museum of London - Fire of London session.
- National Maritime Museum (various), Spanish School, Australian School, LSO, Churchill War Rooms, National Portrait, National Archives. Usually have approx 2 video-conferences per half term at least covering History, Science, Languages, Culture.
- Yes, Museum of London for the Great Fire (Y2). Roman slavery (Y3).



4. What do you think are the benefits of video-conferencing?

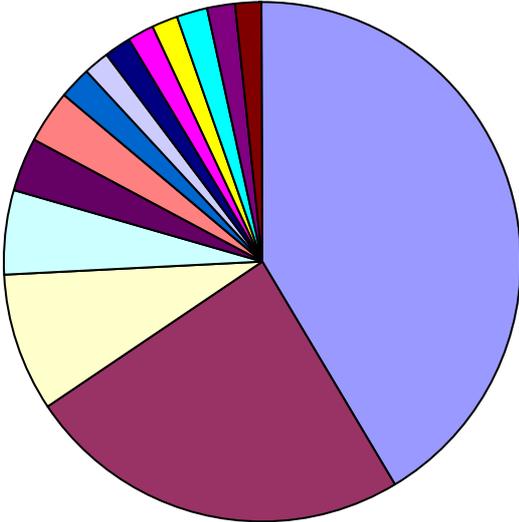
41 out of 41 people answered this question.

- Focus, interaction, access to experts / knowledge base.
- Accessibility without travel / risk issues. Also minimises timetable disruption. Maximises experience.
- It brings experts into the classrooms of our remote rural school.
- New experiences.
- Opportunities for schools not close enough to museums to visit.
- They give children direct access to experts in different fields.
- Staff and students can have experiences that they would not otherwise be able to access.
- Children can ask questions to an expert in the topic. Interesting locations.
- Motivating; provides expert tuition, saves travelling.
- Ease of use, access to specialists, brings curriculum.
- First hand experience, able to ask questions.
- Expertise! No travel required!
- Children accessing artefacts, experts and people they couldn't normally.

- Enhance learning - as interactive. Can't always manage a visit as very expensive and we are a small school.
- Bringing an expert into the classroom.
- Allows children to access museums etc that would be too far away to visit. With French it allows the children to practise speaking and listening to native speakers.
- Access to professionals in their field; use of resources generally unavailable, avoidance of expensive coach travel.
- Experts into school with minimal cost.
- Great if used appropriately. Should take students to places they cannot get to.
- Exciting, gives children an opportunity to access expertise.
- Getting an expert into the classroom.
- Not sure.
- It is a very interactive way to research areas of the curriculum and gain access to information.
- Creates opportunity for a school like ours to 'visit' places we couldn't normally get to and extends and enriches the curriculum.
- Our teachers find many benefits to video conferences. Teachers use this tool to enhance the lessons and course of study. Special education teachers find it is a great learning tool.
- Do not have to get the pupils to London. No transport issues.
- Sharing experiences that would otherwise be more difficult to carry out face to face.
- We are currently looking at providing virtual environment for students and video conferencing would be key part. To promote inclusion and increase opportunities for vulnerable young people.
- Expertise / Direct communication with outside agencies & authorities / Promotion & application of IT within History / Novelty.
- Interaction with other learning environments.
- Meetings can be held at a distance.
- Interactive, asking experts, seeing the wider world in action.
- Adds a new dimension to the work and allows access to information or people who would may not be able to meet normally. Could help with continuity and be more structured in a course; would also help with removing the cost of trips and ensure all students have access to this information.
- Catering for individual needs and learning.
- There might be some, but really I think it's pie in the sky to expect teachers who are harassed to death with lesson planning, marking and discipline, and trying to get students through major exams in periods of preparation time that are too short, to be trying to fiddle around with technological gadgets that take a lot of time and which aren't going to teach them anything directly relevant to passing their AS/A2 syllabus requirements. We just don't have time during the already overcrowded academic year!
- Exposing students to a wider context of learning experiences, venues and styles, as well as showing them, and allowing them to appreciate, a wider range of sources of evidence and artefacts. All this, without the hassle of actually taking them out!

- Not quite sure - good if you are far away.
- Bringing experts into the classroom, exciting medium, eliminates cost of travel, quicker.
- Being able to interact with a variety of providers.
- Allow children greater access to resources both human and objects / documents. Develops speaking and listening skills. Introduces children to places they have not been to. Gives children the opportunity to be taught by an expert in that area and the chance to ask questions of someone with more knowledge on that subject.
- It opens up a wide range of resources etc that children would not experience without going on a trip which is financially and physically difficult.

Benefits of VC



- Access experts, remote activities/resources
- Fewer Health and Safety, organisation worries compared to a school trip
- Interaction
- New experiences
- Exciting
- Extends and enriches the curriculum
- Direct contact with native speakers in MFL
- General communication enhancements
- Develops speaking and listening skills
- Focus
- Motivating
- Ease of use
- To promote inclusion and increase opportunities for vulnerable young people
- Catering for individual needs and learning

5. How long would you like a video-conferencing session to last?

40 people out of 41 answered this question (some people ticked more than one box)

8	10-15 mins
22	20-30 mins
19	30-60 mins
0	1hr+

Comments

- Depends upon depth of topic (this person didn't tick a session time).
- That all depends on the age group / topic in the VC.
- Depends on Key Stage, KS1 - 20 to 30 mins. KS2 - 30 to 45 mins.
- Depends on the focus - 20-30 for French schools, 30 - 60 for museums.
- 20-30 for younger children, 60+ for some eg. motivate where tasks are set.
- Depends on age of children! FS/KS1 - 15 to 30 mins. KS2 - 30 to 45 mins.

6. How do you think video-conferencing compares to face to face museum learning?

41 out of 41 people answered this question.

- Good but a different experience. Many museums are too far away for us to visit.
- In some ways not as good in other ways better - short focussed session.
- It will never surpass the real thing but it is an excellent cost effective alternative.
- Would prefer hands on.
- Not as good, but we are obviously not able to visit!
- Not as good as visiting a museum, but that is not often possible.
- Easier to arrange.
- Face to face contact with artefacts / locations have much more impact on child - retains info.
- Different experience. Visit to museum is preferable but not always. Possible due to time / cost etc.
- For children in a special school VC is much easier.
- On a par with face to face learning.
- An alternative without the travel - not a replacement.
- Face to face much better but not always possible.
- Not as good as the real thing but still much better than just books / internet.
- The first hand experience will always be better.
- A good second best, if a visit is not possible.
- Similar but avoids transport expense.
- Prefer face to face but that is costly and takes time to organise.
- Experiential learning is better but costly - not everyone has time nor money to get there.

- Quick, non intrusive. Too expensive to travel to London. Risk assessment issue too.
- Not replace face to face visits but cheaper and no risk assessments!!
- Could supplement face to face.
- Usually a visit to the museum is preferable to video conferencing where possible.
- A different experience. Not as 'hands on' but very worthwhile if done with proper planning.
- Face to face museums learning is wonderful, however we are not located near major museums so video conferencing allows our students to see great museums.
- Would always go for the hands on approach as it is more memorable.
- Not as personal but much more time efficient.
- It adds another dimension and increases opportunities for young people who otherwise would not engage, eg. those with medical needs, extreme anti social behaviours and for individual students to join a conference.
- Favourably, for although visits have their merits & should never be phased out, VC allows for more frequent contact. It also provides students with opportunities to integrate IT into their learning.
- Element of fun involved but also you can establish wider links.
- Well, but I would need to try it first.
- Not as useful for our visual and kinaesthetic learners.
- Not sure, I would prefer to see the items up close and experience the piece of history.
- It might be possible to get more specific answers to questions and save time.
- Not as good - students pay much more attention to a real person talking to them, or to looking at real objects.
- Can't really comment, because although I have been involved in both museum visits and staff coming into school, I haven't done video conferencing. It must be said that, for many students, the actual getting out of school, going on the tube, seeing another place etc, is really important, but I would guess that more actual learning goes on with other forms of museum contact.
- Not the same at all.
- Nearly as good - esp. as most visits / exp couldn't happen through any other way as it is too far.
- Of more use to rural schools perhaps.
- It can never replace face-to-face or 'hands-on' but considering how much it would cost us to travel to some of the places we have video-conferenced with they are opportunities we would otherwise not get.
- Obviously a visit is great for hands on but video conferencing allows access to a wider range and field of experience.

Almost half of the teachers said that face to face museum learning is (usually) better. However some felt that a VC session was a different / unique experience. Many gave less cost, less organising, less travel and far fewer Health and Safety worries as reasons why they would opt for a VC session. Four teachers felt that VC sessions were on a par with face to face museum learning. One teacher said that a VC session could 'supplement face to face'. Another said 'VC allows for more frequent contact. It also provides students with opportunities to integrate IT into

their learning'. Others felt that with VC you can 'establish wider links', 'access... a wider range and field of experience'. One said that VC 'adds another dimension'.

7. Would you be interested in borrowing real objects for the classroom to complement the video-conferencing session?

41 out of 41 people answered this question.

36 Yes
4 It depends

If no or it depends, please explain.

- What would it involve would need to ask technician advice etc but in theory keen.
- Only if we had time. I honestly don't think you're going to get much take up for this except in a) Junior schools. B) Possibly in colleges with high academic intake where the students might be motivated to attend extra sessions for such events.
- How difficult it would be to organise, costs and insurance.
- If collecting or returning objects became problematic or expensive we would not do it. We already have a free resource borrowing service.

Comments from people who said 'yes'.

- Distance.
- Cost, how to get them into school.
- Have done this with other outlets.

8. Would you like to see objects being handled at the museum as part of the session?

41 out of 41 people answered this question.

38 Yes
0 No
3 It depends

If no or it depends, please explain.

- Sometimes this can become too 'lecture' type conference. The best conferences involve people dressed in appropriate costume and showing how characters lived.
- Usually but often being part of a teaching session would be worthwhile for pupils who have little opportunity to engage with groups.
- Not sure how engaged students would be.

9. The Museum of London offers the following sessions... Would any of these be of interest to you?

41 out of 41 people answered this question.

36 Yes
2 No

3 It depends

Comments

- Fire of London (KS1), Victorian Costermonger (KS2) in particular.
- Countdown to Conflict (KS3), The Suffragettes (KS3/4).
- All of them.
- Roman London Alive (KS2).

If no or it depends, please explain

- As it does not tie in with my Geography curriculum. Loved the growth of London as settlement materials.
- Need to be focused on D&T and the Roman London element would be interesting.
- In principle, any of these could be of interest, but few of them seem to be geared to A Level and unless they are directly related to our syllabuses we are unlikely to be able to make use of them. Sorry!

10. Do you have any other suggestions for sessions?

22 out of 41 people answered this question.

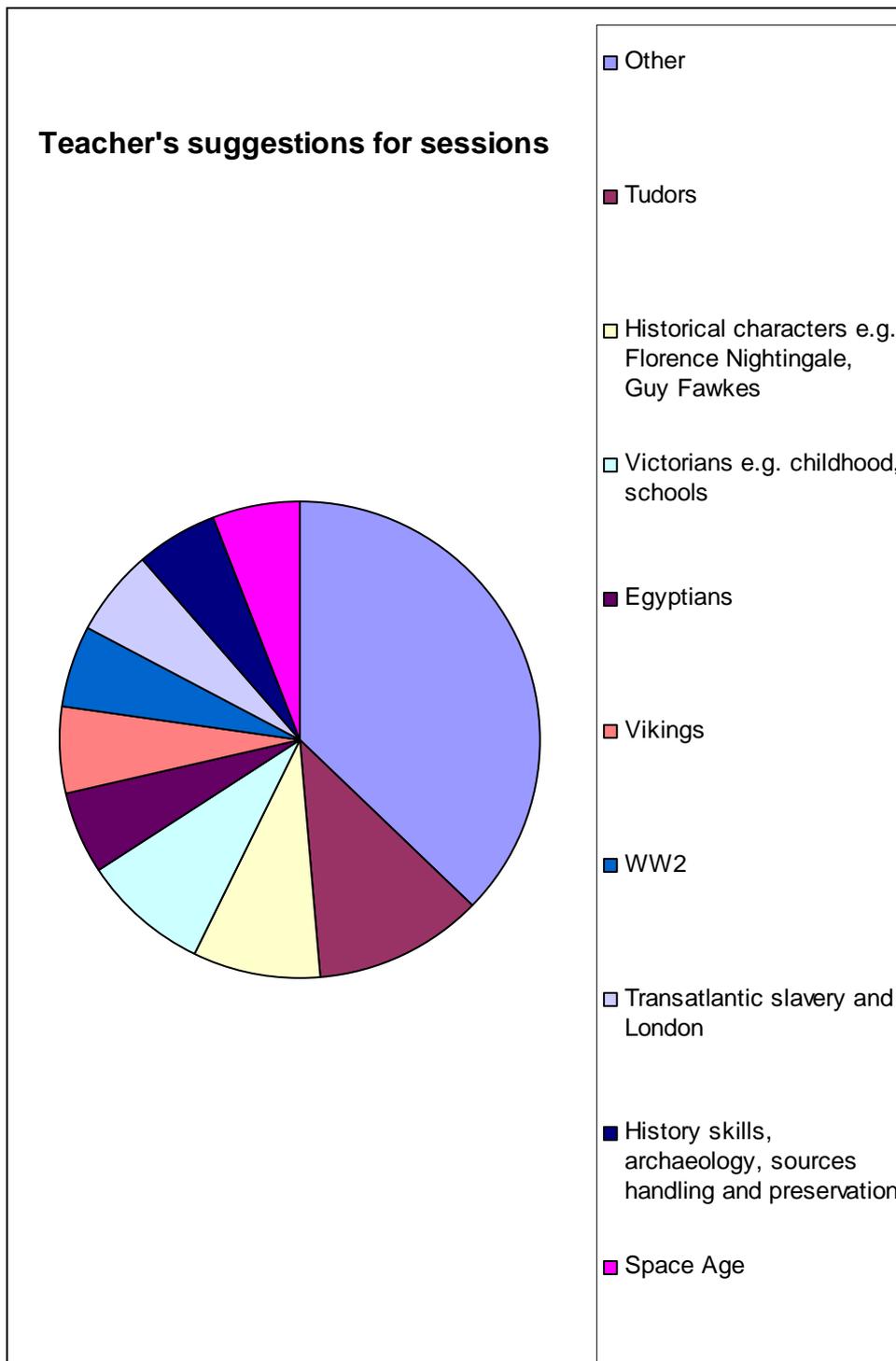
- Tudors and Story for KS1.
- It would be useful if you regularly canvassed for sessions schools would like; suggest all History Dept. in May; they can then review following year's curriculum, ask for complementary VC sessions.
- Not knowing your museum / expertise that is impossible to answer.
- Characters, eg. pirate, astronaut, explorer, Florence Nightingale, Guy Fawkes / other famous historical characters.
- Perhaps more about the Victorians.
- It is great when the speaker appears in role / costume. Also sessions are better when they are interactive.
- Victorian childhood / schools.
- Other history topics - Egyptians, Celts, Saxons, Vikings, WWII for KS2, Tudors.
- Viking times.
- All historical - anything contemporary or future would be great.
- We need Ancient Egyptians / Space Age / Florence Nightingale.
- More special needs focus.
- London, Sugar and Slavery.
- Wartime London.
- Crime and punishment in London at any period GCSE but also KS3.
- We offer a unit on extremism & unrest, 1815-1939. Could the museum provide papers, film & artefacts on, for example, Assassination attempts on Victoria; Cato Street Conspiracy; Bloody Sunday; Dockers' & Matchgirls' Strikes; General Strike; Cable Street.
- The skills of history, archaeology, sources handling, preservation etc.
- Looking at artefacts from the past, how they were made and how they work. Presentation on a specific element of life from the past, putting design into context. Discussion about urban design and the growth of London with an

expert. Seeing a specific element of the museum and the types of lives people had in that time.

- We're planning to do a history of migration to London, as part of our new KS3 curriculum in September. I don't know if this would be duplication of resources already out there (haven't really got that far yet!), but this would be great.

Also, is there any way of doing anything about transatlantic slavery?

- Might be good to link up to experts who could answer questions.
- Toys from the past, washing a long time ago, Greeks, Tudors.
- The Tudor period, Victorian childhood.



'Other' includes (one vote each):

- Celts
- Saxons
- SEN focus
- Crime and punishment in London (GCSE and KS3)
- Extremism and unrest 1815-1939: *'we offer a unit on extremism & unrest, 1815-1939. Could the museum provide papers, film & artefacts*

on, for example, Assassination attempts on Victoria; Cato Street Conspiracy; Bloody Sunday; Dockers' & Matchgirls' Strikes; General Strike; Cable Street'

- Design e.g. urban design and growth of London
- Focus on specific element of museum and people's lives
- History of migration to London (KS3)
- Toys from the past
- Washing a long time ago
- Greeks
- Story for KS1
- Better when interactive

11. Would you be interested in video-conferencing as part of a package which included a visit to the Museum of London/Museum in Docklands?

40 out of 41 people answered this question.

15 Yes
13 No
12 It depends

If no or it depends, please explain.

- We're too far from London.
- Only because visiting London is not an option for us.
- Distance.
- On whether a trip was possible.
- It depends on individual staff and cost of trip.
- Too far to travel.
- Not practical due to our location.
- Price of course!!
- Travelling to London is expensive and an extremely long journey.
- Travel costs make it prohibitive.
- Too far to travel from Devon for a day.
- Our Y 6 do a residential visit to London -timing would therefore be important.
- Cost?
- Too expensive.
- Too far and costly.
- If it were feasible.
- Possibly but many of our pupils cannot access the museums and this makes video conferencing very attractive.
- I doubt it.
- It depends what is offered, and how far it fits with our own plans / needs.
- Depends on cost of travel, time etc.
- It would depend on the cost and amount of work entailed to bring 70 children down to London. If just for a visit to the Museum it may not be feasible. We would need to think it through more carefully.
- Too far.

Barriers are distance from London and overall cost of the trip.

12. Would a choice of sessions on advertised dates be useful?

40 out of 41 people answered this question.

35	Yes
1	No
4	It depends

If no or it depends, please explain.

- It would be better to fit a scheme of work around school dates.
- In KS 4/5 trips need to be planned and fit into the work at that time so flexibility important. Also continuity would be essential as the event would need to be repeated every year for each new group.
- This might perhaps work better.
- Sometimes, having specific dates just completely puts you off, as there are often school constraints placed on when we can go out etc, and if these clash, I tend to just forget the whole idea. I don't really know about how you organise this sort of stuff, so don't know whether or not it is feasible to just say to schools "ring up and book us" - as museums etc do for school trips.

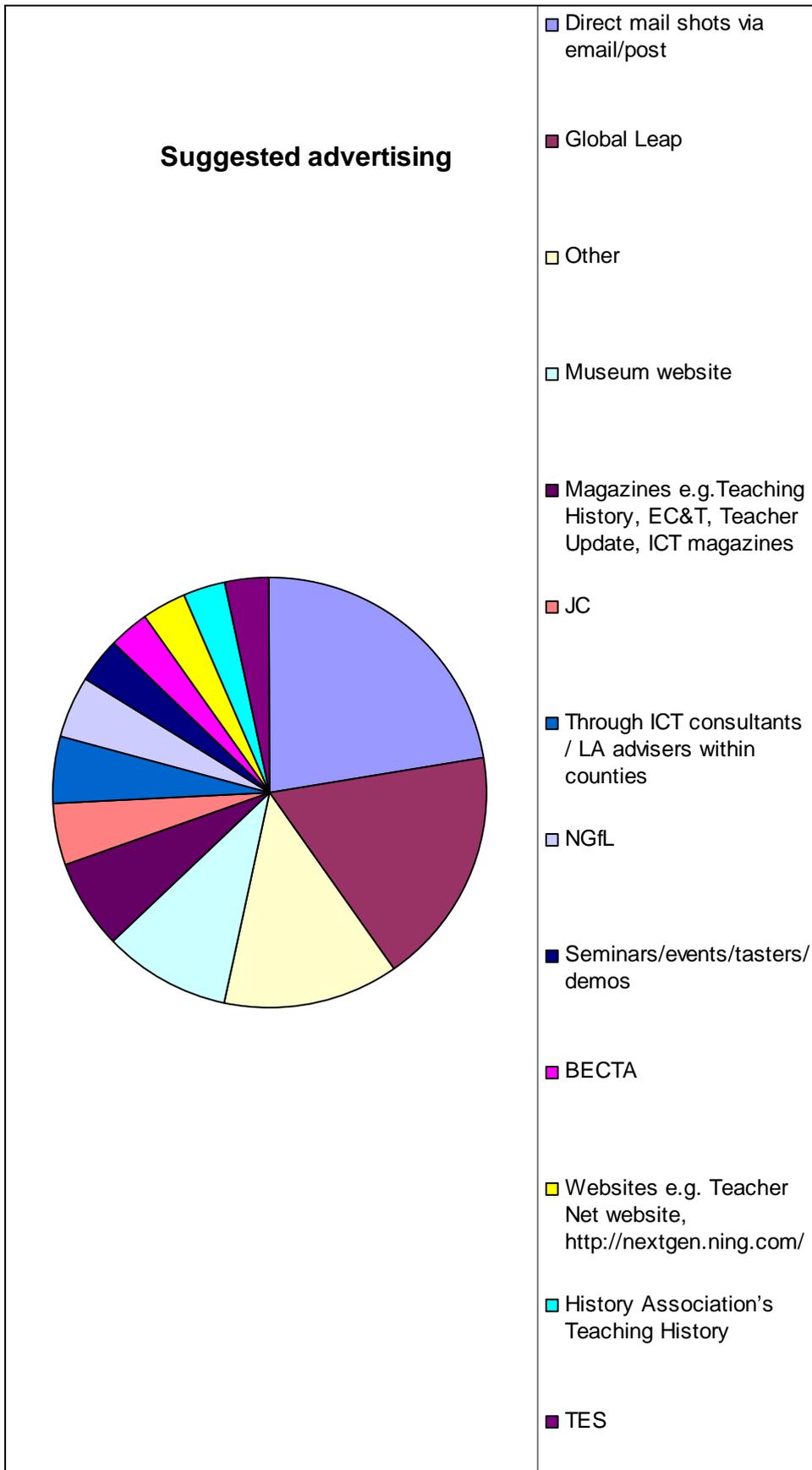
13. Can you suggest where/how the museum should be advertising its video-conferencing sessions?

36 out of 41 people answered this question.

- Probably through CLEO who would send the information throughout Cumbria & Lancashire.
- Global Leap - Direct to Heads of History - Head of Specialism! Perhaps through NESTA or BECTA taking the technology angle!
- We need to be looking at some central point to which people refer. We used to have Global Leap, now JANET Collaborate is developing, but neither completely fulfil this role.
- NGFL website.
- With Global Leap.
- Email to me a regular list, which I can forward to all staff.
- Global Leap.
- Global-Leap.com
- Flyers sent to schools.
- Janet / Global Leap / Kent ngfl website.
- Global Leap (mike@global-leap.com).
- E-mail schools with age appropriate sessions that are available, or list with the video conference catalogues.
- On its own website or via SEGFL.
- Global Leap / Teaching History Magazine.
- E-mail to teachers / schools / representatives calling schools who organise trips there.
- JANET / Local ICT Teams (County) / Fliers to ICT Subject Ldrs.
- Global Leap, EC&T magazines.

Museum of London Video-conferencing Research Report

- With other details of Educational sessions, and through educational press.
- [http: // nextgen.ning.com/](http://nextgen.ning.com/)
- In New State we use several sites to find video conferences Center for interactive Learning and collaboration and Video conferencing catalog from Nassau BOCES.
- Teacher net - web site. Teacher Update magazine.
- As part of annual package of literature sent out to schools.
- Open evening and trial sessions for teachers that are informed through your web page and BECTA.
- Email; HA's Teaching History; TES.
- Leaflets through the post.
- On the museum website and in periodic mails.
- On the internet with live examples. Maybe video conferencing could happen between museums within the Museum of London?
- On the website and emailed to schools. Need to develop target staff in schools or regional areas who could disseminate the information. Use teacher association such as Design & Technology Association to advertise it.
- Email.
- Junior schools and posh independent schools or colleges with high academic intake; or just schools in London who might be able to turn up for events at the museum.
- Teaching History, ITEs, websites. Paper circulars often just get chucked in the recycling bin, and not even read!
- All the usual spots - TES, website - people who are interested and who it's relevant to will know where to look. Oh and of course, a mail out.
- BETT, ICT magazines, eg. E-learning - through LAs.
- Most schools don't have kit. Promoting it through CLCs may be better.
- Global Leap (which I believe you already do). Relevant people in local authorities, schools.
- Global Leap.



'Other' includes (one vote each):

Museum of London Video-conferencing Research Report

- BETT
- CLCs (City Learning Centres?)
- Design and Technology Association
- Educational press
- NESTA
- Regional Broadband consortia
- Subject advisers /heads of departments
- Video conferencing catalogue from Nassau BOCES www.nassauboces.org
(USA)

Appendix H: Report on video-conferencing sessions

Contents:

One Year 5 class – Costermonger session

1. Teacher interview
2. Focus group with pupils
3. Classroom observation grid

One Year 3/4 class – Roman Maidservant session

4. Teacher interview
5. Focus group with pupils
6. Classroom observation grid

One Year 11 group of 25 – Suffragette session

7. Telephone interview with teacher
8. Observation notes - *MoL 28 Jan 08 (prior to formulation of observation grid)*

One Year 7 or 8 group – Suffragette session

9. Observation notes - *MoL 28 Jan 08 (prior to formulation of observation grid)*

10. Reflections and conclusions

Note: Quotes are bullet-marked throughout.

1. Year 5 class – Costermonger session

Southborough Primary School

Wednesday 26th March

Class teacher: Simon Paine, who has done VC sessions with MoL before. Some of his comments were collected before the session and some by telephone afterwards. Additional comments from the VC Coordinator (Mandy Fathers) in Part B.

Year 5: 32 participating and another 30+ pupils observing as they had not been able to obtain two bookings.

A Session content

Note that the session was satisfactorily evaluated by an Ofsted inspector (oral feedback to the teacher).

1. What did you think of the session in terms of content?

- ‘Yes it was the right level and relevant to the curriculum. I took notes and learned stacks. We do the Victorians for a whole term’ so the VC had included both reinforcements of details covered and new material.
- ‘The children remembered the shouting most’ (*being costermongers crying their wares in 3 competing groups. The teacher felt that this could have been done in class without it taking up so much time*).
- ‘The children got really excited about it and it took time to calm them down again’.

There was good information on how the costermonger spent his day (the children had been impressed by how early he had to get up); the children were interested in the costerboys and also in the use of a donkey (the teacher had not thought of this before);

- And the **real** poverty – it helped the children get more of a feel for this, which they hadn't realised before. Also the mobility – they talked about moving on or being moved on by the police. And the pub and drinking which needs a light touch for this age group. And all the jobs the costermonger's mates and family did were useful – like 'crossing sweeper and mudlark'.
- They did not know which Costermonger they would get and it was quite different to the previous year when more time had been spent on eg looking at the produce to be sold, but they were equally relevant.

2. What did you think of the approach taken?

- Good approach apart from the opening when there was a street scene and a disembodied voice. It would have been better to have the costermonger on from the start and for him to point out things in the street and let the children see afterwards.
- The Costermonger interacted well with the children (*but see also Q6 re sound*).

3. Why did you choose this session?

- It's within the context of what we're doing and the children are excited about it. We'll do 20 minutes discussion beforehand.

4. What do you think the pupils got out of the session? (from range of evidence)

- Knowledge and understanding – see Q1
- Teacher clear that they already had the interactive and social skills (conversation)
- Changes in attitude to the poverty of the time + a little empathy – see Q1
- Enjoyment definitely and inspiration for posters and diary entries (see comments re follow-up, observation notes and focus group notes)

5. Pre-session support – any comments?

Did you use the pack? Yes

- Yes this was useful'. *They will use the follow-up activities and the contextual background eg the two biographies.*
- It would be good to know in advance which of the two characters is coming up'. *He had found it difficult to find alternative information about costermongers, but they could do research about London in the 1860s.*

The follow-up work they were likely to do was the costermonger's diary.

- 'Today we will follow up with posters about what they buy and sell or 'A day in the life of a costermonger.'

Was it useful?

The teacher said that it fitted exactly into the curriculum and the children picked up all sorts of information they would not have learned in class

Did the pupils do any preparatory work?

- Yes, in that the term's work was on the Victorians.
Did you brief pupils about interacting beforehand?

The teacher spent 20 minutes immediately before the session preparing questions with the class but otherwise the children are used to VC sessions and know how to interact.

6. *Have you done any follow up work?*

'We did follow-up work immediately. This was key. We looked at a day in the life of a costermonger; it took a lot of discussion to sort out the Victorian currency and today (3 days later) a child brought in a Victorian penny. They thought a costermonger might earn £50 in a day – didn't realise that that was a fortune in those days.' It could have been good to have done this work beforehand but it had worked well this way round too.

B Practical / logistical/ technical questions

7. *How confident are you with the VC technology?*

- The specialist does it for me. This is an inducement for people to do Video Conferencing. This way it doesn't take up half your lunch hour. '

8. *How did you find out about VC with the MoL?*

- The ICT co-ordinator has the Global Leap catalogue. We spent a lot of money last year looking for year-group appropriate activities to encourage staff to take it up.'

9. *How easy was it to make the booking?*

- Easy and straightforward – someone else does it for us' (Teacher)
 - Usually it works really well.' (Coordinator)
- But this time the Co-ordinator had tried to book two sessions for the two classes and there had been a problem ('You have accidently booked two sessions in March 2007' *Global Leap email*) and there was some confusion about day and date not matching. In the end they were allocated one session only which was why there were two classes in together for the session ie 60+ children. And an Ofsted inspector.

10. *Was the length of the session OK? Too long? Too short?*

The teacher thought a few more minutes could have been useful –

- Perhaps there could be a set time for the delivery and then an optional time for questions to be asked which could be terminated by the teacher when s/he knew they had no more to ask. This would make it more flexible. *le Classes with nothing to ask would just get the 30mins. Others might get 35 or 40 (maximum).*

11. *Were there any technical problems? Yes*

Sound:

- There is still a difficulty with the time delay. The children say something clearly and there is a pause long enough for them to think they haven't been heard and so they repeat it at the same moment that the Costermonger is replying. This happened several times, and made the question and response sections uneven – harder to keep the flow.

12. Do you think it is distracting for the pupils being able to see themselves on the screen?

- We switch it off.

13. Any comments about your own role during the session?

- I take a back seat role and interject if I need to. I'm not seen – just a voice. The children always want to answer questions. There's not enough time for them all.' The teacher thought that 'making it mutually endable could be useful'. If the teacher could see/sense that the pupils had had enough then perhaps they could end it themselves?

14. What are the main advantages and disadvantages of VC for you?

- It engages the children... They always pay attention... It's captivating. They (MoL) have the resources and the costume we wouldn't get, and the peripheral information because of the way it's done

15. Do you think it would be better to have a smaller group for the VC session?

- Practically it *has* to be the whole class. And the larger number helps – it reduces self-consciousness.
Would it be possible? No

C Looking ahead

16. Would you be interested in borrowing museum objects to use in the classroom to complement the VC session?

The teacher would be interested in borrowing objects; 'had never done it'. Thought he could borrow objects from their local museum. The logistics of getting them to and from the MoL were too complicated.

17. What do you think of the range of sessions available?

(There are 10 days on offer for KS2 in the summer term 2008, covering 4 topics (Fire of London, Mary Seacole, Roman London and the Costermonger), cf two days covering one topic (Black Death) for secondary schools).

- 'I would like some more Victorian-related sessions, eg about a child or family living in poverty'.

18. Are you likely to use any of the other VC sessions in the future?

- 'I would use other topics if I were teaching other year groups.'
- They had found one on Judaism that they had used recently.

The Coordinator had been using VC for 18 months:

- ... but we're in a bubble. There's a lot more out there that we could use. We need to know all the possibilities

The coordinator did not know whether it was possible to make bookings directly with MoL or not.

19. Are you likely to visit MoL with your group? YES

- Going would be good too. *Teacher intends to go in the future.*

2. Focus group with pupils

Southborough Primary School - 6 Pupil responses – year 5/ KS2

**1. Did you enjoy the VC session? / Who enjoyed the VC session?
Explore – what did you enjoy especially?**

- Involving us like telling us how it would be on the streets...all noisy...and when we were shouting out to sell all the different things [*He had enjoyed doing the shouting*]
- I like it when they say stuff to us and we ask questions so that we find out more about history and stuff. [*Liked being asked what she herself thought about being a costermonger*]
- I found it interesting when he asks the questions
- When we got to ask the questions that was quite good coz we got to know the things that we wanted to find out.
- I liked the whole of it really, like you get to have fun playing it and doing it at the same time.
- The bit that I like is when he explains everything.

The back-slang was both 'a bit confusing' but also 'quite funny' – the group had certainly been intrigued by it.

- If you want to confuse someone you use it

They have VC sessions 'a few times a year'

- We normally have video conferencing when we're studying something in particular, to find out more about it. It's to join with our work in history or Victorians or something.
- It's a fun way of learning

2. Did you learn anything? / Who learned something? Explore – what did you learn? (prompt – GLOs)

How will it help you with your coursework/ classwork/ citizenship work?

- I didn't know they used to do more horrible jobs than I thought - like picking up dog poo.
- I didn't know that they used to say words backwards...
- Sometimes they talked backwards if the police was around.
- Instead of saying Broccoli they said something like brocco
- They said 'doog' instead of 'good'

To be a good costermonger you would have to be:

- Loud
- You have to make things sound good so that people would be tempted to buy them
- In the olden times when they made socks they got cow skin and they put dog poo all over it to make it soft and then they turned the cow skin with the dog poo on it... turned it into leather to make the socks.
- They made leather out of poo. Do they still make leather out of poo? (General discussion about this)

They had known about chimney sweep boys but this reinforced it and they remembered about the boy:

- He was too big
- He suffocated

All the group thought that VC sessions helped their school work

Re learning from objects:

- I saw a kind of fork thing (Couldn't remember what it was for)
General speculation about what the fork had been for (collecting poo?) but no-one could remember. But they all remembered the fork.
- The Photo - *They remembered the photo which had shown*
'people standing on top of something'
'vegetables'
'like a carriage with a man standing selling stuff'
'I saw a donkey'
'The cart the donkey was carrying'
'I saw a man on the cart.'
'I saw his helper – a little boy... a costerboy!'

The pooled memories built up to quite a detailed account of the photo. Group discussion is not specifically mentioned in the follow-up activities but is a powerful tool in reinforcing what has been heard.

Empathy/ evidence of involvement: Two pupils discussed whether it would be good if the costermonger had things written on his barrow, so that people who couldn't hear what he was saying because of the shouts of competing costermongers could read it instead.

3. Did you ask or answer a question? If not – what stopped you from joining in?

Most of them had asked or answered a question – one who hadn't said he hadn't minded not doing it. There wasn't time for any more questions – they had had lots to ask.

- Sometimes different children want to know different things and if you have more time then they get more chance to know stuff

One thought it would be good to have another 10 minutes for questions.

- Maybe if you start the video-conference a little bit earlier ... so you have a little bit more time for questions

4. What didn't work so well?

Responses to this are in Q5

5. How could the VC session be improved? Ask re views on picture & sound quality

- Some of the video conference wasn't that clear - a little bit blurry (*picture quality*)
- Sometimes it goes all jerky and then it freezes
- Some of the time it's all clear and then sometimes it's all blurry

They had had a VC session the previous week about the Jewish religion and traditions and food and that had been a bit blurry too.

Re the sound:

- Some of the time it can be difficult
- I want to hear all the facts. Most of the time it was clear but some of the little words you wouldn't kind of realise what they were.
- There needs to be like a better signal coz we can't hear him properly and he can't hear us properly

They hadn't got a word near the end for the extra money that costermongers could earn. No-one got this word.

[Perhaps it would be possible to have one or two unusual words written up – the costermonger could hold up something with the word written on or it could be on the screen. Or the children could have been asked to say new or slang words back to him]

- When we do a video conference at the end when they ask you a question they should stop like not 2 minutes before it ends but 10 minutes so that you can fit loads of people in and lots of different ones

6. Did you see yourselves on the screen?

All - Yes!

If so, how did you feel about that?

- It was distracting but I'd have it switched on
- It is quite tempting to wave at yourself
- Some people act all silly because they can see themselves
- I don't really mind it but a lot of people mess around in it like putting their hands up and messing around, I'd have it off.
- I'd have it off coz otherwise people wouldn't sit there and wave their hands about
- I'd have it off because if you're looking at it all the time then you can't see what they're showing you
- I'd have it on – it's distracting but I can still hear

Everyone agreed it was a bit distracting but opinions were divided about switching it off. There was the possibility of having it on for a few minutes at the start and then switching it off, although one said everyone would groan when it went off.

**7. How does it compare to someone coming into school? (better/worse?)
Comparison with ordinary lessons**

- (I would prefer) someone coming in because then you could hear all the words and you'd get more of a chance
- I would prefer it if he came in dressed up because then you could see how he was dressed (Discussion about only seeing half of him and it would be good to see all of him at some point in the VC)
- I'd rather have him come because he'd be able to explain it a bit more clearer... and it would be a little more funner (sic) than sitting there because he might ask people to come up and do things. I like them both.. But on the computer sometimes it goes all jerky and then it freezes. A real person wouldn't do this.
- I'd just like it if he was here.
- I'd rather it was on the computer because if he comes and starts talking to us then it's just like Mr F talking to us

8. How does it compare to visiting a museum? (better/worse?)

All prefer visiting a museum

9. What do you think is going on at the museum end? Would you like to see/ know in advance?

- On some video conferences you can see like people at the other end and they can see you and see what they think of our school
- Sometimes you hear them moving about the stuff
- Sometimes people might be watching us
- There'd be the cameraman and the person talking and the person who like worked there to see everything is all right
- It worries me because they could have a video camera and take pictures and print them off and then come and find you and take you away. (*Gave reassurance that the sessions are not recorded and not kept. Boy sighed with relief*)

10. Would you like to visit MoL?

Some confusion – this time with the Imperial War Museum and the British Museum.

Three thought they'd been to the Museum of London. Three would like to go.

- I'd like to go because I'd like to find out more about my country, about what has been happening in History
- I wish like somewhere in the world there was a really big museum about every country....

Suggestion for follow-up work [to compensate for short question time]: Divide the class into pairs or threes; give each group a topic to remember all they can about and to add what they think about it. Time it (few minutes). Get one person from each group to feed back. Groups with duplicate topics to add anything the first group missed out. Then class to discuss the most important issues they themselves have come up with.

Play a backslang game – practise a few words to use in class/ in the playground. Make a little backslang word list.

Museum of London Video-conferencing Research Report

3. Observation grid: Date: Wed 26 March 08

VC session : Costermonger (CM)

School: Southborough Primary Yr gp 5 / KS 2 No of Pupils: 30 and 32 observing Present : 2 teachers+ technician/ coordinator +inspector

During:	Body language, levels of engagement, responsiveness to Qs, Barriers to interactivity, Reactions to actor/topic etc	Evidence of Learning/ GLOs, eg changes in attitude to topic; empathy listening skills/ K & U; enjoyment <i>and others</i>	Technical: Smoothness of connection Quality of sound: Cd hear All/ almost all / > 75%/ < 75%/other Quality of images
Intro /opening	IT suite packed with c. 64 children – one participating class and one observing	Some comments identifying Victorian street but hard to see detail.	Link made with fuzzy picture to begin – empty street. Then could see top half of CM Voice a little blurry to begin with.
Didactic sections Visual feedback	High level of engagement. A few doodling and looking away from screen but listening. Some fidgeting a bit when not comfortable on the floor.	K & U re language, money, dress, etc Eg derivation of ‘coster’ +‘monger’. Eg why produce sold was seasonal Attitude change re details of the poverty of the time:– from disbelief to some acceptance – comments to each other/facial expressions Empathy eg with how early the costermonger had to get up, how he lived (Easier to empathise with than tragedy/ ‘horrible’ jobs) Listening skills in strong use Backslang skill –some trying ‘doog’ Plenty of evidence re enjoyment and engagement (Exclamations/ shared smiles or grimaces). Applause at the end. (<i>see focus gp for more GLOs</i>)	Didactic sections clearly heard. Harder with unusual words eg Word for extra money costerboys could earn not clear
Interactive sections Pupil responses including Q & A session VC facilitator delivery: acknowledging pupil contributions; questioning; building on pupils’ existing knowledge; use of propos/objects; encouraging contributions/engagement.	Children responded instantly to the stories –the sad chimney-sweep (they knew about chimney sweeps) and the collecting of dog poo for treating leather – delighted revulsion at this. The 3 groups selling produce worked well but deafening / some pupils over-excited. CM appreciated when pupils drew on existing knowledge re Victorians on several occasions, valued contributions (eg re backslang, money) Picked up pupil’s ‘gentle’ to describe donkey and then used it himself. Qs really useful for pinning content to pupils’ own experience eg Have you got a job? (Incredulity) Would you like to be a mudlark? (NO) Costume/ background street/One picture of costermonger/boy/cart. (Cd use more?)		Q&A Children needed to shout out clearly which they mostly did but were still not always heard accurately. Quieter voices were not heard. Child repeating Q or A at same time as CM responds. Despite other VC sessions done pupils still tripped over the time delays in Q & A. ‘Did you hear that?’ several times. Pupil Qs for the final 4 minutes or so – really valuable for this group Pinned down understandings ‘Was it a hard life in London?’ Comparing 5hrs sleep with their own
Staff involvement (see also Interviews)	Teacher chose who could speak, repeated quieter responses loudly and did some calming after the selling/ shouting competition	<i>See interviews</i>	The class screen was left on and there was some waving before it was largely ignored

Classroom setup: Class rows

2 classes in IT suite – on chairs or floor and filling every available space

Other : Satisfactorily Ofsted inspected session

Year 3 class – Roman Maidservant session

4. Teacher interview

Netherfield Primary School - Teacher Interview 12/3/08

Roman London session on 12 March 08 with a year 3 & 4 group. 27+ pupils.

Teacher & SENCO - Olga Jones

Additional comments from the Deputy Head

Note: Comments are from the teacher unless otherwise indicated

A Session content

1. What did you think of the session in terms of content?

- 'Romans have been their current learning journey' so *the topic fitted curricular needs.*
- The content was good. It reinforced learning such as about the underfloor heating. They didn't know the Latin names of countries. It fits in very well and we have looked at slavery. They were concerned about the baby being put out.
- She touched on gods and goddesses which we hadn't done – that will feed into the learning journey. And they were very enthusiastic about the Roman food.

2. What did you think of the approach taken?

- It's a whole brain activity – visual and auditory – which is engaging for them
- She (Roman Maidservant) looked rather well-dressed – not their image of a slave.
- She (the actor) did the best she could to engage the children with questions and answers. Sometimes she could have asked more questions – 'What did you think about that?' – but there was very positive valuing of the children's responses. It was done very well.
- It's all underpinned by solid learning

3. Why did you choose this session?

- It fits in with the whole Roman Learning Journey programme which includes: an archaeologist's visit, Roman cookery, a pottery activity and a person coming from the local museum

4. What do you think the pupils got out of the session?

(Evaluator's summary)

K & U: Roman Gods and Goddesses, Latin names/words, Roman food, reinforcing previous learning about Romans (eg underfloor heating)

Skills: looking and listening; responding appropriately and in turns; empathising

A & V: getting more of a sense that the Romans were real people, with problems etc

E, I & C: enjoyment, especially of doing Q&A, and of the stories and the topic of food; some creative/imaginative interactions 'They do enjoy it' Teacher

5. Pre-session support – any comments? Did you use the pack? Was it useful? Did the pupils do any preparatory work?

- Yes I used the pack but... (see notes on change of character in Q 9. Otherwise the session slotted into current work)
- (Deputy Head) It was good to have the teachers' pack and I will use it. *Did you brief pupils about interacting beforehand?*
- Just some encouragement. They've done it before.

6. Have you done any follow up work?

- It reinforces class work in an interesting way. You can choose how to develop it. I will follow up the gods and goddesses for example.
- Activities that carry on from where the video ended would be good (Deputy Head)

B Practical / logistical/ technical questions

7. How confident are you with the VC technology?

The teacher said that she depended on technical support and probably wouldn't learn to do it for herself as she is retiring in the summer.

Another member of staff in the staffroom said that now she had watched it being done by the Deputy Head

- 'I'll do it myself next time.'

The Deputy Head said that she was training staff to make the connections themselves and expected that all would be able to do it soon:

- It adds another dimension to teaching – we use one every few weeks.

On the whole there seemed to be lot of technological confidence in the school and classes all have the blinds and are VC friendly. The school has invested in £1000 worth of equipment and passed all the JANET tests and paid £300 for Global Leap and so wants to get its money's worth.

- And a coach to London from Netherfield costs £400.

8. How did you find out about VC with the MoL?

- The Deputy Head circulates the information to everyone (*Teacher*)

9. How easy was it to make the booking?

Deputy Head:

- We booked through Global Leap. . I just book them. It takes about 10 seconds to book – Log on/ Global Leap/ see Menus/ use the Book button!

- You need more information, more of a feel than you get so I go on the museum website. (Deputy Head)

But there had been some communication problems:

Details had been sent for Martia Martina in the beginning and then (still in plenty of time – ‘late Feb or early March’) replacement details had been sent for a new character and so the teacher had prepared the class for that. In the event, the character in the VC session was the one in the first communication.

- Not what we expected. (Teacher)

10. Was the length of the session OK? Too long? Too short?

- Mostly good but the Art Gallery one was 50 minutes which was too long for KS1! (Deputy Head)

11. Were there any technical problems? Yes

- This session was the worst technically and we've done four ...including one about fossils in Dorset. There were sounds missing and some blurred images especially of the map and the tesserae.
- There should be technical backup (*for the actor*). She was left on her own to cope.

12. Do you think it is distracting for the pupils being able to see themselves on the screen?

- It's not really a problem. They're used to it
Did you know you could turn them off?
- I leave it to (the technician).

13. Any comments about your own role during the session?

Prompt: Were you at ease with it? Did you feel included or do you prefer to leave it to the pupils?

Not an issue – she just needed to choose children to respond and generally check their behaviour. Observation: The teacher sat on a table and was very visible to the children and very clearly in control of them.

14. What are the main advantages and disadvantages of VC for you?

- You get more from VC – it's more alive

15. Do you think it would be better to have a smaller group for the VC session?

- No – it has to be a class

C Looking ahead

16. Would you be interested in borrowing museum objects to use in the classroom to complement the VC session?

- Yes that would be good. There would be more choice than the local museum.
- We do get object handling loans from the local museum – archaeology and Roman remains

17. What do you think of the range of sessions available?

- It's a shame there are not more available. (Deputy Head)

Do you have any other suggestions?

- There are not many story-telling ones or working with artefacts for KS1. And we need more science. But I love the character ones – they're more exciting. We had an Arctic Explorer who made the children believe he was real. Also a Tudor sailor – really good. We need some to be a bit more wacky, like the woman with wacky glasses on who made the children giggle. They love the VC. It's *someone else* telling them – it reinforces what we've done when they hear things from other people (Deputy head)
- Seeing a live dig would be good – even a mock-up (Teacher)

18. Are you likely to use any of the other VC sessions in the future?

- Yes

19. Are you likely to visit MoL with your group?

- They do enjoy it. We've been to the NHM, The National Gallery and the British Museum so I wouldn't rule it out. But the coach journey is very expensive. And it takes over 2 hours and we need to leave in time to get back at the right time.
- We have visiting company in March to do mosaics – in Roman dress. We get money for this from the PTA. They are 'Mad about Mosaics' and cost £300 a day – to do a whole school assembly and then work with one class. (This is the competition – HO)

5. Focus group with pupils

Scenario - Group of 8 x Year 3/4 who had been sitting still for a long time and were therefore easily distracted during the focus group. One was tearful thinking he was missing playtime. One was overwhelmed as holding the recorder made him feel like an important person... etc. The session was therefore conducted cheerfully but swiftly.

1. Did you enjoy the VC session? / Who enjoyed the VC session? Explore – what did you enjoy especially?

Yes they enjoyed the VC session. They have done several. Voting was as follows:

Dinosaurs x 2

Pictures/ paintings (Nat Gallery) (*The teacher's choice later*)

Coral reef x 4

Romans x 2

2. Did you learn anything? / Who learned something?

They had discovered that:

- Slaves can be made to do anything
- *Re the tablets*: That it was wax not concrete. Because some other origins has concrete
- I was surprised they (*the tablets*) were wax – I thought they were made of animal skin
- I thought they used charcoal writing on animal skins
- Do you just make it into a symbol? (*The writing on the tablet*)
- They take the wax out of the hive and put it onto like a stone
- (*confidently*) You use a stylus to write on the beeswax.

The group all thought what the Roman woman said was true, although one hesitated about the curse (*discussion*). One thought they had to have proof about the stories to tell them.

The girl in the group said she still found it hard to imagine what it would be like to be a slave.

3. Did you ask or answer a question? If not – what stopped you from joining in?

Four had asked questions. The others said that 'the questions had been taken already' so there weren't any left for them to ask.

Seven had given answers; the eighth was unable to say why he hadn't (in fact was unable to say anything at all at this point so communication was by nodding and head shaking)

4. What didn't work so well?

- Couldn't see the map properly
- Losing the end bit. (*They didn't like the fact that the end was missing without a goodbye. They had learned 'Salve' as a greeting*)

Re: seeing the tesserae:

- Not that good
- Blurry
- You couldn't see the map at all
- It (the map) was probably in a glass case

5. How could the VC session be improved? See Q4

They would like video-conferencing sessions about: Outer space, cavemen, under water, mummies.

6. Did you see yourselves on the screen? If so, how did you feel about that?

Five said they saw the little screen but then forgot about it.

One said 'I just noticed it'

Two said they had looked at it

- They didn't feel it was a problem for them in any way.

7. How does it compare to someone coming into school? (better/worse?)

- It was better than someone coming into school and just talking.

Re actor in costume

Their teacher would not do that and they all liked it.

Comparison with ordinary lessons

- It's much boring just sitting around... writing with a dumb pencil. (So VC is better)

8. How does it compare to visiting a museum? (better/worse?)

All eight pupils would rather be in the museum than doing VC:

- It's much better going on a school trip than going on a video conference because you can see bits for real and not just in a photo
- *They could* 'enjoy the journey'
- *They could* 'see other things'

9. What do you think is going on at the museum end? Would you like to see/ know in advance?

[Question omitted due to pressure of time – children needing a break.]

10. Would you like to visit MoL?

Most said they'd already visited but there was some confusion about which museum the MoL is. Having eliminated T.Rex and the mummies, it remains unclear if any of them had been to MoL but there was general enthusiasm for going all round.

[Send them posters with pictures of the museums/ a few highlights?]

Museum of London Video-conferencing Research Report

6. Classroom observation grid

VC session title/ actor: Roman Maidservant from London

School: Netherfield Primary Yr gp 3/4 - KS2
connection only

No of Pupils: 27 No of staff: 2 teachers + Deputy Head as Technician for

During:	Body language, levels of engagement, responsiveness to Qs, Barriers to interactivity, Reactions to actor/topic etc	Evidence of Learning/ GLOs, eg changes in attitude to topic; empathy listening skills/ K & U; enjoyment and others	Technical: Smoothness of connection Quality of sound: Could hear All/ almost all/ > 75%/ < 75%/other Quality of images
Intro /opening	Introduced Latin straight away – children learned to say ‘Salve’ and looked pleased with themselves.	The children were working on their listening skills	The connection was tricky. The image was not clear and little breaks in sound meant half words missing. Sound needed adjusting
Didactic sections Visual feedback	Some fidgeting but most children visibly engaged and listening	Learning that the Romans were real people who were good and bad to each other, like today.	Could hear ‘almost all’ most of the time once it was adjusted
Interactive sections Pupil responses VC facilitator delivery: acknowledging pupil contributions; questioning; building on pupils’ existing knowledge; use of propos/objects; encouraging contributions/engagement.	Responses became more spontaneous, especially with the ‘Yes/no’ questions. Pupils responded well although it was getting harder for some of them to stay on task in the last few minutes. Roman Maidservant encouraged them to participate, built on their knowledge eg of the names of Roman gods, valued their responses well. She pinned down a remote time in history to their present by asking them questions ‘Have you ever felt jealous?’ ‘How many gods do you worship?’. She asked their advice and the children gave imaginative responses eg ‘You could write your name forwards on lead and put it in the temple’ (to counteract the curse)	They clearly enjoyed eg the jealousy story and tried to work out what the Roman maidservant could do, which demonstrated some empathy for her. They learned about the wax tablet (see focus group notes) Learned about eg Caledonia being ‘Scotland’ – none of them had known this They were very interested in the Roman food and putting hands up to say what they’d like to eat. They didn’t ask questions about slavery – possibly they were less clear about this	Image: Roman Maidservant was asked to adjust the camera or move back so the children could see her properly, which was hard for her as she was there on her own. There was little apparent interest in the small screen after the first few minutes. Roman maidservant could not always hear what the children said. There were still a few visual freezes. The tesserae and the map were difficult to see – especially the map of the Roman Empire. The session terminated abruptly before the end (It had started late with the connection difficulties) so the children missed doing ‘Vale’ at the end.
Teacher interventions/ general feedback	The teacher intervened mainly to identify pupils to answer or ask questions. Once or twice spoke re individual behaviour.		

Classroom setup: Class in four straight rows in front of the screen

Other

One Year 11 group of 25 – Suffragette session

7. Telephone interview

Wydean School and Sixth Form centre

Miss Landor – History teacher

Two group sessions on the Suffragettes – one of which was observed on 28 Jan 08 (see *observation notes*)

A Session content

1. *What did you think of the session in terms of content?*

- Yes, it fitted our curriculum. We had completed the topic of women's suffrage so it served to review work done.

2. *What did you think of the approach taken?*

- The sessions worked well but it was disappointing that one group was very quiet. Sometimes you just get a group that is reluctant to talk.' *The pupils had been split into two groups for the two sessions and this had been done at the last moment so that 'all the quiet ones ended up in the same group. The actor did all the right things. I wanted them to interact without my interjections'.*

3. *Why did you choose this session?*

- They had recently completed the topic.

4. *What do you think the pupils got out of the session?*

- They saw another point of view – more personal. This deepened their understanding and would be useful if the topic came up on the Source Paper at GCSE. It also contributed to discussions they'd had about whether the use of violence can ever be justified - did the violence actually work?

5. *Pre-session support – any comments? Did you use the pack?*

- No, 'because it was a KS3 pack and this was year 11 and we'd done it in class'

Did the pupils do any preparatory work?

- The topic had been completed

Did you brief pupils about interacting beforehand?

- I talked to the group beforehand and reminded them of the section in the textbook. I encouraged them to ask questions but then felt it was up to them.

6. *Have you done any follow up work?*

- No, because the topic's complete.

B Practical / logistical/ technical questions

7. *How confident are you with the VC technology?*

- Technician sets it all up and the VC co-ordinator stays throughout the session so there's no problem for teachers

8. *How did you find out about VC with the MoL?*

- From a list sent round periodically by the VC co-ordinator

9. *How easy was it to make the booking?*

Booking was OK but:

- I couldn't get hold of anyone to ask about a good size for the group. I emailed and left phone messages and never got any reply. Kevin Lord got a reply in the end but it took weeks.

It seems that some communications had gone to Phil Baker in IT dept. who was no longer there, but these had been forwarded by the IT department, so that hadn't been a big problem.

10. *Was the length of the session OK? Too long? Too short?*

- 30 minutes is about right.

11. *Were there any technical problems?*

- We had to wait for the link... it was a few minutes late. But then it all worked. Sometimes the sound did go a bit. They found it difficult to follow at times. And the picture was a bit grainy.

12. *Do you think it is distracting for the pupils being able to see themselves on the screen?*

- It wasn't a problem.

Did you know you could turn it off?

- Yes. We only had it on for some of the time

13. *Any comments about your own role during the session?*

The teacher was clear that she would not have wanted to intervene any more than she did.

14. *What are the main advantages and disadvantages of VC for you?*

- *This was the first time I'd done it. It was good for the pupils to get another perspective.*

15. Do you think it would be better to have a smaller group for the VC?

- I think 25 is an acceptable number.

C Looking ahead

16. Would you be interested in borrowing museum objects to use in the classroom to complement the VC session?

- Yes, this is always good.

17. What do you think of the range of sessions available? Do you have any other suggestions?

- Anything that fits with the curriculum. We are just about to change our schemes of work – some by next year and some by the year after

18. Are you likely to use any of the other VC sessions in the future?

- Yes – with other year groups – if the topics fit.

19. Are you likely to visit MoL with your group?

- No, I doubt it. It's increasingly difficult to go on trips as it's so expensive. We use Tintern Abbey and Chepstow Castle as they are not too far away. But getting cover is the most expensive part.

8. Observation notes (made at MiD prior to formulation of observation grid)

25 x Yr 11/ KS4 pupils from Wyedean School & VI Form.

Monday 28th January

Rough notes

Suffragette session

Actor engaged students first – complimented and woke them up a bit – only sitting down when she felt they were engaged. She told them 'her' story about becoming a member of the WSPU (Women's Social & Political Union) and the group being regarded as 'hooligans'. Delivery was in a chatty, gossipy, engaging style, easy to listen to, with lots of tonal variations, as if she were taking them into her confidence. Q She asked them about 'oppression' - what it means and if they'd felt oppressed. A few prompts from the (invisible) teacher but group hesitant, embarrassed, some laughing awkwardly.

As actor continued there were a few fidgets from the boys but mostly they seemed well engaged.

There were a few more replies at the next question but they weren't that easy to hear.

The lights went up when questions were asked – as if it were a signal from the teacher that the group should be responding – but this quite possibly made them feel more scrutinised/ 'under the spotlight'.

Inset pictures (old photos or artefacts) were shown now and then, eg a photo of women on a protest march at the time; a picture of the forced feeding taking place; a hunger strike medal. (*Assume all these can be seen at the MoL? This needs to be clear to the students*).

One boy voiced his opinion that women shouldn't have been engaging in militant action but unfortunately the girls didn't really take up the challenge and engage in debate on this.

The actor was forced to acknowledge some input she couldn't hear properly and was therefore unable to reply specifically, which was stressful all round.

There was applause at the end.

Actor felt that the responses – on a scale from brilliant to zero – were close to the bottom in this session. She had worked extremely hard but it was like pushing a heavy weight up a steep slope.

[See teacher interview – this was their first VC session]

9. Observation notes - MiD 28 Jan 08 (prior to formulation of observation grid)

Year 7 or 8 (?) group – Suffragette session

Difficult to find exact year group on the booking details.

Technical hitch at the start meant school couldn't hear actor. Much miming and writing of notices! Solved after a few minutes.

Unlike the last teacher who was invisible, this one walked around throughout and was quite distracting but did encourage the pupils to engage.

They were in normal class setting (rows of desks) and one pupil at the front wanted to answer most of the questions. After a while the actor had to make him wait or he would have dominated the responses to the detriment of the others. This she did expertly.

They were far more fidgety and chatty (to each other) than the last group and it took a lot of effort on the part of the actor to hold their attention. She had to be fairly assertive throughout and had to make boundaries very clear at one point. Again she worked extremely hard and it was no easier than the morning session – just differently difficult.

They all listened intently to the prison story. When she told them about the tube up the nose in the forced feeding session she had to stop them laughing by telling them it was very painful. *(It is perhaps harder to generate empathy from a distance, and some laughter was probably awkwardness)*

One boy asked why they needed the vote when they'd been fine without it for hundreds of years. Actor tried to get the girls to answer this themselves – 'Why do you think she starved herself? What do you really feel strongly about?'. The teacher challenged the girls too – they shook their heads to show they didn't want to be told what to do by boys and men but whatever they said was inaudible.

The teacher abruptly asked the children if they thought the suffragette was 'mad' to want to do violent acts, and asked them to vote on it. The majority thought she was not mad, but the sudden vote did not help children to engage with the issue in more depth. After the session had ended (but the connection was still on) the teacher was making links to the violence and hunger strikes of the IRA.

10. Reflections and conclusions

'They saw another point of view – more personal. This deepened their understanding'

(Secondary school teacher)

Teachers interviewed indicated that VC sessions provide pupils with a brief window to a world outside the classroom and stimulate or encourage deeper levels of learning. Students and staff enjoy them – particularly if they are clear and stress-free. Teachers like the topics that slot into the curriculum and enrich it, but also one also valued the stimulus provided by a 'one off' session.

Interactions/ Q & A:

The primary school children particularly appreciated question and answer interactions, enjoyed the exchanges with a 'new' adult and got a buzz out of responding well or daring to respond at all.

Some of the reticence of the Yr 11 group may have been due to the fact that it was their first experience of VC, as well as their group chemistry

GLO learning:

There is plenty of evidence of gains in **knowledge** about the periods/ characters in question and deeper **understanding**, eg about poverty and slavery, that will have resulted in changes of **attitude** among some students. But equally valuable was the reinforcement of previous teaching – seeing something already encountered from a different perspective. **Skills** developed include listening; responding appropriately; formulating questions; deduction and problem-solving; social skills (eg taking turns, valuing each others responses) and empathy.

The secondary teacher valued the contribution the session made to discussions held by the pupils and also believed it could contribute to GCSE achievement (if that topic comes up). Staff learned from the sessions too. ('I took notes and learned stacks' Primary teacher)

In terms of **intentions to visit** the museum, the primary school children were unclear about the MoL, mistaking it for several other museums. Out of the three schools the nearest one was likely to visit in the future but the financial and logistical problems for the other two made this unlikely.

Follow-up

It was clear from the focus group work with Year 5 that **immediate follow-up/ discussion/ time for reflection** was powerful in itself. When the group pooled their memories and ideas they achieved greater clarity than they had retained as individuals.

Quality of sound and image:

Technically there were problems with both sound and image, but more particularly with sound: losing little bites of sound; sound being fuzzy with new words particularly difficult to hear; the time lapse between speaking and receiving a response being quite difficult for primary children to negotiate.

The image would occasionally jerk and blur and some artefacts were difficult to see (or impossible in the case of the Roman Empire map).

Comments were made in both primary schools about not being able to see enough of the actor/ their clothes, so that varying distance from the camera would have been more interesting/ informative.

The inset screen: Pupils seem to get used to this and then largely cope with it or ignore it. There was reasonable awareness that it could be switched off.

Booking:

This can be both speedy and simple but glitches can cause considerable difficulties. All three schools contacted had had a problem either with the booking itself or with communication about the booking.

Group size

While it is challenging to interact effectively with a large group of students, being impossible to respond to all of them, the practicalities of the timetable make sessions for smaller groups unrealistic.

Timings

Again the exigencies of the timetable (especially secondary) or of the pupils' attention span/ ability to sit still (lower KS2) would seem to make longer sessions difficult or impossible. Although Year 5 wanted more time for questions.

Role of the teacher

The primary teachers observed:

- kept control over their classes – often by eye contact or a quick word
- chose who was to answer or ask a question
- repeated quieter answers so they could be heard.

The secondary school teachers seemed to give more control to the actor or expect the pupils to take their own initiative; the results of this seem to be more variable depending on the motivation of the pupils, their ability to project their voices and their self-confidence.

Borrowing objects

There was some interest from teachers in borrowing objects from the museum although anxiety about the logistics of collecting and returning them.

Recommendations: to consider producing a DVD which could kill several birds with one stone. Teachers would need to select sections relevant to their class/ staff meeting. Firstly, it could show a picture or two of the MoL (and MiD) together with a few memorable star attractions. Secondly, it could include a few minutes of good Q & A as a role model of how best to use the session, for first time users. Thirdly, it could include comments by pupils and teachers about the learning achieved to encourage the take-up of sessions. Fourthly, it could model some good follow-up work. Fifthly, it could show a teacher booking a session, making the connections and switching on and off the inset screen etc as well as preparing the pupils.* One could be issued to every new school that enquires about the sessions or sent for use on INSET days.

(eg Netherfield Primary has a whole school involvement in VC, with almost all staff members trained and on board).*

VC can be a challenging and exhausting process for the actors. Opportunities for the sharing of good practice between actors could be both informative and supportive for them.

(Perhaps this happens? The actor I spoke to didn't know of any such opportunities)

HO 8/4/08

Appendix I:

Report on research with ICT advisers, members of regional broadband consortia, Global Leap and JVCS

Telephone interviews (x 7) and email questionnaires (x 5)

Research participants:

Name	Job title	To what extent VC is part of brief	Familiarity with VC	% of secondary schools in area using VC
Alison Walker	Learning and Development Coordinator, Welsh Video Network	Whole of brief, she works with staff in HE, FE and schools across Wales.	Very familiar with both ISDN and IP. Provides training in use of VC for teaching and learning. Arranges large multipoint conferences.	Most schools in Wales have VC
Ashley Shonpal	Network Manager at Immanuel College (independent orthodox Jewish school), Herts.	Part of brief	<i>"we hold weekly sessions with universities/colleges in Texas and Israel"</i>	He knows of only 5 local schools that use VC
Carol Weale	Leading ICT Teacher in Kent and Thanet	Part of brief	Used at home but not at school <i>"as most teachers are apprehensive or concerned about child safety"</i>	All schools have one room setup and all have had training but she only knows of one school who really employ it on a regular basis embedded in curriculum.
Donia Stick	ICT Consultant - School Achievement and Improvement Service, Schools, Children and Families Directorate, Essex	She is the lead person in the authority for developing the curriculum use of video conferencing.	<i>"The technical aspects leave me cold but I have worked with several secondary schools to identify the learning and teaching possibilities provided by VC"</i>	There are currently no secondary schools using VC. They are in the process of installing a new county-wide high definition VC system - so there will potentially be 80 secondary schools using VC soon.
Gareth Davies	E-Learning Manager, Education ICT	Part of brief. Responsible	Has used VC in number of	Possibly 50% in total

Video conferencing research report

	Service, Cambridgeshire County Council	for ensuring that systems are available and supporting their use (though as a trading service schools have to pay for support)	projects they have run, including international links	They have 6 out of 31 schools who have received funding to install dedicated VC suites and are just beginning to use it to support 14-19. Others are largely using simple web-conferencing (based on the Open University Flashmeeting system)
Heather Pettitt	SEGfL Project Officer	Part of brief	Very familiar	% unknown
Mick Young	E Learning Officer, Northern Grid for Learning	Part of brief	Very familiar	% unknown but “ <i>on the increase</i> ”
Mike Griffith	Global Leap	“ <i>GLVCTA (not for profit) supports, develops, plans, extends, coordinates, funds, hosts and delivers VC content opportunities and activities for our schools, and works with new content providers to support and initiate new VC programmes and opportunities</i> ”	Very familiar. GL was set up eight years ago to pilot VC content and provide a resource for teachers and to support schools and content providers. GLVCTA hosts and supports dozens of activities and VC opportunities, and collaborative projects each month across the UK and around the world.	GLVCTA works across UK and internationally.
Paul Butler	Secondary National Strategy Consultant (ICT), Secondary School Improvement Service, Schools and Lifelong Learning, Family Services Wakefield	Used to be more than now but he is still involved. Started looking at VC 3-4 years ago and over the last 12 months they have	Very familiar, focuses on teaching and learning.	3 out of 18 secondary schools have no VC facilities 80/90 out of 124 primary have VC facilities and receive training

Video conferencing research report

		reached “ <i>saturation point</i> ” with secondary schools.		
Richard Gates	Secondary ICT Adviser, Norfolk Children's Services (Education Advisory)	Small part of brief “ <i>due to my showing some interest</i> ”	He uses Flash meeting and Skype and recommend their use	5% of schools using VC All schools have telephone number to access each other, but not many schools know it exists.
Roger Bloxham	ICT Consultant at the City Learning Centre	He develops video conferencing across Westminster, Kensington and Chelsea	Very familiar	100% of schools in his areas use VC
Tim Boundy	Schools Content Coordinator, JANET(UK)	Part of brief	Very familiar	In schools sector 3000 VC end points are registered. Each month an average 800-1000 VC sessions are booked

The main objectives of the research with ICT Advisers etc. were to find out:

1. The benefits of VC for secondary schools
2. The barriers to secondary schools using VC
3. The percentage of secondary schools using VC
4. Future development in the use of VC in secondary schools - what ICT Advisers would like to see
5. Knowledge of museums which offer VC sessions
6. The best ways museums can promote VC sessions to secondary schools
7. The ideal format (i.e. of sessions), subjects, timings, etc. of VC sessions for secondary schools

Key points:

1. Carry out in-depth consultation

- *“Really need to ask teachers what they want, what they want to get out of it. When videoconferencing with museums has been successful it’s because museum staff have actually talked and listened to teachers in the classroom”*

2. Secondary schools need flexible, interactive, dynamic and targeted content

- *“Schools need to be flexible and museums must develop more flexible relevant / targeted content”*
- *“The museum needs to build content around what the teachers want. Actors/scenarios are not going to do it for all secondary schools....the museum has a fantastic resource - curators, archaeologists which they don’t seem to be exploiting. Working with secondary schools using VC needs a total mind-shift at MOL - need to really get to the bottom of what teachers want and need to be visionary and experimental. Also need to talk to pupils (not just teachers) to see how they do their research and how the museum can fit in with them . Funding is needed to support a diversity of opportunities and to be creative, invested in people creating the content, people who want to deliver. Funding has been invested in connectivity and hardware. Where some funding has been invested in content development, sometimes it has produced just “more of the same”.*
- *“Has to be an interesting format with interactive duties i.e. getting pupils to go and do something and report back”*

3. Be realistic about costs

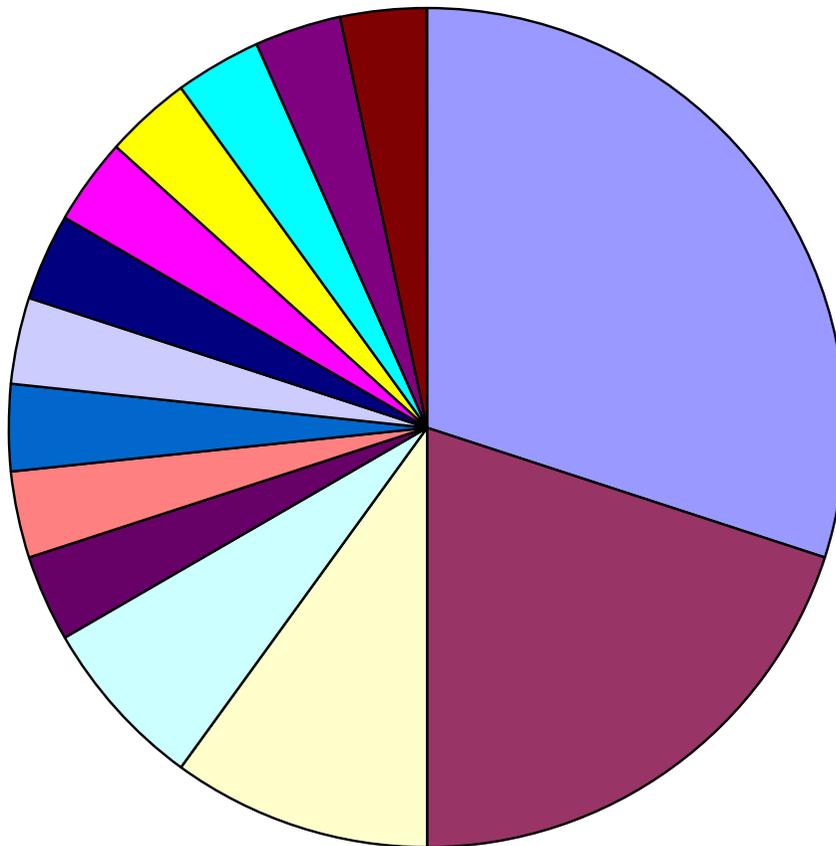
- *“No-one is recognising cost of maintaining and delivering video conferencing content, schools often don’t think about the budget for this (just the upfront budget for the technical equipment). Also need to be realistic about how much it costs. Rather than presenting sessions as ‘free of charge’ need to talk more about ‘funded by....’, or sponsored by, presenting something as free may give it less kudos or perceived value by the school, leading to random booking/cancellations or no shows, which waste resources and time and leave someone else picking up the bill for the room space/freelancer and arrangement costs (see Motivate Maths website re being realistic about how much VC sessions cost)”*

4. Be very clear about the benefits you can provide for secondary schools

- *“Really show impact on attainment - that would really make secondary schools sit up and take notice”*

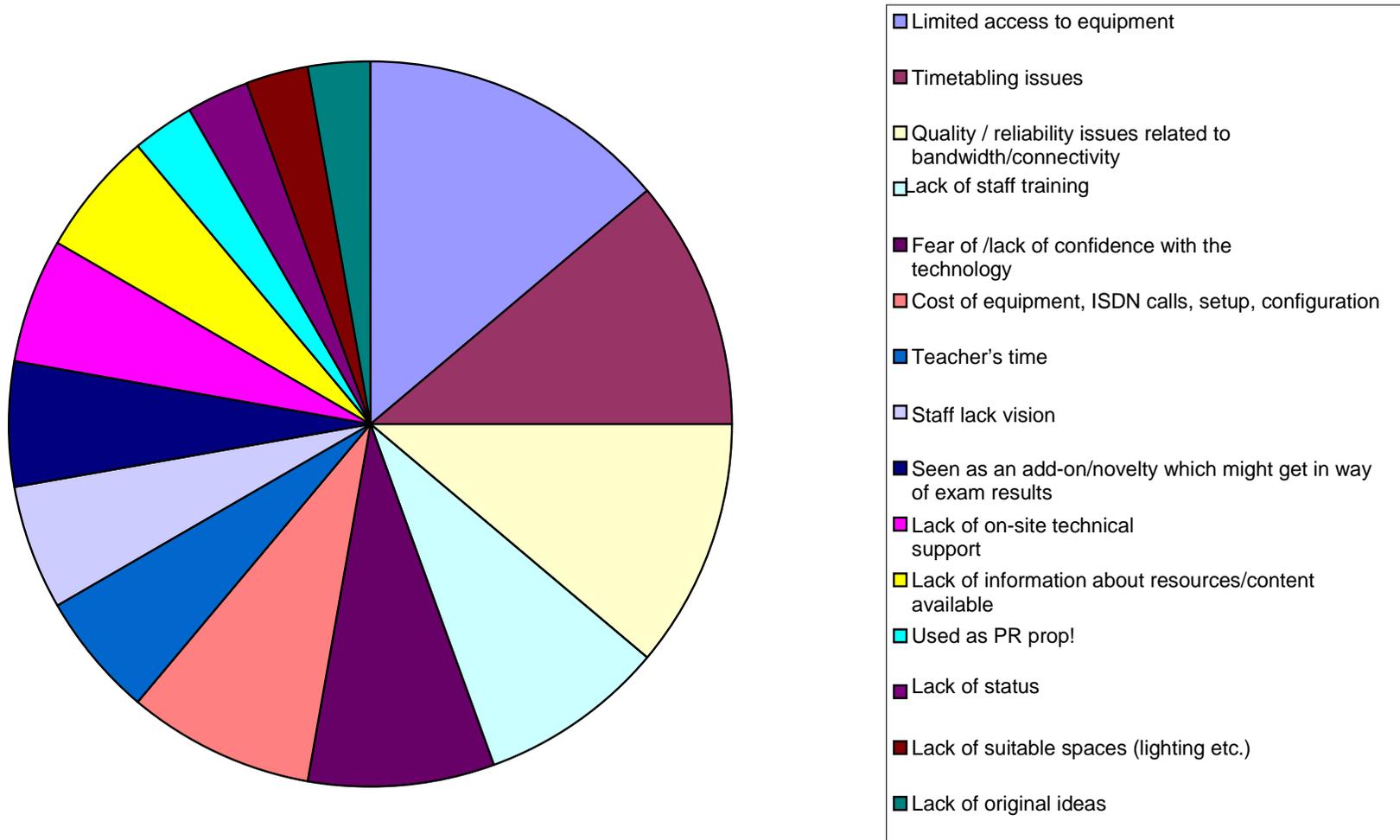
5. Have your own unique USP

1. Benefits of VC for secondary schools



- Access experts, remote activities/resources
- Ability to link/share ideas with other pupils in other schools (locally and internationally)
- Fewer Health and Safety, organisation worries compared to a school trip
- Delivery of minority subjects/no specialist teacher
- Extending range of subject opportunities through shared delivery
- Supporting 14-19 diplomas
- Direct contact with native speakers in MFL
- Support for students with English as a second language
- Learning without a classroom teacher
- Extended opportunities for staff CPD
- Transition activities
- Staff meetings across schools
- General communication enhancements
- Building capacity, sharing resources

2. Barriers to secondary schools using VC



Lack of original ideas:

- *'talking to your twinned school or sharing someone's Latin or physics teacher is not what it's about'*

Limited access to equipment:

- Secondary schools have big budgets and they buy big desk based equipment which can't be moved. Often this is more reliable but then it has to be booked and the teacher has to move their class making it less accessible.
- *'I was at a Becta workshop yesterday for English and ICT specialists and no-one said that they used VC facilities despite them being installed somewhere in their schools. One teacher said that not only had no-one used the facilities but the software was out of date. I cannot see how that can be but I am not an expert... So they probably appear to be the modern version of ICT suites in days of old!'*

Exam result pressure:

- *'scares teachers from being innovative and using different technology' but....*
- *'The secondary curriculum review this year will have an impact on year 7 from Sept 08 - this will have a boost for VC as use of this kind of technology and what it can provide will be embedded in the student programme'*

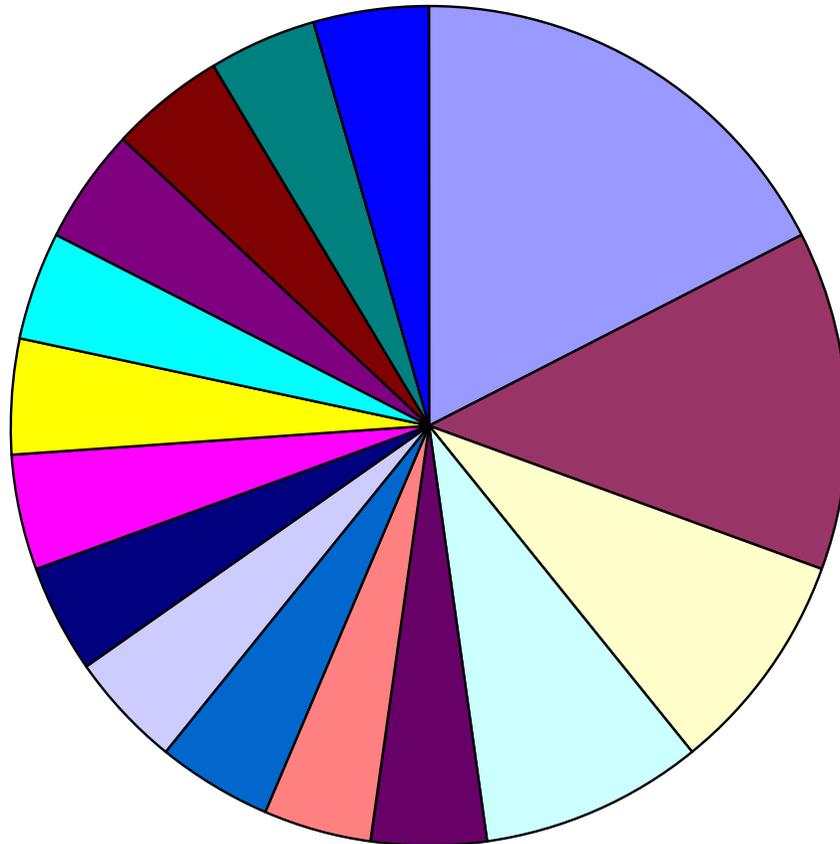
Status:

- *'Until VC opportunities are given a similar status within the secondary school as for example, a sporting fixture or similar, teachers are unable to participate. They lack the support, flexibility/space to be flexible'*

Used as PR prop:

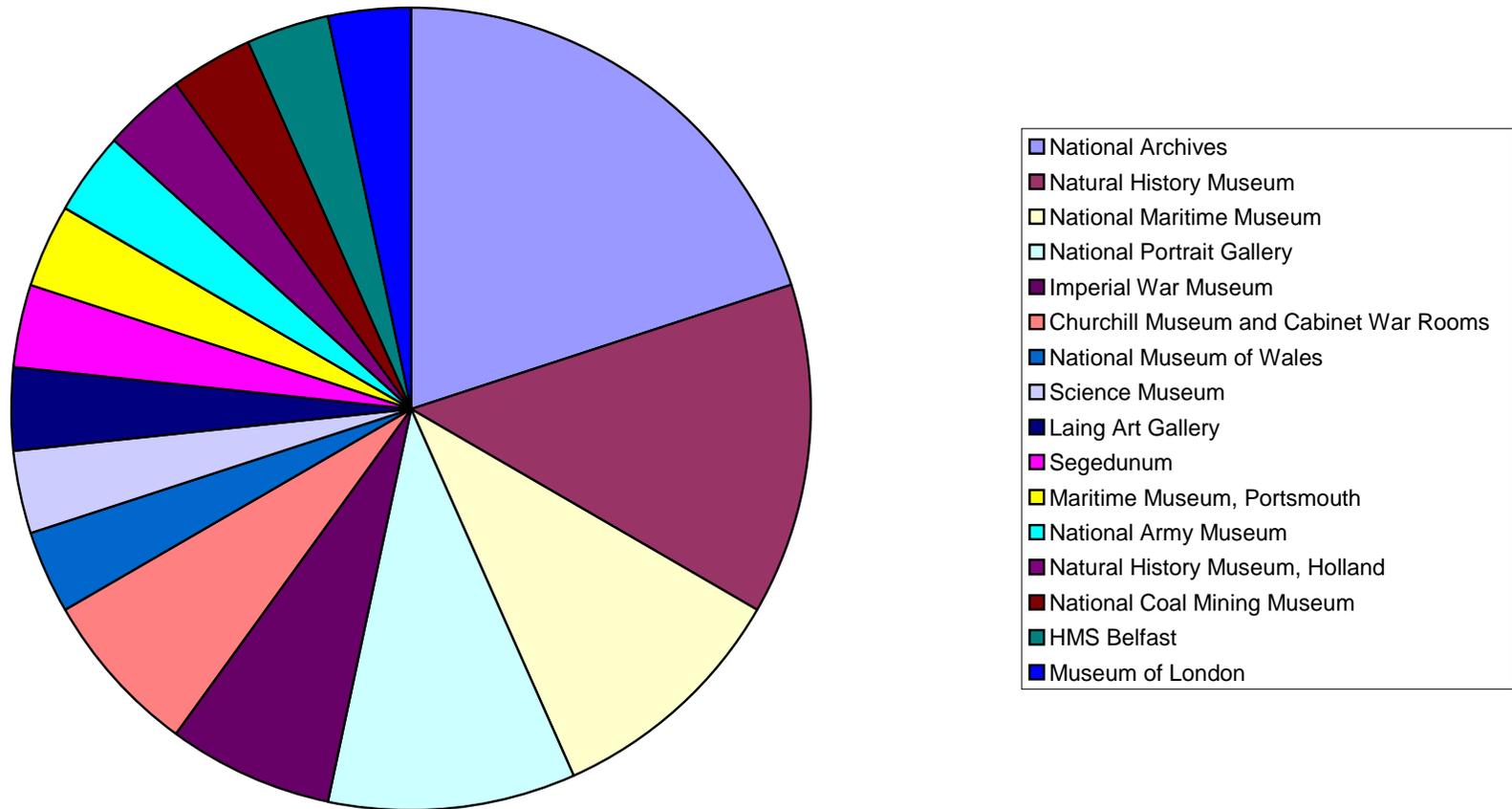
- *'Secondary schools often buy VC equipment and then don't do anything with it - just having it and perhaps using it once or twice is good for PR with the governors/school brochure!'*

3. Future development - what ICT advisers would like to see



- Extending access to experts and remote activities
- Sharing teacher's expertise, experience, building confidence and familiarity
- International liaison
- Embedded in curriculum / embedded as part of learning platforms
- Used with more innovation (especially from content providers)
- Used more in tandem with internet
- Transition opportunities, used to inform course / vocational choices
- Supporting 14-19 diplomas
- Support for students with English as a second language
- Standard teacher training
- Schools deliver courses/content themselves to generate income
- Pastoral/curriculum support outside the classroom
- Inter-school discussion/challenge
- Extending range of subject areas through shared delivery
- Extend opportunity for staff CPD
- Direct contact with native speakers in MFL

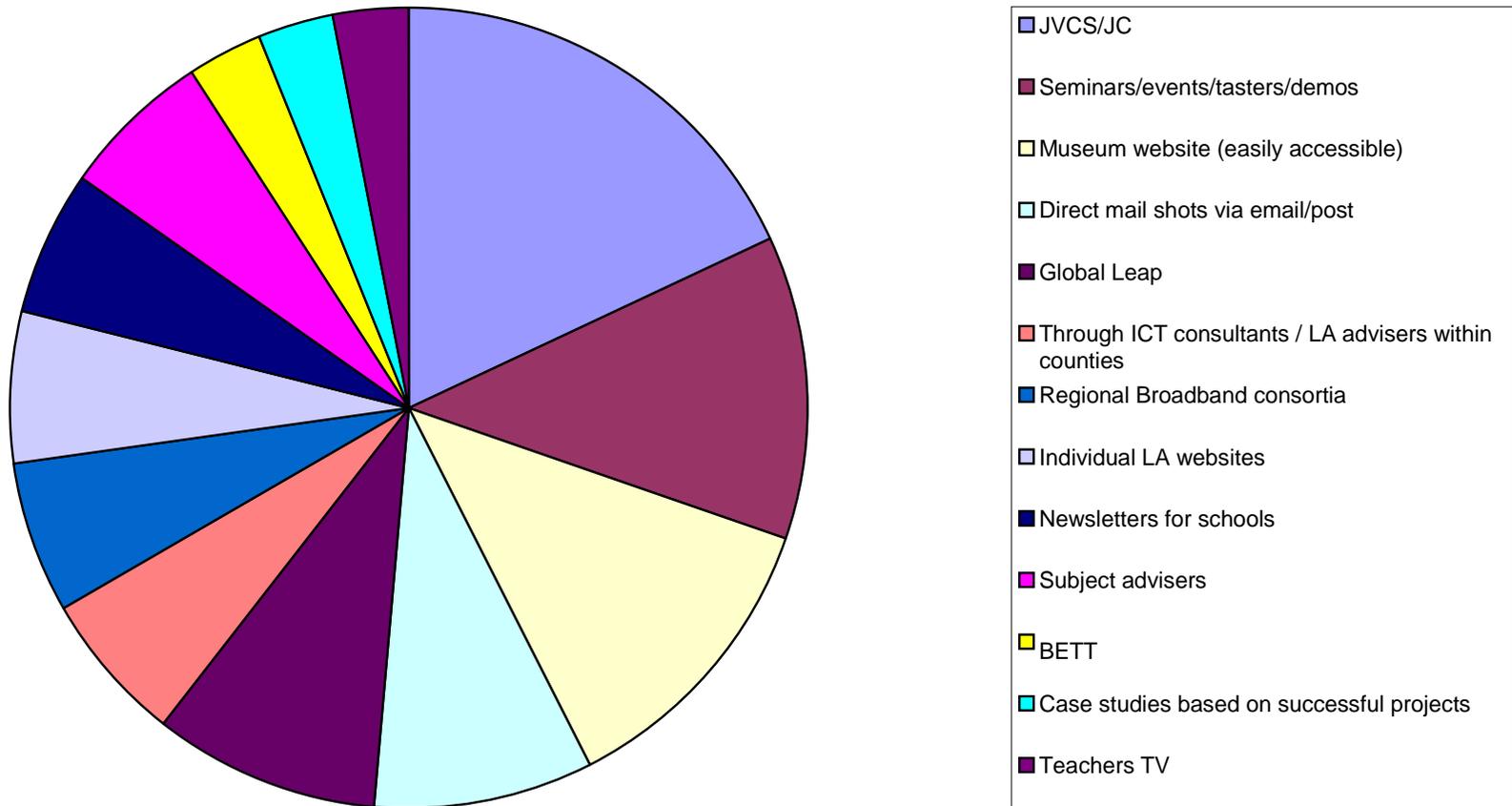
4. Knowledge of museums which offer VC sessions



Video conferencing research report

- One participant did not know of any museums which offer VC sessions (schools based). Two knew a lot (regional advisers).
- The Natural History Museum was praised for its '*good use of auxiliary equipment, different camera angles and a secondary moveable camera*'.
- The National Space Centre (although not a museum) was mentioned and praised a number of times.
- The Natural History Museum in Holland was praised for having a great VC session with museum staff talking about their jobs, the ethos of the museum with a debate about museums and zoos with pupils.

5. How museums can best promote VC sessions to secondary schools



6. Ideal format (i.e. of sessions), subjects, timings, etc. of VC sessions for secondary schools?

- *'likely to vary wildly between schools'*
- *'45 minute sessions are about right to fit in with the timetable and concentration spans. Availability should be as flexible as possible so that learners do not need to be brought out of other lessons to join the conference. History is well catered for. More for Geography, English, PSE and vocational subjects. In Wales, sessions that match the Welsh curriculum are very important, as is Welsh medium delivery if available. A short introduction - with lots of visual resources to support - followed by opportunities for questions, works well with older learners. There is a lack of opportunities for post 16'*
- *'30 minute sessions which are the result of pre-session teaching so that the time is maximised. Perhaps e-learning quests would enable schools who are divided geographically and financially to work on a similar topic and therefore several sessions throughout the day with an intermediary figure/school working alongside?'*
- One participant felt that it depends on the age group - interactive, lively and interesting for both secondary and primary, drama is good. However he did feel that at GCE and A level some groups might need more factual information at a higher level. Primary would need 15 mins max.
- *'Subjects - would need to correspond with KS3 and KS4 curriculum but with some extension areas for the advanced or as an interest stimulator. Timings - 20 minute and 40 minute slots to fit inside a lesson'*
- *'Museums need to be more web savvy, with clips of video conferencing on website, museums should collect teachers' emails, get a better grasp of internet technology, would like to see museums having a higher expectation of what they can do. Kids (esp. secondary) have got very high expectations of technology and a low interest threshold - something exciting has to happen, something dramatic. Has to be an interesting format, with interactive duties i.e. getting pupils to go and do something and report back or using technology to shock them. Secondary students demand more innovation but their timetable is more structured than primary. Its easier to impress a 5 year old - less of a challenge'*
- *'We also have the presentations and sometimes the VC recorded/stored on the network so that they can be accessed by members of staff/pupils that were not able to attend. Podcast fashion'*
- *'These would need to fit with the National Curriculum programmes of study and the examination specifications'*
- *'Don't replicate what other museums are doing - have your own unique USP. QCA are changing curriculum into much more skills based incorporating team skills, problem solving - need to address some of these things in VC. Use VC to enable students to talk to other students to inform their course choices e.g. student nurses. Actor based stuff not enough for secondary. VC sessions need to be interactive - getting kids to go away and do something'*

Video conferencing research report

- *'Shouldn't be prescriptive - it goes back to finding out what teachers want. You could link in over a mornings work 2-3 times, need to work creatively with teachers, could be 5 min input at end of session'*
- One participant felt interactivity is key, he would like to see different formats used e.g. kids go and do tasks and come back. He feels that more use of experts, archaeologists needs to be explored for secondary schools. He would like to see VC events being more mobile throughout the museum galleries. Also VC with museum re vocational topics would be good for secondary.
- *'20 mins long at most within actual lessons in school. Secondary schools hate moving things. Have to be within scheduled lesson of subject. This would not be difficult as long as the museum flexible. Museum might need to designate 1 or 2 members of staff to manage VC timetable - it's the only way to go'.*

Nicky Boyd

Appendix J: Report on research with museums and related organisations

Sample of 11 museums/organisations: 8 telephone interviews (T)
3 e-mail responses (E)

Table showing organisations consulted:

Museum/ organisation	Staff member	Job title	How long using VC?	Offer to secondary schools?	Charge for VC sessions?
Exeter City Museums and Art Gallery (E)	Kate Osborne	Access Officer	About 4 years	Yes in theory – though session available aimed at KS2	Yes £30
Luton Museums Service (T)	Eleanor Markland	Education/Lifelong Learning Officer	1 year	Yes – secondary only as can't cater for large groups onsite, but still piloting	Yes – but still at piloting stage and no price agreed yet
The National Archives (E)	Rachel Hillman	Education Officer	About 5 years	Yes, several sessions available	No (school pay for cost of call)
National Coal Mining Museum (T)	Jayne Ambrose	Education Officer	6 months	No – but one secondary session under development	No
Natural History Museum (T)	Sarah Whittle	Formal Learning Programme Manager	2½ years	No – have done some one-off pilots	No
National Maritime Museum (T)	Graham Dolan	Senior Education Officer	3/4 years	Yes – but just one session at the moment, staff shortage	No
National Portrait Gallery (T)	Clare Gittings	Learning Manager	At least 7 years	Yes – but take-up not good and has got worse	No (don't charge for anything)

National Space Centre (T)	Chris Derby	Education Manager	4/5 years	Yes, 2 main sessions	Yes – different prices and different lengths £150-£250
Royal Armouries (E)	Gillian Waters	E-Learning and Education Manager	No longer offer it (did so about 5 years ago for a short while)	Yes – but not taken up	No
Tullie House Museum, Carlisle (T)	Julie Wooding	Learning & Access Officer	About 2 years	No – primary only, but on agenda for future	No
Wordsworth Museum & Art Gallery (T)	Catherine Kay	Outreach Officer	1½ years	Yes – three sessions available	No

The main objectives of the research with other museums using video-conferencing were to find out:

- what their experience of video conferencing was, particularly with secondary schools
- whether and what they charged for VC sessions
- whether VC sessions were stand alone, pre-visit or post-visit
- what format they used and whether students were expected to do preparatory work
- how they marketed VC sessions to secondary schools
- what worked well for secondary schools in terms of format, duration, flexibility of booking, etc.
- what they felt the barriers were to secondary schools using VC
- what they felt the benefits were to secondary schools using VC

Findings:

1. How long have you been using video-conferencing?

The 11 organisations contacted had been using video-conferencing for anything between six months (National Coal Mining Museum) and seven years (National Portrait Gallery).

One museum (The Royal Armouries) no longer offered video conferencing as they found that some schools were using it as a way of avoiding trips to the museum and they felt they were undermining their own footfall. They also found that the time taken to prepare for a video conference was uneconomic. Another (National Maritime Museum) was currently cutting back and focusing on onsite programmes due to staff shortages.

See previous table for details.

2. What video-conferencing sessions do you offer secondary schools?

Eight out of the eleven contacted offered video conferencing to secondary schools, though in several cases take-up was limited. Exeter City Museums and Art Gallery have just one session on the Romans which is designed for KS2 but is open to any age group although no secondary school has ever asked for it.

However, Luton Museums Service offers video conferencing only to secondary schools as they do not have the space to accommodate the large numbers in each year group at the museum site, however, they are still at the piloting stage. The subject is local history. The National Archives offer a range of History sessions through video-conferencing for Years 8, 9, KS4 and A-level students. The National Space Centre offers two main sessions and can gear it to age groups varying from Years 6, 7, 8 and 9 to PGCE students. The sessions are Science-based. The National Portrait Gallery offers Art, History and Citizenship sessions to KS3, 4 and 5 but take-up is not good and has got worse.

Of the three who do not currently offer video conferencing to secondary schools, all have plans to extend their service and two have already piloted sessions with secondary schools.

See previous table for details.

3. Do you charge for VC sessions? If so, how much?

Most services do not charge, several receive external funding to support the programme. Of the three that do, the prices vary greatly from £30 a session (Exeter) to £150-250 a session (National Space Centre). Luton have not yet agreed a price

as they are still at the piloting stage, but expect it to be low, depending on the need to employ a re-enactor to deliver. See previous table for details.

4. Are these sessions stand-alone/pre-visit or post-visit?

All of the video conferencing sessions offered are stand alone and most do not expect the schools to be able to visit as they are often some distance away. See table below for details:

Museum/organisation	Feedback
Exeter City Museums and Art Gallery	Can stand alone or be adapted for pre/post as required.
Luton Museums Service	Not intended to encourage visits as no space for large year groups but can manage one or two classes from local schools
The National Archives	Stand alone
National Coal Mining Museum	Can stand alone but some local schools have visited and VC has been used to follow up a visit where pupils can interview a miner.
Natural History Museum	Have to be stand alone as not all schools can visit. There is no expectation of a follow up visit, however, they have one example of a preparatory VC session prior to a field trip involving the museum and the school.
National Maritime Museum	Tend to be stand alone as remit is to reach schools which can't get to them. Hope to use VC as a follow up to site visit (or initial video conferencing session) for questions and answers and school to present their work.
National Portrait Gallery	Stand alone – though in her experience the VC session positively encourages them to come and see the real thing, even from as far afield as Devon. Keen to encourage schools to show what follow up work they have done through a VC session. One school used VC to showcase amazing follow up work they had done (a Samuel Pepys banquet).
National Space Centre	Stand alone – most are usually some distance away. It is designed as outreach for people who can't get to the centre.
Royal Armouries	Stand alone
Tullie House Museum, Carlisle	Stand alone – some local schools who use VC visit anyway and others are further afield and therefore very unlikely to visit.
Wordsworth Museum & Art Gallery	They would like the VC session to lead to a visit but so far all the VC schools are non-visitors.

5. What format do you use? (*length of session? pupils do prep. work?*)

The video conferencing sessions range in length from 30 to 90 minutes with most being 40-45 mins long.

Several use role play and characters in costume. Most use objects, artworks or images as part of the session. Most include an interactive element, either discussion or an actual activity or task. Pupils are encouraged to prepare questions in advance, but do not always do so. All agree that the session works better when they do, but some have given up expecting it as it is beyond their control. In some cases the video conferencing session is part of a longer unit or scheme of work. Support material is available on the organisations' websites. See table below for details:

Museum/organisation	Length of session	Format and preparatory work required
Exeter City Museums and Art Gallery (E)	45 mins to an hour	Presenters in character along with modern day host. Characters talk to children about their lives and answer questions children have pre-planned. Interactive element (togas) and use of objects at both ends.
Luton Museums Service	50 mins	They are briefed prior to the session and there is a resource pack. VC session is part of a four week scheme of work. Quality is higher if pupils better prepared. Introduction is an object-based activity, then pupils role play inspectors interviewing a hat mistress in appropriate 19 th century language and then decide on recommendations. The museum uses stills on a laptop.
The National Archives (E)	1 hour	All session require some sort of preparation work from the students (we will either send them a pack by post or they can download it from http://www.learningcurve.gov.uk/index/education.htm). If students do prep work it helps to create good interaction between students and session leader during VC.
National Coal Mining Museum	30 mins (primary) 45 mins (secondary)	They have to prepare some questions in advance and they get more out of it if they have.
Natural History Museum	30 mins (primary) 30-40 mins (secondary)	Online pre and post support materials available, part of a unit of work. It works much better with clear objectives and when students have prepared.
National Maritime Museum	45 mins (scope for shorter)	They look for a degree of interactivity. Use greenscreen – effective as can use different images as backdrop to set the

	sessions if follow up (eg. 15/30 mins)	scene. They don't expect any prep work as no guarantee they will have done it.
National Portrait Gallery	Up to an hour and a quarter (booked slot) but not usually that long	Very closely based on format of gallery sessions – all based on discussion. They use a visualiser for 35mm slides and can use close-ups of paintings and objects – you can see the details better than on the real thing so using technology to advantage. No expectation of prep work – they send out a CD of images but they may not be used.
National Space Centre	Range from 40 mins to 90 mins	They prefer the teacher to have prepared the students in advance. Case study on website – some use, but optional. If not before they hope they might use it afterwards. Sessions offered include Living and Working in Space; Ask the Expert and Operation Montserrat – an interactive mission.
Royal Armouries (E)	No response	Tried lots of different formats
Tullie House Museum, Carlisle	30 mins (can take longer setting up)	There are pre and post activities on the website, but the onus is on the teacher so prep work is optional.
Wordsworth Museum & Art Gallery	40 mins to an hour (sometimes shorter for secondary schools)	The original idea was that there was a scheme of work including pre and post conference activities but they found the schools didn't do it so now the VC sessions aren't dependent on it and the museum doesn't expect it.

6. Do you market to secondary schools? If yes, how do you do this?

The organisations which currently offer video conferencing sessions to secondary schools advertise video conferencing as part of their general publicity, eg. through their websites and in brochures/newsletters sent to all schools. Individuals also promote video conferencing through local teachers' group meetings, ICT Adviser, regional grids for learning, City Learning Centres and promotional shows. Several of them also use Global Leap and two mentioned JANET, though it seems there is not yet the critical mass of organisations and schools using this to enable it to work effectively. Two are part of a pilot scheme in the North West run and advertised by an organisation called CLEO (Cumbria and Lancashire Education Online). They also hope for word of mouth publicity. See table below for details:

Museum/organisation	Feedback
Exeter City Museums and Art Gallery	Yes – brochure sent to all schools in Devon
Luton Museums Service	No – still at piloting stage. Plan to use Global Leap and newsletter/website and local History Heads Group meeting.
The National Archives	Send out Education Service booklet to all schools on their database followed by reminder flyers at specific times of year.
National Coal Mining Museum	Not yet, but for primary sessions ICT Adviser e-mailed his colleagues which worked well.
Natural History Museum	In schools packs and through Global Leap, JANET, regional grids for learning and word of mouth.
National Maritime Museum	<i>'This is critical to success – it's a nightmare'</i> Marketed alongside other sessions. Secondary programme sent out to schools and on websites; also through Global Leap (they are very good at holding schools' hands). Advertise on JANET Collaborate but not well used at present – need to direct people to the site.
National Portrait Gallery	Yes – through Global Leap (need their help – technical input and admin) and in general publicity. Sessions they have done for secondary schools have gone very well.
National Space Centre	More by word of mouth. Termly newsletter includes all offers. VC sessions are mentioned on the website and they market directly to City Learning Centres which works very well. They also do shows.
Royal Armouries	Yes, through Education programme (but not any more).
Tullie House Museum, Carlisle	No (primary only) – information is available through CLEO and in museum publicity.
Wordsworth Museum & Art Gallery	Mentioned on website and also done through CLEO.

7. What is the take-up like?

Prompts: *KS3/4 or yrs 12 + 13 (6th form)?*

subject / citizenship etc?

abilities/ disabilities and special needs?

Only one organisation (The National Archives) said that secondary school take-up was good, for the History sessions they offer. The others who currently offer video conferencing to secondary schools (x 4) feel that take-up is patchy. Two museums are not worried by this as the primary school take-up is so good. One organisation no longer offers video conferencing at all and four are still developing sessions for secondary schools. The subjects covered vary, depending on the nature of the collection, and include History, Science, Art, Technology, Leisure & Tourism and Citizenship. One session also links to Mathematics and Geography. The National Maritime Museum pointed out that year groups are likely to be smaller for Humanities subjects as they are optional rather than core, making VC sessions easier to organise. Most of those consulted had not yet considered offering video conferencing sessions tailored to the needs of SEN groups or pupils with specific disabilities, although the Natural History Museum and the National Portrait Gallery have some experience of working with such groups. See table below for details:

Museum/organisation	Feedback
Exeter City Museums and Art Gallery	N/A as secondary schools see the VC session is aimed at KS2. Never really gone after the secondary school market as they are fully occupied dealing with the primary school market.
Luton Museums Service	History sessions aimed at Year 9s – still piloting with one partner school. New session to be piloted shortly with two partner schools. Plans for session on Leisure & Tourism. Idea came from school for autistic children as a follow up to consolidate a visit (not sure it would work without concrete experience of visit for special needs groups).
The National Archives	Good take-up of History sessions – mix of A level and KS3/4
National Coal Mining Museum	Good take-up – usually 1/2 a week, sometimes 3 at primary level. Still to launch secondary sessions with History focus.
Natural History Museum	Secondary sessions still in the pipeline – will have Science focus. Have worked with hearing impaired children (storytelling with a signer) for primary VC sessions and SEN groups who get really engaged with the novelty of VC.
National Maritime Museum	Largely KS3/4 but take-up is patchy. Subjects include Science, Citizenship, Leisure & Tourism. (One primary school used VC as Literacy session, with children taking notes on info provided).
National Portrait Gallery	All age groups but take up not good with secondary and has got worse. Not really worried about the poor take-up. All available VC sessions are taken up but mostly by primary schools. Subjects include Art, History and Citizenship. Have done a couple of SEN session with schools desperately wanting to show children's work (portraits).
National Space Centre	They want to increase the secondary school usage as

	they have the equipment. Mainly Science sessions but also teambuilding key skills and links to Citizenship, Maths and Geography. Hadn't really thought about working with SEN/disabled pupils.
Royal Armouries	Previously offered History VC sessions but these were not taken up.
Tullie House Museum, Carlisle	No secondary sessions as yet. Primary sessions cover History, Technology and Science (Materials). Unable to target particular schools (eg. SEN) as CLEO host the bookings.
Wordsworth Museum & Art Gallery	They have run three sessions for secondary schools, Years 7/8, in the last year (just taking off, but especially with primary schools). Other secondary schools have booked and then cancelled due to problems with equipment in the wrong place/technician not available, etc. May look at catering for particular abilities/disabilities in the future.

8. What works well for secondary schools?

Prompts: type of session, format, duration, flexibility of booking/on demand, etc.

Some museums did not have experience to draw upon but guessed at what would work best. All those consulted felt that it was important to make the sessions as interactive as possible and get the students involved: including question and answer sessions, live research and setting tasks, as well as providing access to real objects. Several found that characters in role were particularly effective. Luton commented: *'We had the idea that they would respond better to a character via video conferencing – otherwise there are too many anomalies. Video is a familiar genre and they are more willing to suspend their disbelief'*. The more focused the sessions, the more effective they are. They are also better when the students have done some preparatory work. Some mentioned using video conferencing to follow up a video conferencing session a week or so later – for students to present their work or ask further questions.

Two organisations offer sessions on demand, but most (x 6) offer specific timeslots, often because booking is done by external organisations such as Global Leap. One pointed out that there is the opportunity to offer video conferencing sessions before or after school visits to the site – particularly useful for those with the video conferencing equipment in the teaching room.

See table below for details:

Museum/organisation	Type of session	Flexibility of booking
Exeter City Museums and Art Gallery	N/A	
Luton Museums Service	Opportunity for students to have context to frame	Don't know yet – will depend on sessions and whether

	questions and do live research.	external re-enactors are required.
The National Archives	Combination of offering interpreter-led role-play sessions and sessions led by an Education Officer	Timings to fit in with a lesson period at school. Some sessions are advertised and bookable at specific times of the year only, but the majority are offered on demand.
National Coal Mining Museum	Currently sessions are presentation style, in character, and presenter asks students questions. They can ask questions at the end. Works best when the students are doing most of the work. Want to do intro VC, set them a task, they do it then hold VC the week after and use their work.	Have two timeslots on a Thursday and a Friday (because we use the classroom for the VC sessions).
Natural History Museum	Difficult to say – it's best when the teacher and students prepare questions in advance. Problem is it is a lot of work liaising between schools and scientists.	Offered at a set time – may not fit in with timetable.
National Maritime Museum	Includes interactivity and questioning, eg. 'Ask an Astronomer'	Ideally complete flexibility – you have the opportunity to start at 9.15 (before open to public and before schools arrive at site) and offer VC sessions at end of school day – efficient use of staff time. Have tried to be more flexible but the booking systems can't cope it – need to have personal contact with the teachers (not possible if using Global Leap), so administratively it's quite difficult. Need to be clear about objectives and ensure teacher and students understand the purpose of the session, though the presenter can bridge the gap.
National Portrait Gallery	Hard to say	Offer am and pm sessions Tuesday-Friday so there is a

		bit of flexibility.
National Space Centre	It has to be interactive – keep them occupied – especially the 90 min sessions. They usually start slowly, but once they get into it...	Anytime in the school day so best to be very flexible. The onus is on the school to select an appropriate timeslot.
Royal Armouries	N/A	N/A
Tullie House Museum, Carlisle	Would expect more of a dialogue with secondary school students. Primary sessions often very directed by the teacher.	Currently offer one day a week to primary schools.
Wordsworth Museum & Art Gallery	Format is much the same as when they visit. Secondary students are less willing to talk and do/share creative activity so often more fact-based activity. Intro with map and visuals – video of cottage – use PowerPoint of manuscripts on laptop – video of curator (but quality is poor). <i>'A lot of what we do could be done by the teacher in the classroom or on CD-Rom. Problem is the nature of the collections'</i> .	Offer set days and times but are prepared to be flexible. VC equipment is in the education room so can't do it if there is a group already booked in.

9. What are the barriers to secondary schools using VC?

The two main barriers identified related to timetabling – the lack of flexibility in secondary schools - and the location of the video conferencing equipment. Half of those consulted mentioned these issues. The equipment is often in a room which has to be booked, or in a department which does not encourage others to have access – internal politics. Two people mentioned the problem of the equipment being based in the IT suite which is not ideal for video-conferencing if students are sitting behind PCs. Other barriers mentioned included lack of confidence and experience of the relevant teachers and the fact that secondary school teachers may not have time to learn about video conferencing. There are also technical issues relating to the quality of the equipment and connecting. See table below for details:

Museum/organisation	Feedback
Exeter City Museums and Art Gallery	None seen

Luton Museums Service	Wide range of experience, equipment, support, commitment and confidence in different schools
The National Archives	Some schools don't have kit so we have used Click-to-Meet site in the past
National Coal Mining Museum	Needs individual teacher to push it (in primary schools they have an ICT Co-ordinator who can do this). In secondary schools a problem is they need to go to a different room to use the equipment. Also, if there are limited time slots they may not fit their timetable (museums may need to be more flexible).
Natural History Museum	Logistics and confidence in using equipment. Science teacher may not be aware of/familiar with the equipment. Kit may be in IT suite and needs to be booked. Lack of flexibility in timetable.
National Maritime Museum	Flexibility of offering – timing is part of the issue. In primary schools the VC unit can be wheeled around – this is less likely at secondary schools. Space VC equipment is in is not always suitable for a VC session, eg. computer room (no good if all sitting behind PCs – less interaction). Technical issues keep recurring – connect through JVCS. Problems at schools if VC equipment unplugged and moved around, but once teachers are familiar with it it's OK.
National Portrait Gallery	VC tends to get marooned in one department, eg. Modern Languages, who don't make it easy for others to use – internal politics. Secondary school teachers don't seem to be as clued up about what it can do for them.
National Space Centre	A lot of teachers are afraid of the technology. If it doesn't work first time they need IT support – more likely to be an IT department in secondary schools.
Royal Armouries	N/A
Tullie House Museum, Carlisle	Assumes flexibility of booking the space to use the VC equipment, but doesn't really know. Problem if in the IT suite – would have an impact on format of the session. Timetabling.
Wordsworth Museum & Art Gallery	Timetabling. Many secondary school teachers don't have time to learn how to use.

10. What are the benefits for secondary schools using VC?

Half of those consulted mentioned that it saved the hassle of organising and managing a visit, pointing out that secondary school year groups were often very large and that teachers might be concerned about appropriate student behaviour on a visit. Several people mentioned having access to experts and to museums which would otherwise be too distant to visit (could be anywhere in the world!) or are unable to host large groups (as in the case of Luton). This is particularly useful for organisations with a national remit (most of the sample). Having access to real objects was also mentioned and the National Portrait Gallery pointed out that secondary school teachers were usually more confident in the subject matter and

keen on the real thing. Four people mentioned that video conferencing could be cross-curricular and touch on other subject areas and develop key skills such as speaking and listening. IT skills were also cited as a benefit – with an opportunity for students to learn them through video-conferencing, as well as a motivator for this age group. Tullie House suggested the students could operate the equipment. Two people also mentioned the benefit of video conferencing having novelty value for students. Secondary schools were considered to be more likely to have IT support for teachers who lacked confidence in using the equipment, however, Tullie House thought that secondary school teachers were likely to be more confident with technology. Finally, the fact that video conferencing could be in short timeslots means that it could fit into the lesson period (which a visit cannot). See table below for details:

Museum/organisation	Feedback
Exeter City Museums and Art Gallery	Huge potential – opportunity for students to engage with museum specialists/live experts and artefacts via VC, also developing IT skills. Can interact with a museum for which a visit may be impractical, eg. due to geography. Take up of VC is variable among primary schools mainly because of lack of confidence of teachers in operating the equipment ‘up their end’. However, with secondary schools this would probably not be an issue as they would have IT specialists.
Luton Museums Service	Contact with a museum which cannot deal with large groups. Museum becomes a personalised resource and accessible in this way.
The National Archives	They don’t have to travel yet can be connected to an organisation and speak with ‘experts’ on specific subjects during a lesson period.
National Coal Mining Museum	It enhances their learning. ICT is a motivator for this age group anyway. Can do VC in short time slots. There is scope to be more cross-curricular. But not a substitute for a visit. Beneficial for those further afield (museum has a national remit – part of outreach), without the hassle of organising a visit.
Natural History Museum	Opportunity to speak to people – experts in the field – they may not usually encounter, without travelling. Good for speaking and listening skills (cross-curricular element). Great potential to communicate - across the world.
National Maritime Museum	Core entitlement – difficulties of taking eg. nine classes out so VC is an alternative. Fewer concerns re student behaviour/risk assessment too (though still a lot of work to organise x 9 VC sessions). Year groups are smaller if a humanities subject as they opt for this.
National Portrait Gallery	Don’t have to go on a trip. More access to the real thing. Secondary school teachers are more confident of their subject matter and keen on the real thin/g.
National Space Centre	If they can’t make a visit, cost of VC session is as

	cheap as hiring a coach. Opportunity to reinforce key skills. Something different. Students are engaged with the technology (eg. they go online as part of the Operation Montserrat session).
Royal Armouries	N/A
Tullie House Museum, Carlisle	Expect secondary school teachers to be more confident about the technology, students likely to adapt to the equipment quicker (get them to operate it?).
Wordsworth Museum & Art Gallery	Access to expert talking about the collections. Change from the norm. Link to real objects. Cross-curricular.