The new National Curriculum and Museum Learning: A survey of the opportunities offered by changes to the National Curriculum to school and museum partnerships.

A Stronger Together Research Project Report

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This project undertaken as part of Stronger Together, a regional partnership development project for Museum Learning in secondary schools led by the River & Rowing Museum and The Langley Academy

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Contents

1. Executive Summary ................................................................. 4
2. Introduction and context for the research .................................. 5
3. Methodology ............................................................................ 7
4. Summary of changes in the new national curriculum and changes to assessment ......................... 9
5. Views from schools on the new National Curriculum ................................................................. 13
   5.1 Museum Learning at The Langley Academy: review of previous activity and opportunities afforded by the new curriculum ................................................... 13
      5.1.1 English (Teacher 1) .......................................................... 13
      5.1.2 Maths (Teacher 2) ............................................................ 14
      5.1.3 Science (Teacher 3) ......................................................... 15
      5.1.4 PE (Teacher 4) ................................................................ 16
      5.1.5 Humanities (Teacher 5) .................................................. 16
      5.1.6 MFL (Teacher 6) ............................................................. 17
      5.1.7 Creative and Performing Arts (CAPA) (Teacher 7) ............. 18
   5.2 Views on opportunities afforded by the new curriculum from teachers in other schools .......... 18
6. The impact of the new National Curriculum: The view from museums ........................................ 21
   Support in place ........................................................................ 22
   6.1 Opportunities offered by the new curriculum by subject ...................................................... 23
      6.1.1 Opportunities in History ................................................... 23
      6.1.2 Opportunities in the Arts (Art & Design, Design & Technology, Drama) .................... 24
      6.1.3 Opportunities in Geography ............................................ 26
      6.1.4 Opportunities in Science ................................................ 27
   6.2 Other feedback from museums ......................................................................................... 28
7. Conclusion .............................................................................. 29
8. Appendices ............................................................................. 31
   8.1 Statements used in focus group discussion with museums professionals .......................... 31
   8.2 Questions used in focus group discussion with teachers .................................................. 31
   8.3 Online survey for museum professionals ........................................................................... 31
   8.4 Interview questions for Heads of Faculty at TLA ................................................................. 33
   8.5 Interview questions for museum professionals ................................................................. 33
   8.6 Summary of museum sector staff feedback about secondary schools ............................... 34
8.7 Summary of feedback on how to engage secondary schools .......................................................... 35
1. Executive Summary

The introduction of a new curriculum is an opportunity to review provision. It can be a daunting time for both schools and museums with many changes shaping their work. This research aimed to identify opportunities in the new curriculum across the range of subject areas.

Trends in the new curriculum:

- Subjects show increased reference to context, with students requiring breadth of knowledge and real world application.
- There is a trend towards making subjects more challenging, including material taught at higher levels for all students.
- Teachers are expected to include more content in the same amount of teaching time.
- There is a focus on knowledge away from skills, including critical thinking skills and students’ own creative responses.

There are many specific opportunities within subjects, such as local study for history, fieldwork for geography, contextualising Shakespeare for English. The new IT curriculum will also be fruitful for museums to explore. Across the subject areas there are the following opportunities:

- Collections can provide wider world context, such as religious, social or cultural examples.
- Museums can give students the chance to see the real applications of their subjects for example through functional mathematics or natural science.
- The sensory experience of a museum can help make a challenging subject more accessible.
- Museums, with their background in the Generic Learning Outcomes, are used to the relationship between skills and knowledge and how they both support learning.

Teachers are taking time to analyse how they can successfully deliver the new curriculum. The delivery of new programs has only just begun at KS3 and will only begin for Maths and English GCSE in September 2015, whilst the rest of the GCSE subjects will start being taught the following year.

Free schools and academies do not have to follow the National Curriculum, but they frequently do in practice. This is relevant at KS4 as exam boards use the National Curriculum for their specifications. Although teachers nominally have more freedom, in practice they will follow the exam boards’ lead. Course work has been reduced and the emphasis is now on a final exam. This will increase the pressures on students and teachers at the end of KS4.

While the museum professionals interviewed showed some reluctance to work with secondary school students, the teachers were enthusiastic about working with museums. They discussed the benefits museums could bring and the importance of an inspiring visit in supporting students’ understanding of their subjects. Logistical problems in leaving the classroom remain a challenge but this report suggests that the new National Curriculum has many opportunities for secondary students to enjoy, be inspired and challenged by cultural heritage.
2. Introduction and context for the research

About the Stronger Together project

The Stronger Together Research Report was part of a wider regional project to enable museums and schools to collaborate in developing and delivering Museum Learning partnerships. The umbrella project, Stronger Together, was set up and run by the River & Rowing Museum and The Langley Academy and funded by a major grant from Arts Council England.

The purpose of the Stronger Together project is to understand how the Museum Learning developed at The Langley Academy can be replicated in other contexts. At the core of this project are 30 bursaries for museum and education professionals from across the Berkshire, Buckinghamshire and Oxfordshire region and three research projects, of which this is one.

The grant has been primarily awarded on the basis of the project’s potential to shape how the museum sector understands secondary education.

The term ‘museum’ is used throughout to describe a museum, art gallery or heritage site.

About Museum Learning at The Langley Academy

The Langley Academy (TLA) opened in 2007 as the only school in the country with a Museum Learning specialism. It was inspired by the Museum School in New York. The TLA approach is founded on partnership working with museums to deliver meaningful learning experiences for students. Since then the Academy has built up a wealth of experience delivering less obvious areas of the KS3-5 curriculum through Museum Learning such as Modern Foreign Languages, Maths and PE. Museum Learning encompasses activity in school (e.g. curating, visits from external experts, object handling) as well as off-site activity (e.g. trips linked to curriculum topics, project workshops).

Objectives of this research project

In September 2014 a new National Curriculum came into force, touching all areas of the curriculum (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/330327/SECONDARY_national_curriculum_FINAL_140714.pdf). The research looks at opportunities for schools to deliver all less ‘obvious’ areas of the curriculum using museums as well as identify opportunities offered by changes to more traditionally ‘museum-friendly’ areas of the curriculum, such as history, art and science.

Who is the research for and how will it help them?

We have called the project Stronger Together as we believe it is important to give both teachers and museum staff greater exposure to the others’ professional contexts to achieve better outcomes for students. This research is aimed at people in the museum sector who work with/are looking to work with secondary schools. Museums have been anticipating the changes to the curriculum and planning accordingly, particularly in subjects like history where they are used to developing schools programmes with a curriculum focus. This research will provide practical inspiration for how their museum can support learning in more areas of the curriculum and help
them see how by focusing on areas of change in the new curriculum they can ‘plug a gap’ for teachers. It is also aimed at teachers so that they can articulate their demand and be clearer in their demands of museums.

**Context for the research**

This report was commissioned to identify the impact the new curriculum is having on schools and museums. It is important to provide an insight into the opportunities the new curriculum provides for schools and museums to work together and develop partnerships in the context of new content for the new curriculum.

**About the researchers**

*Sandrine Rutherford:*

I am currently working as a French and Latin tutor, but previously I was a French teacher at The Langley Academy (TLA) for five years. Museum Learning was an integral part of my day to day teaching at the Academy. I think it is the most rewarding and pleasurable way to teach; your lessons come to life, your students are fully engaged and the knowledge passed on to them that way stays with them. The new curriculum brings about changes and changes can be exciting or daunting. This research project reminded me of my journey learning to become a Museum Learning teacher and the support I needed. As the requirements of the new curriculum are in their first year, it seems a very good time to provide support to museum professionals and teachers to find new curriculum links and opportunities to work together to enrich the learning of students.

*Nicholas Royle:*

I am a teacher of Humanities (History, Geography and RPS) at TLA and have been for the past two years. The reason I chose this school was the unique element of Museum Learning that this school offers. I was interested to see how Museum Learning would be incorporated within the curriculum. After experiencing successes with Museum Learning I was interested to see how the opportunity of a new National Curriculum could offer not only TLA but many other schools the chance to utilise Museum Learning.
3. Methodology

What did the research involve?

This research project involved the following:

a) The mapping of previous activity through:
   - A review of TLA Museum Learning partnership activity from 2012 to 2014, identifying activity across all curriculum areas from KS3 to KS5 (interviews with TLA ML team, interviews with TLA partner museums involved in projects, project documentation research).
   - Interviews with TLA Heads of Faculty to understand which projects have been most successful and why.

b) The identification of opportunities within the new curriculum through:
   - Interviews with TLA Heads of Faculty on opportunities for Museum Learning projects to deliver the new curriculum.
   - Research interviews with professionals from a range of museums to understand where they see greatest challenges and opportunities in the new curriculum, including with our Museum Advisory Group members (River & Rowing Museum in Henley, Oxford University Museum of Natural History, The V&A, Reading University Museums).

The final written report presents the findings for research areas a) and b) and clearly identifies new opportunities for museums and schools.

The methodology took the form of:

- Project documentation research and study of online publications.
- Interviews with TLA ML team and museums mentioned above.

Key questions:

1. Which partnerships / projects between your organisation and secondary schools have been the most successful and why? Are they ongoing projects or not?
2. Did you anticipate the changes in the NC? How did you prepare for these changes?
3. Has the implementation of the new curriculum had an impact on your organisation? If so, what challenges and opportunities do you think the new curriculum provides? If challenges were met, how did you tackle them?
4. Which curriculum areas do you traditionally work with? Has that changed since the implementation of the NC? From which curriculum areas have you had the most enquiries since the National Curriculum changes?
5. Do you feel your organisation offers activities and support to a variety of curriculum areas? Do you think the new curriculum offers you more opportunities to involve subject areas you have not worked with before?
6. Have you seen an increase or a decrease of interest from secondary schools since September 2014?
7. What do you think of the shift of certain subject topics from the primary curriculum to the secondary curriculum?

8. How do you think the Stronger Together Projects can shape the future of Museum Learning in Secondary schools? How do they support an inclusion of a variety of subject areas in Museum Learning?

- Focus group with a selection of partner museums taking part in the Stronger Together project on 14th January 2015.
- Focus group with the members of the Berkshire, Oxfordshire and Berkshire museum network members on 2nd February 2015.
- Survey to a selection of museums involved.
- Interviews with TLA staff regarding Museum Learning and the new curriculum.

Key questions:
1. How, if at all, has the new curriculum impacted on Museum Learning within your subject area?
2. Do you see any potential for Museum Learning to be used within the new curriculum? If so how?
3. How does your subject area include Museum Learning within the curriculum currently?
4. How easy/difficult have you/your staff found it to include/set up Museum Learning within your subject area?
5. Do you feel Museum Learning benefits the pupils learning?

- Focus group with staff taking part in the Stronger Together project.
4. Summary of changes in the new national curriculum and changes to assessment

Changes across the curriculum

There are clear themes across the whole curriculum. All three core subjects of English, Mathematics and Science show the same trend of more difficult material included at lower key stages. There is a general trend towards a need for context and real world application which also applies to the core subjects. The same can be said for History and Geography, where there is a new emphasis on local field work and historical studies, although interestingly, History sees less emphasis on source interrogation skills. DT and Computing both reflect this move towards practical application of the subject.

There is less emphasis on creativity and imagination in both Art and PE. While other subjects are moving towards practical application, in this latter subject there is a very clear shift towards classroom analysis and away from practical experience.

Students’ own ideas are being downplayed in subjects like DT (less emphasis on theories of ergonomics) History (less emphasis on historiography) Art and Music (less emphasis on creativity).

Computing shows a radical change. Students will no longer learn about software packages. Instead they will learn about programming and how computers work. Drama shows a great change in that it is now going to be part of the English curriculum rather than a standalone subject.

Details of the changes to the different subjects are shown in the table below.

Changes to assessment

One of the most controversial changes in the new curriculum is that modular exams will no longer exist. Instead, a one off exam at the end of Year 11 will determine the grades of the students. There has been a reduction of coursework with many subjects becoming exam only.

An additional complication is that now schools’ positions in league tables will be judged from the first entry results of pupils rather than the final grade. The advantage for schools of multiple entry was that it gave pupils exam condition practise. It allowed weaker pupils another chance or chances. Stronger students had the opportunity to focus on other subjects after their initial exam success. Now many schools may enter pupils only once for an exam. This will add pressure to an already stressful situation. It may mean that the last months leading up to GCSE will be entirely focused on exams, with much less hope of leaving the classroom.

There has also been a change to assessment at KS3. Levels are no longer required; schools have the flexibility to use their own levelling or grading criteria.
## Changes to subjects: Summary table

<table>
<thead>
<tr>
<th>Subject</th>
<th>Included</th>
<th>Removed</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td>Two Shakespeare plays and some pre-1914 literature. Study two authors a year. Students will have to put a text in its social, historical, and cultural context. Drama is now part of the English curriculum. More emphasis on expressing pupils’ feelings and less on factual or formal speech, although they will practice public speaking and debating.</td>
<td>There is no set list of authors. Although there is no set list of authors, teachers express concerns that the pre-1914 requirement will heavily influence the texts chosen. At TLA the KS3 texts are also changing to help students cope with pre-1914 texts when they reach GCSEs.</td>
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<td><strong>Mathematics</strong></td>
<td>Probability, algebra, geometry and rates of change now taught at both KS3 and KS4. More complex mathematics included on all exam papers.</td>
<td>Students will no longer have aide memoire equations on exam papers. For example, previously students had trigonometry equations on the front of an exam paper. They are now expected to learn them by heart and use them in exam conditions. At TLA the lower set mathematics students were not introduced to some of these challenging topics at GCSE.</td>
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<td><strong>Science</strong></td>
<td>More challenging topics taught at KS3 as well as KS4: Evolution and inheritance, the importance of diet and exercise / effect of drugs human reproduction. The Periodic Table and climate change is now a focus throughout KS3/KS4.</td>
<td>Like mathematics, the Science curriculum has more content. There will be time pressures for teachers delivering this. However, museums can provide real world examples to support learning.</td>
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<tr>
<td><strong>Art</strong></td>
<td>Multimedia techniques and the history of artistic, architectural and design movements.</td>
<td>There is less emphasis on students developing their own creativity and imagination. Art is hugely popular at TLA because it gives students the chance to develop their own creativity and imagination. In practice the teaching</td>
<td></td>
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<tr>
<td>Subject</td>
<td>Change</td>
<td>New Focus</td>
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<tr>
<td>DT</td>
<td>3-D Printers and similar contemporary design and manufacturing techniques</td>
<td>Less theory, fewer references to the concepts underpinning DT.</td>
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<td></td>
<td>The 3-D printer at TLA is very popular and has given the subject real contemporary relevance for students. There are lots of opportunities for studying objects inspired by new technologies in design.</td>
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<tr>
<td>Geography</td>
<td>Topics include: contextual knowledge of the location of globally significant places, countries of world, counties and cities of UK, physical Geography including volcanoes, reading Ordnance Survey maps, using this in conjunction with field work, Climate change and use of satellite technology.</td>
<td>European Union</td>
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<td></td>
<td>The local fieldwork unit should provide scope for museums. Contextual knowledge of globally significant places should support work with museums. Counties and cities of the UK also gives museums an opportunity for links.</td>
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<tr>
<td>History</td>
<td>Britain from 1066 to the present day, including Empire, Victorian Britain, world wars, Cold War, creation of NHS and the Holocaust. Schools must study the history of the local area. “The final solution” has been added to the KS4 curriculum.</td>
<td>Skills for example, how to interrogate sources material. Theories of history, historical processes and historiography.</td>
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<td></td>
<td>The local history study unit should provide scope for museums. There is a lot to cover and the choice of exam board will be significant.</td>
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<tr>
<td>ICT / Computing</td>
<td>ICT will become computing. A very different curriculum will look at codeing, computer design. Students will be set computing problems to solve.</td>
<td>How to use Word, Powerpoint, Excel etc.</td>
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<td></td>
<td>TLA has begun to explore this with apps created with Amersham Museum.</td>
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<tr>
<td>Modern Foreign</td>
<td>How to initiate conversations, read a range of stories, poems and letters, and translate material into English.</td>
<td>MFL will no longer be compulsory at primary schools.</td>
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<tr>
<td>Languages</td>
<td>MFL knowledge at Year 7 is already patchy. Removing the compulsory element at primary may make it</td>
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</table>
At TLA the MFL teachers work hard to make their subjects relevant and exciting for students. Starting the subject early is a beneficial part of that mix.

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<tr>
<th>Music</th>
<th>The use of musical devices such as tonalities or types of scales is to be extended. Demonstrating tonalities to students, and enabling them to engage with scales could extend the musical possibilities in the classroom. By understanding what musical devices are and what they do, students can apply them in their own compositions.</th>
<th>Less emphasis on exploring ideas and feelings through music.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education</td>
<td>60% analysis, 40% practice. Competitive games such as football, netball, rounders, cricket, hockey, basketball, badminton and tennis continue to be a focus. At KS3 Dance is now a requirement to be taught. There is also more of a focus on analysis of past performances to improve standards and a requirement to take part in competitive sport outside school.</td>
<td>Previously the ratio was 60% practice and 40% analysis. There are no longer references to creativity in PE.</td>
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<td></td>
<td></td>
<td>At TLA the teachers use museums to inspire students about sport. There has been some exploration of museum learning to support literacy in PE.</td>
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</table>
5. Views from schools on the new National Curriculum

The teachers surveyed from TLA and other schools are not yet delivering the new National Curriculum. Their responses can only be based on assumptions about how the new programme of study will work in practice. At the time of the survey the teachers were not yet in their planning phase. This means that their responses will only be based on a general overview rather than a detailed analysis. Another word of caution is that the teachers surveyed from TLA are already interested in working with museums and are more likely to be open to new ideas from the cultural heritage sector. They are not necessarily a representative sample, but they do have plenty of ideas.

The respondents show clear enthusiasm for working with museums and the benefits for students, particularly for real world application of subjects and the ability to bring a wider context to students’ studies. Another theme that runs through the teachers’ responses is the idea that Museum Learning can inspire students; it can make a complex subject understandable and fun.

5.1 Museum Learning at The Langley Academy: review of previous activity and opportunities afforded by the new curriculum

5.1.1  English (Teacher 1)

Previous and current programmes
English use a variety of different Museum Learning techniques within the current curriculum such as field trips, external groups, object handling and the faculty have even started to build their own collections and setting up displays in TLA museum. One of the most successful uses of Museum Learning used in English is the annual visiting production of Shakespeare’s *Romeo and Juliet* from the Globe Players. Pupils are given the opportunity to experience the text they study being brought to life.

How museums could help deliver the new curriculum
One of the main changes to the new English curriculum is the focus on contextualising pieces of work. The recent Frankenstein trip to the Old Operating Theatre and Hunterian Museum at the Royal College of Surgeons demonstrates how Museum Learning could be used to help deliver the new curriculum. A Year 9 bottom set English class (with most pupils having a reading age of around 7) who, if taught traditionally, might have found the task to contextualise an early 19th century novel challenging. However, teacher 1 explains that after the trip the pupils had a deep understanding of the text and crucially, knew how to use that understanding in an exam. Teacher 1 illustrated that her pupils did make an improvement on exam question due to this work, partly due to pupils were more engaged and attentive when analysing the book in lessons. As pupils need to study more texts this can be trying for many pupils, so being flexible and looking at how to generate interest within the new curriculum is vital.
An example of this is at KS3 when Teacher 1 focussed on fairy tales and how they have changed over time, leading up to modern day Disney fairy tales. Using old texts and costumes within lessons pupils compared how the morality of fairy tales has dramatically changed over time. Pupils began to develop an interest as to why the morality had changed, which led further discussion and interest amongst the group.

5.1.2 Maths (Teacher 2)

Previous and current programmes
The Maths department run several annual projects:

- An internal data collection project for Year 7 pupils. This is a school wide audit of the different types of materials are being used around the school. Different groups are then challenged to present this data in a variety of interesting ways.
- A Year 8 internal Pi project on measurement. Using TLA grounds and differing equipment to try and accurately measure different objects using the mathematical principles of Pi.
- All Year 9 pupils visit the Oxford Museum of the History of Science, where the collection of nautical instruments underpins an exploration of geometry, and Museum of Natural History, where the collection supports learning about symmetry in nature. It is important to note that this project was originally co-designed by Oxford Museum staff working with TLA teachers.
- The most recent activity was a Year 11 trip to Paris in conjunction with the MFL department.

How museums could help deliver the new curriculum
There are vast changes for Maths in the new curriculum. The content is getting larger with a focus on functional (real world) maths. There is an increase in literacy questions and ratio and proportion are now being kept separate. One of the more important changes is that the curriculum is going to get harder. The Foundation Paper is becoming a lot harder with lots of Higher Paper material moving to foundation bringing a smaller threshold to pass. With these raft of changes a member of the Maths faculty (teacher 2) discussed that Museum Learning will continue to play a major role in their curriculum.

Teacher 2 is looking to change the KS3 curriculum to focus on one Museum Learning project per term. She believes this will help students obtain higher marks in KS4 as Museum Learning will help pupils relate maths to the real world more easily. Pupils typically struggle with the functionality of Maths and relating Maths to the real world and with the shift of the curriculum it is important that pupils can start to do this, Museum Learning can make this aspect memorable. Visiting business and using real world practice in their curriculum could be an excellent opportunity, not only for KS4 pupils and their curriculum needs, but also for future prospects with those businesses.

Working with museums has already helped with functional maths and literacy. As previously said pupils often find it difficult to relate questions to the real world. The ‘hands on’ approach of museums helps with this. An example of this is the annual trip Year 9 to Oxford museums to look at
symmetry. Pupils in Year 11 can accurate recall principles of symmetry due to handling live animals and objects, by analysing a tarantula these principles are more easily remembered and related to the real world.

**Perspective on how to make Museum Learning successful**

Teacher 2 discussed that Museum Learning helps with pupil engagement as lots of activities that are usually ‘boring’ have been brought to life. Pupils can more accurately recall those activities, lessons and concepts. When asked further about Museum Learning teacher 2 talked about it being a key part of successful Museum Learning project to sit down and talk to museums about potential project ideas. Teacher 2 found that museums were surprised about the amount of variety they could offer schools. It is only with these discussions that many of the opportunities that Maths offer would not have arose. However there were some areas that need to be addressed in that some of the more shy pupils can fade into the background, teachers need to be proactive to resolve this issue, this, as teacher 2 mentioned, is only a minor issue in a model that has been so successful for TLA Maths department.

**5.1.3 Science (Teacher 3)**

**Previous and current programmes**

The main way the Science department utilise Museum Learning is by object handling in lessons. Examples of these are: body parts, models of the solar system and chemical models to name but a few. By allowing pupils to assemble chemical models they gain a better insight into how a chemical model is made up as they are the ones who have put it together.

Other external activities have been to the River & Rowing Museum to look at Ecology, and a KS4 trip to the Ashmolean Museum for a visit focusing on the science of conservation.

**How museums could help deliver the new curriculum**

The Science curriculum is another subject that is changing dramatically. Similar to Maths, KS4 content is moving to KS3, A-level work is being brought down to KS4, making Science at all ages more difficult. There has been a larger focus on Maths skills as 30% more numeracy is being added to Biology and Chemistry. After a lengthy discussion with Teacher 3 and examining all the changes the Science faculty are going to wait before implementing Museum Learning within the new curriculum. The current focus for the Science faculty is content, teachers are going to have to re-learn and revise extensive material for the new curriculum. After the first year of adjusting to the new curriculum the faculty will look to use museum resources as much as possible.

**Perspective on how to make Museum Learning successful**

The Science faculty are big advocates of Museum Learning and have had past success and are looking forward to using Museum Learning within the new curriculum. To make it successful teacher 3 suggest integrating Museum Learning within the curriculum by doing work pre and post museum visit. This is important as it enables students to make clear links between the museum experience and their learning. Pupils may see trips as a fun day out and can miss the key meaning of the event. Using schemes of work and classroom activities to build up to the event and evaluating
after allows the museum experience to have real meaning as is a very important part of effective Museum Learning.

5.1.4 PE (Teacher 4)

*Previous and current programmes*

PE run annual external trips to the River & Rowing Museum for Year 10 pupils to look at science and sport, this links with the curriculum.

*How museums could help deliver the new curriculum*

There have been few changes to the PE curriculum, KS3 will now incorporate Dance and more Outdoor activities. At KS4 the original 60/40 split for practical/theory has now been reversed with a greater focus on theory. Teacher 4 highlighted the fact that many pupils take PE for the practical nature of the subject, this switch could be problematic. One area which we identified that Museum Learning could help is by using external visits to watch elite athletes and coaches. This fits with the new curriculum and would help not only engage pupils but also inspire and motivate them in their studies of PE.

*Perspective on how to make Museum Learning successful*

Teacher 4 was positive about Museum Learning, he talked about how using external visits benefits pupil learning as it adds depth and understanding. As it is a different aspect of learning pupils seem to be more engaged and able to recall information. With a greater shift towards PE theory, teacher 4 is planning to continue utilising Museum Learning due to previous successes. However, teacher 4 did mention that without the help of TLA Museum Learning team many of the trips would not have occurred as the workload of setting up trips is very time consuming. They also had to trial the trip a few times to get content how they wanted it.

5.1.5 Humanities (Teacher 5)

*Previous and current programmes*

Religious and personal studies have recently run trips to temples of different faiths, which will become an annual trip. Annual external groups have also run workshops on multiculturalism and diversity. Geography run an annual field trip study to help pupils with their coursework. They also have recently set up trips to the Olympic park to look at sustainability. History continue their annual trips to the Imperial War Museum.

*How Museum Learning could help deliver the new curriculum*

With the requirement to look at local History TLA are fortunate in that Langley was the main site for the production of the Hawker Hurricane aircraft for the duration of the Second World War. This is an excellent opportunity to incorporate local history within the Second World War section of the curriculum. There is a fantastic opportunity for schools to work with local museums to create projects for this requirement. Areas might not be as lucky as Langley with their local history but many cities and towns in England will have an area of interesting local History.

Geographical map skills have been taught by taking the pupils on an orienteering trip around a local park, this could be scaled down to a route around school grounds if required. By allowing pupils to navigate their own way round using skills in lessons helps the pupils understand the use of these
skills, which often many pupils question. From my own experience many pupils do not see the need to study map skills when many would simply use their smart phones for directions. However, by making the lesson more interactive and competitive pupils seem to engage more with the lesson and understand the skills are useful for navigating unknown areas such as foreign cities.

**Perspective on how to make Museum Learning successful**
Teacher 5 describes how Museum Learning and Humanities work very well together as there are lots of opportunities to work together, an example of this was incorporating object handling into lessons about 1066. Pupils got to wear a Norman helmet and hold a Saxon sword, this helped them visualise the battle. Compared to showing a video or having a picture on the board, the level of engagement and enthusiasm is far better when the lesson is ‘hands on’.

He also described how it is essential for teachers to visit the potential museum or location and work with the staff to create an activity that suits that particular school, otherwise it just feels like a one off event that might only cover a very small aspect of their learning.

5.1.6 MFL (Teacher 6)

**Previous and current programmes**
The Modern and Foreign Languages (MFL) department have used a variety of different ways. They frequently use objects in lessons so pupils can relate words to items, for example; items of clothing, different foods and household items. Recently MFL set up a trip to the battlefields of the First World War. They worked with a number of different companies and museums to organise the trip to meet their own needs. This trip was so successful they are going to run this trip annually.

**How museums could help deliver the new curriculum**
The change to curriculum is to focus on authentic material such as poetry and literature. There seems to be a clear opportunity with the new curriculum to be creative. For example, to look at French literature (*Les Misérables* by Victor Hugo) could allow MFL to look at lots of different aspects of France at that time such as historical, social, political movements during the French revolution. This could be linked with other faculties around TLA to make a more substantial project. As previously mentioned the MFL department set up a very successful trip to the battlefields of the First World War a trip that fits is perfectly with the new curriculum. The requirement for more ‘authentic’ French illustrates that an overseas trip would be an excellent opportunity for pupils to gain a first-hand experience of speaking French.

**Perspective on how to make Museum Learning successful**
Museum Learning can help innovate classroom teaching as it offers something new and exciting which pupils seem to respond more positively and seem more engaged and motivated. This only works if Museum Learning is used within lessons and is not one off activities. Museum Learning gives lots of opportunities for pupils to develop more widely which benefits the whole child, not just focussing on one subject.

Teacher 6 wants to use more cross-curricular opportunities to implement Museum Learning. With the limited time available to MFL cross curricular links/projects seem to be an excellent way to involve more people with Museum Learning and find a project that will benefit multiple subjects.
However, it was mentioned that some external visits seem to be a process of box ticking which can put teachers off as they feel it is too much time wasting.

5.1.7 Creative and Performing Arts (CAPA) (Teacher 7)

Previous and current programmes
Across the department Museum Learning is important valued very highly, they recently received the Arts Mark Gold award using Museum Learning. The Art department run regular trips to galleries in London; one regular is the National Portrait Gallery. Within Art they use lots of real world art work in lessons as inspiration for the pupils. The music department focus on internationalism week and run workshops for TLA. Drama do not have a National Curriculum but the Drama team have written their curriculum linking with GCSE focusing on Museum Learning, using external visits and groups to help support the pupils.

How museums could help deliver the new curriculum
GCSE Art pupils benefit greatly from Museum Learning as the trips helps their own work as they get to see exemplar pieces and use that inspiration for their own work. Teacher 7 described that seeing artwork up close and in the context of a museum has much more of an impact that seeing it on the board in the classroom.

Perspective on how to make Museum Learning successful
Teacher 7 has found it easy to set up projects and relationships with museums as she personally visits the galleries and discusses with them the possibility of working together. She notes that communication is the key. It is important that the pupils know how the visit fits into their work, and that they use what they have learnt on the visit back in school so there is a clear link between the visit and school work. This is important to keep pupils engaged and focused throughout the visit.

However, it was discussed that Art need more objects to use within lessons. As pupil time in lessons is at a premium it is sometimes difficult to remove pupils from lessons, so having a resource bank available in lessons is an excellent resource, the enthusiasm is there they just need the funding. The objects/resources do not need to be expensive they can be found in charity shops or car boot sales.

5.2 Views on opportunities afforded by of the new curriculum from teachers in other schools
The four teachers in the focus group were part of the Stronger Together project and are therefore more likely to be enthusiastic about the opportunities for working with museums than teachers without this experience.

Previous and current programmes (before the Stronger Together Project)
Teacher A is a teacher of History, he explains that as his school is close to London he runs one off trips to many museums as there is a wide variety on offer.

Teacher B is a teacher of Geography and has little experience in working with museums. She currently conducts one trip per year.
Teacher C is a teacher of Science; the department run infrequent trips depending on timings and completion of content. Trips are seen as reward and not utilised as a learning resource for the curriculum.

Teacher D is a teacher of History, her school does very little work with museums. She sometimes organises a trip to a local museum or gets an external group in to deliver sessions but this is a rarity due to cost restrictions of the school.

*How could museums help to deliver the new national curriculum?*

Teacher A:
He believes that the new ‘local History’ aspect could help improve engagement in History. He discussed that when pupils can relate to the topics they are studying (due to locality) they are more willing to engage. An example of this is studying The Magna Carta and the role Windsor castle played. It is a great opportunity to explore the local area and look at one of the most important historic documents in English History. He is going to use lots of objects for enquiry in lessons to get the pupils thinking and taking responsibility for their learning. It has been a successful tool for Teacher A to generate more interest and independent learning within his classes.

Teacher B:
After running a Museum Learning project Teacher B describes the benefits of using more artefacts in lessons. Teacher B has been using them for a curiosity starter and to help answer a main learning objective. After running a successful trip she explained that recall is much higher for those pupils as interesting trips are more memorable pupils could often recall more information about that trip. She now couples this with pre and post work to imbed the trip within lessons which is much more useful to pupil progress. Teacher B has identified the new topic of glaciation as a potential area that museums may help, she is currently working with the Physics department to look at glaciation from a more scientific focus.

Teacher C:
One topic that Teacher C identified that pupils typically struggle with is Year 10 renewable energy. She has already begun to the process of organising a trip to take them to the wind farm close to her school. This will give the pupils a chance to speak to the experts to give the pupils real insight in to how the farm works and the advantages and disadvantages of renewable energy. She illustrated that some aspects of the new curriculum might be difficult to teach and so museums could fill that gap.

Teacher D:
Before the Stronger Together project Teacher D explained that she believed object handling to be a primary school technique but after working with objects in lessons, she says that it is so valuable for Secondary. For future activities/trips she highlighted that she is actively looking at ways to bring in more objects and use local History is lessons much more. Teacher D has targeted the topic of the Normans to use more objects such as weapons, clothing and tools to give pupils a better insight into Norman life.
Teacher A:
One way Teacher A has found to make working with museums successful is by teachers sharing practice of what works and doesn’t work, this allows teachers to create better opportunities. Pupils need to be shown the real world and by using museums it allows pupils to be taken out of a school environment which helps them to relate work to the “real world”.
However, Teacher A did mention that costing of trips can put a lot of pupils off as parents may not have the disposable income to pay for a trip. All pupils should be offered the opportunity not just the wealthy pupils.

Teacher B:
Some issues that Teacher B highlighted were as follows:

- Teachers need to become familiar with object handling, setting clear objectives in relation to the object which should focus pupil attention to the learning aspect of the object rather than the handling of the object. She found that the more pupils are exposed to artefacts/objects in lessons the better their focus becomes as they become familiar with the process of object handling resulting in better quality learning in lessons.
- Some subject areas do not have the budget for lots of different trips. She found that this can be addressed by scaling the trip/activity down for example instead of using a local park for orienteering use the school grounds.

Teacher C:
Teacher C illustrated the point that the teachers themselves are excellent resources and if they look at the new curriculum they will find links of how to bring Museum Learning into lessons. As teachers are the experts they can explain to museums/organisations exactly what they want, Museums can then discuss what they offer and if you co-operate you can develop excellent opportunities for pupils. However, Teacher C did mention that the problem of logistics (the administrative work and organising coaches) can put teachers off. Also time is going to be a concern as the new curriculum changes are to deliver more content but in the same amount of lesson time. Teacher C has identified that objects seem to be a great way to continue Museum Learning, even with these new changes.

Teacher D:
From previous experiences Teacher D talked about how you can pay for a session and it might not work for you and your pupils. The key is to work with museums to tailor the trip to your exact needs. It is the teacher that needs to take the lead to visit and explore the different possibilities. One example she gave is to utilise local museums as they are a great resource, one major benefit is that you do not have worry about pupils missing too many lessons which makes trips much more viable. Teacher D discussed that she is keen to continue to use Museum Learning in lessons. Originally she was a little apprehensive that pupils would get bored with the work. However, pupils were engaged and enthusiastic with their learning throughout the project. The fun, interesting lessons seemed to motivate pupils to want to come to the lessons, be inquisitive and read around the subject.
6. The impact of the new National Curriculum: The view from museums

‘There are opportunities to link to everything!’ (Online respondent E)

The survey respondents were generally positive about the new primary curriculum and the forthcoming secondary changes. In the online survey, 67% of the respondents rated the opportunities offered by the new curriculum as good, 22% as average and 11% as very good.

Most of the respondents acknowledged the importance of reviewing their offer, even if it is still too early to fully appreciate the impact on schools.

‘The introduction of the new curriculum has encouraged us to review our schools’ offering. We are still in the process of updating our programme.’ (Online respondent H)

For museums, the new curriculum is part of a raft of other changes.

‘We are constantly responding to what the new exhibition is, what the priorities are (…) if there is national funding, (…) so the new curriculum is just very much in the mix of what we are reacting to, it is not a shock.’ (Organisation 1)

There are some words of caution about the changes. Some services expressed caution about trusting to the appearance of opportunity offered by the curriculum.

‘We are playing somewhat on the supposed freedom for teachers to develop their own approaches and methods.’ (Online respondent A)

‘In theory teachers are reviewing what they are doing and we can step in and say “we can help with this”, they are themselves open to new opportunities.’ (Organisation 2)

Another trend was for museum respondents to be concerned about “shoehorning” collections simply to fit the national curriculum.

‘In the conference (National curriculum training day for Buckinghamshire, Oxfordshire and Berkshire museum professionals in February 2014), what came out was that, as a profession, we should not feel we should shoehorn’ (…) just because there is a sudden demand for that era, it might not last and it is irrelevant to my property.’ (Organisation 8)

‘[…engaging more curriculum areas] Why should we? More is always considered better, [but] when you put it alongside the programme, it does not have the depth and we want that consistency of offer.’ (Organisation 1)

In the main however, museums were positive about the opportunities.

‘I think those opportunities have always been there – It may be that the change will prompt people to explore them more.’ (Online respondent E)
‘Whether it is the new curriculum or teachers have recognised that we have started doing sessions for schools, (...) we are getting more and more requests for bespoke sessions from secondary schools, (...) landscape, marketing, World War One, teachers contact us saying “we need to tick this box, can you help us tick it”. (Organisation 8)

There is a sense that the changes are welcome and can offer fresh perspectives.

‘A shake-up offers an opportunity to rethink practice and cultural partnerships.’ (Online respondent A)

When museum staff were consulted about secondary schools and the new national curriculum, there was a general tendency for respondents discuss logistics, behaviour and similar difficulties relating to secondary students rather than focus on future curriculum change. This has been included in the report to show the general experience of the museum sector in relation to secondary schools.

Support in place
Museum networks and organisations across the country such as The Cultural Learning Alliance anticipated the changes and requirements of the new curriculum and organised sessions for museum professionals, and sometimes teachers, so they could explore the new curriculum, discuss it and consider the opportunities provided for their organisations. A large proportion of the museum professionals spoken to had attended those meetings, some were covering the whole curriculum, whilst others focused on certain curriculum areas and they found the support in place very useful. However, the emphasis for some of those sessions was solely on the changes to the primary curriculum, which was the case of the training session “Unpicking the new curriculum” offered to BOBLI (Buckinghamshire, Oxfordshire and Berkshire Learning & Interpretation Group) members in February last year. Having attended a BOBLI network meeting recently for the purpose of this research, it is clear that the main audience for the majority of the members present are primary schools and this was reflected in the training provided. This seems to limit the possibilities of engaging secondary schools, if museums are not given the opportunity to explore together the new secondary curriculum and consider how they can benefit from it and develop new links.

Museums were also the providers of support specifically for teachers. Oxford Art Teach for example, a network for Oxfordshire Art and Design teachers, run largely from the University Museums, held a series of network meetings with invited speakers talking about the new curriculum.

‘The museum service has been able to play a central role in creating a network where [Art and Design] teachers can support one another and organise their own cpd. The teachers feel very insecure about the new syllabus and marking scheme, they feel ill prepared and without Advisory support, they are floundering.’ (Online respondent F)
6.1 Opportunities offered by the new curriculum by subject

The opportunities afforded by the new curriculum have been compiled below by subject as mentioned during interviews, focus groups or in the online survey.

6.1.1 Opportunities in History

The new chronological aspect of the history curriculum and the year 1066 separating the primary and secondary curriculums were received with mixed feelings by museums.

‘It is a worry to think that children at the age of eleven would have never heard of Queen Victoria or Henry VIII.’ (Organisation 3)

‘I think learning chronologically is beneficial to students’ understanding of how different periods of history fit together.’ (Online respondent C)

However, the curriculum review offered some flexibility and ways to focus on post-1066 periods at primary level and pre-1066 at secondary level. Primary schools can study “an aspect or theme in British history that extends pupils’ chronological knowledge beyond 1066” or they can “study an aspect of history or a site dating from a period beyond 1066 that is significant in the locality.”

Consequently, the museums who have been offering post 1066 sessions at primary level have noticed no or little decline in the take up from primary schools. When a decline was noticed because the historical period associated with the workshop is now in the secondary curriculum, some museums would not offer it to secondary schools, they would instead rebrand it as a local history session or find a new focus, such as creative writing or even develop new workshops suitable for the primary curriculum.

‘There may be sessions that we offer at primary level that are no longer on the curriculum, but are still valuable to schools offered as a local history topic, or we can look to deliver them in a more cross-curricular manner so we can meet other primary level objectives with them.’ (Online respondent C)

‘The changes in the primary History curriculum have meant that bookings for the 2014-2015 school year have shown a slight decline. This is because the Victorians had previously been one of our key offerings. (...) For the next academic year, we hope to have an archaeology based session relevant to students studying prehistory and the Romans.’ (Online respondent H)

‘There was an expectation that KS1 and KS2 visits would drop and we would need to increase KS3 to 20% but that has not happened, we are fully booked with KS1 and KS2’ (Organisation 3)

‘The shift of the Second World War to the secondary curriculum was a concern for us, as a large part of our collections relate to this topic. (...) our response has been to focus on branding the sessions as local history.’
Many organisations feel the study of local history at KS2 and KS3 is helping smaller museums with limited resources; the local aspect is viewed as having a very positive impact. There is also no specification as to what ‘local’ is in terms of distance, as suggested by one organisation, so schools in a 30 miles radius may not be out of your reach.

‘(...)The focus on local history will be of benefit to many local museums across the country, and hopefully by engaging with their local museums whilst at school, pupils will grow feeling invested in them and in their community and its history.’ (Online respondent D)

However one organisation warns us in the online survey of the potential pitfall of “those visits which may offer a local history outcome”. The respondent is wary that this may only appeal to a few local schools when the aim is to attract a wider audience.

Some organisations found that they did not need to change the sessions they were offering, it was more a case of rebranding their sessions with a focus on the local history.

‘[It is] the way to go for us’, ‘the “local” is how I’m branding that now. Before, wartime aviation, Spitfires were sold as World War II sessions, now it’s Maidenhead has an amazing aviation history, really local and important (...) and you should come and visit, not because it is World War II, it just happens to be World War II.’ (Organisation 6)

Some professionals found that the shift of certain periods of study from the primary to the secondary made their organisation, as historical buildings, fit into the secondary curriculum. They can engage secondary schools on three fronts: the KS3 curriculum requirement for a “local history study”, the period of history the building belongs to and potentially an opportunity to also meet the requirements of the new History GCSE, one of its key foci being “the study of a particular site in its historical context.” Windsor Castle is now offering secondary schools medieval studies sessions “in the Footsteps of Medieval Kings”, using the building itself as the focus and “awesome arms and armours” as a workshop, having outsourced a mail armour craftsman to provide a session on mail armour and medieval life.

‘I was aware that the 16th century had been made a KS3 topic. We have a 16th century building and it is an important era for the town so I felt it was a good opportunity for us’. (Online respondent I)

Finally, museums can use the items in their collections to support and inspire creative writing and art and design. For example, a resource pack has been produced for the new Waterloo exhibition at Windsor Castle to encourage a teacher-led visit focusing on history of art and creative writing as well as a the historical aspect.

6.1.2 Opportunities in the Arts (Art & Design, Design & Technology, Drama)

As mentioned in the March 2014 briefing of the Cultural Learning Alliance, “there is a series of disincentives at work which are affecting the provision of arts subjects in schools”, the new curriculum being one of them. Drama no longer stands alone but is a small part of the English
Curriculum and Art and Design has a very slim content. Museums are, however, finding ways to overcome these issues.

**Art & Design, Design & Technology**

The Secondary Art and Design education officer for the Oxford University Museums considers that ‘Secondary Art and Design, along with all the Creative Arts, is being squeezed in maintained secondary schools’, reporting a drop of 6% arts staffing. In response, she adds that in the Oxford Museums they have established Arts Award: Discover, Bronze and Silver, which have been widely taken up. In addition they offer ReSource, a half-term GCSE and A level research programme in February and also summer holidays workshops for those supplementing their Portfolios. As the quote below shows, other organisations are considering the scheme:

‘Schools seem to be responding to a perceived “threat” to these subjects by taking up Arts Awards (one school that we work with aims to offer this to all Year 8) and we have always planned to offer this too so there’s been an opportunity there.’ (Online respondent E)

The “slim” art and design curriculum is seen as an opportunity for more freedom given to the teacher and the museums.

‘The projects that we are working with secondary schools for are focused on art, design and textiles. The curriculum for these is so broad that we can do virtually anything!’ (Online respondent E)

‘The Art and Design curriculum is one page and a half, so open. There is so little direction that you could continue doing exactly what you were doing before and existing resources would still fit.’ (Organisation 1)

The Art and Design curriculum has offered opportunities for organisations such as the Oxford Museums to engage new subject areas across their five museums: Museum of Anthropology, Science, Art and Archaeology, Natural History and Botany. These museums have offered a range of opportunities to adapt Art and Design to the curriculum according to its Secondary Art and Design education officer. He has run workshops for Art and Maths, Art and Religion, Art and Bio-diversity, Art, Optics and Perspective, but he has specifically worked with Art and Darwin for Science, Art and Magellan for Geography and History and Art and Anthropology for representations of the body. Moreover, to support the delivery of the curriculum, links were forged with other art organisations, such as the Ruskin School of Drawing and the Royal College of Art to bring in expertise and opportunities for teachers and students they may not have at school, particularly in the maintained sector. Finally, as the head of an Art department before joining the museum education service, the Art and Design education officer for the Oxford museums understands the needs art teachers have in delivering their courses and the importance of exam boards. He therefore has partnered with AQA, Edexcel and OCR in offering digital resources and space in the museums for CPD training.

The design component figuring in both the art and design and the design and technology curriculums was raised as a potential issue, which could be overcome by organisations through the nature of their workshops.
‘There is ongoing tension between Art and Design and Design and Technology. With design with a foot in both camps, the access will go one way or the other: it will be technical or be creative and imaginative and quite open. The line is very blurred and the balance is not right. You have too much of one thing or the other, no coherent understanding of the design process and it can be tricky to pull together somehow, across the two. (...) [We] focus on process and materials (...), very pragmatic about developing practical skills and we have a lot of the history of design and it is very international in its outlook, so we are able to cover both.’ (Organisation 1)

**Drama**

Drama no longer has its own framework, but instead is included in the English Curriculum. It is seen by some as “cutting the expertise out of an organisation and selling students short” (Organisation 1).

‘I am very interested in drama processes and techniques, and in a museum context, it is a very physical way of engaging with text, or history or objects. (...) If people are moving around, if it’s physical, then it is another layer of learning going in.’ (Organisation 1)

Organisations such as the V&A Museum stress the importance of drama and its validity as a learning experience. They have not reported a decline in the take up of drama workshops and in some cases there has been an on-going increase. For example, the viewing of theatrical productions from the National Video Archive of Performance, which can only be screened at the V&A, was expected to attract 20 school visits a year, now attracts 60, presumably as knowledge of the resource has spread through word of mouth. The V&A has also seen the benefits in partnerships to enhance the experience of students. They provide traditional theatre make-up, costumes and physical objects for their drama workshops but as they do not have an actual theatre to support the technical aspect of theatre productions such as lightning design, set design or use of CAD for example, they have partnered with The Backstage Theatre who can provide resources, are experts in training students about the practical aspect and can provide the performance space.

**6.1.3 Opportunities in Geography**

Organisations with a programme offering geography-based sessions have found that the new curriculum has not prevented them from offering their usual sessions, and they have all welcomed the changes.

The renewed focus on fieldwork at KS3 was received positively and organisations feel they will benefit from it. There is an opportunity for museums and heritage sites to promote cross-curricular visits, including geography as a component, by using the location of their site. Visits could contain an orienteering workshop, as orienteering in now part of the KS3 curriculum, using the grounds of the organisation, a study of the environment nearby, a river for example, which could provide a link to the topic of floods, alongside the usual workshop they may be coming for. It would be an opportunity to attract and cater for larger groups as well, as they could be split.
Attracting more KS3 groups may also be necessary in case organisations were to see a drop of visits from GCSE groups due to the removal of coursework from the syllabus in 2016.

‘(...) The emphasis on fieldwork in Geography is a lever to encourage getting out of the classroom.’ (Online respondent A)

This change in the assessment process for the new Geography GCSE may have an impact on organisations currently providing fieldwork for a piece of coursework. The River & Rowing Museum currently offers tailored session linked to coursework questions to GCSE groups. The removal of the coursework component may reduce the number of visits from those groups. However, fieldwork is still present in the GCSE content and they feel students will still need to gather evidence for case studies. Moreover, they are of the opinion that if the teachers see an impact on the students’ results, they will continue to see the museum as a valuable place.

The Earth Science topics of the new curriculum have been assigned to the Geography and Science programmes of study. The Earth science content in Geography sees the addition of plate tectonics (explaining the location of volcanoes and earthquakes), which used to be studied in Science, and a strong focus on the key processes in physical geography including glaciation, rocks, soils and geological timescales. The Oxford University Museum of Natural History supports the changes to the Geography curriculum, offering Geography days to recognise the shift of tectonic plates to the geography curriculum, and online resources “rocks in the museums” to be used to study the rocks on display in the museum and understand the topic of plate tectonics.

6.1.4 Opportunities in Science
New content has been added to the KS3 science curriculum and organisations spoken to have reviewed their current provision and in some cases have developed new sessions for it. The Oxford University Museum of Natural History, in partnership with the Oxford Museum of the History of Science has been offering a session called ‘Ideas and Evidence’ for a few years now, for KS3 to look at scientific ideas and evidence. They look at the discovery of dinosaurs: who discovered them, when and how they analysed their fossils. The students get to understand that palaeontologists often get things wrong the first time then re-discover things many years later, building on the development of new theories and ideas. Students also look at the differences between scientific models, instruments and equipment, the education officer then demonstrates some scientific ideas and explains how these have evolved as people have learnt new things. The name and focus of this programme of activities completed in one day over two museums link perfectly with one of the scientific attitudes of the new curriculum: “understand that scientific methods and theories develop as earlier explanations are modified to take account of new evidence and ideas.”

The topic of evolution has been added to the Year 6 primary curriculum. This means that evolution is now studied across KS2, KS3 and KS4. This addition gives the opportunity to Science museums to redistribute their specimens across the three Key Stages. At the Oxford University Museum of Natural History, the task was to ensure that there would be no overlap between key stages and that the concept of evolution was pitched at the right level. The topic of evolution also allows cross-curricular links with Religious Studies as part of the C1 requirement of the framework, which
recommends that students explore some of the ultimate questions that are raised by human life, namely where we come from and why we are here.

6.2 Other feedback from museums

A high proportion of museums find working with secondary schools challenging. They struggle to make contact with them and they are not seen as being a financially secure prospect. A variety of issues are cited when working with secondary schools: the constraints of timetables, the potential issues with behaviour, the size of groups, a perceived lack of expertise at higher key stages and uncertainties that schools would commit to visiting again. Also, when at capacity with primary schools, some museums do not feel they need to seek out secondary schools. However, some museums have found very effective ways to engage with secondary schools and their teachers mainly by communicating with them more effectively and by building relationships, some of these were achieved since the implementation of the new curriculum.
7. Conclusion

Key findings

The National Curriculum at secondary level is undergoing profound change. This is taking place over the next few years, with core subjects of English, Mathematics and Science starting from September 2015. Some of the changes will in theory suit the museum sector well, with subjects requiring a greater focus on context and real world application. History and Geography both include references to the local area. English offers many opportunities. The drive towards making subjects more challenging, including difficult content lower down the curriculum might mean teachers keep students in the classroom. However, it could have the reverse effect, encouraging them to look at new ways to bring challenging content to life for subjects like Mathematics and Science.

The general trend away from encouraging students to develop their own creativity may be a problem for museums with a strong arts offer. However, in practice it is likely that Art teachers are aware of the importance of a creative offer and will still seek to involve their students in inspiring activities.

With a final exam at the end of the GCSEs rather than modular assessment, museums may find that there are practical implications for the timing of school offers. There will now be more freedom for school groups to make visits and run projects in year 10 and the early part of year 11. Nearer the exams it is very unlikely that schools will take the risk of activity that draws the students away from focusing on their exams. Museums that are able to partner up with universities or similar organisations may find that there is potential in projects that include exam skill elements.

In contrast to their knowledge of the Primary curriculum, museum staff demonstrated much less awareness of the Secondary offer. They do appear to be relatively positive about the changes, but this is in contrast to the general level of negativity expressed by some museum staff towards secondary schools. This feedback has been included in the appendix as not specifically relevant to the research topic. However, the attitude is an interesting one and may hold the sector back from exploring new possibilities.

The teachers surveyed were positive about the value of working with museums. They are not necessarily a representative sample given that they were either from The Langley Academy or participants in the Stronger Together project. However, they do show what is possible once a teacher is convinced.

While it was not specifically the remit of this research, many of the interviewees from both sectors had much to say about the nature of partnerships between schools and museums. The evaluation report on Stronger Together by Professor Justin Dillon and Dr Caterina Correia should bring through
these elements. However, it is worth saying that both sides see these partnerships as important, offering mutual support to develop inspiring opportunities for young people.

**Recommendations**

Museum sector professionals should be ready to capitalise on the opportunities offered by the new National Curriculum to a wide range of subjects. Local networks like BOBLI have offered training for the primary curriculum. Extending this support to the Secondary level would help sector staff to think about new possibilities.

The History and Geography local elements should prove relatively easy for museums to capitalise on. The English curriculum also offers plenty of potential for museums. Services would be able to use their collections in similar ways as they would for a History activity and would probably find that teachers were looking for material in time periods that a standard local authority museum is likely to have collected, such as nineteenth century and the First World War. Other subjects, such as Mathematics and Science, certainly have potential for Secondary exploration for services with relevant collections.

Arts Council England through the bridge organisations, offers support for museums thinking about working with creative arts subjects. The secondary curriculum changes might make this more r

Use of museum objects in lessons can help deliver content without taking large numbers of pupils out of school, without taking away lesson time from other teachers. It is a much cheaper option for schools and much less time consuming. With the new National Curriculum, museums should explore this opportunity by making some of their collections available for use in school. Using objects in a lesson helps teachers evaluate the benefit of an off-site trip, particularly if these are led by a museum professional. Trips are a big investment in time and resources, so museums that offer off-site activities can help teachers judge the quality of the on-site experience before they visit. A summary of other suggestions raised by this report is included in the appendices.

Strategic partnerships between schools and museums could offer a solution to the problem of engaging secondary school audiences. Museums would learn about different groups within secondary schools, rather than having to think about whole year groups at a time. Schools would find that the cultural services can support them across a wide range of subjects.
8. Appendices

8.1 Statements used in focus group discussion with museums professionals
1. My organisation was fully prepared for the requirements of the new curriculum.
2. The new curriculum has provided my organisation with new opportunities.
3. My organisation sees an opportunity in the new curriculum to work with subjects areas we have not worked with before.
4. The shift of certain subject topics from the primary curriculum to the secondary curriculum has had no impact on my organisation.
5. More secondary schools are visiting my organisation since September 2014.
6. The changes to the curriculum presented my organisation with new challenges. (resources / programmes redundant)
7. Since September my organisation has been approached by curriculum areas we do not normally work with.
8. It is better if the schools contact us and tell us what they need from us.

8.2 Questions used in focus group discussion with teachers
1. How, if at all, has the new curriculum impacted on Museum Learning within your subject area?
2. Do you see any potential for Museum Learning to be used within the new curriculum? If so how?
3. How does your subject area include Museum Learning within the curriculum currently?
4. How easy/difficult have you/your staff found it to include/set up Museum Learning within your subject area?
5. Do you feel Museum Learning benefits the pupils learning?

8.3 Online survey for museum professionals
Impact of changes to the new Curriculum to your organisation.

This survey has a total of 15 questions, and should take no more than 15-20 minutes to complete.

Responses to this survey are anonymous, and data will be aggregated for research purposes only.

* Required

1. What impact has the new curriculum had on your organisation?
   Please type your text below - as much information as you want!
   
2. How prepared were you for the changes in the National Curriculum? *
   - Not at all prepared
   - A little prepared
   - Quite prepared
3. How would you rate the opportunities the new National Curriculum can offer to your museum? *
   - Poor
   - Average
   - Good
   - Very Good

3a. Can you give any examples of opportunities the new National Curriculum has offered your museum? *
   Please type your text below - as much information as you want!

4. Were you faced with new challenges following the introduction of the new curriculum? *
   - YES
   - NO

4a. If YES - Can you tell us about these and how you overcame them?
   Please type your text below

5. Which curriculum areas did you mainly work with prior to the changes? *
   Please type your text below

6. From which curriculum areas have you had the most enquiries since the National Curriculum changed? *
   Please type your text below

7. Have you found any opportunities to offer provision or develop programmes for less 'obvious' areas of the curriculum, i.e. MFL, Maths, PE etc...? Can you tell us about these? *

8. Do you think the new curriculum offers opportunities to engage subject areas you have not worked with before? *
   - Yes
   - No

8a. If YES - Please give examples of what subjects you think you could work with.
9. What impact has the shift of certain subject topics from the Primary Curriculum to the Secondary Curriculum had on your organisation? *
Please select an option below

10. Have you seen an increase or decrease of interest in your museum from secondary schools since the changes to the National Curriculum?
Select an answer

11. Beyond your organisation, what benefits do you believe the changes in the Curriculum provide? (benefits for the students for example) *
Please select an option below

12. Is there anything you would like to add or expand on? *
This is your chance for feedback and suggestions!

8.4 Interview questions for Heads of Faculty at TLA
1. How, if at all, has the new curriculum impacted on Museum Learning within your subject area?
2. Do you see any potential for Museum Learning to be used within the new curriculum? If so how?
3. How does your subject area include Museum Learning within the curriculum currently?
4. How easy/difficult have you/your staff found it to include/set up Museum Learning within your subject area?
5. Do you feel Museum Learning benefits the pupils learning?

8.5 Interview questions for museum professionals
1. Which partnerships / projects between your organisation and secondary schools have been the most successful and why? Are they ongoing projects or not?
2. Did you anticipate the changes in the NC? How did you prepare for these changes?
3. Has the implementation of the new curriculum had an impact on your organisation? If so, what challenges and opportunities do you think the new curriculum provides? If challenges were met, how did you tackle them?
4. Which curriculum areas do you traditionally work with? Has that changed since the implementation of the NC? From which curriculum areas have you had the most enquiries since the National Curriculum changes?
5. Do you feel your organisation offers activities and support to a variety of curriculum areas? Do you think the new curriculum offers you more opportunities to involve subject areas you have not worked with before?
6. Have you seen an increase or a decrease of interest from secondary schools since September 2014?
7. What do you think of the shift of certain subject topics from the primary curriculum to the secondary curriculum?

8. How do you think the Stronger Together Projects can shape the future of Museum Learning in Secondary schools? How do they support an inclusion of a variety of subject areas in Museum Learning?

8.6 Summary of museum sector staff feedback about secondary schools

Many museums involved in this research were found to work either solely with primary schools or sparingly with the secondary sector. In the online survey, only one organisation mentioned an increase of interest in their organisation from the secondary sector since the implementation of the new curriculum and reported that teachers needed support in delivering their course. The other organisations reported no change in interest for a variety of reasons: no sessions offered to Secondary at all, no previous offer to measure it against, no take up of the programme. For a high proportion of the organisations involved in the online survey, the focus groups and the interviews, working with secondary schools presents a variety of challenges which are compiled below.

- **Capacity**

  This was often mentioned as being an issue to accommodate whole year groups or even small groups of teenagers.

  ‘Primary school children will sit on the floor, but is it harder with 30 Y10 students.’ (Organisation 6)

- **Behaviour**

  The respondents showed concerns about the behaviour of Secondary age students. It was mentioned that there are more teaching assistants on primary school visits than secondary and they tend to be more involved with the pupils.

  ‘We want to work with Secondary, but schools won’t commit to time.’ (Organisation 4)

- **Timetable**

  The catchment area is another issue that was identified: for any catchment area, there will be 40 to 50 primary schools but only 10 secondary ones, so museums are more likely to work with primary schools as a result.

  A vast proportion of museum professionals who participated in the research find that they can cope with the subject knowledge demands of the KS1 and KS2 curriculum, but do not
feel they have the level of expertise to deliver a KS3 or KS4 session. The variety of exam boards at KS4 make it more difficult as the content will vary.

- Seeking out secondary schools has proved to be a challenge for most organisations, especially smaller ones. Marketing to secondary schools is expensive and identified as being difficult. Flyers or emails do not necessarily reach the right person for example. It is very difficult for smaller organisations to make themselves known as a result.

‘Before we can have a conversation [with secondary schools], we need to make them aware we are there.’ (Organisation 6)

- Some museums feel it is not worthwhile to develop sessions for secondary schools if they are not going to be used. There is a perceived element of risk doing it once with a school and not revisiting it. When museums do have sessions in place or resources are on offer, they find they are underused and it does not encourage them to review their offer. Reading Museum offers the Bayeux Tapestry and the Victorians to KS3, but secondary school visits only represent 5% of their audience.

- Museums are under a lot of financial pressure due to funding cuts and working with secondary schools is perceived by many as a financial risk where there is pressure to attend to the number of visitors they get. They feel they have to take into consideration the cost of developing new workshops against their financial return. For some, a big commitment from at least one secondary school making a year on year visit is what is needed, for others; it is not enough and developing content for primary schools represent a safer financial investment.

- Many organisations do not feel the need to offer sessions to secondary schools as they are already at capacity with primary.

- Creating links with less obvious areas of the curriculum most of the time requires a creative teacher who will ‘think outside the box’ and see the opportunity in your collection.

- Being close to the ‘big hitter’ museums in London creates fierce competition. Both secondary schools and parents are attracted by larger museums, “the British Museum is a rite of passage” and if the parents have to fund the visit, schools find it easier to justify it if it is to a well-known organisation as the visit seems worth paying for.

8.7 Summary of feedback on how to engage secondary schools

Some organisations do work with secondary schools and some are trying to attract them, however not all of them will have a schools participation officer but they have found ways to reach out. Below are ideas to improve the uptake of Secondary schools which came to light through this research.

- Keeping in touch with schools that have made a visit, calling them back within the year to get their next visit booked in or in their mind.

- Contacting schools directly and asking for a slot in a staff meeting to advertise your sessions.
• Finding out if some of your local schools are walking-distance from you to offer a session that does not disrupt the whole day, but only a couple of periods.
• Using the museum space as a venue for meetings of local headteachers, subject leaders, cluster meetings etc… to raise the profile of your organisation and mention your learning programme.
• Inviting schools to take part in the trial of any new session before running them, especially in light of sessions developed for the new curriculum.
• Creating links with universities of Education to bring trainee teachers from different subject backgrounds to your organisation. They will take a fresh look at your collections and may see new opportunities for links with less obvious areas of the curriculum. Once they qualify, they are more likely to continue using your organisation to support their teaching.
• Organising open days to make contacts and follow-up schools with a phone call or an e-mail.
• In dealing with whole year groups, considering splitting the group during the visit. Devise sessions in a carrousel so students use different parts of your building for each session, including the exterior, at different times so that you can accommodate them. Advertise those sessions to secondary schools on your website for example.

‘100 to 180 pupils? If you are unable to attend the above session because pupil numbers exceed those shown, why not join us for Medieval Mayhem and take advantage of our special programme for larger groups?’ (Organisation 3)

• Creating links with other partners to bring more interest to your sessions. Joining up with other organisations so that you can advertise the day as being a trip to two organisations, relieving the pressure of numbers and making it more attractive to schools.

‘We are trying to bring in other partners (…), drawing expertise in (…) which might make it more attractive [with] more to offer, also looking at a double site visit.’ (Organisation 7)

• Offering skype sessions as a way in the classroom either as a follow-up to a visit, as it can be difficult to timetable more than one visit, or as a session in its own right.
• Considering a “light touch tour”. The Banbury Museum offers a ‘Welcome and Wow tour’. ‘A 15 minute introductory museum tour which showcases key collections on display either in the permanent galleries or through our temporary exhibition programme’.
• Organising teachers’ evenings to showcase your collections and discuss what you can offer them.
• Providing resources for self-guided visits “as a crutch” for teachers who are less confident, but also for teacher who are confident in leading their class through your museum, but need a resource bank.
• Making as many resources as possible downloadable and uploading them on teachers’ forums.
• Post-visit evaluations of new workshops created to meet the requirements of the new curriculum can be used to find out which aspect of the curriculum they would link the session to if they visited again.
• Many museums promote the new resources they have created for primary schools, promoting new materials developed for KS3 linked to the new curriculum would also increase interest.
• Taking part in funded projects to raise secondary school engagement or find out if working with secondary schools works for you.

‘We took part in the John Lyon’s Charity project to address the shortage of state secondary schools in the neighbouring boroughs making use of our organisation. Only 10% of them were using us, three years later 80% were.’ (Organisation 1)

‘We do very little work with secondary schools (...) that was our motivation for being involved in the [Stronger Together] project.’ (Online respondent I)

• The new curriculum can be an opportunity to draw expertise when creating new secondary school workshops by outsourcing parts of it, using experts to deliver sessions. Windsor Castle uses an external company to deliver its “armour session” as part of its new medieval studies workshop.
• As part of their training, some museums are providing a session on how to work with secondary schools to their new members of staff.
• Having dedicated members of staff working with secondary schools, or tutors, specialists in their fields, who used to be teachers to deliver sessions.
• Providing CPD sessions to support teachers and as a way to start conversations.

‘With creative subjects, teachers are very creative individuals themselves. You have to have inspiration going in to feed you, to generate creativity. To support that cycle is vital and it’s that feeling of looking after teachers’ creative side we try to offer through our teachers’ CPD.’ (Organisation 1)

• Providing an alternative learning environment. The learning experience in the classroom has been mentioned as needing to be different from the one students will experience in a museum. Also, museums can be versatile in what they can provide students with, offering school experience placements was mentioned, as well as enrichment, through clubs, Arts Awards etc… since ‘the cultural value is an important part of learning’ (Organisation 5). One of these experiences is provided by Windsor Castle through their Ambassadors scheme. Four Y12 students from three local secondary schools follow a familiarisation programme to learn more about the Castle and the Queen, they are then trained to deliver in pairs a “Castle” session to primary school pupils. The students are immersed in a variety of situations, discussing the planning of sessions with teachers, attending high profile events
such as Garter Day and investitures and meet at the Governor’s house for update meetings. The aim is to enhance their public speaking skills and boost their confidence in speaking to various audiences, their collaboration skills, and their planning skills. In the future, Windsor Castle plans to involve more students in those three schools. One of the online respondents sees the new curriculum as ‘a positive way forward (…) for schools and the Heritage sector’, considering it a good moment to think about the purpose of what museums do: ‘What is education? Is it just piling through for results? If you’d take Year 10 off timetable for a soul-destroying afternoon of controlled assessment, why not do it to redress the balance and give them an opportunity to extend their cultural experience?’ (Online respondent E).

- Reaching students and promoting Higher Education, a role University museums mention, having a responsibility to engage with secondary schools. The Museum of English Rural Life reported a very successful project with Y13 students, who were new to the country and had not heard of Dickens. Through the project the students looked at Great Expectations by Charles Dickens and used the visit to understand more about what life was like in the countryside in the 1850s, they were also able to have a questions and answers skype session with an expert. The project not only changed their perception of Dickens, it also changed their perception of Higher Education, with some students considering going to University as a result.