### **SECTION SIX**

# TEACHERS' VIEWS OF THE IMPACT OF THE MUSEUM VISIT ON THEIR PUPILS

#### 6.0 Introduction

This section reviews the data from Form A, Q.12-18, which asked teachers to estimate to what extent their pupils had achieved specific learning outcomes during the museum visit they had just undertaken. Teachers completed this questionnaire as their visits ended, thinking specifically about that particular occasion and those pupils who were with them. The statistical data is complemented by evidence from the case-studies and focus groups, where teachers discussed their knowledge, experience and feelings about the learning outcomes stimulated by museum visits in a more general way, calling on their memories of a number of visits on a number of different occasions.

The section examines the statistical evidence, looking at each of the five Generic Learning Outcomes in turn. The statistical data is followed in each case by evidence from discussions with teachers; there is one exception – the inter-relationships between Knowledge and Understanding and Attitudes and Values were very complex, and the discussions with teachers in relation to these two GLOs are presented together.

Throughout this section comparisons are made between responses in 2005 and 2003 as well as between the Phase1 and 2 museums and these are accompanied by a chi square analysis to indicate when a difference can be considered to be statistically significant. Due to the addition of a new 'don't know' category in 2005, comparisons with the 2003 study are not as straightforward as the other chi square tests used in this report. Teachers' responding 'don't know' in 2005 had to be removed from the chi square tests as no comparable category existed in 2003. Mostly this was unproblematic as responses in the 'don't know' category made up only a small percentage of the overall responses. However in some cases the 'don't know' category contained guite a few responses. In these cases the exclusion from the analysis may have produced a significant difference between the 2003 and 2005 results. This difference is misleading as it may well be that more teachers were opting to tick the 'don't know' category in 2005 therefore depressing the percentages of all other categories. All instances where this may have occurred are noted in the text accompanying the tables.

The consensus amongst the teachers we spoke to as part of the qualitative research was that museums could be a very powerful teaching tool for all pupils regardless of socio-cultural or ability background. While teachers used the museum in different ways with different objectives, as we have discussed in the previous section, there was an overwhelming agreement that the museum experience had very positive learning outcomes for pupils.

#### 6.1 Teachers' talking about museums

Compared to the 2003 study, teachers were more articulate in talking about a diverse range of learning outcomes for their pupils as a result of a museum visit. In addition, from discussions with teachers, the impact of a museum visit in relation to issues concerning social and cultural identity and inclusion was more of a focus for teachers in 2005 than in 2003. For those teachers who were focused on these issues, the museum was potentially a powerful tool in relation to identity, cultural entitlement, aspiration, class mobility and inclusion, regardless of the pupils socio-economic or cultural background, although it was noted that the museum cannot act alone in facilitating changes in attitudes or values. See discussion below especially in Sections 6.3 and 6.6, see also Section 7.

In general, teachers thought that museums were a learning resource from which all pupils, no matter their ability, cultural or social background, could derive meaningful learning outcomes.

#### 6.2 Enjoyment, Inspiration, Creativity

There were two questions on the Teachers' Questionnaire that asked about Enjoyment, Inspiration, Creativity. The first was a general question - Q.12: 'To what extent do you think your pupils have enjoyed or been inspired by their museum visit?', which was a new question in 2005, and the second was a more specific question - Q.16: 'To what extent will you be using the museum experience to promote creativity?'. The table below presents the results for Q.12.

Table 6.2a: Form A, Q.12: 'To what extent do you think your pupils have enjoyed or been inspired by their museum visit?' (new question), 2005

	Enjoyed the experience	Excited by new ways of learning	New interests aroused	Inspired to learn more	Inspired to make something creative
	2005	2005	2005	2005	2005
TOTAL	1,632	1,632	1,632	1,632	1,632
Very likely	1,337 82%	869 53%	913 56%	880 54%	748 46%
Quite	277	645	643	670	631
likely Neither	17%	40% 59	39%	31	39% 134
	0%	4%	2%	2%	8%
Quite unlikely	2 0%	17   1%	5 0%	10   1%	43   3%
Very unlikely	1 0%	4 0%	4 0%	2 0%	10 1%
Don't	0	7	6	9	27
know	0%	0%	0%	1%	2%
Not	14	31	29	30	39
stated	1%	2%	2%	2%	2%

Eighty-two percent (82%) of teachers stated that it was 'very likely' that their pupils would have enjoyed the visit, and more than half of the teachers thought it 'very likely' that their pupils would have new interests aroused, be inspired to learn more and be excited by new ways to learn.

The percentages of teachers who ticked 'likely' and 'very likely' for each of the sub-questions is given below:

- 99% enjoyed the museum visit,
- 95% have new interests aroused,
- 95% be inspired to learn more,
- 93% be excited by new ways to learn, and
- 85% inspired to make something creative.

These figures are very high; teachers overwhelmingly endorse the potential of museums to inspire further learning.

Q.12 was a new one in 2005. It was a surprise in 2003 to find that Enjoyment, Inspiration, Creativity was the strongest learning outcome for teachers, and it was felt that the questions asked in the Teachers' Questionnaire did not really probe far enough on this dimension. While evidence from the focus groups seemed very positive, the research in 2003 did not have quantitative evidence to support this powerful qualitative evidence. Asking the question in 2005 has provided resoundingly conclusive statistical evidence of the power of museums to stimulate and take forward their pupils' learning.

When comparisons are made between the Phase 1 and Phase 2 museums in relation to the new question on creativity, there is no significant difference<sup>1</sup> for all outcomes.

Table 6.2b: Form A, Q.12: 'To what extent do you think your pupils have enjoyed or been inspired by their museum visit?', (new question), comparing the Phase 1 and Phase 2 museums, 2005

Enjoyment, Inspiration, Creativity	Very likely, 2005	Very likely, Phase 1	Very likely, Phase 2	
Enjoyed the experiences	82%	81%	83%	
New interests aroused	56%	57%	55%	
Inspired to learn more	54%	54%	54%	
Excited by new ways to learn	53%	55%	52%	
Inspired to make something creative	46%	46%	46%	

Base: all teachers' responses Q.12: 'To what extent do you think your pupils have enjoyed or been inspired by their museum visit?', 'very likely' only, 2005 (1632); Q.12 'very likely' only Phase 1, 2005(773); Q.12 'very likely' only, Phase 2, 2005 (856)

Enjoyment, Inspiration, Creativity	Degrees of Freedom	Chi Square	Significance	Significance at 0.05
Enjoyed the experiences	3	5.02	0.17	>0.05
New interests aroused	4	1.80	0.77	>0.05
Inspired to learn more	4	3.82	0.43	>0.05
Excited by new ways to learn	4	7.34	0.12	>0.05
Inspired to make something creative	4	1.13	0.89	>0.05

The second, more specific, question on creativity, Q. 16, also resulted in high positive values, with some differences from 2003.

Table 6.2c: Form A, Q.16: 'To what extent will you be using the museum experience to promote creativity?', 2005

	Exploring Creative			Other		Desig	ning	Dance/		
	new i	deas	writing	9	of cre	ative	and		drama	
					work		makir			
	2003	2005	2003	2005	2003	2005	2003	2005	2003	2005
Total	936	1,632	936	1,632	936	1,632	936	1,632	936	1,632
Very	56%	53%	52%	44%	42%	35%	41%	42%	18%	21%
likely	524	865	486	712	395	578	386	688	170	347
Quite	33%	35%	27%	30%	33%	35%	34%	34%	27%	28%
likely	313	576	253	493	310	578	314	548	257	452
Neither	4%	4%	8%	10%	10%	9%	10%	10%	23%	21%
	41	62	75	162	97	153	97	164	213	341
Quite	1%	2%	4%	4%	2%	3%	6%	5%	13%	10%
unlikely	13	26	36	70	18	50	54	74	117	157
Very	1%	1%	3%	3%	2%	2%	3%	3%	9%	8%
likely	8	11	26	52	15	25	25	42	86	129
Don't	n/a	1%	n/a	2%	n/a	4%	n/a	1%	n/a	3%
know		17		29		65		22		57
Not	4%	5%	6%	7%	11%	11%	6%	6%	10%	9%
stated	37	75	60	114	101	183	60	94	93	149

The high levels of use of museums for creativity is clear when 'very likely' and 'likely' are combined.

A comparison of teachers' responses between 2003 and 2005 shows significant differences in the use of museums for 'creative writing', 'dance/drama', and 'other forms of creative work'. Teachers' responding that it would be very likely the museum visit would be useful for creative writing and other forms of creative work show a decline, while there is a small increase in teachers considering the visit would be very important for 'dance and drama'. However, a closer inspection of 'dance/drama' and 'other forms of creative work' reveal a considerable proportion of teachers' fall within the 'don't know' category. As this category was only created in 2005 it is possible

Enjoyment, Inspiration, Creativity	Degrees of Freedom	Chi Square	Significance	Significance at 0.05	
Exploring new ideas	4	1.88	0.60	>0.05	
Creative writing	4	13.36	0.004	<0.05	
Designing and making	4	1.53	0.67	>0.05	
Other forms of creative work	4	8.90	0.031	<0.05	
Dance/drama	4	8.67	0.03	<0.05	

that these changes in teachers' responses are in fact due to the addition of this new category.

Table 6.2d: Form A, Q.16: 'To what extent will you be using the museum experience to promote creativity?', 2005, all positive values, all museums

Enjoyment, Inspiration, Creativity	'Very likely' and 'likely' all museums 2005
Exploring new ideas	88%
Creative writing	74%
Designing and making	76%
Other forms of creative work	70%
Dance/drama	49%

Base: all teachers' responses Q.16: 'To what extent will you be using the museum experience to promote creativity?', 'very likely' and 'likely' only, 2005 (1632)

A comparison of Q.16 across the Phase 1 and Phase 2 museums comparing responses reveals no significant differences.<sup>3</sup>

Table 6.2e: Form A, Q.16: 'To what extent will you be using the museum experience to promote creativity?', 2005, comparing the Phase 1 and Phase 2 museums

Enjoyment, Inspiration, Creativity	Very likely, 2005	Very likely, Phase 1	Very likely, Phase 2
Exploring new ideas	53%	54%	53%
Creative writing	44%	44%	44%
Designing and making	42%	43%	41%
Other forms of creative	35%	35%	36%
work			
Dance/drama	21%	19%	23%

Base: all teachers' responses Q.16: 'To what extent will you be using the museum experience to promote creativity?', 'very likely' only, 2005 (1632); Q.16, 2005 Phase 1 (773); Q.16, 2005 Phase 2 (856)

Enjoyment, Inspiration, Creativity	Degrees of Freedom	Chi Square	Significance	Significance at 0.05
Exploring new ideas	4	3.89	0.42	>0.05
Creative writing	4	4.66	0.32	>0.05
Designing and making	4	3.28	0.51	>0.05
Other forms of creative work	4	4.88	0.30	>0.05
Dance/drama	4	8.47	0.08	>0.05

## 6.3 Enjoyment, Inspiration, Creativity: evidence from the focus groups and case-studies

In the 2003 study we found that there was a causal relationship between teachers' perceptions of their pupils' Enjoyment, Inspiration, Creativity and Knowledge and Understanding. In this study we wanted to take the opportunity to seek to further understand the relationship between Enjoyment, Inspiration, Creativity and learning outcomes more broadly. In the qualitative research we found that teachers thought enjoyment was central to good learning outcomes. Teachers said:

'Enjoyment leads to motivation [which] leads to learning'.

'Enjoyment opens children up to learning'.

'Enjoyment leads to a heightened sense of awareness'.

'I try to make learning fun... The museum experience is about learning through having fun'.

'Enjoyment on its own leads to a latent experience and they may make the connections later on'.

'Attendance has definitely improved. Well I think it's just that they enjoy it, so they come along'.

We found evidence that enjoyment could be a catalyst to a range of other learning outcomes. In the following quote the teacher described a shy, clever girl enjoying her museum visit and this enjoyment leading to a change both in her own attitude towards herself in terms of increased confidence and self esteem and in other pupils' attitudes towards her:

'One student was very able but badly bullied. [She] loved the museum and taking part in an exhibition inspired her and gave her confidence. Still talks about it even though it was a year ago... It increased her self-esteem and gave her a chance to feel safe in a museum. The boffs have a hard time at school, it's bad to be good in school, they don't answer questions in class. It's endemic. But in the museum it was different, she could answer questions and some of the kids who gave her stick liked her being there'.

Most teachers reflected that the impact of the museum visit as a catalyst for good learning outcomes was more complicated than their pupils having fun. Most teachers talked about the importance of an emotional and/or a personal connection as being central to the production of a positive learning outcome. For many teachers the impact of the museum on positive learning outcomes was due to the combination of the museum providing the possibility for their pupils to engage in a 'real' experience which elicited an emotional reaction:

'Children are engaging in a direct relationship with the subject'. 'It's about emotions, if emotions are triggered it helps you to learn whether it's negative or positive'.

'Emotional response is the catalyst because it is real'.

'Real connections exist [in the museum] and triggers the emotional response- "wow this is real"- this has to take place on a cognitive level... and we're seeing the emotional response'.

'Children are engaging in a direct relationship with the subject'.

'The concrete elements of a visit increases learning'.

'I think it brings history alive, they can actually feel what it would be like cos they've seen the clothes, it's not just a dry subject. It brings in something that they can relate... it's relating it to their own experiences and how different they are now'.

Can this personal connection, even if not in relation to a positive emotional experience, still be categorised as 'enjoyment'? One teacher's comment is interesting in this respect. He said:

'But very often it's not a positive experience, what makes it enjoyable is the making contact and having feelings about things... doing about WWII is like that... learning about the horror is not fun'.

It may be possible to understand pupils engaging with a museum visit which was scary or 'disgusting' as pleasurable and enjoyable- for instance, one set of pupils we observed in a Tudor kitchen were very much enjoying expressing their 'errs!!!' to a skinned rabbit on display. However, it is more difficult (and possibly misleading) to understand the emotional response to something like a challenging depiction of conditions during the Blitz as consisting of 'enjoyment'.

One of the case-studies used Theatre in Education involving historical characters whose interaction with the pupils was designed to provoke an angry response from them.





This particular museum programme involved working with KS3 pupils to communicate the complexity of an issue, exposing both sides of an argument. The pupils engaged with the material as a result of the actors' strategy of provoking a heightened emotional response. The response that was provoked was anger or outrage so this cannot be categorised as 'enjoyment' per se. The museum educator explained the strategy by saying:

'I try to make them angry... you watch them - they can look really bored out of their head, [but] if I start to talk about the jacket women- the unmarried mothers- they sort of unwind and then if it works. They argue with me as the workhouse master... I mean this whole concept of fun isn't necessarily what we're about, it's about yes it should be engaging and challenging'.

Learning elicited by this kind of emotional engagement can be described as 'inspiration' if we recall that 'inspiration' can be defined as the 'stimulation of the mind or emotions to a high level of feeling or activity'.

We interviewed four of the teachers who attended this visit to the museum, and for them there was no doubt that the emotional engagement which was facilitated by the museum was very important to what the teachers felt had been a very good learning outcome from the day:

<sup>&</sup>lt;sup>4</sup> Dictionary.com, <a href="http://dictionary.reference.com/search?q=inspiration">http://dictionary.reference.com/search?q=inspiration</a>

'I think it has really quite an impact ... they think about themselves and other people and the world ... I think during the visit they are encouraged to think and reflect and to kind of put themselves into somebody else's situation. I think they do become more reflective and they've got a lot more empathy... And talking to them I think that's quite clear'.

As a result of the focus groups and case-studies we got a much more indepth understanding of teachers' assessment of the impact of a museum visit on their pupils. We found that above all teachers described museums as having an impact to the extent that museums could provide an experience that the pupil could relate to emotionally. Because of this emotional engagement, the pupil was able to establish a personal connection to both the subject matter and to the experience of the museum.

#### 6.4 Knowledge and Understanding

• Form A, Q.13: 'To what extent do you think your pupils have gained facts and information during their museum visit?'

The summary table below (6.4a) presents the overall responses and the following table (6.4b) presents the comparisons between the Phase 1 and the Phase 2 museums, and between the results in 2005 and 2003. The findings are very positive, especially when all positive values are considered.

Teachers ticked 'likely' or 'very likely' that their pupils would have gained facts and information as follows:

- 95% subject specific facts,
- 80% interdisciplinary facts,
- 76% facts about museums,
- 65% facts about themselves and/or the wider world, and
- 77% other kinds of facts.

The comparison across museums shows no significant<sup>5</sup> change except in the case of pupils gaining 'facts about themselves, their families and the wider world' for which higher number of teachers thought it was very likely in the Phase 2 museums. The comparison with 2003 does show a significant<sup>6</sup> change for; 'Subject specific facts', 'Interdisciplinary or thematic facts', Information about museums or galleries', 'and 'Other kinds of facts' with teachers slightly less likely to think that their pupils will have gained facts as the result of their museum visit in 2005. However the inclusion of a 'don't

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Knowledge and Understanding	Degrees of Freedom	Chi Square	Significance	Significance at 0.05
Subject specific facts	4	0.95	0.92	>0.05
Interdisciplinary or thematic facts	4	0.95	0.92	>0.05
Other kinds of facts	4	5.77	0.22	>0.05
Information about museums and galleries	4	5.71	0.22	>0.05
Facts about themselves, their families or the wider world	4	13.15	0.01	<0.05

Knowledge and Understanding	Degrees of Freedom	Chi Square	Significance	Significance at 0.05
Subject specific facts	3	23.20	0.00	<0.05
Interdisciplinary or thematic facts	3	26.73	0.00	<0.05
Other kinds of facts	3	15.20	0.002	<0.05
Information about museums and galleries	3	12.75	0.005	<0.05
Facts about themselves, their families or the wider world	3	1.81	0.61	>0.05

know' category still impacts on the 'Interdisciplinary or thematic facts' and 'Other kinds of facts' categories and thus it is possible that the changes in teachers' responses are due to more opting for the 'don't know' category in 2005.

As we saw in Section 5, teachers seem slightly less focused on the acquisition of facts and information and slightly more attuned towards using museums in relation to change or development of Attitudes and Values.

Table 6.4a: Form A, Q.13: 'To what extent do you think your pupils have gained facts and information during their museum visit?', 2005

	Subject- specific facts		Interdisciplinary or thematic facts		Other kinds of facts		Information about museums or galleries		Facts about themselves, their families or the wider world	
	2003	2005	2003	2005	2003	2005	2003	2005	2003	2005
TOTAL	936	1,632	936	1,632	936	1,632	936	1,632	936	1,632
Very	681	1,044	339	457	310	433	266	370	194	338
likely	73%	64%	36%	28%	33%	27%	28%	23%	21%	21%
Quite	223	512	464	841	465	809	471	859	440	718
likely	24%	31%	50%	52%	50%	50%	50%	53%	47%	44%
Neither	5	23	48	152	60	155	97	217	160	298
	1%	1%	5%	9%	6%	9%	10%	13%	17%	18%
Quite	6	13	22	43	20	38	45	75	70	117
unlikely	1%	1%	2%	3%	2%	2%	5%	5%	7%	7%
Very	1	3	6	12	6	14	13	29	18	47
unlikely	0%	0%	1%	1%	1%	1%	1%	2%	2%	3%
Don't know	n/a	7 0%	n/a	45 3%	n/a	73 4%	n/a	18 1%	n/a	40 2%
Not	20	30	57	82	75	110	44	64	54	74
stated	2%	2%	6%	5%	8%	7%	5%	4%	6%	5%

Table 6.4b: Form A, Q.13: 'To what extent do you think your pupils have gained facts and information during their museum visit?' comparing the Phase 1 and Phase 2 museums, 2005

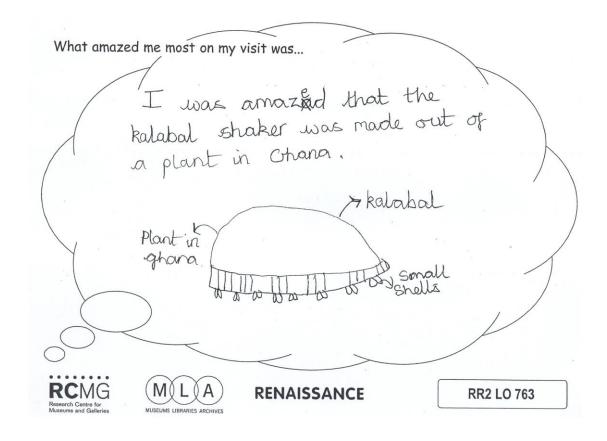
Knowledge and Understanding	Very likely, 2005	Very likely, Phase 1	Very likely, Phase 2
Subject specific facts	64%	65%	63%
Interdisciplinary or thematic facts	28%	28%	29%
Other kinds of facts	27%	25%	28%
Information about museums and galleries	23%	24%	22%
Facts about themselves, their families or the wider world	21%	18%	24%

Base: all teachers' responses Q.13: 'To what extent do you think your pupils have gained facts and information during their museum visit?, 'Very likely' only, 2005 (1632); Q.13: 2005 Phase 1 (773); Q.13: 2005 Phase 2 (856)

Evidence from the Form Bs completed by pupils reveal the different kinds of facts and information that can be learnt. These could be as specific as Sona, aged 9, finding out about the kalabal shaker at the Horniman.

Evidence from the focus groups is presented at 6.6.

Fig 6.4c: Form B, KS2 and below, visit by 9 year old pupil to the Horniman



#### 6.5 Attitudes and Values

There was one question on the Teachers' Questionnaire about Attitudes and Values, and this was the same as the question in 2003. Form A, Q.15: 'To what extent do you think that the museum visit will have enabled your pupils to feel more positive about any of the following?' The table below presents the responses as a whole.

Table 6.5a: Form A, Q.15: 'To what extent do you think that the museum visit will have enabled your pupils to feel more positive about any of the following?', 2005

	Lea	rning		eums/ eries	peo	her ple/ nunities	and	selves their lities	Anythi	ng else
	2003	2005	2003	2005	2003	2005	2003	2005	2003	2005
TOTAL	936	1,632	936	1,632	936	1,632	936	1,632	936	1,632
Very	473	690	482	723	370	503	288	452	120	179
likely	51%	42%	51%	44%	44%	31%	31%	28%	13%	11%
Quite	402	809	380	754	439	809	490	895	283	415
likely	43%	50%	41%	46%	47%	50%	52%	55%	30%	25%
Neither	23	57	33	67	71	171	91	171	200	300
	2%	3%	4%	4%	8%	10%	10%	10%	21%	18%
Quite	2 0%	8	6	11	9	39	16	27	12	14
unlikely		0%	1%	1%	1%	2%	2%	2%	1%	1%
Very	2	3	2	6	6	14	5	9	5	9
unlikely	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%
Don't know	n/a	9 1%	n/a	18 1%	n/a	26 2%	n/a	24 1%	n/a	230 14%
Not	34	56	33	53	41	70	46	54	316	485
stated	4%	3%	4%	3%	4%	4%	5%	3%	34%	30%

Taking all positive values, teachers ticked 'likely' and 'very likely' as follows:

- 92% more positive about learning,
- 90% more positive about museums and galleries,
- 83% more positive about themselves and their abilities, and
- 81% more positive about other people and communities.

A comparison between teachers' responses in the Phase 1 and Phase 2 museums shows no significant<sup>7</sup> differences, while a comparison with the 2003 figures does show a significant<sup>8</sup> difference for 'Learning', 'Museums/ gallery' and 'Other people/communities'. These outcomes show a decrease in teachers considering it was 'very likely' the pupils had felt more positive about these in 2005. The small percentage of teachers using the 'don't know' category means it is unlikely this has affected the change in teachers' response to these questions.

Table 6.5b: Form A, Q.15: 'To what extent do you think that the museum visit will have enabled your pupils to feel more positive about any of the following?', 2005, comparing the Phase 1 and Phase 2 museums

Attitudes and Values	Very likely, 2005	Very likely, Phase 1	Very likely, Phase 2
Museums/galleries	44%	42%	47%
Learning	42%	41%	43%
Other people/communities	31%	29%	33%
Themselves and their abilities	28%	27%	28%
Anything else	11%	11%	11%

Base: all teachers' responses Q.15: 'To what extent do you think that the museum visit will have enabled your pupils to feel more positive about any of the following?, 'very likely' only, 2005 (1632); Q.15: Phase 1, 2005 (773); Q.15: Phase 2, 2005 (856)

Attitudes and Values	Degrees of Freedom	Chi Square	Significance	Significance at 0.05
Museums/galleries	4	7.52	0.11	>0.05
Learning	4	4.88	0.30	>0.05
Other people/communities	4	4.54	0.39	>0.05
Themselves and their abilities	4	7.85	0.10	>0.05
Anything else	4	2.71	0.61	>0.05

Attitudes and Values	Degrees of Freedom	Chi Square	Significance	Significance at 0.05
Museums/galleries	3	11.45	0.01	<0.05
Learning	3	17.12	0.001	<0.05
Other people/communities	3	25.25	0.00	<0.05
Themselves and their abilities	3	2.97	0.40	>0.05
Anything else	3	0.12	0.99	>0.05

## 6.6 Knowledge and Understanding and Attitudes and Values: evidence from the focus groups and case-studies

The evidence from the focus groups and case-studies about Knowledge and Understanding and Attitudes and Values is discussed together as there are such close links between attitudes to subject matter and increase in knowledge about that subject matter. In any discussion with teachers about pupils and their learning, it is very difficult to separate the cognitive from the affective.

When asked about Knowledge and Understanding teachers were much less forthcoming about analysing the ways in which their pupils gained facts and information than they were about Enjoyment, Inspiration, Creativity as a result of a visit to the museum. This seemed to be more to do with an assumption that they would gain facts as the museum was generally acknowledged as a source of primary evidence and information rather than meaning that teachers did not think this was an important outcome of a museum visit. Their pupils on the other hand, as we will see in Section 7, were very descriptive about the range of facts and information they learnt on a museum visit.

Teachers were most forthcoming about the Knowledge and Understanding pupils gained about themselves and the wider world as the result of a museum visit. In this sense teachers tended to talk about Knowledge and Understanding in terms of the impact of a museum visit on pupils' Attitudes and Values. In other words teachers believed that a museum visit was important in that it gave their pupils Knowledge and Understanding of themselves, those around them and the world, which in turn affected their Attitudes and Values.

For instance, one secondary teacher described how a museum visit which involved being introduced to a number of points of view in relation to the ways in which poverty was dealt with in the nineteenth century might challenge some of her pupils' attitudes to contemporary poverty:

'I would like to think that it's going to produce somebody a bit more rounded... because we do have students here who are quite arrogant and quite affluent and they're very blinkered in their view of people who are poor as scumbags. So I'm hoping that maybe... if they do have preconceived ideas... by speaking to the actors from both perspectives, it will make them hopefully think in the future that there may be more than one way of looking at it. For instance I said, "so don't we have any poor people nowadays?" And they all said "well not really". And I said "so you don't think poor people exist any more then, they were only in Victorian times?" And then they said "well they've got food and they've got a house but they might not have a job". And I said "well then aren't they still living in poverty?" "Oh it's not the same sort of poverty". And I said "but it is; it's still poverty". And so I was trying to get them to understand the continuity of things'.

This teacher also expected her pupils to improve by at least half a level on their assessed assignments they did for this topic because they enjoyed the visit, and were emotionally connected with it. This resulted in them engaging more fully with information presented by the museum which meant they had both a better Knowledge and Understanding of the topic and a more enthusiastic attitude to the assignment they had to do. In fact as you will see in Section 7, this teacher's pupils also believed they would improve a level on their assignments, and we are able to show that they did.

In one of the focus groups a KS3 teacher recounted how a number of pupils in her class had used the opportunity of the Self Portrait UK competition to communicate some of their experiences of being Muslim girls. The teacher felt that the experience of travelling to London to see her portrait displayed in the National Portrait Gallery had been particularly significant for one girl who came from a very conservative Muslim environment with little exposure to the larger world.

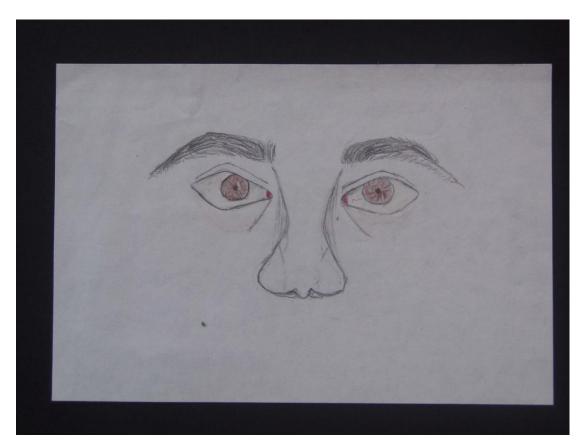


Fig 6.6a: Self Portrait UK entry

http://www.channel4.com/learning/microsites/S/selfportraituk14to19/

<sup>&</sup>lt;sup>9</sup> Self Portrait UK was a Channel 4 campaign challenging 14- to 19-year-olds to explore their culture and identity, by making a self-portrait about who they are, what they want to say and how they want to be seen. They were presented at a number of public galleries, including London's National Portrait Gallery, from 10 December 2004. See Channel 4, Self Portrait UK, 14 to 19,





In another very different example, a KS2 teacher at an inner city school in a very deprived area (according to the IMD 2004) with a very high population of pupils from an Asian background, found that the increase in Knowledge and Understanding that her pupils gained about the police as a result of a visit to a Police Museum had a positive effect on their attitudes towards the police:

'I took a class to the Police Museum. I have some boys who stigmatise the police because their families have had run-ins with the police; a cousin has been locked up. They would say things like "I hate the police". But when they got there the boys were really enthusiastic, they got to try things on and sit on a motorbike. They had a huge change in attitude and I didn't hear them speak against the police quite so much. Not sure how long it will last. Not sure if this attitude was carried home, they come from families which have lots to do with the police so it may remerge with time'.

Another primary teacher described using an exhibition about Mesopotamia to help the pupils understand that this was Iraq's ancient history. They were then able to 'make links and change values, it was a surprise about Iraq for the children'.

In addition, a museum visit can change a child's attitudes to the museum itself by giving them a better understanding of it:

'A lot of children think museums are boring. They do not experience [these things] in their home life... [A visit] changes their attitude towards museums - they see that they are not boring'.

As already discussed in relation to Enjoyment, Inspiration, Creativity, teachers thought that an emotional and personal engagement with the museum was essential for a good learning outcome. Many teachers described how Knowledge and Understanding was basic to enabling this emotional connection to occur. In this sense many of the teachers talked about positive learning outcomes from museum visits because the museum facilitates a particular kind of Knowledge and Understanding which enables pupils to feel empathy with the topic:

'... actually concentrating and looking, and extracting evidence... creates empathy'.

'During the visit they are encouraged to think and reflect and to kind of put themselves into somebody else's situation. I think they do become more reflective and they've got a lot more empathy I think'.

In addition to the museum being an important provider of Knowledge and Understanding it also has an important function in the demystification of knowledge. A number of teachers mentioned that the museum was important in providing pupils with access to people who they might not usually come across and, through this, providing the pupils with Knowledge and Understanding of the reality of, for instance, an artist's life. A number of KS3 and above teachers talked about this in terms of making people (and the knowledge they represent) accessible, for these teachers this could also broaden a pupil's vocational choices:

'They didn't know you could talk to a real artist, that's got their work in a gallery. They just feel as if, you know, is it really him, he's just got trainers on'.

'Listening to someone who's an expert, we once had this young PhD student talking about nuclear fuels and I thought this is going to go right over their heads and the fact that the expert was so engaging, so interesting. And she made this very, very difficult topic really come alive... and the pupils that came with us, you know, got so much out of that'.

'It was just nice that they were getting confident talking to people and talking to them about how they'd got to be artists and what their job was like...'

#### 6.7 Action, Behaviour, Progression

There were two questions that dealt with teachers' views of the extent to which museum visits can enable new experiences that lead to progression for their pupils. Form A, Q.17: 'To what extent do you think that the experience of the museum will result in you working with your students in a different way?' Form A, Q.18: 'To what extent do you anticipate that the museum visit will support pupil development?'. The results across the museums are given in the two tables below.

Table 6.7a: Form A, Q.17: 'To what extent do you think that the experience of the museum will result in you working with your students in a different way?', 2005

		Undertaking new activities		Using their new skills		ng o work eir n new	Other in ways of working the classro	of g in
	2003	2005	2003	2005	2003	2005	2003	2005
TOTAL	936	1,632	936	1,632	936	1,632	936	1,632
Very likely	334 36%	502 31%	328 35%	532 33%	210 22%	375 23%	203 22%	371 23%
Quite likely	405 43%	774 47%	384 41%	734 45%	404 43%	728 45%	372 40%	620 38%
Neither	110	183 11%	132 14%	183 11%	199 21%	302 19%	225 24%	328 20%
Quite unlikely	30 3%	44 3%	31 3%	53 3%	53 6%	79 5%	47 5%	81 5%
Very unlikely	7 1%	30 2%	7 1%	30 2%	7 1%	32 2%	11 1%	48 3%
Don't know	n/a	20 1%	n/a	23 1%	n/a	35 2%	n/a	62 4%
Not stated	50 5%	79 5%	54 6%	77 5%	63 7%	81 5%	78 8%	122 7%

Taking all positive values for Q.17, teachers ticked 'likely' and 'very likely' as follows:

- 78% undertaking new activities with their pupils following the museum visit,
- 78% pupils to be using new skills,
- 68% pupils to work with their peers in new ways, and
- 61% working in other new ways in the classroom.

Comparing 2003 and 2005, only one of the outcomes 'using their new skills' showed a significant difference.<sup>10</sup> Teachers surveyed in 2005 were slightly less inclined to think it was 'very likely' pupils would use their new skills and more inclined to be uncertain or think it 'unlikely' that pupils would use their new skills back in the classroom. The small amount of teachers choosing the 'don't know' category in 2005 suggests this had little bearing on the change in teachers' responses.

Table 6.7b: Form A, Q.18: 'To what extent do you anticipate that the museum visit will support pupil development?', 2005

	In their subject- related	understanding	In increased motivation to	learn	In their cultural understanding		In increased confidence		In learning across the	curiculum
	2003	2005	2003	2005	2003	2005	2003	2005	2003	2005
TOTAL	936	1,632	936	1,632	936	1,632	936	1,632	936	1,632
Very	668	1126	455	678	357	574	357	574	330	574
likely	71%	69%	49%	42%	38%	35%	38%	35%	35%	35%
Quite	214	407	383	755	430	699	430	779	468	776
likely	23%	25%	41%	46%	46%	43%	46%	48%	50%	48%
Neither	17	29	47	88	93	193	93	156	72	145
	2%	2%	5%	5%	10%	12%	10%	10%	8%	9%
Quite	4	8	4	15	8	42	8	25	12	40
unlikely	0%	0%	0%	1%	1%	3%	1%	2%	1%	2%
Very	1	4	3	5	4	12	4	8	5	7
unlikely	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%
Don't know	n/a	13 1%	n/a	25 2%	n/a	32 2%	n/a	28 2%	n/a	23 1%
Not	32	45	44	66	44	80	44	62	49	67
stated	3%	3%	5%	4%	5%	5%	5%	4%	5%	4%

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Action, Behaviour, Progression	Degrees of Freedom	Chi Square	Significance	Significance at 0.05
Using their new skills	3	8.55	0.036	<0.05
Undertaking new activities	3	7.24	0.07	>0.05
Other new ways of working in the classroom	3	6.80	0.078	>0.05
Enabling them to work with their peers in new ways	3	2.80	0.42	>0.05

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Taking all positive values for Q.18, teachers ticked 'likely' and 'very likely' as follows:

- 94% subject-related understanding,
- 88% increased motivation to learn,
- 83% increased confidence,
- 83% learning across the curriculum would,
- 78% cultural understanding, and
- 61% assessed work.

There is less confidence in the extent to which pupils' assessed work would be improved, with only 61% of teachers expecting to see this. However, Section 7 will provide some evidence of the ways in which the museum experience can impact on the assessed work of pupils. This research study suggests that teachers do not fully use the potential of museum-based learning, and that if they were more confident about the impact of a museum experience on assessed work, pupils could achieve more.

Two outcomes, 'Motivation to learn' and 'Cultural understanding' show a significant difference between the two studies. 11 Teachers in 2005 were less inclined to think it was 'very likely' for either of these outcomes. Again the 'don't know' figure is relatively small and unlikely to have impacted on the figures.

Action, Behaviour, Progression	Degrees of Freedom	Chi Square	Significance	Significance at 0.05
In their subject-related understanding	3	1.91	0.59	>0.05
In increased motivation to learn	3	11.94	0.008	<0.05
In learning across the curriculum	3	4.43	0.22	>0.05
In their cultural understanding	3	9.53	0.02	<0.05
In increased confidence	3	3.75	0.29	>0.05
In their assessed work	3	6.04	0.11	>0.05

The two tables below compare the percentages of those teachers who responded 'very likely' in the Phase 1 and the Phase 2 museums in 2005. The differences between the museums in 2005 show no significant difference<sup>12</sup>, <sup>13</sup>.

Table 6.7c: Form A, Q.17: 'To what extent do you think that the experience of the museum will result in you working with your students in a different way?', 2005, comparing the percentages of those teachers responding 'very likely' in the Phase 1 and the Phase 2 museums

Action, Behaviour, Progression	Very likely, 2005	Very likely,	Very likely,
		Phase 1	Phase 2
Using their new skills	33%	34%	31%
Undertaking new activities	31%	31%	30%
Other new ways of working in the classroom	23%	24%	22%
Enabling them to work with their peers in new ways	23%	24%	22%

Base: all teachers' responses Q.17: 'To what extent do you think that the experience of the museum will result in you working with your students in a different way?', 2005 (1632); Q.17: Phase 1, 2005 (773); Q.17: Phase 2, 2005 (856)

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Action, Behaviour, Progression	Degrees of Freedom	Chi Square	Significance	Significance at 0.05
Using their new skills	4	2.94	0.57	>0.05
Undertaking new activities	4	4.86	0.30	>0.05
Other new ways of working in the classroom	4	3.49	0.48	>0.05
Enabling them to work with their peers in new ways	4	2.77	0.60	>0.05

Action, Behaviour, Progression	Degrees of Freedom	Chi Square	Significance	Significance at 0.05
In their subject-related understanding	4	2.51	0.64	>0.05
In increased motivation to learn	4	2.47	0.65	>0.05
In learning across the curriculum	4	1.16	0.88	>0.05
In their cultural understanding	4	5.77	0.22	>0.05
In increased confidence	4	4.68	0.32	>0.05
In their assessed work	4	1.27	0.87	>0.05

Table 6.7d: Form A, Q.18: 'To what extent do you anticipate that the museum visit will support pupil development?', 2005, comparing the percentages of those teachers responding 'very likely' in the Phase 1 and the Phase 2 museums

Action, Behaviour, Progression	Very likely, 2005	Very likely, Phase 1	Very likely, Phase 2
In their subject-related understanding	69%	69%	69%
In increased motivation to learn	41%	42%	41%
In learning across the curriculum	35%	36%	35%
In their cultural understanding	35%	32%	38%
In increased confidence	35%	37%	34%
In their assessed work	19%	21%	19%

Base: all teachers' responses: Q.18: 'To what extent do you anticipate that the museum visit will support pupil development?', 'very likely' only, 2005 (1632); Q.18: Phase 1, 2005 (773); Q.18: Phase 2, 2005 (856)

## 6.8 Action, Behaviour, Progression: evidence from the focus groups and case-studies

In the 2003 study, teachers rated Action, Behaviour, Progression less highly as a learning outcome of a museum visit compared with other learning outcomes. In 2005, we asked teachers in the focus groups and case-studies about this and found that initially teachers thought of Action, Behaviour, Progression as only related to long term progression. When asked why teachers didn't seem to value this GLO as much as others in the 2003 study one teacher commented:

'We don't always see Action, Behaviour, Progression immediately; these are long term aims so it might be one reason why they are not considered important'.

However, when we probed teachers further, we found that teachers both expected significant progression from their pupils as a result of a museum visit and had experienced this progression. This was particularly so for pupils who for whatever reason were not good at academic or written work as their teachers believed that the museum gave them an opportunity to display their aptitudes in another way. Teachers felt that the impact of the museum for these kinds of pupils was particularly significant:

'We had a boy who loved history- not brilliant at anything else... at parents evening talking to his mother and I told her about English Heritage and as a result the whole family became members'.

'In the summer holidays I was visiting Staples and a chap ran towards me, calling my name and hugged me. It turned out he was an ex-student from 13 years ago who had been inspired to do computer science after a visit to Birmingham Museum and Art Gallery which had on display one of the first computers... ever since he had been on the visit it had triggered an enthusiasm and interest. He had language problems and special needs but he had forced his parents to get him a computer, triggered by that visit'.

'Museum visits give opportunities for those kids who are not academically strong on paper to shine'.

'Everyone gets to shine at the museum in a different way'.

'[A museum visit] motivates them to do their own learning... they bring in pictures, some joined the history club at the local library, watch TV programmes and look up on the Internet'.

Most striking, as was mentioned in Section 6.6, was a teacher who expected that her pupils would actually go up at least half a level on their assignment as a result of their visit to a museum. This echoes the experiences of a

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teacher in the 2003 study where GCSE grades improved as a result of using a visit to Aston Hall. He said:

'Without the museum visit we would not be able to deliver the [History] syllabus and exam marks would fall... Students tend to get better marks in coursework related to the museum visit than in exams' (What did you learn at the Museum today? 2003).

In Section 7 we are able to show how a museum visit did in fact improve the grades of a group of pupils we observed in a case-study.

#### 6.9 Skills

There was one question on the Teachers' Questionnaire about Skills, Form A, Q.14: 'To what extent do you think that your pupils will have increased or gained skills during their museum visit?'. The table below presents the data across all museums.

Taking all positive values, the statistics tell us that the percentage of teachers thinking it is 'likely' or 'very likely' that pupils will have increased or gained skills as a outcome of their museum visits in 2005 as follows:

•	Thinking skills	92%
•	Communication skills	87%
•	Social skills	86%
•	Practical skills	72%
•	Creative skills	69%
•	Literacy skills	66%
•	Spatial skills	59%
•	Other skills	41%
•	Numeracy skills	23%
•	ICT skills	10%

Comparing between the two studies four outcomes show a significant difference, 'Thinking skills', 'Literacy skills', 'Numeracy skills', 'Practical skills' and 'Other Skills'. While all these outcomes appear to be showing a decline in teachers' thinking it was 'very likely' pupils had increased or gained these skills it is important to note that 'Numeracy' and 'Other skills' have a sizeable 'don't know' category which has been excluded from the analysis. This new category maybe impacting on the 2005 results causing a declining in teachers' rating these outcomes 'likely' or 'very likely'.

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Skills	Degrees of Freedom	Chi Square	Significance	Significance at 0.05
Thinking	3	16.99	0.001	<0.05
Communication	3	7.31	0.063	>0.05
Social	3	2.22	0.53	>0.05
Practical	3	8.20	0.042	<0.05
Creative	3	0.35	0.95	>0.05
Literacy	3	18.46	0.00	>0.05
Spatial	3	1.07	0.78	>0.05
Other	3	44.36	0.00	>0.05
Numeracy	3	14.29	0.003	<0.05
ICT	n/a	n/a	n/a	n/a

Table 6.9a: Form A, Q.14: 'To what extent do you think that your pupils will have increased or gained skills during their museum visit?', 2005

	ICT skills		Thinking skills		Communication skills		Social skills		Creative skills		Practical skills		Literacy skills		Spatial skills		Other skills		Numeracy skills	
	2003	2005	2003	2005	2003	2005	2003	2005	2003	2005	2003	2005	2003	2005	2003	2005	2003	2005	2003	2005
TOTAL	n/a	1,632	936	1,632	936	1,632	936	1,632	936	1,632	936	1,632	936	1,632	936	1,632	936	1,632	936	1,632
Very likely	n/a	43	495	731	403	642	391	634	306	523	292	555	264	371	195	313	175	216	50	59
		3%	53%	45%	43%	39%	42%	39%	33%	32%	31%	34%	28%	23%	21%	19%	19%	13%	5%	4%
Quite likely	n/a	117	370	762	427	780	423	766	343	602	335	618	415	703	374	659	374	457	225	311
		7%	40%	47%	46%	48%	45%	47%	37%	37%	36%	38%	44%	43%	40%	40%	40%	28%	24%	19%
Neither	n/a	485	34	57	51	89	58	106	149	259	150	235	109	242	183	332	161	372	251	492
		30%	4%	3%	5%	5%	6%	6%	16%	16%	16%	14%	12%	15%	20%	20%	17%	23%	27%	30%
Quite unlikely	n/a	273	9	20	14	39	16	32	60	77	74	85	62	138	67	92	30	57	193	337
		17%	1%	1%	1%	2%	2%	2%	6%	5%	8%	5%	7%	8%	7%	6%	3%	3%	21%	21%
Very unlikely	n/a	492	2	11	4	17	5	12	18	48	21	37	18	58	20	54	7	46	110	228
		30%	0%	1%	0%	1%	1%	1%	2%	3%	2%	2%	2%	4%	2%	3%	1%	3%	12%	14%
Don't	n/a	48	n/a	6	n/a	10	n/a	15	n/a	26	n/a	21	n/a	21	n/a	43	n/a	193	n/a	43
know		3%		0%		1%		1%		2%		1%		1%		3%		12%		3%
Not stated	n/a	172	26	45	37	55	43	67	60	97	64	81	68	99	97	139	189	291	107	162
		10%	3%	3%	4%	3%	5%	4%	6%	5%	7%	5%	7%	6%	10%	9%	20%	18%	11%	10%

The table below compares the percentages of teachers saying 'very likely' in the Phase 1 and the Phase 2 museums. As with the other GLOs, there is little differentiation between the teachers in the different museums.

Comparing the Phase 1 and Phase 2 museums reveals a significance difference in teachers' responses for 'Practical skills', 'Numeracy skills', and 'ICT skills'. <sup>15</sup> Teachers visiting Phase 2 museums were more inclined to think it 'unlikely' their pupils had improved their numeracy skills as part of the museum visit. However a larger proportion of teachers' visiting Phase 2 museums thought it likely that pupils would have increased their practical skills and ICT skills.

Table 6.9b: Form A, Q.14: 'To what extent do you think that your pupils will have increased or gained skills during their museum visit?', comparing the percentages of those teachers responding 'very likely' in the Phase 1 and the Phase 2 museums

Skills	Very likely, 2005	Very likely, Phase 1	Very likely, Phase 2
Thinking	45%	44%	45%
Communication	39%	41%	38%
Social	39%	40%	38%
Practical	34%	33%	35%
Creative	32%	31%	33%
Literacy	23%	24%	22%
Spatial	19%	20%	19%
Other	13%	13%	14%
Numeracy	4%	5%	2%
ICT	3%	3%	2%

Base: all teachers' responses Q.14: 'To what extent do you think that your pupils will have increased or gained skills during their museum visit?', 'very likely' only, 2005 (1632); Q.14: Phase 1, 2005 (773); Q.14: Phase 2, 2005 (856)

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**Skills** Significance Degrees of Chi Significance Freedom Square at 0.05 4 3.14 0.54 >0.05 Thinking Communication 4 2.01 0.73 >0.05 1.17 0.88 4 >0.05 Social 10.93 Practical 4 0.03 < 0.05 Creative 4 1.03 0.91 >0.05 4 1.55 0.82 >0.05 Literacy 4 Spatial 4.76 0.31 >0.05 Other 4 1.03 0.9 >0.05 Numeracy 4 16.36 0.003 < 0.05 4 11.88 < 0.05 0.04 ICT

#### 6.10 Skills: evidence from the focus groups and case-studies

In the 2003 study teachers rated Skills less highly as a learning outcome of a museum visit, therefore we were particularly interested in understanding why this might be so. We discovered that if we asked teachers to provide a 'skills audit' of the skills they believed their pupils gained as a result of a museum visit teachers were able to provide a very substantial list of diverse skills:

- Social skills
- Working in teams
- Analytical skills
- Synthesising
- Role playing
- Empathy
- Self analysis
- Self expression
- Verbal skills
  - descriptive language
  - questioning language
  - talking to adults
- Enquiry
- Concentrating
- Making judgements
- Listening
- Looking
- Improvising
- Research skills
- 'Museum skills'

These generic skills were in addition to a whole range of skills which teachers mentioned in relation to specific museum projects their pupils had participated in such as: photography, ICT, drawing, painting, and writing.

#### 6.11 Conclusion

This section explored teachers' expectations about the learning outcomes of their pupils in relation to museum-based learning. It is based on questionnaires completed by 1,643 teachers immediately after a museum visit, and also discussions with 31 teachers who expressed their views about the outcomes of museum learning reflecting on past experience of museum visits.

Those teachers who are using museums are extremely enthusiastic about them, especially in relation to the enjoyment experienced by their pupils and the increased motivation to learn that follows. Teachers were particularly articulate about Enjoyment, Inspiration, Creativity as an outcome of museum-based learning. They also talked about emotional engagement that could not really be called enjoyment but which was to some extent inspirational.

Ninety-nine percent (99%) of teachers thought it 'likely' or 'very likely' that their pupils would have enjoyed the museum visit, with 82% ticking 'very likely'. Ninety-five percent (95%) thought new interests would be aroused and pupils would be inspired to learn more. Ninety-three percent (93%) thought pupils would be excited by new ways to learn and 88% of teachers expected to be exploring new ideas with their pupils as an outcome of the museum visit. In discussions, teachers were explicit about the causal link between enjoyment and learning, saying, for example: 'enjoyment opens children up to learning' and 'enjoyment leads to a heightened sense of awareness'.

Knowledge and Understanding remains of key importance to teachers, with 95% of teachers thinking it is 'likely' or 'very likely' that their pupils would have gained subject-specific facts. The positive attitudes that museums can generate is well understood, with 92% of teachers thinking pupils will feel more positive about learning as an outcome of their museum visit. Pupils' expected progression was expressed most strongly in relation to increase in subjectrelated understanding, with 94% of teachers thinking this would improve. In discussions, it seemed that teachers understood progression as something that would happen in the middle to long term, and thus they were uncertain about what could be identified in the short-term, immediately following a museum visit. This may account for a larger number of teachers not responding to this part of Q.19, as discussed in Section 5. The most likely skillsrelated outcomes were thinking skills, with 92% of teachers anticipating an increase here; 87% of teachers expected an improvement in communication skills, and 86% expecting an improvement in social skills. The least likely skillsrelated area for learning to occur was in the area of ICT, and here it is very clear that unless teachers are deliberately using the museum to work on and around ICT, these skills are unlikely to be encouraged. When teachers in the focus groups were prompted to think more broadly about both Skills and Action, Behaviour, Progression, they were easily able to extend their views and give examples of these learning outcomes which they had observed in their pupils.

Above all, teachers felt that the museum could impact on learning outcome to the extent to which it engaged the pupils' emotional responses. This is

regarded as of major importance and achievable for all pupils. The tangibility of the experience and the opportunity to access information and feelings through the senses, combined with the possibility of individual emotional engagement makes the museum a powerful teaching tool. Pupils are able to deploy a broad range of learning styles, and respond to open-ended events in diverse ways.

Teachers' views about what their pupils had achieved did not vary greatly across the 69 museums. Their expectations in relation to their pupils' learning outcomes seemed to be much the same in nearly all instances, although there were one or two instances where small, but statistically significant differences were found. Section 4 reported a slightly larger number of teachers (3%) using the Phase 1 museums for curriculum-related work than in the Phase 2 museums, but this does not seem to have greatly affected teachers' views.

In their discussions of the value of museums to their pupils, teachers highlighted the importance of emotional engagement and the resulting personalised response from pupils. This was perceived as highly significant in stimulating learning. Some very original and successful ways of provoking emotional engagement were observed in museums, and this capacity of museums may be something that should be explored and reviewed further. One of the key issues in current government strategy is the personalisation of learning. It became clear during the case-study observations, and is also very evident in the responses in the pupils' Form Bs, that pupils are able to make a collective museum experience their own. Investing emotions, and through personalising and taking ownership of an aspect of experience, is one of the very important factors in museum-based learning.

Section 7 discusses the pupils own views about their learning.

### **SECTION SEVEN**

# PUPILS' VIEWS ON THE IMPACT OF THE MUSEUM VISIT ON THEIR LEARNING

#### 7.0 Introduction

This Section discusses pupils' views of their own learning. It is based on the quantitative analysis of just over twenty-six thousand questionnaires (Form B) completed by pupils directly after their museum visit, combined with evidence from three school case-studies. In the schools, some pupils completed Form Bs at the time of the case-study, which enabled comparisons with those completed immediately after the museum visit. Some of these pupils also completed assignments which provide evidence of the positive impact on assignment grades as the result of a museum visit. The section presents the quantitative data together with qualitative evidence from discussions with teachers and pupils, and from observations in schools and museums.

The design of the two Form Bs was kept largely the same as in 2003. They covered all the five GLOs, with the exception of a question on Skills at KS2 and below, as it was judged in 2003 that children at that age would not be able to respond sensibly to such a question. A space at the bottom of the form for the older pupils was left blank as this had proved so successful in 2003 with the younger pupils. The following question was asked to stimulate a response: 'The most interesting thing about today was...'

Pupils of all ages are, as in 2003, both very enthusiastic about their museum experiences, and confident about their own learning. Older pupils seem to be more enthusiastic about their museum experiences than in 2003, with 10% more pupils finding museums inspiring and 6% considering museums to be good places to pick up new skills. Older pupils in the Phase 2 museums seem to be more enthusiastic on more dimensions than older pupils in the Phase 1 museums. There is strong and consistent evidence that although for the most part teachers are very confident that their pupils have experienced successful learning outcomes, even where they are not confident, their pupils remain convinced that they have, in fact, been successful learners. This suggests that the potential for museum learning is not in all cases, being exploited by teachers.

Case-studies revealed some of the factors that might influence a productive visit that is likely to result in positive learning outcomes for pupils. Where all of these factors were in place, the Form Bs yielded more positive responses, and evidence was found of significantly enhanced success levels in assignments.

#### 7.1 The pupils completing Form B

There are two age-related Form Bs in this study, as there were in 2003. Twenty-six thousand seven hundred and ninety-one (26,791) pupils completed Form Bs, with 82% of these (21,845) at KS2 or below and 18% (4,946) at KS3 and above.

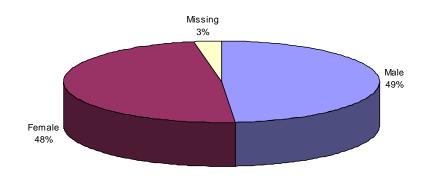
Table 7.1a: Numbers and percentages of pupils completing Form B, 2005

All pupils completing Form B in 2005	26,791	100%
Pupils completing Form B KS2 and below in all museums	21,845	82%
Pupils completing Form B KS3 and above in all museums	4,946	18%

In 2003, 17,198 pupils completed Form B, with 86% at KS2 and below and 14% at KS3 and above. In 2005, there were slightly higher numbers of older pupils completing Form Bs (by 4%).

In terms of gender there was a fairly even division for pupils completing Form B KS2 (48% female and 49% male).

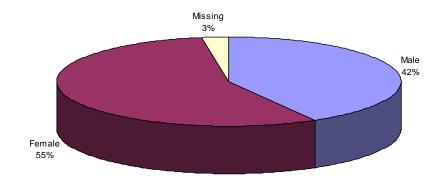
Fig 7.1b: Breakdown of KS2 and below pupils completing Form B, by gender, 2005



Base: all KS2 and below pupils (21845)

For the older pupils of KS3 and above there was a predominance of female pupils (55%) completing questionnaires compared to numbers of male pupils (42%).

Fig 7.1c: Breakdown of KS3 and above pupils completing Form B, by gender, 2005

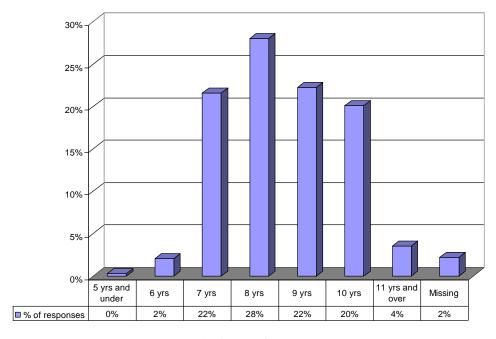


Base: all KS3 and above pupils (4946)

This is very similar to the gender breakdown of responses to the 2003 study which was more-or-less 50/50 at the lower age-range (with 48% male and 49% female), and at the higher age-range, there was a higher proportion of girls (51%) than boys (47%).

Pupils were also asked to record their age. From the KS2 and below data, it can be seen that respondents are concentrated between the ages of 7-10 years, for whom the form was designed. This was not very different from 2003.

Fig 7.1d: Breakdown of KS2 and below pupils completing Form B, by age, 2005



Base: all KS2 and below pupils (21845)

For pupils of KS3 and above the spread across the age range is quite different with a more noticeable decline in number of pupils after the age of 13 years. The category with the highest percentage (25%) of the older pupils is 11 years.

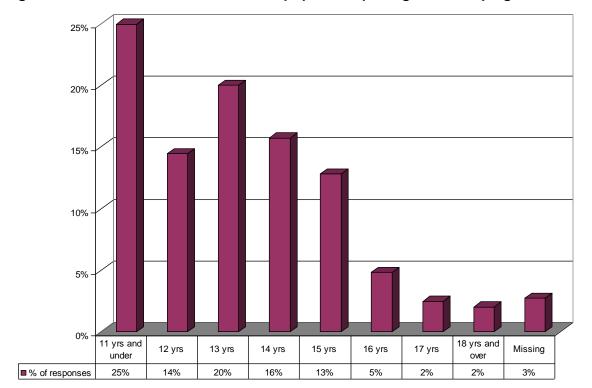


Fig 7.1e: Breakdown of KS3 and above pupils completing Form B, by age, 2005

Base: all KS3 and above pupils (4946)

This spread is very similar to the findings from the 2003 study. However, it is interesting to note that percentages of older pupils aged 11 and 12 years have decreased slightly (from 30% to 25%) since 2003 and this has been accompanied in a slight rise in the other age categories.

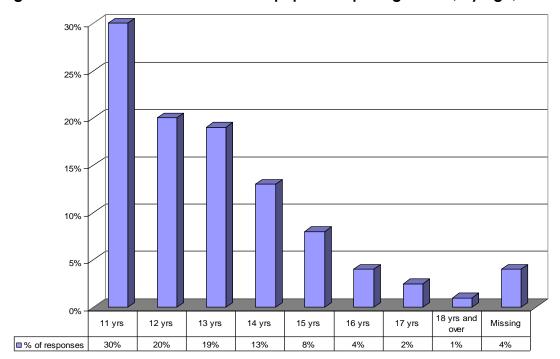


Fig 7.1f: Breakdown of KS3 and above pupils completing Form B, by age, 2003

Base: all KS3 and above pupils (3406)

Looking at the age distribution across all pupils it can be noted that most visits made to museums are by pupils aged between 7 and 10 years, and that there is a noticeable decline from then on.

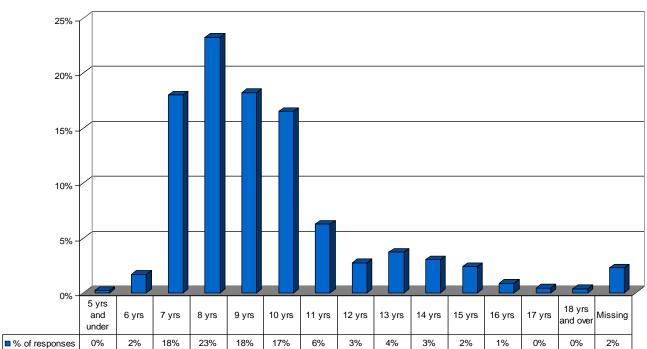


Fig 7.1g: Breakdown of all KS2 and below and KS3 and above pupils completing Form B, by age, 2005

Base: all pupils (26791)

### 7.2 Summary of results for older and younger pupils

The tables below present the results from the two Form Bs. They are presented first across all the museums in the 2005 study, comparing them with the results in 2003; and secondly comparing the pupils visiting the Phase 1 museums and the Phase 2 museums, and comparing these figures with those from 2003.

The pupils are very consistent across both time and space. They are also very enthusiastic about their museum experiences, and confident about their own learning. Ninety-three percent (93%) of the younger pupils enjoyed their visit, and 90% learnt some interesting new things. The new question in the KS3 and above Form B asked older pupils whether they had enjoyed their visit, and 86% agreed. Eighty-five percent (85%) of the older pupils agreed they had learnt some interesting new things.

Table 7.2a: What KS2 and below pupils said about their learning in 2005; comparing percentages that ticked 'yes' in 2003

Key Stage 2 and below	Yes	No	Don't	Missing	Yes,
			know		2003
I enjoyed today's visit	93%	2%	5%	1%	94%
I learnt some interesting new things	90%	3%	6%	1%	90%
I could understand most of the things we saw and	80%	6%	13%	1%	81%
did					
This is an exciting place	86%	4%	8%	2%	87%
Visiting has given me lots of ideas for things I could		11%	15%	2%	73%
do					
A visit is useful for school work	86%	4%	8%	2%	87%
The visit has made me want to find out more	76%	9%	13%	2%	77%

Base: all KS2 and below pupils' responses Q.1-7, 2005 (21,845) and all pupils KS2 and below responses Q1-7, 2003 (17,198)

Table 7.2b: What KS2 and below pupils said about their learning in 2005; comparing percentages that ticked 'yes' in the Phase 1 and the Phase 2 museums; and in 2003

Key Stage 2 and below	All	Phase	Phase	2003
		1	2	
I enjoyed today's visit	93%	93%	93%	94%
I learnt some interesting new things	90%	90%	90%	90%
I could understand most of the things we saw and	80%	80%	79%	81%
did				
This is an exciting place	86%	86%	85%	87%
Visiting has given me lots of ideas for things I could	72%	73%	72%	73%
do				
A visit is useful for school work	86%	87%	86%	87%
The visit has made me want to find out more	76%	77%	76%	77%

Base: all KS2 and below pupils' responses Q.1-7, 2005 (21,845), all pupils KS2 and below responses Q.1-7, Phase 1, 2005 (10,342), all pupils KS2 and below responses Q.1-7, Phase 2, 2005 (11,503), and all pupils KS2 and below responses Q.1-7, 2003 (17,198)

Table 7.2c: What KS3 and above pupils said about their learning in 2005; comparing percentages that ticked 'yes' in 2003

Key Stage 3 and above	Yes	No	Don't know	Missing	2003
I enjoyed today's visit	86%	4%	9%	1%	n/a
I discovered some interesting things from the visit today	85%	6%	8%	1%	87%
A museum/gallery visit makes school work more inspiring	68%	12%	19%	1%	58%
The visit has given me a better understanding of the subject	71%	12%	16%	1%	72%
A museum visit is a good place to pick up new skills	68%	11%	20%	1%	62%
The museum is a good place to learn in a different way to school	83%	6%	10%	1%	82%
I could make sense of most of the things we saw and did at the museum	73%	8%	18%	1%	70%
I would come again		14%	31%	2%	55%
I've left the museum more interested in the subject than when I came		17%	23%	2%	59%

Base: all KS3 and above pupils' responses Q.1-9, 2005 (4946); all pupils KS3 and above responses Q.1-9, 2003 (3406)

Table 7.2d: What KS3 and above pupils said about their learning in 2005; comparing percentages that ticked 'yes' in the Phase 1 and the Phase 2 museums; and in 2003

Key Stage 3 and above	All	Phase 1	Phase 2	2003
I enjoyed today's visit	86%	85%	88%	n/a
I discovered some interesting things from the visit today	85%	84%	87%	87%
A museum/gallery visit makes school work more inspiring	68%	67%	70%	58%
The visit has given me a better understanding of the subject	71%	72%	70%	72%
A museum visit is a good place to pick up new skills	68%	68%	68%	62%
The museum is a good place to learn in a different way to school	83%	81%	85%	82%
I could make sense of most of the things we saw and did at the museum	73%	71%	75%	70%
I would come again	54%	55%	52%	55%
I've left the museum more interested in the subject than when I came	58%	58%	58%	59%

Base: all KS3 and above pupils' responses Q.1-9, 2005 (4946), all pupils KS3 and above responses Q.1-9, Phase 1, 2005 (2834), all pupils KS3 and above responses Q.1-9, Phase 2 2005 (2112); all pupils KS3 and above responses Q.1-9, 2003 (3406)

The tables above show only a little differentiation between the Phase 1 and the Phase 2 museums, which is not surprising given that the Phase 2 museums were chosen because they had well developed and therefore (probably) effective education sections. These results suggest strongly that pupils are experiencing equally good provision in museums in both Phases. However, there are a number of higher values for the Phase 2 museums.

The most noticeable change in the tables above concerns the views of KS3 and above pupils in relation to museums. Ten percent (10%) more of the older pupils consider visits to museums and galleries can make school work more inspiring than in 2003. There is also an increase in pupils who consider museums are good places to pick up skills. These are interesting findings, the first of which can be illustrated by some of the responses to the open question on Form B completed by older pupils.

Fig 7.2e: Form B KS3 and above, visit by Stacey aged 15 to Manchester Art Gallery

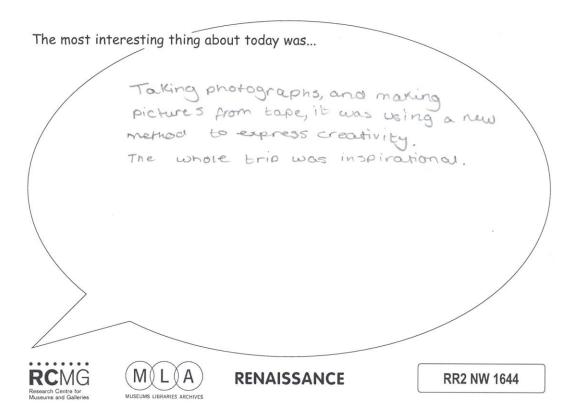
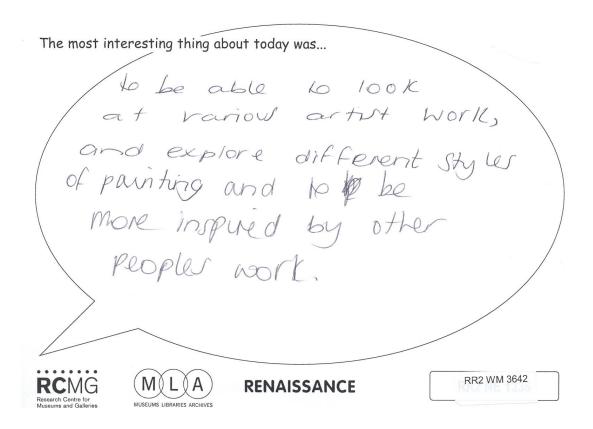


Fig 7.2f: Form B KS3 and above, visit by Vicky aged 15 to Birmingham Museums and Art Gallery



### 7.3 Evidence from the school case-studies

The case-studies provided us with evidence on the pupils' views of the impact of the museum visit on their learning. In total we spoke to 29 pupils between the ages of 7 and 16 across the following age categories:

- interviews with four 7 to 8 years olds,
- interviews with twelve 13 to 14 year olds,
- interviews with six 9 to 10 year olds, and
- focus group with seven 15 to 16 years olds.

As we have already described in Section 2 these pupils represented a cross-section of school-aged children from across England:

- from urban and rural areas.
- mixed cultural backgrounds,
- mixed socio-economic backgrounds,
- male and female,
- different levels of academic ability, and
- different types of school specialism- an Art and Technology school, for instance.

The interviews involved a maximum of three pupils at any one time and these, including the focus group, were taped, transcribed, analysed and coded. In addition, we observed five classes, about 120 pupils in total, on the three museum visits and three classroom observations undertaken. Two researchers were present at all visits, in interviews, and the focus group. Independent reflections on each museum or class observation, all interviews and the focus group were written by both researchers and then analysed. For all of the case-studies the class filled in a questionnaire at the end of the case-study which we then compared with the questionnaire the class filled in immediately after their museum visit. These second questionnaires were filled in by the pupils a minimum of one week and a maximum of a month after the visit. This allowed us to compare the pupils' views on the impact of the museum visit on their learning both immediately after the visit and after some time had passed. In general the younger pupils were less articulate about their experience of the museum and their learning outcomes from the visit, which might possibly be what would be expected.

#### 7.3.1 Key factors for a successful visit

We found some evidence which suggested that pupils were more reflective and articulate if the context of their museum experience contained multiple factors which ensured a productive and successful visit. These factors included:

- whether the child had any museum experience,
- the child's social and cultural context,
- the quality of the facilitation provided by the museum, and
- the quality of the facilitation provided by the teacher.

The teacher's facilitation included the pupils' preparation for the visit, follow up after the visit (not necessarily in terms of subject matter but in terms of the level of information the students were given about the actual visit itself), the teacher's engagement with the visit, and the institutional support for museum visits.

However, not all factors needed to be present for a productive and successful visit to occur.

### 7.3.2 Impact of a museum visit on assessment

Following on from the identification of key factors for a successful visit, we anticipated that where these factors were present, pupils' responses were likely to be very positive. This is illustrated by one of the case-studies in which we observed the museum/school partnership featured excellent facilitation by both the museum and the teacher in the classroom, the pupils had some museum experience and were of medium level academic ability. As illustrated in Table 7.3.2a, the Pupils' Questionnaire responses completed after this visit showed significantly higher levels of positive response than for KS3 and above pupils in this study overall.

Table 7.3.2a: Form B responses for the case-study; KS3 pupils answering 14/11/2005 compared with all KS3 and above pupils

Form B responses	Yes	No	Don't know	All KS3 and above (yes)
I enjoyed today's visit	96%	0%	4%	86%
I discovered some interesting things from the visit today	96%	0%	4%	85%
A museum/gallery visit makes school work more inspiring	90%	4%	6%	68%
The visit has given me a better understanding of the subject	94%	1%	4%	71%
A museum visit is a good place to pick up new skills	76%	4%	18%	68%
The museum is a good place to learn in a different way to school	94%	1%	4%	83%
I could make sense of most of the things we saw and did at the museum	90%	3%	7%	73%
I would come again	71%	6%	24%	54%
I've left the museum more interested in the subject than when I came	82%	4%	14%	58%

Base: all case-study pupils (72) and all KS3 and above pupils responding 'yes', (4946)

For this case-study we observed pupils from two different classes, a medium ability class and a class in the lowest ability. Pupils from both classes believed that they would try harder and get a better mark for their assignment, for which they could draw on the museum visit.

Fig 7.3.2b: Form B KS3 and above, visit by 13 year old pupil to Roots of Norfolk, Gressenhall

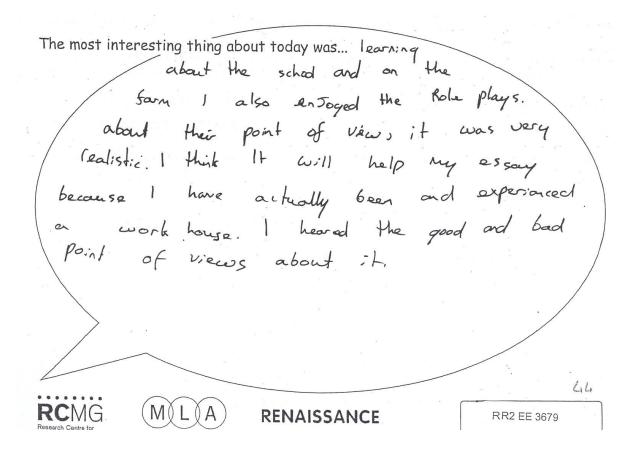
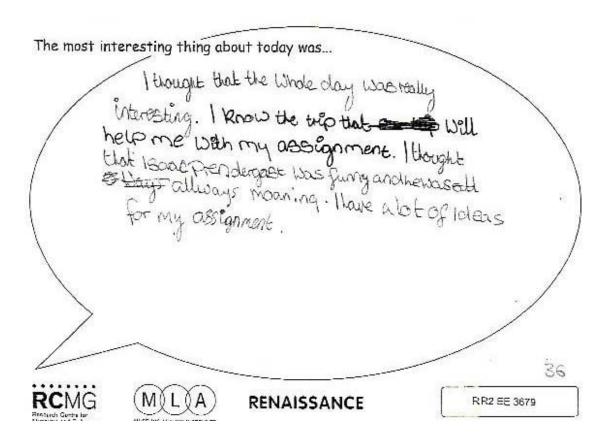


Fig 7.3.2c: Form B KS3 and above, visit by KS3 pupil to Roots of Norfolk, Gressenhall



In addition to the pupils from these classes being of different abilities their class teachers also used very different teaching styles. One of the teachers had worked in partnership with the museum to design the visit. The six pupils we interviewed in the class whose questionnaire response rate is shown above did in fact improve their mark. Two of these pupils improved by a whole two levels on this assignment, compared to their previous academic levels. The other teacher's class saw very little change in marks with no pupils going up in levels. It is important to note here that pupils from both classes had limited museum experience. As discussed in the introduction to this section the significance of a museum visit on learning impact is the result of a number of factors.

Table 7.3.2d below shows the increased levels achieved by pupils for the assignment based on the museum experience. What this table shows very clearly is that where there are many influences working well the museum can have a very significant impact on academic achievement.

Table 7.3.2d: Comparison of assignment levels for case-study KS3 pupils

Name	KS2 SAT English	Previous KS3 History assignment (where a museum visit was not undertaken)	Previous KS3 History assignment (where a museum visit was not undertaken)	KS3 assignment (where a museum visit was undertaken)
Class 1				
Dayna	4	5	4/5	6/7
Daniel	4	3/4	4/5	5
Joshua	4	New to school	New to school	5
Michael	4	6	5/6	7/8
Charlotte	4	5/6	5/6	6/7
Cameron	4	5/6	6	7
Class 2				
Alice	3	3	5	4
Ben	3	3	4	4
James	3	3	4	4
Emily	Absent	3	4/5	4
Rebecca	3	3/4	4	4
Mitch	3	No assignment	3	No assignment

#### 7.3.3 The museum as a 'leveller'

Evidence was found which supported teachers' expectations that the museum was a 'leveller' in terms of being able to facilitate good learning outcomes across ability levels. As we saw in Section 6 teachers thought that pupils who had a low achievement level in relation to written and other academic work were able to shine at the museum. One of the pupils we interviewed in the case study described above was characterised by his teacher as having poor writing skills but an enthusiasm for History. This student gained a level on the assignment he completed for which the museum visit was a primary resource.

Teachers also thought that pupils with poor behaviour in the classroom were able to shine at the museum due to being in a different environment and engaging with adults who do not know their 'naughty child' reputation. However, as we will see later in this Section we found evidence which shows that this is not always the case.

### 7.4 Younger pupils' responses to the museum visit

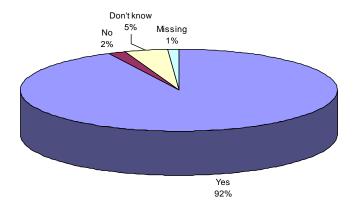
# 7.4.1 Younger pupils' responses to the museum visit: Enjoyment, Inspiration, Creativity

The first question on Form B focused on Enjoyment.

♦ Q 1: 'I enjoyed today's visit'

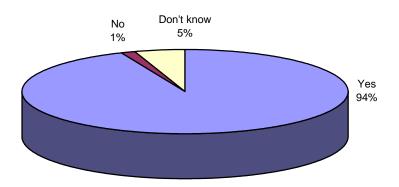
Ninety-two percent of the younger pupils agreed that they had enjoyed the visit. This can be compared with the results from 2003, where 94% agreed with this statement.

Fig 7.4.1a: Form B KS2 and below, Q.1: 'I enjoyed today's visit', 2005



Base: all KS2 and below pupils' responses to Q.1: 'I enjoyed today's visit', 2005 (21845)

Fig 7.4.1b: Form B KS2 and below, Q.1: 'I enjoyed today's visit', 2003



Base: all KS2 and below pupils' responses to Q.1: 'I enjoyed today's visit', 2003 (17198)

Many of the students talked about having fun at the museum. Two 7 year olds who were part of a long term project with a museum which involved a museum educator visiting the school and doing activities with the class said that they had enjoyed themselves because:

Pupil: 'They're fun'.

Researcher: 'They're fun, why do you think they're fun?'

Pupil: 'Cos I like activities. Cos when I grow up I want to

be an artist.'

[The other child being interviewed said:]

Pupil: 'And me'.

Researcher: 'You want to be an artist as well, why?'

Pupil: 'Cos I like doing art'.

A number of pupils talked about the relationship between enjoying themselves and Knowledge and Understanding:

#### Two 9 year olds:

'I had fun cos I like knowing things about the olden days, I don't know why, I just do'.

'It was quite fun and that, and it... makes you know what happened in the olden days and what the Tudors did'.

Many of the Form Bs completed by KS2 and below pupils demonstrate the inspiration they had experienced as a result of their museum visit which resulted in remarkable creativity by drawing pictures in response to the statement 'What amazed me most at the museum today...'

These responses included illustrations of museum exhibits such as an evocative image of an iron by Patrick aged 9 drawn in response to a school visit to Brighton Museum and Art Gallery:

Fig 7.4.1c: Form B KS2 and below, visit by pupil aged 9 to Brighton Museum and Art Gallery



Kirrika aged 11 chose to draw a lively illustration of Boudicca (Boadicea) based on the story she had heard at Colchester Castle:

Fig 7.4.1d: Form B KS2 and below, visit by pupil aged 11 to Colchester Castle



Megan aged 7 produced an incredibly detailed picture of a painting she had seen at Manchester Art Gallery:

Fig 7.4.1e: Form B KS2 and below, visit by pupil aged 7 to Manchester Art Gallery



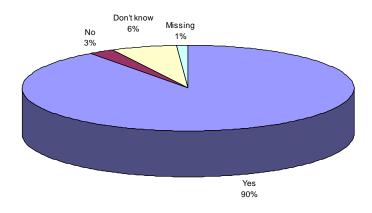
# 7.4.2 Younger pupils' responses to the museum visit: Knowledge and Understanding

There were two questions that asked about Knowledge and Understanding.

◆ Q.2: 'I learnt some interesting new things'

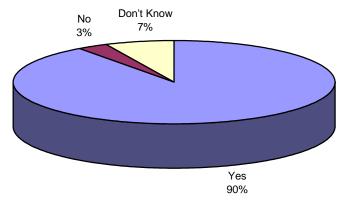
This question aimed to discover whether pupils had increased their Knowledge and Understanding. A substantial number (90%) of the pupils agreed with this, which was exactly the same as in 2003.

Fig 7.4.2a: Form B KS2 and below, Q.2: 'I learnt some interesting new things', 2005



Base: all KS2 and below pupils' responses to Q.2: 'I learnt some interesting new things', 2005 (21845)

Fig 7.4.2b: Form B KS2 and below, Q.2: 'I learnt some interesting new things', 2003

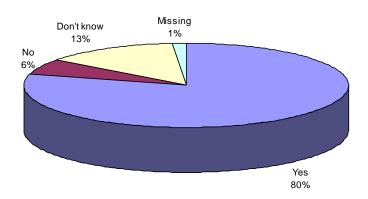


Base: all KS2 and below pupils' responses to Q.2: 'I learnt some interesting new things', 2003 (17198)

• Q.3: 'I could understand most of the things we saw and did'

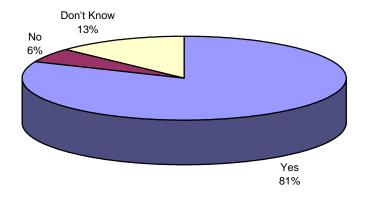
Did the pupils understand what they had been exposed to at the museum? Although the vast majority of pupils agreed with this, the numbers are not as high as for Q.2. Eighty percent of pupils agreed with this statement. This compares very favourably with 2003.

Fig 7.4.2c: Form B KS2 and below, Q.3: 'I could understand most of the things we saw and did', 2005



Base: all KS2 and below pupils' responses to Q.3: 'I could understand most of the things we saw and did', 2005 (21845)

Fig 7.4.2d: Form B KS2 and below, Q.3: 'I could understand most of the things we saw and did', 2003



Base: all KS2 and below pupils' responses to Q.3: 'I could understand most of the things we saw and did', 2003 (17198)

Across all three case-studies when the pupils were interviewed up to a month after their museum visit they had very good recall of very specific facts and information they had learnt as a result of their visit. It was in recalling the facts of their visit that the younger pupils were most forthcoming. So, for instance, pupils who had been to an art gallery talked about seeing statues and paintings about people and animals, and they were also able to talk about what the 'statues' were made of – 'brick I think', 'iron', 'You know that man he's out of rock'. However, the pupils' experience was such that they did not develop a correct understanding of the materials they were looking at as the statues they referred to were actually made out of bronze and carved stone.

Many of the pupils we spoke to in one class enjoyed drawing a particular sculpture of a girl on a swing indicating that where pupils can relate to something they are more likely to engage with it (which can happen for a number of reasons including, as is likely in this case, simply that the object represents something that is part of the child's experience). We will discuss this further in relation to the older pupils later in this Section.



Fig 7.4.2e: KS2 pupils drawing 'Girl on a Swing', 1956 by John Paddison

Some 9 year olds we talked to, who had no museum experience outside of school, made the connection with a museum visit they had experienced in school the year before, comparing the architecture of the house they had seen on that visit, which was wooden framed, with the Tudor house they had seen on the visit we observed. These same pupils were able to talk about the

ways the Tudors learnt to write using books made out of horn as well as drinking and eating out of horn cups and spoons. They also commented on the fact that children drank beer or milk but 'men drank the strongest'. These pupils were able to recall a large amount of facts and information they had learnt specifically from this single day museum visit.

Elliot aged 10 was amazed to find out that in the past, children of his age were able to drink beer:

Fig 7.4.2f: Form B KS2 and below, visit by pupil aged 10 to Brighton Museum and Art Gallery



In some cases the Knowledge and Understanding gained as a result of a museum visit is inseparable from inspiration, as in this case of a child whose school was located in a very deprived inner-city area and whose school population included a high number of pupils from a deprived socioeconomic background. She had never seen herbs before visiting a museum which included a large kitchen garden:

'Well actually that amazed me most ... I didn't know what herbs meant. But when we went in, when me and the teacher went in and the table went outside to look at herbs. And in the olden times they used to use like most herbs, some of the herbs in for food like mint, rosemary and lavender'.

This pupil completed her Form B after the visit to Blakesley Hall with a picture of the herbs she remembered from the garden:

Fig 7.4.2g: Form B KS2 and below, visit by 9 year old pupil to Blakesley Hall, Birmingham Museums and Art Gallery



Fig 7.4.2h: The large kitchen garden attached to Blakesley Hall



Another child was particularly impressed with a sun dial:

'[In] Tudor times the Tudors never, they didn't have clocks and... so they never knew what the time was. And in the gardens there's this massive rock and there's this blade and if when the sun would rise up and it would be touching the blade, they knew when it was noon. And then if it went down they knew what the time was when it was night. And in the morning they would know because it's on one side where there's light, where there's the sunshine because the sun actually moves. And then when it goes down the moon comes up, so that's how they knew the time'.

As teachers believed, we found evidence which showed that museum visits impress upon children the reality of life in the past:

'You know in those times yeah, they didn't have supermarkets and stuff, so if you were rich you would have a garden and then you would get food from there like all the things. But rich people just ate, mostly ate meat like beef and ham and all other kinds of... The poor people had like different stuff. They had vegetables always'.

Some pupils were quite able to reflect on the development of their Knowledge and Understanding through a museum visit. Two 9 year old pupils commented about a museum visit we observed which was facilitated by a highly skilled museum educator who used a number of technical terms:

'Well I actually thought like a bit hard because when she said all these kinds of words that I've never heard before, at the beginning I never knew what she meant... when she said more, I got the understanding and then I knew what she meant'.

'It was a bit alright cos I didn't know at first what she was on about cos I didn't know things about the stuff... And then as she was going on I learnt about what there was and that'.

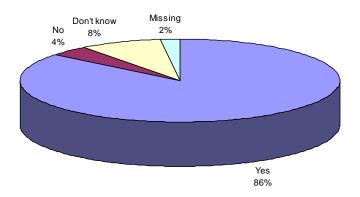
#### 7.4.3 Younger pupils' responses to the museum visit: Attitudes and Values

There were two questions asking about pupils' attitudes to museums.

♦ Q.4: 'This is an exciting place'

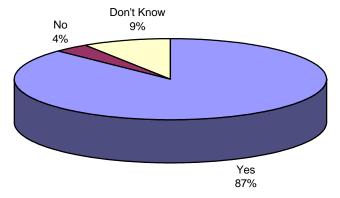
Did the pupils find the museums they visited exciting and stimulating? Eighty-six percent of the younger pupils agreed with this. This compares with 87% in 2003.

Fig 7.4.3a: Form B KS2 and below, Q.4: 'This is an exciting place', 2005



Base: all KS2 and below pupils' responses to Q.4: 'This is an exciting place', 2005 (21845)

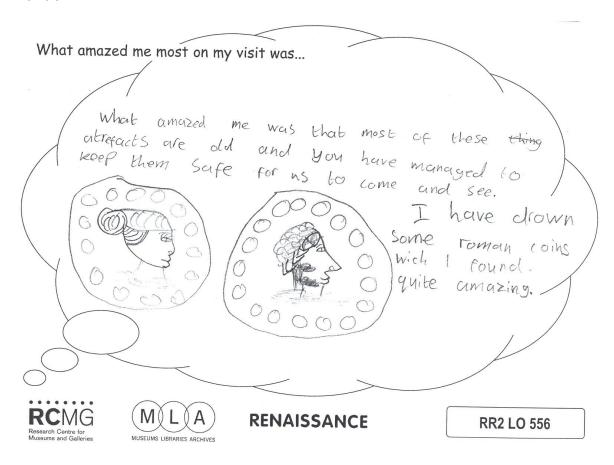
Fig 7.4.3b: Form B KS2 and below, Q.4: 'This is an exciting place', 2003



Base: all KS2 and below pupils Q.4: 'This is an exciting place', 2003 (17198)

Iqra aged 8 was impressed by the fact that the museum existed in order to keep 'things safe' so that people like her could visit and look at them. She also drew a careful picture of two coins she saw during her visit to the Museum of London.

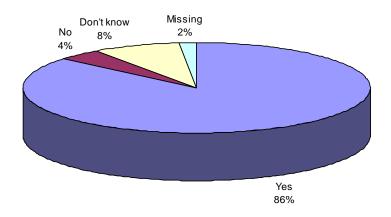
Fig 7.4.3c: Form B KS2 and below, visit by 8 year old pupil to the Museum of London



Q.6: 'A visit is useful for school work'

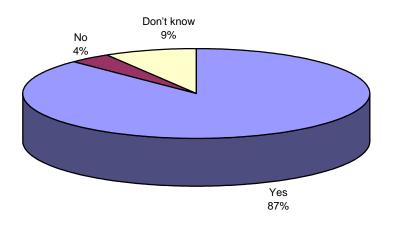
Of the younger pupils, 86% agreed with this statement, compared with 87% in 2003.

Fig 7.4.3d: Form B KS2 and below, Q.6: 'A visit is useful for school work', 2005



Base: all KS2 and below pupils' responses to Q.6: 'A visit is useful for school work', 2005 (21845)

Fig 7.4.3e: Form B KS2 and below, Q.6: 'A visit is useful for school work', 2003



Base: all KS2 and below pupils' responses to Q.6: 'A visit is useful for school work', 2003 (17198)

On one of the museum visits we observed, the facilitator was being quite specific about making a comparison to the gender politics of the period in contrast to the contemporary position of women. Despite their very young age, 9 years, the girls in this group were quite thoughtful about this

comparison. When asked what the worst thing about living in that historical period would be one of the girls said:

'The worst thing would be when my head ached and my husband would be not nice and they would not like me and then they would keep my children and they would like divorce me'.

Researcher: 'Tell me, what did you think about what she was

talking about school in Tudor times, do you

remember that bit?'

Pupil: 'Yeah. Boys only went to school and girls had to

stay home and they had to like be home so they'd

learn to clean.'

Researcher: 'What did you think about that, do you think it was

good or bad?'

Pupil: 'Bad. Cos it wasn't fair. How would girls learn to be

clever? Boys would be clever and girls won't because they wouldn't learn and that's actually unfair. And boys actually were the bosses in those

times.'

# 7.4.4 Younger pupils' responses to the museum visit: Action, Behaviour, Progression

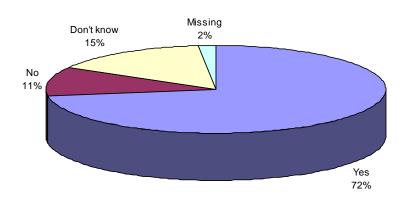
There were two questions that focused on development and progression after the visit.

• Q.5: 'Visiting has given me lots of ideas for things I could do'

Did the museum visit stimulate interest and potential to take things further?

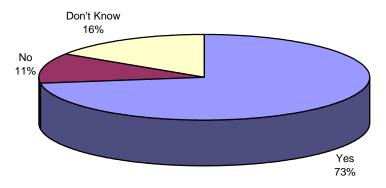
Seventy-two percent of the younger pupils agreed that it did, compared with 73% in 2003.

Fig 7.4.4a: Form B KS2 and below, Q.5: 'Visiting has given me lots of ideas for things I could do', 2005



Base: all KS2 and below pupils' responses to Q.5: 'Visiting has given me lots of ideas for things I could do', 2005 (21845)

Fig 7.4.4b: Form B KS2 and below, Q.5: 'Visiting has given me lots of ideas for things I could do', 2003

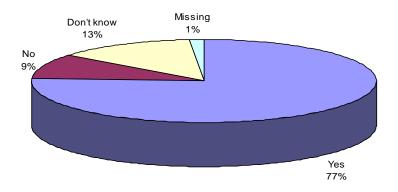


Base: all KS2 and below pupils' responses to Q.5: 'Visiting has given me lots of ideas for things I could do', 2005 (17198)

• Q.7: 'The visit has made me want to find out more'

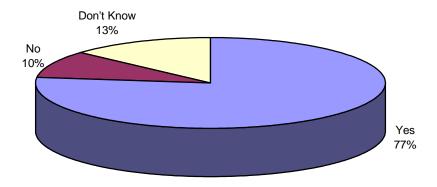
Seventy-seven percent of the respondents agreed with this, compared with 77% in 2003.

Fig 7.4.4c: Form B KS2 and below, Q.7: 'The visit has made me want to find out more', 2005



Base: all KS2 and below pupils' responses to Q.7: 'The visit has made me want to find out more', 2005 (21845)

Fig 7.4.4d: Form B KS2 and below, Q.7: 'The visit has made me want to find out more', 2003



Base: all KS2 and below pupils' responses to Q.7: 'The visit has made me want to find out more', 2003 (17198)

Section Seven: Pupils' Views on the Impact of the Museum Visit on their Learning

In exposing children to new things and experiences a museum visit can inspire them to do new things.

A 7 year old with special educational needs talking about an installation made of coat hangers forming a person's face:

Researcher: 'And what was the best thing about the museum

for you?'

Pupil: 'I liked the man that's been made out of hangers.

Cos I would like to try and do that.'

Researcher: 'Have you ever done anything with coat hangers

before, you've got coat hangers in your house

haven't you?'

Pupil: 'I may, I've got loads of hangers ....'

### 7.5 The older pupils' responses to the museum visit

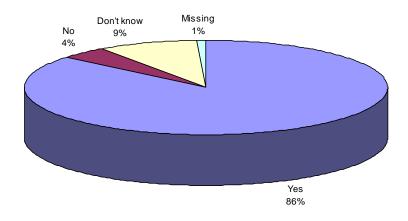
# 7.5.1 The older pupils' responses to the museum visit: Enjoyment, Inspiration, Creativity

There were two questions about Enjoyment, Inspiration, Creativity at KS3 and above, the first of which was new for 2005.

♦ Q.1: 'I enjoyed today's visit'

Eighty-six percent of the pupils completing Form B agreed with this statement.

Fig 7.5.1a: Form B KS3 and above, Q.1: 'I enjoyed today's visit', 2005

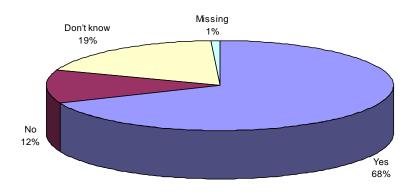


Base: all KS3 and above pupils' responses to Q.1: 'I enjoyed today's visit', 2005 (4946)

Q.3: 'A visit to a museum/gallery makes school work more inspiring'

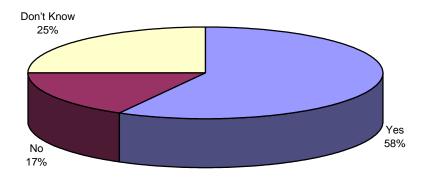
The evidence that museum visits are enjoyable and inspiring and thus arouse interest and provoke learning emerged strongly from the teachers in 2005 as in 2003. Sixty-eight percent (68%) of the older pupils agreed with this statement, which is in marked contrast to 2003, where 58% agreed. Evidence from the case-study in Norfolk shows how intellectual challenge combined with emotional engagement in a rich and new environment enables teenagers to go beyond their accustomed reticence.

Fig 7.5.1b: Form B KS3 and above, Q.3: 'A visit to a museum/ gallery makes school work more inspiring', 2005



Base: all KS3 and above pupils' responses to Q.3: 'A visit to a museum/ gallery makes school work more inspiring', 2005 (4946)

Fig 7.5.1c: Form B KS3 and above, Q.3: 'A visit to a museum/ gallery makes school work more inspiring', 2003



Base: all KS3 and above pupils' responses to Q.3: 'A visit to a museum/ gallery makes school work more inspiring', 2003 (3406)

As we discussed earlier, in one of our case-studies the pupils were doing an assignment for which the museum visit was presented to them as a resource by their teachers (the teachers in partnership with the museum had developed a particular programme for these pupils designed in relation to the assignment they were undertaking). It is possible that this direct relationship between the museum visit and an assignment is a factor in these pupils being very conscious of the connection between their museum experience and their learning outcomes. As we saw earlier, this connection led almost all of these pupils to believe that they would do better than usual on their assignment. And in fact, many of these pupils did in fact do better on their assignments than usual.

A pupil who was from a medium streamed class and was very bright, but had special educational needs, believed that the museum visit had made him more enthusiastic about doing his assignment and therefore he would get a better mark:

Pupil: 'Yeah I think I will get a higher mark. Cos I've tried harder

this time.

Researcher: 'Why will you try harder this time?'

Pupil: 'So I can get a high mark.'

Researcher: 'Has it motivated you to try harder though going on the

visit?'

Pupil: 'Yeah.'

Researcher: 'In what way?'

Pupil: 'Well it means I can know about the workhouse in more

detail so I can get a higher mark'.

This pupil went up two levels on his assignment.

Many of the pupils talked about the 'reality' of the museum, that is, the concrete nature of the museum experience. It was their personal involvement with this concrete experience (as compared to reading out of a book) which was the aspect of the museum which was most important to their learning outcome. The pupils were very particular about how the good time they had, or the extent to which they personally related to the experience, resulted in a learning outcome:

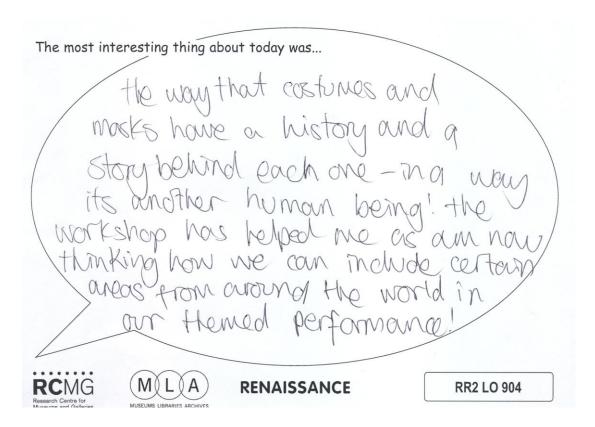
'Cos we went there and actually like experienced it, it just made it better to learn because I think if you're enjoying it'.

'I think like the whole experience was interesting cos this was something different, you sort of take it in a bit more than if you're sitting in the classroom. You're sort of there and they're telling you about it and you can see it and touch it sort of thing'.

'It was really good and it like helped, taught me a lot about what it was actually like and it was really good. And it sometimes actually felt like I was actually one of the people that used to work there cos it was so good and everything'.

Beatrice, aged 17, found inspiration from the way in which a visit to the Horniman allowed her to put a human face to history:

Fig 7.5.1d: Form B KS3 and above, visit by 17 year old pupil to the Horniman, London



A number of pupils picked up on the information gained through the concrete nature of the museum experience to compare it favourably with information gained from a book. The following are from three different pupils in separate interviews:

A 13 year old pupil from a medium streamed class for ability:

'Atmosphere about it, cos it was, it was a genuine workhouse, you know, and it had been used, it gave a sort of different, different feel to it than just reading out of a book'.

A 16 year old pupil in the top stream reflecting on a museum visit taken four years before:

'It's sort of there in front of you, you know, sort of, you know... more powerful than reading out of a book'.

A 13 year old pupil from the lowest streamed class for ability:

'You don't really take it in when you're reading it from a book; you're just like oh I don't really want to do this. You just see it as a whole bunch of words, but when you're actually there you actually see it'.

Emma aged 13 also appreciated the difference between learning from a book and seeing actors in costume after a school visit to the Workhouse:

Fig 7.5.1e: Form B KS3 and above, visit by 13 year old pupil to Roots of Norfolk, Gressenhall

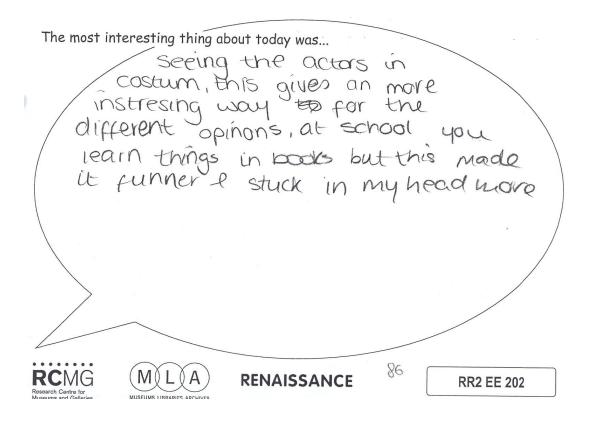


Fig 7.5.1f: An actor, performing as an historical character at Roots of Norfolk, Gressenhall, showing the pupils the Workhouse sleeping arrangements



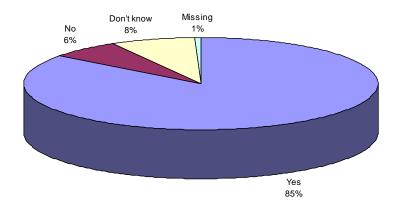
# 7.5.2 The older pupils' responses to the museum visit: Knowledge and Understanding

There were four questions about Knowledge and Understanding.

• Q.2: 'I discovered some interesting things from the visit today'

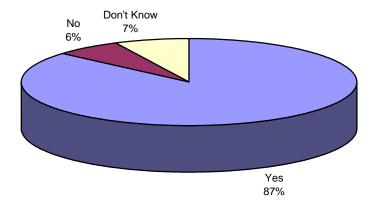
Eighty-five percent (85%) of the respondents agreed with this statement, which is pleasing. Some pupils of this age are very difficult to interest in anything at all, and museums may be one way to achieve this. It compares with 87% in 2003.

Fig 7.5.2a: Form B KS3 and above, Q.2: 'I discovered some interesting things from the visit today', 2005



Base: all KS3 and above pupils' responses Q.2: 'I discovered some interesting things from the visit today', 2005, (4946)

Fig 7.5.2b: Form B KS3 and above, Q.2: 'I discovered some interesting things from the visit today', 2003

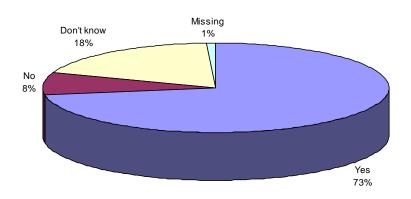


Base: all KS3 and above pupils' responses Q.2: 'I discovered some interesting things from the visit today', 2005, (3406)

 Q.7: 'I could make sense of most of the things we saw and did at the museum'

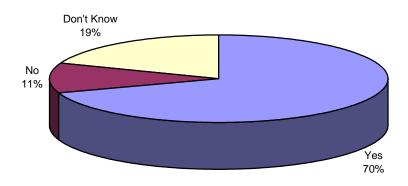
Seventy-three percent of the respondents agreed with this, compared with 70% in 2003.

Fig 7.5.2c: Form B KS3 and above. Q.7: 'I could make sense of most of the things we saw and did at the museum', 2005



Base: all KS3 and above pupils' responses to Q.7: 'I could make sense of most of the things we saw and did at the museum', 2005 (4946)

Fig 7.5.2d: Form B KS3 and above, Q.7: 'I could make sense of most of the things we saw and did at the museum', 2003

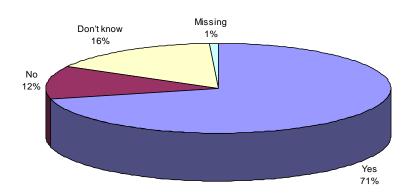


Base: all KS3 and above pupils' responses to Q.7: 'I could make sense of most of the things we saw and did at the museum', 2003 (3406)

• Q.4: 'The visit has given me a better understanding of the subject'

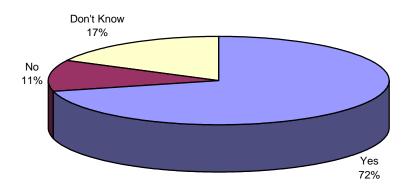
Seventy-one percent of the pupils agreed with this, compared with 72% in 2003.

Fig 7.5.2e: Form B KS3 and above, Q.4: 'The visit has given me a better understanding of the subject', 2005



Base: all KS3 and above pupils' responses to Q.4: 'The visit has given me a better understanding of the subject', 2005 (4946)

Fig 7.5.2f: Form B KS3 and above, Q.4: 'The visit has given me a better understanding of the subject', 2003



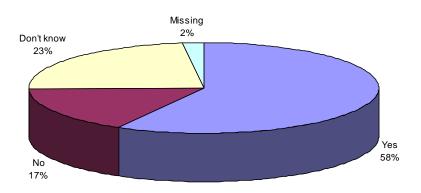
Base: all KS3 and above pupils' responses to Q.4: 'The visit has given me a better understanding of the subject', 2005' (3406)

Section Seven: Pupils' Views on the Impact of the Museum Visit on their Learning

Q.9: 'I've left the museum more interested in the subject than when I came'

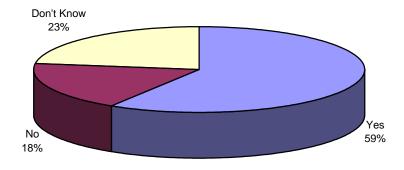
Over half of the respondents agree with this statement, 58% compared with 59% in 2003.

Fig 7.5.2g: Form B KS3 and above, Q.9: 'I've left the museum more interested in the subject than when I came', 2005



Base: all KS3 and above pupils' responses to Q.9: 'I've left the museum more interested in the subject than when I came', 2005 (4946)

Fig 7.5.2h: Form B KS3 and above, Q.9: 'I've left the museum more interested in the subject than when I came', 2003



Base: all KS3 and above pupils' responses to Q.9: 'I've left the museum more interested in the subject than when I came', 2003 (3406)

Like the KS2 and below pupils, the KS3 and above pupils were very forthcoming about the amount of knowledge they had gained as a result of the museum visit:

'Well I learnt a lot more about the workhouse and they made it more interesting, making it seem like it still exists'.

In particular, pupils used this museum visit to make up their own minds about the subject:

Researcher: 'Do you think that you'll be able to do this

assignment that you've got to do better having

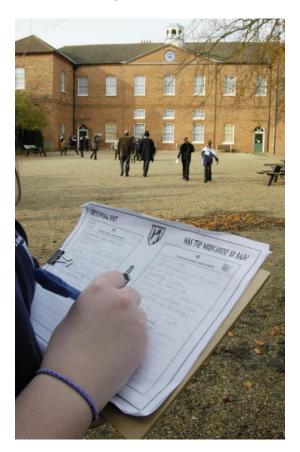
been to ...?'

Pupil: 'Yeah definitely. Cos it will be more of the truth, we

> actually know what happened there and not what we were told. Cos when ... was explaining it, it sounded really bad, but when you actually got there it was a bit scary cos it is so big but then from the beginning of the day to the end of the day I had completely different opinions about it. At the beginning I didn't think it was going to be any good and I thought it was going to be really rubbish and scary sort of thing ... but it was really good and you learnt a lot more than what you did

before you went.'

Fig 7.5.2i: A pupil fills out an activity sheet - 'Was the Workhouse so bad?'



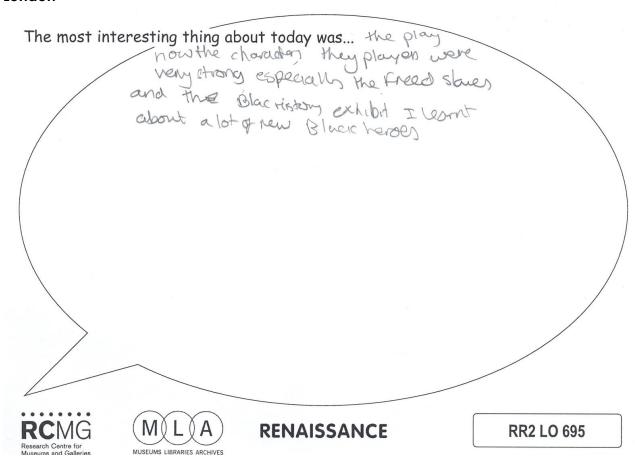
Many pupils discussed this shift of opinion as a result of their more in-depth Knowledge and Understanding:

'Well it was really bad but there were good things about it too. I don't think it's as worse as we first thought it was'.

'I would have liked it more than being on the outside cos like if you had nothing, if you was rich then yeah you'd have been alright on the outside, but it didn't seem that bad and if you was really desperate then yeah it would be okay. It's not as bad as they all made it out to be'.

Museums also expose pupils to diverse reading of history, for example Myyles aged 13 learnt about Black History at the Museum of London:

Fig 7.5.2.j: Form B KS3 and above, visit by 13 year old pupil to the Museum of London



Museums are places where pupils can find out about contemporary issues as well as finding out about history, illustrated by this Form B completed by Megan aged 15 after a visit to Manchester Art Gallery.

Fig 7.5.2k: Form B KS3 and above, visit by 15 year old pupil to Manchester Art Gallery



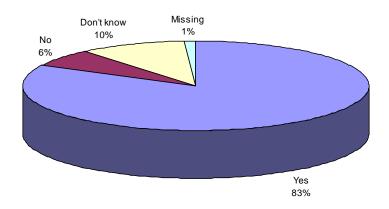
### 7.5.3 The older pupils' responses to the museum visit: Attitudes and Values

There was one question about pupils' attitudes to museums and learning.

Q.6: 'A museum is a good way to learn in a different way to school'

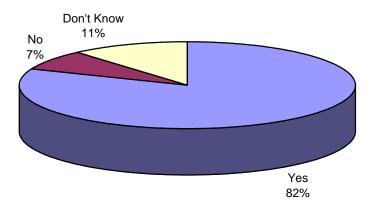
What did these older students think about museums? A surprisingly high 83% agreed that museums were good places to learn in ways different from school. This compares with 82% in 2003.

Fig 7.5.3a: Form B KS3 and above, Q.6: 'The museum is a good way to learn in a different way to school', 2005



Base: all KS3 and above pupils' responses to Q.6: 'The museum is a good way to learn in a different way to school', 2005 (4946)

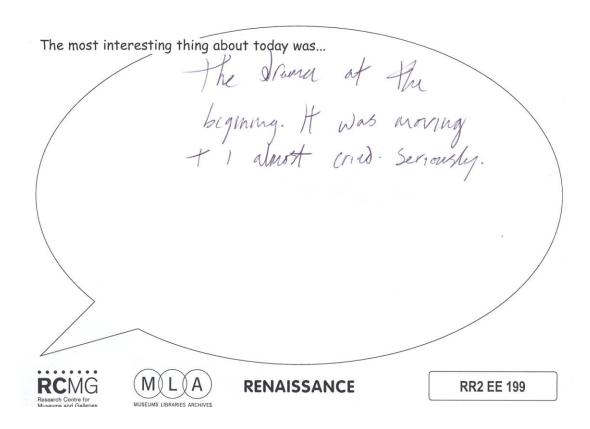
Fig 7.5.3b: Form B KS3 and above, Q.6: 'The museum is a good way to learn in a different way to school', 2003



Base: all KS3 and above pupils' responses to Q.6: 'The museum is a good way to learn in a different way to school', 2005 (3406)

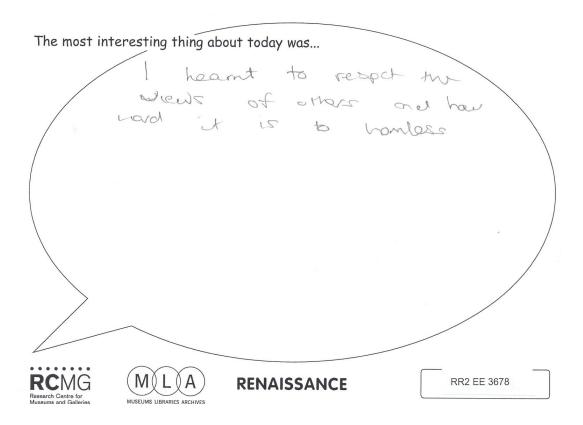
The case-studies produced evidence of the Attitudes and Values pupils gained from their museum experience. In learning about the attitudes and values of another era these pupils were confronted with their own attitudes and values. For a number of pupils the museum made them feel empathy with people in the past which in turn helped them gain a better understanding:

Fig 7.5.3c: Form B KS3 and above, visit by 15 year old pupil to Roots of Norfolk, Gressenhall



'I imagine if you had been somebody who had been sort of reasonably well off and then fallen on hard times, you know, it would be, well I don't know, there's different ways of treating people depending on who you are when you went in there. It's about discrimination or something'.

Fig 7.5.3d: Form B KS3 and above, visit by 13 year old pupil to Roots of Norfolk, Gressenhall



'When they were discussing whether a jacket woman [unmarried mother] should have Christmas dinner ... and he was saying put your hands up if you think they should and most people said yeah. And he was like no they shouldn't... it's not like they're different from anybody else, they just haven't got married'.

Pupil: 'Being in the conditions that there were at that

time, you actually felt emotions that they would be feeling at the time and it's easier to understand how things were if you're actually doing it and

seeing...'

Researcher: 'So the emotional side of it, tell us a bit more about

that?'

Pupil: 'Well when like you heard that children and how

they work and don't really get paid, little food, you sort of feel angry and sad about that. Especially with the children, you can sort of put yourself in their shoes and, you know, try and imagine what it was like for them... there was a woman, I can't remember what she was exactly, she was just a woman who got separated from her children and

her husband, I felt sorry for her doing that'.

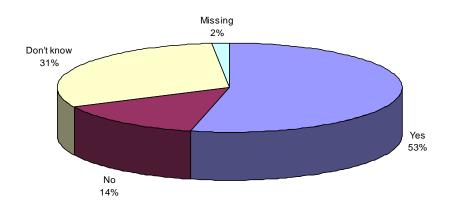
'Well it was just the fact that people were there ages ago and we're there and everyone who was there in the olden days worked their socks off and you're just standing there. It was like really weird, but it was good, it was a good experience. It's made a difference if you see what I mean, our lives are so much better if you see what I mean from when they were alive'.

# 7.5.4 The older pupils' responses to the museum visit: Action, Behaviour, Progression

Q.8: 'I would come again'

Over half of the respondents (54%) agreed that they might visit again, compared with 55% in 2003.

Fig 7.5.4a: Form B KS3 and above, Q.8: 'I would come again', 2005



Base: all KS3 and above pupils' responses to Q.8: 'I would come again', 2005 (4946)

Don't Know
28%
Yes
55%
17%

Fig 7.5.4b: Form B KS3 and above, Q.8: 'I would come again', 2003

Base: all KS3 and above pupils' Q.8: 'I would come again', 2003 (3406)

We have discussed pupils' beliefs that they would work harder and do better on their assignments as a result of their visit to the museum. We found that, based on their grades, some pupils had done better on their assignment as a result of their museum visit. We also spoke to seven Year 11 pupils about the museum trip they had taken part in when they were in Year 9. We were particularly interested to find out what they felt had been the outcome of the visit for them. We found that they also believed that the museum visit had helped them to do the assignment because it had given them a better understanding of the subject matter due to facilitating their personal involvement with it.

### One pupil said:

Pupil: 'Well he just said what the workhouse was like and

the jobs done, food, why people were in there and that sort of thing. But cos it was sort of like first hand experience of and made it loads easier to understand at that time. And that in turn sort of

helped the essay as well.'

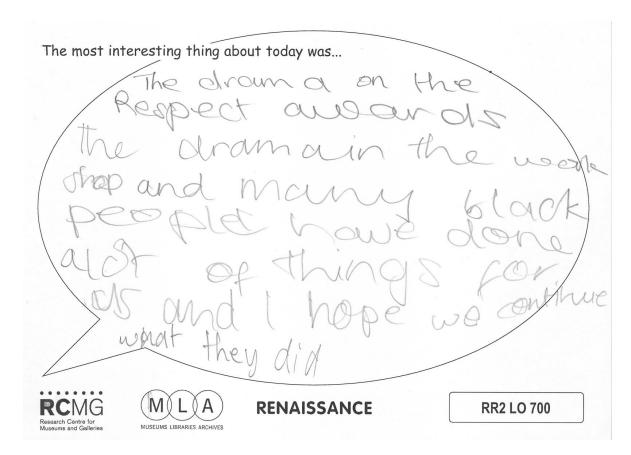
Researcher: 'How did that impact on your assignment then?'

Pupil: 'Instead of just sort of taking information out of

books, it was like our own experiences'.

For some pupils, the museum visit potentially had an impact on achievement that went beyond their school-work. Shanez aged 13, after a visit to the Museum of London, was inspired by the achievements of Black people in history; she says that she hopes 'we continue what they did'.

Fig 7.5.4c: Form B KS3 and above, visit by 13 year old pupil to the Museum of London

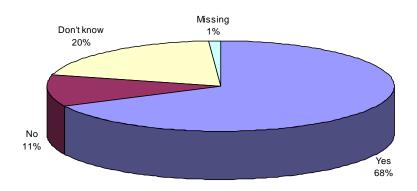


### 7.5.5 The older pupils' responses to the museum visit: Skills

◆ Q.5: 'A museum visit is a good chance to pick up new skills'

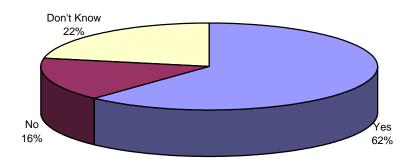
While it was felt that younger pupils would be unsure what this question might mean, it was judged appropriate for older students. Sixty-eight percent (68%) agreed with the statement, compared with 62% in 2003. This is an interesting increase.

Fig 7.5.5a: Form B KS3 and above, Q.5: 'A museum visit is a good chance to pick up new skills', 2005



Base: all KS3 and above pupils' responses to Q.5: 'A museum visit is a good chance to pick up new skills', 2005 (4946)

Fig 7.5.5b: Form B KS3 and above, Q.5: 'A museum visit is a good chance to pick up new skills', 2003



Base: all KS3 and above pupils' responses to Q.5: 'A museum visit is a good chance to pick up new skills', 2003 (3406)

Some pupils noted that a museum visit enabled them to learn new skills or develop skills they already had. For instance, there was evidence of skills learnt in Art and in more 'specialist' skills in Textiles.

Fig 7.5.5c: Form B KS3 and above, visit by 12 year old pupil to Birmingham Museums and Art Gallery

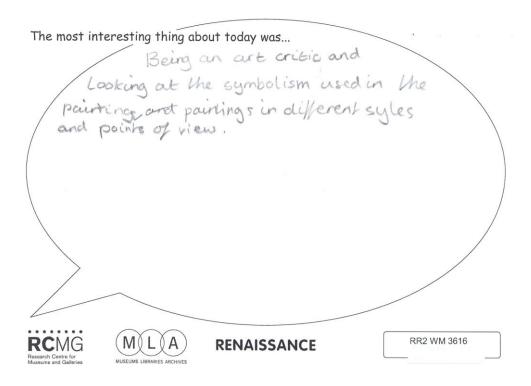
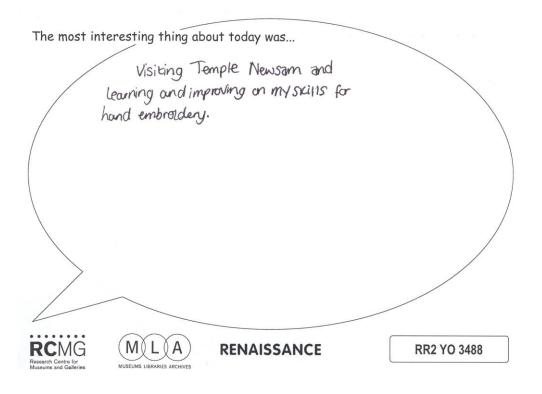


Fig 7.5.5d: Form B KS3 and above, visit by 17 year old pupil to Temple Newsam House, Leeds

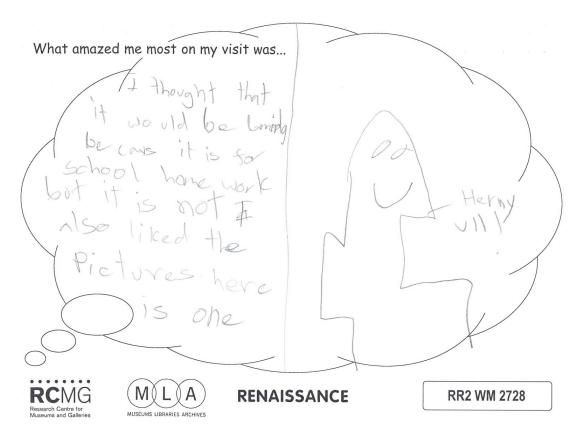


### 7.5.6 The museum as a motivator

As we have seen there was a great deal of evidence of pupils enjoying their visit to a museum.

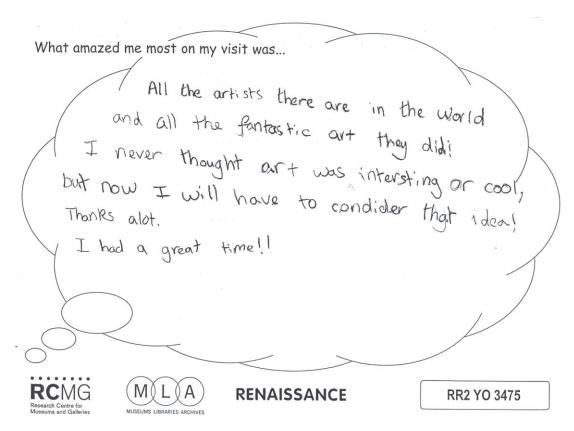
Emma, aged 8, initially thought that a visit to Birmingham Museums and Art Gallery would be 'boring because it is for school' but changed her mind after the actual visit:

Fig 7.5.6a: Form B KS2 and below, visit by 8 year old to Birmingham Museums and Art Gallery



For Renuka aged 10 a visit with her school to Leeds Art Gallery had a similar effect although in this instance it altered her opinion about Art:

Fig 7.5.6b: Form B KS2 and below visit by 10 year old to Leeds Art Gallery



The evidence above suggests that most pupils are very positive about learning in museums and are confident that a considerable range of outcomes ensues. However, there are some pupils that are very difficult to reach. Despite the fact that the teachers we spoke to were very positive about the museums ability to affect pupils who were badly behaved in class, it is worth acknowledging that this is not always the case. The following excerpt is from our interview with a 13 year old child who is in the lowest band class and also has quite notable behaviour problems. On the visit to the museum we noted how much effort he put into *not* engaging with the experience, he worked quite hard at it. Therefore the lack of learning outcome is reflected in his response to a later interview:

Researcher: 'So tell us about your trip to ... what did you think

of it?'

Pupil: 'It was alright. I didn't think it was that bad'

Researcher: 'Did you expect it to be bad?'

Pupil: 'Yeah' Researcher: 'Why?'

Pupil: 'Cos it was a workhouse'

Researcher: 'So what kind of work did they do in the

workhouse?'

Pupil: 'I don't know, they didn't tell us'

Researcher: 'Can you remember the tramp showing you some

work?'

Pupil: 'Yeah'

Researcher: 'Was there anything that made you annoyed

about what he was telling us about his attitude?'

Pupil: 'Not really'

Researcher: 'You didn't care?'

Pupil: 'No.'

However, even this child with this level of disengagement thinks that the visit gave him Knowledge and Understanding which will enable him to do the assignment, although he doesn't think he will do better than usual:

Researcher: 'Do you think that the visit will help you write the

assignment?'

Pupil: 'Yeah' Researcher: 'Why?'

Pupil: 'Cos before we went there we didn't really know

anything about it and now we've been there we

do'

Researcher: 'Do you feel more motivated than usual to do this

assignment or just the same as usual?'

Pupil: 'Just the same as usual'

Researcher: 'Do you think you'll do any better in the

assignment or just the same as usual?'

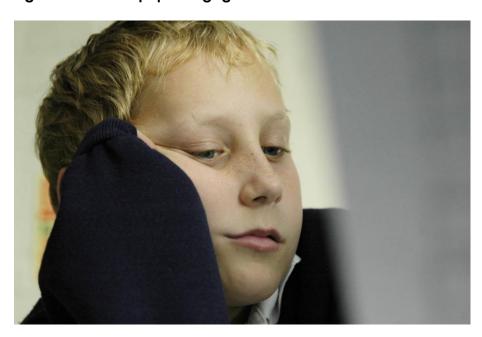
Pupil: 'Just the same'

Researcher: 'Why's that do you think?'

Pupil: 'Don't know'.

In the event this student failed to hand in an assignment.

Fig 7.5.6c: Not all pupils engage with a museum visit



### 7.6 Comparing the views of teachers and pupils about learning outcomes

### 7.6.1 Comparison of pupils' and teachers' responses

Teachers' responses throughout the study show their belief in the overwhelmingly positive impact of museums on pupils' learning outcomes, a finding that is echoed in the pupils' responses. Only a very small proportion of teachers thought it was unlikely or were unsure that pupils would have achieved certain learning outcomes. However, a comparison of pupils' and teachers' responses shows that in these instances the pupils often appear to have been more positive that the visit had provided them with a useful learning experience than their teachers had expected.

In most cases the responses from pupils can be matched with their accompanying teachers' responses as each Evaluation Pack was allocated a unique number. In some instances it was impossible to match the pupils' Form B to their teachers' Form A. This occurred when:

- only teachers had completed a questionnaire from the visit
- only pupils had completed questionnaires from the visit
- Evaluation Packs were mixed, making it impossible to employ the unique numbers to match questionnaires.

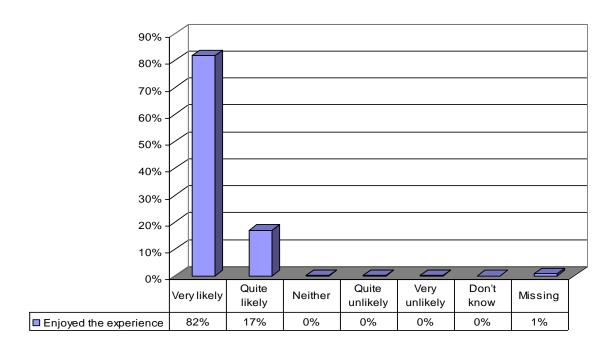
In these instances pupil and teacher responses had to be excluded from the analysis. Responses from pupils of KS2 and below and KS3 and above were considered separately due to differences in the wording of questions for the two groups.

### 7.6.2 KS2 and below matched A and B forms

• Matching Form A, Q.12: 'To what extent do you think your pupils have enjoyed or been inspired by the museum visit?' to Form B KS2 and below Q.1: 'I enjoyed today's visit'

As we saw in Section 6.2, very few teachers considered it unlikely that pupils had enjoyed the museum experience.

Fig 7.6.2a: Form A, Q.12: 'To what extent do you think your pupils have enjoyed or been inspired by the museum visit? – Enjoyed the experiences', 2005



Base: all teachers' responses to Q.12: 'To what extent do you think your pupils have enjoyed or been inspired by the museum visit? – Enjoyed the experiences', 2005, (1632)<sup>16</sup>

These teachers' responses can be linked with their accompanying pupils by matching pupils' responses to Q.1 from Form B which asked pupils whether they had enjoyed the visit, with Q.12a from Form A which asked teachers whether they thought their pupils had enjoyed the experience. In Figure 7.6.2b each column represents the pupils whose teachers thought it was: 'very likely', 'quite likely' or 'quite unlikely' that their pupils had enjoyed the experience (Q.12). These are compared against the proportion of pupils answering 'yes', 'no', and 'don't know' to Q.1.

<sup>16</sup> Teachers' responses, frequencies

1001011010	. 00000.10007.					
Very	Quite	Neither	Quite	Very	Don't	Missing
Likely	Likely		Unlikely	Unlikely	Know	
1337	277	1	2	1	0	14

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Very Likely Quite likely Quite unlikely ■ Missing 1% 1% 0% 4% 6% 2% □ Don't know ■ No 1% 3% 5% 93% 91% 93% Yes

Fig 7.6.2b: Form A, Q.12: 'Enjoyed the experiences' by Form B KS2 and below, Q.1: 'I enjoyed today's visit', 2005

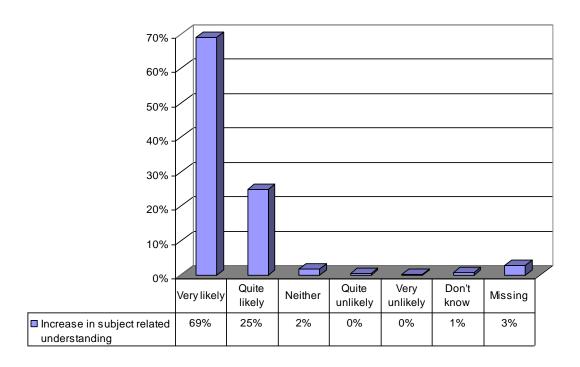
Base: all KS2 and below pupils' responses Form B, Q.1 that could be matched with teachers' responses Form A, Q.12 (18861 pupils)

Where teachers thought it was 'very likely' their pupils had enjoyed the visit 93% of pupils in these groups also said they had enjoyed the visit. However, if the teachers' who thought it 'quite unlikely' their pupils had enjoyed the visit are considered, 93% of pupils still said they enjoyed the experience. While it is important to remember that these are only a very small number of teachers it does still appear to indicate that pupils may be getting more enjoyment out of a museum visit than teachers expect.

◆ Matching Form A, Q.18: 'To what extent do you anticipate that the museum visit will support pupil development?' with Form B KS2 and below, Q.7: 'The visit has made me want to find out more'

When teachers were asked if they thought their pupils had increased their subject related understanding only a small very small percentage of teachers thought it unlikely or were uncertain that this had occurred.

Fig 7.6.2c: Form A, Q.18: 'To what extent do you anticipate that the museum visit will support pupil development in their subject related understanding?', 2005



Base: all teachers' responses to Q.18: 'To what extent do you anticipate that the museum visit will support pupil development in their subject related understanding?', 2005 (1632)<sup>17</sup>

If teachers' responses to Q.18a: 'increase in subject related understanding' are compared with pupils responses to Q.7: 'The visit has made me want to find out more' there is a clear agreement between teachers thinking it likely that the visit had increased subject related understanding and their pupils stating they want to find out more as a result of the visit.

However, even when teachers thought it was unlikely the pupils had increased their subject related understanding a large proportion<sup>18</sup> of pupils

<sup>17</sup> Teachers' responses, frequencies

Very	Quite	Neither	Quite	Very	Don't	Missing
Likely	Likely		Unlikely	Unlikely	Know	
1126	407	29	8	4	13	45

still said they wanted to find out more. This suggests that teachers may not always be picking up on pupils' desire to learn more as a result of their museum visit.

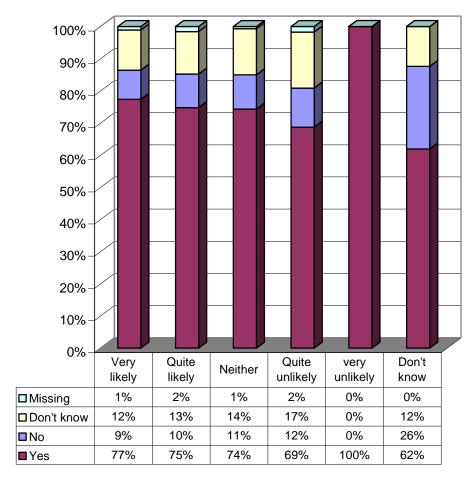


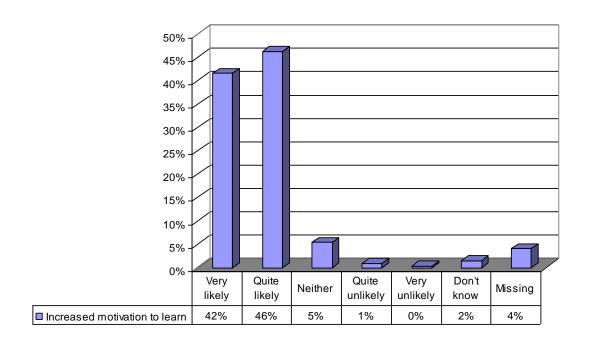
Fig 7.6.2d: Form A, Q.18: 'Subject related understanding' by Form B KS2 and below, Q.1: 'The visit has made me want to find out more', 2005

Base: all KS2 and below pupils' responses Form B, Q.7 that could be matched with teachers' responses Form A, Q.18 (18457 pupils)

Staying with Q.18, it can be seen that a very small proportion of teachers responded that they were uncertain or thought it unlikely that the visit had increased their pupils' motivation to learn.

<sup>&</sup>lt;sup>18</sup> 69% of pupils responded 'yes' to Q1 when their teachers' thought it 'quite unlikely' they would increase their subject related understanding, 100% of pupils responded 'yes' to Q1 when their teachers' thought it 'very unlikely' they would increase their subject related understanding.

Fig 7.6.2e: Form A, Q.18: 'To what extent do you anticipate that the museum visit will support pupil development in increased motivation to learn?', 2005



Base: all teachers' responses to Q.18: 'To what extent do you anticipate that the museum visit will support pupil development in increased motivation to learn?', 2005 (1632)<sup>19</sup>

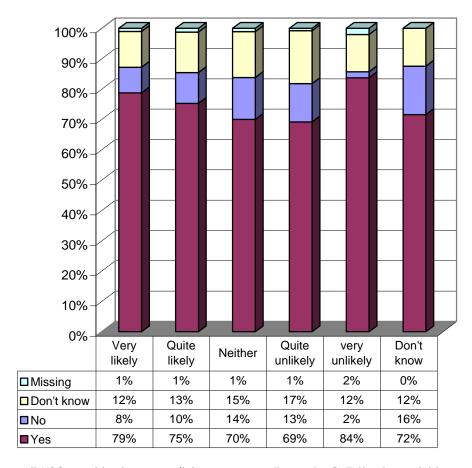
As with the previous question a large proportion of pupils were in agreement with their teacher that the visit had increased their motivation to learn. However, those pupils whose teachers thought it was unlikely that they had increased motivation to learn still responded on the whole<sup>20</sup> that the visit had inspired them to learn more. This has implications for teachers missing possible opportunities to engage pupils in learning following on from the museum visit.

19 Teachers' responses, frequencies

reactions respectises, in equations						
Very	Quite	Neither	Quite	Very	Don't	Missing
Likely	Likely		Unlikely	Unlikely	Know	
678	755	88	15	5	25	66

 $<sup>^{20}</sup>$  69% of pupils responded 'yes' to Q1 when their teachers' thought it 'quite unlikely' they would increase their motivation to learn, 84% of pupils responded 'yes' to Q1 when their teachers' thought it 'very unlikely' they would increase their motivation to learn.

Fig 7.6.2f: Form A, Q.18: 'Increased motivation to learn' by Form B KS2 and below, Q.1: 'The visit has made me want to find out more', 2005

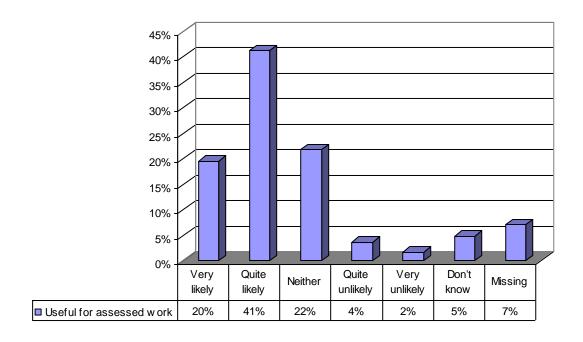


Base: all KS2 and below pupils' responses Form B, Q.7 that could be matched with teachers' responses Form A, Q18 (18278 pupils)

 Matching Form A, Q.18: 'To what extent do you anticipate that the museum visit will support pupil development?' with Form B KS2 and below, Q.6: 'A visit is useful for school work'

Thirty-three percent (33%) of teachers expressed uncertainty or thought it unlikely that the museum visit would be helpful for assessed work; this is quite a high uncertain and unlikely value in comparison with other questions.

Fig 7.6.2g: Form A, Q.18: 'To what extent do you anticipate that the museum visit will support pupil development in their assessed work?', 2005



Base: all teachers' responses to Q.18: 'To what extent do you anticipate that the museum visit will support pupil development in their assessed work?', 2005 (1632)<sup>21</sup>

While the pupils were on the whole in agreement with their teachers, who thought the visit was likely to be useful for assessed work, a large proportion of pupils still thought the visit would be useful for school work when their teachers were stating this was unlikely to be the case. This raises the possibility that museum visits may well be helping pupils in their assessed work in a way that many teachers are not expecting.

<sup>21</sup> Teachers' responses, frequencies

reactions respenses, tredeetieses						
Very	Quite	Neither	Quite	Very	Don't	Missing
Likely	Likely		Unlikely	Unlikely	Know	
319	674	355	60	28	79	117

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Very Quite Quite Don't verv Neither likely likely unlikely unlikely know 1% 1% 1% 2% 1% 1% ■ Missing 7% 11% 8% 8% 10% 8% ■ Don't know 3% 4% 5% 5% 5% 5% ■ No 89% 87% 86% 84% 83% 86% ■ Yes

Fig 7.6.2h: Form A, Q.18: 'In their assessed work' by Form B KS2 and below, Q.6: 'A visit is useful for school work', 2005

Base: all KS2 and below pupils' responses Form B, Q.6 that could be matched with teachers' responses Q.18 (17846 pupils)

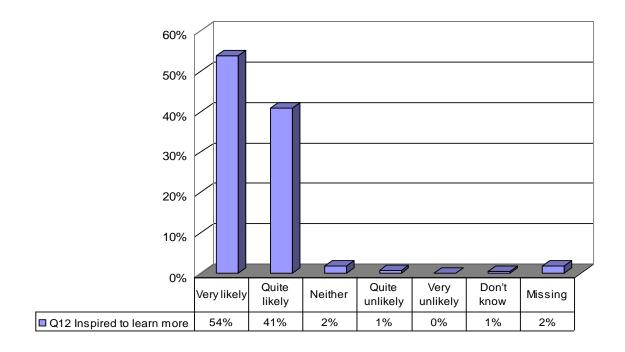
### 7.6.3 KS3 and above matched A and B forms

Responses from KS3 and above pupils make up a much smaller proportion of Form B returns than KS2 and below pupils. However, when their responses are compared with their corresponding teachers a similar pattern emerges with pupils responding positively to a visit even when their teachers expressed doubt the visit had been beneficial.

 Matching Form A, Q.12: 'To what extent do you think your pupils have enjoyed or been inspired by their museum visit?' with Form B KS3 and above, Q.3: 'A visit to a museum / gallery makes school work more inspiring'

When teachers thought it 'quite unlikely' or were uncertain the visit had inspired the pupils to learn more (Form A, Q.12), we found that when we compared the responses of their pupils, just over 50% of pupils felt the visit to be inspirational in relation to their school work.

Fig 7.6.3a: Form A, Q.12: 'To what extent do you think your pupils have enjoyed or been inspired by their museum visit? – inspired to learn more', 2005



Base: all teachers responses to Q.12: 'To what extent do you think your pupils have enjoyed or been inspired by their museum visit? – inspired to learn more', 2005 (1642)<sup>22</sup>

<sup>22</sup> Teachers' responses, frequencies

		7				
Very	Quite	Neither	Quite	Very	Don't	Missing
Likely	Likely		Unlikely	Unlikely	Know	
880	670	31	10	2	9	30

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Very Likely Quite unlikely Don't know Quite likely Neither 19% 20% 16% 19% 17% □ Don't know 8% 13% 25% 29% 4% ■ No 73% 67% 59% 53% 79% ■ Yes

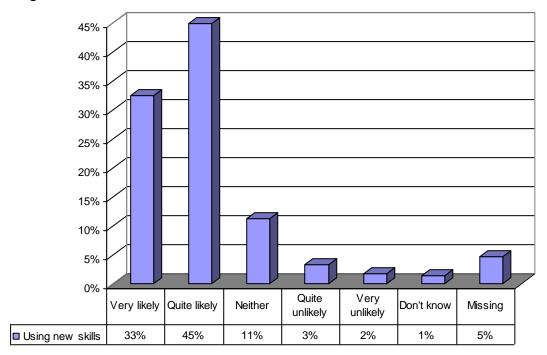
Fig 7.6.3b: Form A, Q.12: 'Inspired to learn more,' by Form B KS3 and above, Q.3: 'A visit to a museum or gallery makes school work more inspiring', 2005

Base: all KS3 and above pupils' responses Form B, Q.3 that could be matched with teachers' responses Form A, Q.12 (3688 pupils)

• Matching Form A, Q.17: 'To what extent do you think that the experience of the museum will result in you working with your students in a different way?' with Form B KS3 and above, Q.5: 'A museum visit is a good place to learn in a different way to school'

Teachers responding that it was unlikely their pupils would use new skills acquired from their museum visit make up a very small percentage of responses.

Fig 7.6.3c: Form A, Q.17: 'To what extent do you think that the experience of the museum will result in you working with your students in a different way? – using their new skills', 2005



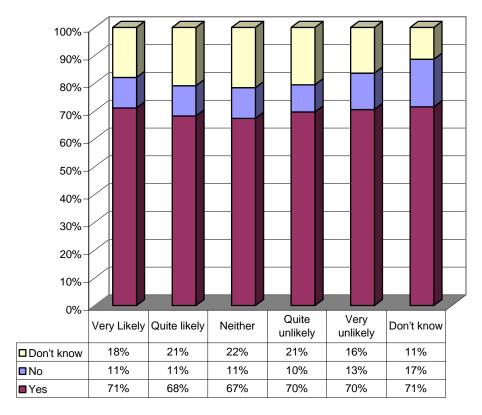
Base: all teachers' responses to Q.17: 'To what extent do you think that the experience of the museum will result in you working with your students in a different way? – using their new skills', 2005 (1632)<sup>23</sup>

<sup>23</sup> Teachers' responses, frequencies

		,,				
Very	Quite	Neither	Quite	Very	Don't	Missing
Likely	Likely		Unlikely	Unlikely	Know	
532	734	183	53	30	23	77

A comparison with pupils' responses shows that in these cases around 70% of pupils still thought the museum was a good place to pick up new skills.

Fig 7.6.3d: Form A, Q.17: 'Using their new skills,' by Form B KS3 and above, Q.5: 'A museum visit is a good place to learn in a different way to school', 2005

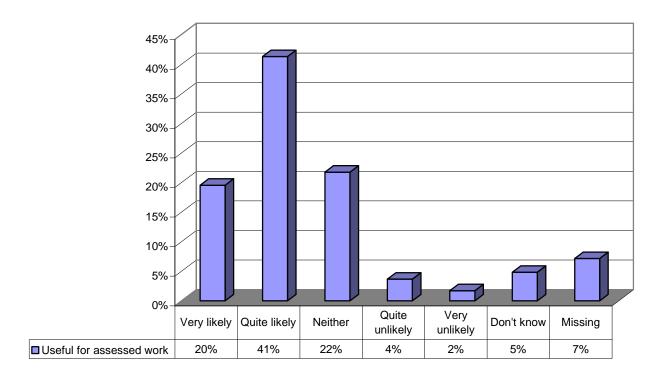


Base: all KS3 and above pupils' responses Form B, Q.5 that could be matched with teachers' responses Form A, Q.17 (3688 pupils)

Matching Form A, Q.18: 'To what extent do you anticipate that the
museum visit will support pupil development?' with Form B KS3 and above,
Q.6: 'The museum is a good place to learn in a different way to school'

Around a third of teachers expressed uncertainty or thought it was unlikely that the visit would be helpful for pupils assessed work.

Fig 7.6.3e: Form A, Q.18: 'To what extent do you anticipate that the museum visit will support pupil development in their assessed work?', 2005



Base: all teachers' responses to Q.18: 'To what extent do you anticipate that the museum visit will support pupil development in their assessed work?', 2005 (1632)<sup>24</sup>

However, the majority of pupils still thought the museum was a good place to learn even when teachers thought it wasn't likely to be useful for assessed work.

<sup>24</sup> Teachers' responses, frequencies

100001010 10000110007 11000010100						
Very	Quite	Neither	Quite	Very	Don't	Missing
Likely	Likely		Unlikely	Unlikely	Know	
319	674	355	60	28	79	117

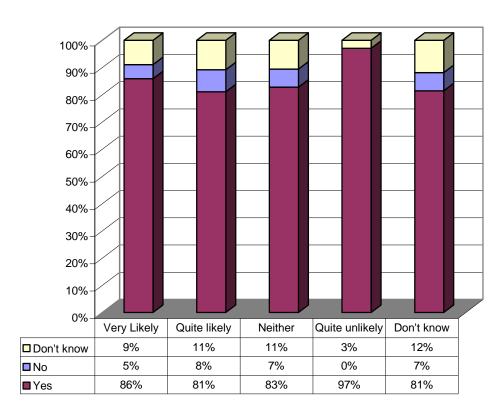


Fig 7.6.3f: Form A, Q.18: 'In their assessed work,' by Form B KS3 and above, Q.6: 'The museum is a good place to learn in a different way to school', 2005

Base: all KS3 and above pupils' responses Form B, Q.6 that could be matched with teachers' responses Form A, Q.18 (3745 pupils)

# 7.6.4 Pupils describe positive experience even where the experience does not seem to be optimum – evidence from the case-studies

It is apparent that pupils often believe the museum visit is presenting them with a positive learning experience even when teachers do not expect this to be the case. This finding is also endorsed in the case-study findings which raise the possibility that teachers may not be fully exploiting the learning opportunities provided by a museum visit.

One of the case-studies featured a museum/school relationship which did not seem to be optimum. It involved poor quality facilitation at the museum, low levels of teacher engagement, low levels of institutional support from the school, pupils with no previous museum experience and a socio-cultural background of disengagement from cultural institutions such as museum and galleries. We assumed that we would find that the pupils had not gained much from their involvement with the museum. In fact, we were surprised to find that pupils believed that over the period of their museum involvement they had learnt lots of ideas for things they could do.

This museum/ school involvement consisted in an initial museum visit and subsequently a museum educator coming into the classroom over a period of 6 weeks to do arts and crafts-based work with the pupils. We surveyed the

Section Seven: Pupils' Views on the Impact of the Museum Visit on their Learning

pupils at the beginning and the end of their museum programme in order to discover the pupils' assessment of their learning over time.

We found the results to be mixed. In response to Q.5: 'Visiting has given me lots of ideas for things I could do', the pupils were much more positive when they filled out the questionnaire a month later after their museum visit.

Table 7.6.4a: Form B KS2 and below, Q.5: 'Visiting has given me lots of ideas for things I could do', 2005

Date	Yes	No	Don't Know
18/10/2005	95%	5%	0%
20/09/2005	76%	18%	6%

Base: all KS2 case-study pupils answering 18/10/2005 (19), and 20/09/2005 (34)

However, despite weekly contact with the museum educator an increased response rate is not recorded on any of the other questions. Furthermore, the pupils' response to Q.7: 'The visit has made me want to find out more', shows them to be much less positive a month later than immediately after their first museum involvement.

Table 7.6.4b: Form B KS2 and below, Q.7: 'The visit has made me want to find out more'

Date	Yes	No	Don't Know
18/10/2005	74%	11%	16%
20/09/2005	86%	11%	3%

Base: all KS2 case-study pupils 18/10/2005 (19), and 20/09/2005 (35)

These figures could be taken to indicate two things: firstly, that even where conditions are not optimum, pupils still believe that they have had a significant learning experience and second, that this positive orientation to museum-based learning is not always capitalised upon by the school.

### 7.6 Conclusion

This study demonstrates conclusively the power of museums to touch very nearly all pupils and to stimulate and enhance their learning. In this study, nearly 26,791 pupils indicated how enjoyable, interesting and accessible they had found museums to be, and showed how much they had learnt, even when their teachers were doubtful that learning had occurred. Their opinions of and attitudes towards museums echoed closely the opinions and attitudes of the 20,604 pupils completing questionnaires in 2003, although more of the older pupils find museum visits make school work more inspiring. These findings need to read in the context of the high percentage of Special schools and schools from deprived areas, with high percentages of pupils entitled to free school meals, which are using these 69 museums.

Twenty-six thousand seven hundred and ninety-one (26,791) pupils completed Form Bs, with 82% of these (21,845) at KS2 or below and 18% (4,946) at KS3 and above. More older pupils (by 4%) completed forms than in 2003. In terms of gender there was a fairly even division for pupils completing Form B KS2 and below (48% female and 49% male), while at KS3 and above there were more girls (55%) than boys (42%). This was virtually identical to the 2003 study. The age range of pupils is also very similar to the earlier study, with most pupils concentrated in the 8-12 age range.

Pupils are, as in 2003, both very enthusiastic about their museum experiences, and confident about their own learning. There were more enthusiastic older pupils in the Phase 2 museums. Looking at the evidence from all pupils:

#### At KS2 and below:

- 93% enjoyed today's visit,
- 90% learnt some interesting new things,
- 80% could understand what they did, and
- 86% thought museums were exciting places.

### At KS3 and below:

- 86% enjoyed today's visit,
- 85% discovered some interesting things,
- 83% thought museums were good places to learn in a different way to school.
- 71% said the visit had given them a better understanding of the subject
- 68% said the museum/gallery visit makes school work more inspiring

These findings are based on all pupils experiencing a range of different kinds of museum provision. While evidence from teachers suggests that the quality of much museum education is high, there is still some diversity of provision in terms of quality. Where the factors that influence successful learning outcomes are all in place, pupils are even more enthusiastic as the Form B completed at a case-study school demonstrates:

- 96% enjoyed today's visit,
- 96% discovered some interesting things,
- 94% thought museums were good places to learn in a different way to school, and
- 82% said the visit had given them a better understanding of the subject.
- 90% said the museum/gallery visit makes school work more inspiring

This research has also found that where all the key success factors are in place, there is evidence that students can significantly enhance their levels on assignments as a result of a museum visit.

Testimony from both pupils and teachers suggests that it is successful engagement of the emotions and feelings that lies behind the power of museums to motivate learning. This engagement is stimulated by encounters with museum collections and environments, and with different kinds of adults, such as actors and artists that pupils do not often meet as part of their daily lives.

The enthusiasm of pupils for museums is conclusively demonstrated in their words and drawings. It is particularly noticeable that even older pupils find museums inspiring places to learn outside school. Given the concern in the 2005 Youth Green Paper, Youth Matters, to find ways to enable teenagers to fulfil their potential and to contribute in meaningful ways to society in preparation for becoming effective citizens,<sup>25</sup> museums can be seen as places with further potential in this respect.

The study has also found that although the numbers of teachers who are not convinced that their pupils have learnt during their museum visits is very small, the pupils of these teachers are convinced that they have learnt something. One case-study that was, in the researchers' views, less than optimum, led to more learning than the researchers expected. Both of these facts, in their different ways, suggest that there is more learning potential to be exploited as a result of museum visits.

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<sup>&</sup>lt;sup>25</sup> Department for Education and Skills, 2005, Youth Green Paper, Youth Matters, DfES, London, <a href="http://www.dfes.gov.uk/publications/youth/">http://www.dfes.gov.uk/publications/youth/</a>

### **SECTION EIGHT**

# THE IMPACT OF RENAISSANCE FUNDING IN REGIONAL MUSEUMS

#### 8.0 Introduction

Section 8 considers the impact of Renaissance funding from the perspective of the museums which have been in receipt of the funding.

Each museum service was asked to complete a questionnaire (Form D) that asked questions which focused on the impact of Renaissance funding on museums and education. The aims of this form were to collect some basic quantitative data concerning the museums' views on the significance of the funding, and also to enable some reflective comments on the impact of the funding from the point of view of museum staff. As all the other data collected for the evaluation research was from the perspectives of teachers and pupils, the evidence from Form D offered a useful counterpoint.

It was hoped that these forms would collect responses from education staff and also from museum management, although in the event, very few museum managers were involved in the discussions. The museum responses are coded so that it is clear where responses have come from.

Staffing has increased by 46% in the Phase 1 and Phase 2 museums. All but two of the museum services report an increase in pupil numbers. All museums report that their relationships with schools have developed, and all but one report that their support for teachers has improved. Museum staff report that teachers are more confident in the way they use museums, have higher expectations, and are integrating museums more closely into their teaching. Museum education staff are highly enthusiastic about the Renaissance programme.

### 8.1 Coding the responses

The questionnaires were emailed to museum education staff and were mostly returned in the same way. Twenty-nine Form Ds were received. For the purposes of analysis, the museums were given codes based on their names and whether they were part of Phase 1 or Phase 2. These codes are used below to identify the responses from the museums.

Table 8.1a: Museums in Phase 1 and 2 with codes

Name of Museum	Phase	Code
Beamish, the North of England Open Air	1	BE1
Museum		
Birmingham Museums and Art Gallery	1	BI1
The Bowes Museum	1	B1
Bristol's Museums, Galleries and Archives	1	BR1
Hartlepool Arts, Museums and Events Service	1	H1
Coventry Arts and Heritage	1	HC1
Ironbridge Gorge Museums Trust	1	IG1
Plymouth City Museum and Art Gallery	1	P1
Royal Albert Memorial Museum	1	E1
Royal Cornwall Museum	1	RCM1
Russell-Cotes Art Gallery and Museum	1	RU1
Potteries Museums and Art Gallery	1	ST1
Tyne and Wear Museums	1	TWM1
Wolverhampton Arts and Museums	1	W1
Bolton Museum and Art Gallery	2	BOL2
Brighton and Hove Museums	2	BH2
Colchester Museums	2	COL2
Hampshire Museums and Archives Service	2	HA2
Horniman Museum	2	HOR2
Hull Museums and Art Gallery	2	HU2
Leeds Heritage Services	2	LE2
Leicester City Museums Services	2	L2
The Collection, Lincoln	2	L12
Luton Museums Service	2	LU2
Manchester Art Gallery	2	MAN2
Museum of London	2	MOL2
Norfolk Museums and Archaeology Service	2	N2
Tullie House Museum and Art Gallery	2	TH2
York Museums Trust	2	YO2

## 8.2 Who was involved in completing and discussing Form D?

Form D collected information about the names and job title of the member of staff completing the form. It also asked for the issues addressed in the questionnaire to be discussed more generally. These forms were completed either by the Head of Education/Learning, or by a more junior member of the education/learning team. The forms were discussed with other members of the education/learning staff, including the Head of Education/Learning where they were not themselves completing the questionnaire. Most of the museum services with multiple sites made considerable efforts to discuss the issues with staff across the sites. Directors and senior management staff were not involved in the discussion very often, with only four museums mentioning this; Bowes Museum (B1), Royal Albert Museum and Art Gallery, Exeter (E1), Tyne and Wear (TWM1), and Hull (HU2).

Very few museums took the opportunity to discuss the issues with their Local Education Authority (LEA), teachers or other professionals; although at Hull the issues were discussed with LEA Advisers and a Teachers Forum. Only one museum; (Beamish - BE1) reported they had not discussed the issues with others. Leicester City Museums Service (L2) was the only museum that discussed the issues with the local Regional Agency officer in charge of education and learning.

## 8.3 Impact of Renaissance funding on staffing

The first main question on Form D asked about the increase in paid museum education staff, comparing the position in October 2003 and October 2005. This was intended to measure the increase in staffing numbers which was attributable to Renaissance funding. However, while the responses were very positive with many new staff being appointed, the question has not revealed the entire picture, as many staff funded by Renaissance were already in post by June 2003. This was made plain by some respondents who gave us the figures in October 2003 and October 2005, but also explained what the staffing situation was before June 2003. At Bristol, for example, it was pointed out that in October 2003, there were 7 staff, and in October 2005 there were 8, but prior to Renaissance funding in June 2003, there were only 4 full-time-equivalent (FTE) museum education staff. And at Coventry, there were 4.5 staff in post in October 2003, 6.5 staff in post in October 2005, but only 1.5 staff pre Phase 1 Hub funding in 2002.

Table 8.3a: Total numbers of FTE paid museum education staff in Bristol and Coventry Museum Services prior to Renaissance, in 2003 and in 2005

Museum	FTE staff prior to Renaissance Funding	FTE staff 2003	FTE staff 2005	The informatio n presented
Bristol	4	7	8	below represents
Coventry	1.5	4.5	6.5	

a comparison between October 2003 and October 2005.

Museums were asked to present figures as FTE for paid museum education staff only. While many museums also use freelance and volunteer education staff, these numbers are not included in the evidence gathered.

Overall, there has been a 46% increase of paid FTE museum education staff.

Table 8.3b: Total numbers of FTE paid museum education staff

Total Numbers, 2003	Total Numbers, 2005
136	199

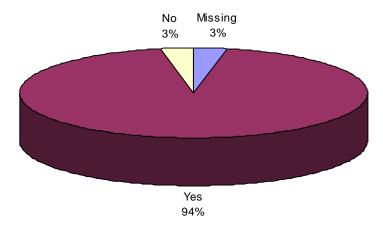
Table 8.3c: Numbers of FTE paid museum education staff in each reporting museum/museum service

Name of Museum	Phase	Percentage Change in FTE Staff 2003-2005
Beamish, the North of England Open Air Museum	1	100%
Birmingham Museums and Art Gallery	1	47%
The Bowes Museum	1	17%
Bristol's Museums, Galleries and Archives	1	14%
Hartlepool Arts, Museums and Events Service	1	0%
Coventry Arts and Heritage	1	44%
Ironbridge Gorge Museums Trust	1	4%
Plymouth City Museum and Art Gallery	1	134%
Royal Albert Memorial Museum	1	14%
Royal Cornwall Museum	1	185%
Russell-Cotes Art Gallery and Museum	1	n/a
Potteries Museums and Art Gallery	1	67%
Tyne and Wear Museums	1	36%
Wolverhampton Arts and Museums	1	31%
Bolton Museum and Art Gallery	2	80%
Brighton and Hove Museums	2	0%
Colchester Museums	2	260%
Hampshire Museums and Archives Service	2	18%
Horniman Museum	2	17%
Hull Museums and Art Gallery	2	400%
Leeds Heritage Services	2	100%
Leicester City Museums Services	2	50%
The Collection, Lincoln	2	n/a
Luton Museums Service	2	94%
Manchester Art Gallery	2	22%
Museum of London	2	22%
Norfolk Museums and Archaeology Service	2	67%
Tullie House Museum and Art Gallery	2	200%
York Museums Trust	2	88%

## 8.4 Impact on pupil numbers

Museums were asked if they had seen an increase in pupil numbers following the introduction of Renaissance. All but two museums in both Phase 1 and Phase 2 museums report that they have seen an increase. In Leicester City Museums cuts in the museum service as a whole have led to problems maintaining the educational provision that was established prior to Renaissance. No reason is given for lack of increase in Luton Museum Services.

Fig 8.4a: Form D, Q.8: 'Have you seen an increase in pupil numbers using the museum?'



Base: all museums (29)

Hull Museums report a 29% increase in use by schools since the education programme began in April 2005. (HU2 Form D)

These numbers suggest that some museums achieve a considerable level of penetration of local schools. Plymouth Museum, for example, reported working with 98% of local schools. (P1 Form D)

## 8.5 Impact on relationships with schools

Museums were asked if their relationship with schools had developed as a result of Renaissance. Here there was a unanimous 'yes'.

Missing 3%

Yes
97%

Fig 8.5a: Form D, Q.9: 'Have your relationships with schools developed?'

Base: all museums (29)

Museums were asked to describe what form this development has taken and details were presented of the various ways in which Renaissance has enabled museum staff to work more closely and effectively with schools. Several categories can be identified, including:

- the development of an increased number and range of activities
- new or enhanced relationships and partnerships
- school attitudes towards museums are becoming more positive
- schools being used more in a consultative way by museums
- museums working harder to respond to schools needs.

While most museums had something to report in many of the categories, the details of responses were very diverse, reflecting different ways of developing and managing museum education services according to local situations.

Increased number and range of activities:

- More schools catered for (BI1, COL2)
- Increased number of sessions offered (HOR2)
- Greater variety of sessions (HOR2, N2, HU2, HA2)
- Offering workshops and activities on a more regular and consistent basis (H1, HC1, B1)
- Increased demand for workshops (IG1)
- Schools involved in longer projects (IG1, ST1, BI1); special projects (LU2, RU1)
- Museums offering bespoke activities when asked (H1, TWM1, B1, HOR2)
- Development of e-learning (LE2)
- Better provision for self-directed school visits (HC1)
- Increased work on follow-up at school (BE1)

- Increased use of loans service (BI1)
- More feedback obtained from schools, more evaluation (BI1,MOL2)
- Visiting schools, outreach (W1, IG1, ST1, E1, MOL2, HU2, HA2, TH2)
- Establishing after school clubs. (H1, B1)

New or enhanced relationships and partnerships:

- New conferences and networks across the region (TWM1) and across Hubs (RU1)
- More relationships with individual teachers (TWM1, HA2)
- Increased relationships with ITT and In Service Training for Teachers (INSET) providers (TWM1, ST1, P1, HOR2)
- Involvement in whole school training days (MAN2)
- Increased relationship with LEA (MAN2, HA2)
- Teacher advisory groups and partnerships established (ST1, E1, BOL2, LE2, HU2, BH2, LU2)
- Employment of freelancers (LE2)
- Working with Advanced Skills Teachers on a regular basis. (RCM1,P1)

School attitudes towards museums becoming more positive:

- Schools viewing the museum as a serious provider of relevant sessions (HC1, W1, P1, BE1)
- Schools building the museum into planning more. (W1, HC1, E1, BE1, MOL2)

Schools being used more by museums:

- Schools being involved in planning new programmes and resources (BR1, B1)
- Schools piloting new activities and resources (H1, ST1, E1)
- Schools being consulted more. (TWM1, YO2, LE2)

Museums working harder to respond to schools needs:

- Putting schools at the heart of the service (N2)
- More school-friendly approach in the museum (W1)
- Increased marketing (W1, HU2)
- Targeting non-users (N2, L2)
- Partnerships with non-Hub museums to develop school use (COL2)
- More research into which schools use service and which not. (MOL2)

The categories are linked, as is shown by this comment from Beamish, the North of England Open Air Museum (BE1):

'We have been working on developing the experience in school, before the children visit and afterwards. This means that we can connect the learning between the school experience and museum experience much better. Teachers have generally found the experience very useful and feedback has been very positive. This means that schools have a much better respect for

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what we are doing and value much more the opportunity offered' (BE1 Form D).

This comment also reveals how many museums have been concentrating as much on the quality of the experience of teachers and pupils as on increasing the volume of use.

## 8.6 Impact on support for teachers

All but one of the museums/museum services reported that their support for teachers had improved. Leicester City Museums Service was the only service which reported that their support for teachers had not improved. Due to cuts in the museum service, there is a struggle to maintain the successful teacher support resources such as newsletters, marketing, INSET, previews, and Teachers Panel that had been established in 2003.

When asked to tell us how the support for teachers had improved, details were given of how additional staff and budgets have meant new and improved advisory services for teachers; improved provision for workshops and activities; up-grading, improvement and introduction of new material resources; and new or increased training for teachers. Museum education staff have also benefited and in one case, improved facilities were mentioned.

Additional staff and budgets have meant new and improved advisory services for teachers:

- More individualised and flexible responses to need (H1, W1, B11, HOR2,N2, MOL2, MAN2, BH2, LU2)
- Faster responses to teachers (BI1, HOR2, RU1)
- More help with pre and post-visit support (TWM1,E1, BE1, YO2, HU2)
- Free teachers' pre-visits (B1)
- More information on specific subjects (E1, RU1)
- More support for teacher-led visits (BI1, YO2, RCM1)
- New approaches to workshops and loan boxes (TWM1)
- More consultation (H1, IG1, LE2, LU2)
- More publicity, improved marketing (H1, BR1, BOL2, MOL2, RU1)
- Improved booking arrangements (E1, BI1, MOL2)
- Support for teachers on the edges of mainstream schooling (COL2).

Improved provision for workshops and activities:

- A wider-ranging programme (TWM1, HOR2, YO2, N2, MO2L)
- Activities developed or re-planned in response to feedback from teachers (ST1,MAN2)
- More special events throughout the year (ST1)
- Development of outreach programme (ST1, P1, BI1, TH2)
- Better sessions e.g. using thinking skills, challenges (E1).

Up-grading, improvement and introduction of new material resources:

- Loans boxes (H1, ST1, BI1, TH2)
- Teachers packs (H1, IG1, HC1, ST1, P1, E1, B1, BE1, BOL2, HU2)
- Suggested lesson plans (E1)
- Web-based resources (IG1); new schools website (TWM1, BI1);
   collection projects on-line (P1); visit logistics and curriculum links on-line (E1); children's web-site (BI1)
- Curriculum linked interactives in galleries for self-led visits (BI1)

- Advice and information on CD Rom (E1)
- Interactive whiteboards (BI1)
- New costumes and artefacts for use (BI1, RU1)
- New ICT programmes (BI1)
- Termly newsletter (TWM1, E1); e-newsletter (MOL2); information leaflet (P1, E1, BR1)
- Improved mail-out system (TWM1).

#### New or increased training for teachers:

- CPD sessions on how to use galleries (W1)
- CPD sessions on art techniques (W1)
- Teacher training sessions in digital animation (W1)
- Teacher training in interactive whiteboards (MAN2)
- Additional INSET days (IG1, HC1, TWM1, E1, B1, HU2) on use of loans in classroom (BI1)
- Whole school INSET (MAN2)
- Increased support for ITT (TWM1, HU1)
- Additional LEA meetings (HC1)
- Improved teacher twilight sessions (E1)
- Secondments for teachers to research and help prepare new curriculum-based modules (HC1)
- Launch events and previews (HU2).

#### Museum education staff:

- Are more familiar with current best practice in teaching and learning (BR1)
- Define and express formal and informal learning objectives for programmes more clearly (BR1)
- Contribute more to exhibition development, which will lead to improved experiences for teachers (HOR2)
- Work more closely with curatorial and other staff (N2)
- Freelance educators team have received training from LEA specialists e.g. in Understanding Behaviour, Learning Styles (MAN2).

## Improved facilities:

Toilets and lunch room (BOL2).

There are a number of interesting examples of initiatives which have been developed as a result of Renaissance funding:

Birmingham Museums and Art Gallery website<sup>26</sup> is lively and informative, with supporting information for a visit, including risk assessments, downloadable worksheets, pre-visit and follow-up work, information and bookings forms for the loans service. There is also a part of the website for children (BM&AG for

<sup>&</sup>lt;sup>26</sup> Birmingham Museums and Art Gallery, Birmingham Museums Schools website, <a href="http://www.schoolsliaison.org.uk">http://www.schoolsliaison.org.uk</a>

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Kids) with special activities. This is very popular with hits having increased from 8,000 – 60,000 hits per month.

One or two museums have developed provision for new partners who work on the edges of mainstream schooling (such as Colchester Museums - COL2) and Norfolk, who have established the Traveller Education Service (N2).

The Museum of London has established a Teachers' Network as a result of Renaissance funding. The 500 members receive a termly e-newsletter, free private viewings, discounts in the museum shop, and advance information on new programmes. This has created a new dialogue with teachers and many are now involved in consultations.

## 8.7 Have schools changed the way they use your museum?

Q.11 asked museums to report on any observed change of use by schools. This question was motivated in part by concerns that the development of educational services in the Hub museums might represent a lessening of use by schools of non-Hub museums. While it was thought that this would be a very difficult thing to prove without extensive consultation with teachers, it was considered that it would be useful to ask museums about any perceived change of use. Nearly all museums agreed that they had noticed a change in the ways schools were using them. While no museum made any reference to museums that were not used by schools, all made similar comments about the growth of teachers' confidence and expectations; development of use of museums by schools; the ways that schools were building museum resources more closely into their work; and, how increased evaluation by museums enabled them to see how teachers valued what they did.

Growth in teachers' confidence and expectations:

- Schools more confident and aware of museum service (H1, HOR2, MAN2, RU1)
- An increased knowledge by schools of the relevance of museums (W1)
- Schools using the museum where they lack confidence e.g. in design and technology or religious art (B1)
- Schools more focused in what they want (BE1, HOR2)
- Teachers have higher expectations of more advice and resources, and expect museum staff to understand more about learning (BR1, RU1).

## Development of use of museums by schools:

- Increase in number of schools using the museum-based service (H1, TWM1, ST1,E1, MOL2, LE2, HU2)
- Increase in repeat visitors (HC1,E1, MAN2, RU1)
- Some new schools using the service (N2)
- Schools better prepared and doing more follow-up work(BI1)
- More visits from schools further away (BI1, HU1)
- More work in extended school hours (BI1)
- Wider range of year groups being brought to the museum (W1,IG1)
- Schools using a broader range of workshops (BOL2)
- More secondary schools (BOL2, MOL2, BH2)
- Museums more involved in whole school activities i.e. whole year groups (P1)
- More schools asking for workshops as part of their visits (spending longer in fewer places) (IG1, RCM1)
- Better use of galleries (YO2)
- More schools using the museum independently as more support is provided (E1, YO2)
- More schools using the outreach service (ST1,P1, BI1, MOL2)
- More schools using the loans service (BI1, TH2)
- More requests for INSET (HOR2)
- More website use (BI1, HOR2)
- Schools using email for contact (HOR2)

 More requests for opportunities for work experience placements at the museum (RU1).

Schools building museum resources more closely into their work:

- Museums being built into schools' planning year on year (HC1,P1, MAN2, RU1)
- Teachers prepared to change curriculum plans to fit in with the museum if needed (HC1)
- Pupils know why they are at the museum and this has led to increased learning (BE1)
- Much higher level of trust from teachers (HC1).

#### Increased evaluation by museums:

- Increased expressed appreciation of the museum support, through evaluations (HC1,TWM1)
- GLOs used in impact studies to demonstrate worth (HA2).

Several museums reported that their evaluations from teachers showed how teachers valued their services (e.g. HC1, TWM1), with teachers describing the museum as a vital source of educational inspiration, that teachers appreciate the different learning styles that are able to be used in the museum, and that pupils' responses demonstrate a wide range of learning outcomes.

Only two museums had not noticed a change in use by schools. Colchester Museums responded that they had not noticed a change in school use of the museums as their Renaissance funding has not been focussed on developing the school service further. Leicester City Museums answered 'no', but gave no further details.

In many of the responses from both Phase 1 and Phase 2 museums, a clear inter-relationship of these categories was evident. As Manchester Art Gallery pointed out:

'Through all the advocacy work, teachers are well informed about what is on offer, and are confident about the quality and value. Therefore they are integrating visits into their future planning. This is evident as teachers are now booking up to a year ahead and there is a noticeable number of repeat visits' (MAN2 Form D).

Many museums have noticed an increase in use, and this was described very precisely by Hull Museums, who said that a 29% increase had occurred since the education programme had begun in April 2005. However, Luton Museum Services commented that the cost of visits and the pressures of curriculum have meant that schools find it difficult to visit, and schools are coming for a half rather than a full day, and looking at other ways to reduce the cost of the museum visit.

# 8.8 The most significant impact in regional museums of Renaissance funding

The final question (Q.12) asked museums to comment on the most significant thing about the Renaissance programme in relation to museum education. There was a considerable range of answers here, but the value of Renaissance is very clear. The Renaissance programme has enabled museum education staff to increase capacity in general, and through having more resources, such as more staff and more money, to improve the quality of educational services through increased research and consultation; to be more responsive to need; and, to provide more for schools. Museum education staff value hugely the opportunities that Renaissance presents to build local and regional networks and to learn from colleagues. The emphasis on users and learners in museums has led to an increased profile for education staff and in some museums to considerable impact on museum culture as a whole.

## Increased capacity in general:

- Increased capacity to deliver museum learning (TWM1,YO1, RCM1, LU2)
- 'Enabled us to begin to reach full potential' (P1)
- 'Enabled us to offer free provision to all, including those at risk of cultural exclusion' (RU1)
- Dramatic increase in school visits (H1)
- Bringing in new schools, often from deprived parts of the region (BE1, COL2)
- Expand the school service (TH2, RCM1)
- Learning to evaluate better (E1)
- Increased evaluation, using GLOs (MOL2).

#### Improving the quality of educational services:

- More non-contact time for research/preparation for school visits (W1, HOR2, LU2)
- Opportunity to consult teachers and pupils in planning and piloting (TWM1)
- Able to pay for supply cover for teachers to work with museum in planning (E1, BR1)
- Delivering what teachers really need, rather than what museum staff think they need (BE1, BH2)
- Developing new relationships with education professionals (COL2)
- Spend time on exhibition development (HOR2)
- Given time to reflect and refresh practice (YO2)
- Levering other opportunities, e.g. working with national museums (B1).

#### More staff:

- More staff (ST1, B1, YO2, MAN2, HU2, HA2, RCM1)
- Now have dedicated education officers (H1); qualified teachers, freelance, historical re-enactment, supply teachers (E1)

- Increase in art interpreters (W1); increased level of staffing (HC1), add specialist staff (BOL2)
- Funding freelancers, broadening activities that can be offered (TWM1).

#### More money:

- More money (ST1, B1, MOL2, L1, RCM1)
- Now have an education budget (H); extra budget to try new things, take risks, be innovative and increase capacity (IG1, HC1)
- Having funds to use in a huge range of ways (staff, resources, building capacity and networks, responding to initiatives (E1, YO2, HA2); developing a new Learning Centre (HU2).

#### More responsive to need:

- More resources (ST2); more sessions per week (HOR2)
- Better service to schools and others (W1, BI1, HU2); proactive rather than reactive (HC1); improved targeting (TWM1, COL2)
- Being able to deliver areas of the curriculum where we knew teachers needed help but we did not have the resources to be effective (B1).

#### Providing more resources for schools:

- Greater use of collections from store (W1)
- Purchasing handling collections (E1)
- Use of environments other than the museum classroom for learning (W1)
- Digital learning developments (HU2).

## Building networks and learning from colleagues:

- Regional education 'Hubcap' meetings to share best practice and support (E1, B1, HC1, L2, YO2, HA2)
- Closer links between museums and galleries in the region (TWM1)
- Working with non-Hub museums (COL2).

## Increased profile for education staff:

- Career boost (HC1)
- Education staff gaining profile within the museum (B1, BI1, HOR2, MAN2)
- Education staff development (BR1)
- Able to manage education staff better, better resources and time (E1).

## Impacting on museum culture as a whole:

- Education and learning a priority area across the museum (BI1)
- Better networking and skills sharing across the museum (YO2)

- Along with Inspiring Learning for All,<sup>27</sup> has put learning at the centre of museums (YO2)
- The museum has become more audience-focused (MAN2, LE2)
- Emphasis on education is beginning to affect the work of the marketing, collection and exhibitions teams (MAN2).

The comments below from the respondents illustrate vividly the impact of Renaissance.

'The education services we now offer in Coventry are unrecognisable from pre-Hub days, in both quantity and quality and this is mainly down to the expertise, enthusiasm and new skills that the [new] staff have brought to our service... There has been a complete turnaround in our organisation'. (The Herbert, Coventry, Form D)

'We have been able to provide a wider range of high-quality resources and a larger number of sessions for schools, and have reached a larger schools audience. The status of education and learning within the museum has risen: this is now a priority area for all staff, not only those in Learning and Outreach'. (Birmingham Museums and Art Gallery, Form D)

'For us, [the most significant thing has been] an increase in the numbers of staff to start to increase capacity at our sites, and the 'blank canvas' that Renaissance in the Regions has given us. The delivery plans and milestones have given us a sense of direction and the budgets have allowed us to consult, develop and market in a way which we did not do before'. (York Museums Trust, Form D)

'Increased funding has created new posts and this has increased our capacity and allowed us to work in new ways, with new partners and new audiences and respond to initiatives in a way that was not possible before when we were all working to full stretch. [Renaissance in the Regions] has given us opportunities to reflect and refresh our practice. Along with Inspiring Learning for All, it has put learning at the centre of museums'. (Norfolk Museums and Archaeology Service, Form D)

While the vast bulk of responses are highly positive, there is evidence that where there have been cuts in funding, the responsibility for Renaissance projects has led to problems of sustaining capacity. Leicester City Museums made the following comment:

'It is worth noting that, even though we gained a part-time education officer as part of Renaissance, the work involved in supporting and developing hub projects has actually meant

<sup>&</sup>lt;sup>27</sup> Museums, Libraries and Archives Council, 2004, *Inspiring Learning for All*, MLA, London, <a href="http://www.inspiringlearningforall.gov.uk">http://www.inspiringlearningforall.gov.uk</a>

that I no longer have the capacity to manage and deliver our established and successful education programme, leading to gaps in the service. As a result, capacity is a huge issue for partner services, especially when not running at full funding'. (Leicester City Museums, Form D)

The new regional networks are very much appreciated in some areas, and especially where there are difficulties to be managed:

'The most positive thing to me personally has been the creation of the Renaissance East Midlands Learning Team. Comprising of heads of learning/access in the partner services around the region, this has become an excellent support mechanism and is leading to some truly excellent regional thinking/working'. (Leicester City Museums, Form D)

## Change in museum culture:

'Renaissance in the Regions has emphasised the user focus as the driver for change... Learning is now recognised as a core function by many people: there has been a progressive shift from the use of the word 'education' (often seen in a narrow sense as referring to schools) to 'learning and access', as defined by the *Inspiring Learning for All* framework'. (Hampshire Museums and Archives Service, Form D)

#### 8.9 Conclusion

It is clear from the information given by museum staff that Renaissance has had a very strong impact on museums and education. Staff numbers have increased by 46% in the last two years (2003-2005). All museums report detailed changes and developments. In all cases, while the main characteristics of these developments, improvements and changes are shared, the details in each museum are very diverse.

All museums report that their relationships with schools have developed through increased numbers and range of activities, new or enhanced relationships and partnerships, and more positive attitudes from schools, which are using museums more as museums work harder to respond to school needs. Some museums report that because relationships are closer and more collaborative, teachers now have a much better understanding of what museums can offer.

All but one of the museums report that their support for teachers has improved through new and improved advisory services for teachers, better provision for workshops and taught sessions, up-grading and improvement of teachers' materials and the introduction of new materials, better training for teachers, and a greater awareness on the part of museum staff of teaching and learning. Some museums reported that in the museum, they were more closely integrated into museum culture, contributing to exhibition development and working more closely with curators. Museum education websites are also improved, as is the provision of information in general.

Some changes in school use of museums have been observed. Museum staff report that, in their view, teachers are more confident and expect more from museums, as their knowledge and understanding of how museums can be used increases. Schools are broadening and deepening the way they use museums, getting involved in longer term relationships and projects. This supports the findings of the case-studies, where a good number of the teachers discussed their use of museums with well-informed confidence. More evaluation is taking place at museums, which is showing teachers' responses to museum provision.

Museums report that the main impact of Renaissance has been in increased capacity for educational work, achieved through increased staffing, and increased budgets. In the view of the museum educators, the quality of educational services has improved because museums are both more aware and more responsive to what teachers want. This is because museums and teachers are working more closely together, collaborating and developing projects together.

The networks that have emerged as a result of Renaissance, such as the regional education meetings, are appreciated by a great many education staff, who find support and examples of best practice from colleagues. Many education staff report that personally, Renaissance has boosted their careers by increasing their management responsibilities and their profile among other museum staff.

There are some suggestions that Renaissance is beginning to impact on other areas of museum work, although, from the evidence of Form D, this impact is not as strong as it might have been. Only 5 of the 29 museum services reported that museum culture was becoming more open and audience-focused. An example from the Castle Museum, York, where the well-known and influential Victorian Kirkgate is being redeveloped shows what might be hoped for:

'The learning element is now core to new exhibitions, from the planning stage... the Assistant Curator of Social History Learning attends all planning meetings [for the development of Kirkgate, the Victorian street] and all members of the planning team, including designers are aware of the needs of groups and the way in which the National Curriculum covers this area of learning'' (York Museums Trust, Form D)

Very few museum managers seem to have discussed Form D and this adds to the impression that the educational work of the museum is still not fully integrated into other museum work.

The Renaissance programme and *Inspiring Learning for All* seem to have had a considerable impact on the development of evaluation.

'Other than increased funding, the increased level of evaluation and in particular the use of the GLOs, has made a major impact on the quality of provision'. (Museum of London, Form D)

Form D revealed few differences between Phase 1 and Phase 2 museums. Educational provision in museums across England is at different stages of development, and in museums in both Phase 1 and Phase 2 Hubs there are both new and well-established services. Because of this, as the detail reported in this section shows, there seems little distinction in the use of the additional funding in museums in either Phase 1 or Phase 2. Phase 1 museums continue to use the funds well, and most Phase 2 museums have quickly set plans in motion to enhance educational delivery, especially for schools.

Phase 2 museums have moved very quickly to deploy the extra funds and it is clear from the responses that much has already been done. Museums report activities and procedures that are already in place, not those that are still in planning. The only exception to this is where there have been other difficulties or events; in Leicester, cuts and restructuring in the service as a whole appear to have affected the effectiveness of the education service. In Norfolk, the closing of 3 museums for redevelopment and the opening of a new museum have made pupil numbers difficult to assess, although an increase is reported at Roots of Norfolk, Gressenhall.

The evidence described in the questionnaire Form D suggests strongly that the strategic approach adopted by MLA to the development of a comprehensive museum education service across England has been effective. MLA strategy began by requiring all 9 regional Hubs to research the needs of teachers in their regions and to produce EPDPs based on this

research. This regional research surveyed teachers' views, consulted stake-holders and examined specific themes of particular relevance in specific regions, setting museum school services in the context of out-of-school hours learning, early years, family and life-long learning. The additional Renaissance funding was then deployed on the basis of the findings of these regional research studies. The Form D evidence suggests that museum education staff are better informed, more confident, more focused and more proactive than previously. In addition, they are more numerous.

# **SECTION NINE**

# THE RESEARCH FINDINGS

#### 9.0 Introduction

Renaissance in the Regions is proving to be a powerful tool for the modernisation and development of museums in the English regions, and a major element of this has been the development of museum education services.

This research has explored the impact of Renaissance funding for museum education, looking specifically at the impact on learning. The GLO approach has been used to measure pupils' learning following a museum visit. This study grows out of and extends an earlier study in 2003 that concentrated on 36 museums in the Phase 1 museum Hubs. In 2005, the research has revisited the Phase 1 museums, and also encompassed museums in the Phase 2 Hubs, 69 museums in all.

This has been a very large study, larger than the 2003 study. It has involved larger samples than two years ago and has also included two new sources of evidence, the school case-studies and the information from the museums on the impact of Renaissance funding gathered through Form D. The findings from the research confirm, reinforce and deepen the findings from the earlier study.

Key findings are:

#### Museums and schools

- The 69 museums are working with disproportionately high levels of schools in areas of deprivation, where there are high percentages of pupils entitled to free school meals
- These museums are working with disproportionately high numbers of special schools
- The numbers of primary and secondary schools using museums closely match the distribution of primary and secondary schools in England
- Numbers of contacts with school-aged children in the 69 museums have increased by 40% (47% Phase 1 museums, 29% Phase 2 museums)

#### **Teachers**

- Teachers remain highly enthusiastic about museums, are very satisfied with what they find in museums and very confident about using them in the future
- Teachers are more focused on outcomes than in 2003, and think about learning outcomes differently according to their purposes in using

- museums. If their work at the museum is curriculum-focus, learning outcomes are regarded as more important than if it is not
- Teachers at KS2 and below value museum-based learning outcomes more highly than teachers of older pupils
- Teachers have increased their use of museums for cross-curricular work considerably since 2003
- Teachers use museum on-line resources, and borrow objects and handling material in addition to visiting museums
- Primary teachers use museums most, but those secondary teachers using museums do so consistently
- Most, but not all, teachers use museums flexibly and imaginatively, taking advantage of government encouragement to promote creativity
- A very large percentage of all teachers use these 69 museums for historical work. Most of the cross-curricular work is History-based
- There are fewer teachers using museums for Art and Design than in 2003, possibly because of the selection of the 69 museums which may not include a large number of art galleries
- Teachers do not always find using museums easy as taking pupils out of school can be problematic, and some elements of museum culture are unwelcoming

## **Pupils**

- Pupils remain extremely enthusiastic, and confident about their learning even where (in a few cases) their teachers do not think learning has occurred
- Pupils are more enthusiastic where all or most of the critical success factors are in place
- Some pupils can obtain higher levels for their assignments following a museum visit
- Ten percent (10%) more older pupils found museums made school work more inspiring than in 2003
- Pupils and teachers value highly the emotional engagement that museums enable – this stimulates the attainment of Knowledge and Understanding and also the development of Attitudes and Values
- Many pupils progress considerably in their understanding after museum visits because of concrete experiences that make facts 'real'
- Most pupils are able to personalise their learning through their individual responses to collective group events; this leads to ownership of the experience and its resulting Knowledge and Understanding, Attitudes and Values. Through this ownership, progression occurs

#### Phase 1 and Phase 2 museums:

- Taking the Phase 1 and the Phase 2 museums as a whole, there were very few significant differences between them
- Phase 1 museums in this study make up 100% of the three Phase 1 Hub museums
- Phase 2 museums make up 17% of the museums in the six Phase 2 Hubs

Phase 2 museums were selected because of high levels of educational use

#### Phase 1 museums

- Secondary schools make up 3% more of the school audience than in the Phase 2 museums
- 69% of teachers visiting the Phase 1 museums are using on-line resources compared to 64% of teachers visiting Phase 2 museums
- There are fewer teachers on first time visits than in the Phase 2 museums (40% compared to 49%)
- Teachers are less likely to be linking their work at the museum to the curriculum
- Teachers are more likely to value Action, Behaviour, Progression

#### Phase 2 museums

- Older pupils were more enthusiastic about museums
- Higher proportion of teachers on first visit (49% compared to 40%)
- Teachers are more likely to be doing curriculum-related work

#### The Generic Learning Outcomes approach:

- The GLOs were used to shape this research study and its analysis
- The GLOs proved effective in encompassing, describing and analysing all dimensions of the evidence of learning generated by the research methods
- While each individual GLO can be identified for the purposes of research and analysis, they are closely interwoven in practice
- Teachers are much more attuned to an outcome-based approach to learning than they were in 2003

#### How museums contribute to government agendas:

- Museums promote creativity and this could be further exploited by schools
- Museums can help in the development of personalised learning
- Museum school services play a powerful role in delivering Every Child Matters

These Key Findings are presented in more depth in this Section.

## 9.1 Scope and background to the research

The research involved 69 museums in the nine regional Hubs; 1,643 teachers who responded to Form A, and a further 31 teachers who were interviewed in focus groups and schools; 26,791 pupils who completed Form B and a further 29 pupils who were interviewed in case studies. This can be compared with 936 teachers and 20,604 pupils in 2003.

The qualitative evidence arising from the school case studies and the focus groups is very closely linked to the quantitative evidence; the schools used in the case studies, as the free school meal and the postcode data demonstrates, are representative of the schools within which the teachers completing Form A might be based.

The research has produced robust evidence with reliable findings. The study has compared this study in 2005 with the study in 2003 (What did you learn at the museum today, 2003) and it has also made comparisons within the 2005 study. The 2003 study involved the Phase 1 Hub museums only, while the 2005 study involved museums from all nine Hubs.

The research has taken place at a time of change in schooling. A number of shifts in government educational policy have taken place since the research in 2003, and these seem to be having a bearing on the way teachers think about museums. The National Curriculum, which has been experienced by many teachers for some time as a constraint, is opening up and there is an increased emphasis on creativity and innovation in teaching. There is an increased emphasis on outcome-based teaching and learning.

The sample size for this study is considerably larger than for the 2003 study, but exhibits many of the same characteristics. The school breakdown is much the same, with the largest percentage coming from primary schools; the Phase 1 museums are attracting 3% more secondary schools than the Phase 2 museums. The distribution of types of school (e.g. primary and secondary) in the museum audience closely matches the distribution of all schools in England, with the exception of special schools, which are over-represented at 12% compared to the percentage they form of all schools (5%). However, there is considerable variation in the relative distribution of different types of school across the 9 Hubs.

The Key Stage and gender breakdown of the pupils is very similar to the 2003 study, although there are 4% more Form Bs from older pupils.

## 9.2 Uplift in numbers using museums

The numbers of school-aged children using museums has increased by 40% from 2003-2005; considered by Hub, in the Phase 2 museums the increase is 29%, which is very similar to the Phase 1 museums who were at the same position in relation to funding when this study was carried out in 2003. The Phase 1 museums, two years on, have increased their contacts with schoolaged children by 47%. These are remarkable figures, showing that across the Hubs, museums are making great efforts to increase their use by schools and families. The figures also show that these efforts can be both sustained and improved over time with continued funding. The increase in use of museums is a major impact of the Renaissance programme.

It must also be remembered that this increase includes a disproportionate percentage of schools located in areas with high levels of deprivation, where children may be at risk of social exclusion. Evidence of this capacity of museums, to work with schools where deprivation may be experienced by children, seems consistent.

## 9.3 Museums are serving schools in deprived areas

The postcode and free school meal data from this study shows that museums are working with large numbers of schools serving children from socially deprived circumstances, more than would be expected if the schools using museums reflected the normal distribution of schools in relation to deprivation. This confirms the findings from the 2003 study, which, based on postcode data alone, suggested that museums were serving a disproportionate number of schools based in areas of deprivation. A further confirmation of this fact is that two different deprivation indices have been used in 2005, and both show very similar results.

The analysis of postcodes and entitlement to free school meals also enables a tying together of the evidence from the case studies and the statistics arising from the questionnaires. Given that both sources of data conform to the same social patterns, strong relationships between the findings can be assumed.

## 9.4 Teachers' use of museums

The vast bulk of teachers in this study (86%) came from schools that used cultural organisations on a regular basis, although there were larger numbers of primary teachers (91%) than secondary teachers (86%). The overall figure compares with 85% in 2003.

Forty-three percent (43%) of all teachers were on their first visit to the museum where they completed the questionnaire, compared with 44% in 2003, with a higher proportion on their first visit in the Phase 2 museums (49%) compared to the Phase 1 museums (40%), suggesting that the education services in the Phase 2 museums were successfully extending their services because of additional funding. Primary teachers were significantly more likely to be on their first visit (46%) than secondary teachers (36%). Over half of all teachers (58%) had organised the visit themselves, compared to 62% in 2003.

During the last two years:

- 86% of teachers in this study visited a museum
- 64% used on-line resources
- 40% borrowed an object or handling box

Ninety-two percent (92%) of secondary teachers had visited a museum in the past two years compared to 88% of primary teachers. Primary teachers were more likely to use resources such as on-line museum resources (69%) or have borrowed an object or handling box (45%) compared to secondary teachers (64% and 22% respectively). As this question was new in 2005, no comparisons could be made with the earlier study.

There were some differences in the response to these questions between the teachers in the Phase 1 and Phase 2 museums, most noticeably for the use of on-line resources, with 69% of teachers visiting the Phase 1 museums using online resources compared to 64% of teachers visiting Phase 2 museums.

It is clear that teachers are taking advantage of what museums can offer in a range of ways. We can expect the use of web-based resources to increase considerably and rapidly, as museums increase and improve their web-based materials. The rather low rate of borrowing objects or handling materials may be related to the lack of availability of museum loan services. Historically, many local authority (and some national) museums have provided loan services, which have certainly been much appreciated by teachers, but very many of these historic services were closed down during the 1980s as local authority museum budgets were cut. Any desire to increase the numbers of teachers borrowing museum objects would need to be very carefully reviewed, given the enormous costs of providing handling objects and boxes.

## 9.5 Using the museum for curriculum-related work

The vast body of work that is done by teachers and pupils in these museums was linked to the curriculum. However, since 2003 there has been a slight reduction in curriculum-related projects and an enormous increase in interdisciplinary work.

When asked if the work at the museum today was linked to the curriculum, 90% of teachers agreed that it was, compared with 94% in 2003, with 3% more teachers working in this way in the Phase 1 museums than in the Phase 2 museums. More primary teachers linked their visit directly to the curriculum, 94% compared to 87% of secondary teachers.

Teachers were asked what curriculum areas they were covering in their visit, and it was clear from their responses that, in contrast to the 2003 study, many teachers (27%) were working in an interdisciplinary manner. The breakdown of subject areas cited by teachers shows a large percentage (51%) working on History-related themes; this compares with 70% in 2003. However, when the interdisciplinary themes are studied closely, it is clear that History as a subject plays a large part in many of them. Eleven percent (11%) of the teachers were working on Art and Design, compared with 15% in 2003, and other subject areas are made up of very tiny percentages.

That teachers, and especially teachers working on History-based themes in the primary school, are beginning to use museums in a more creative and open-ended way is clear from the rapid rise in interdisciplinary themes. In addition, the drop in teachers using museums for curriculum-related work from 94% to 90% may be a further indication that teachers are beginning to think of museums in a broader way than before.

It became clear during discussions with teachers that schooling and teaching cultures were changing, due at least in part to the impact of new government initiatives. The freeing up of the curriculum, and the emphasis on multi-agency working, potentially offers new opportunities for schools and museums to work in partnership.

## 9.6 The value of the five Generic Learning Outcomes

Overall, teachers are extremely positive about the value of museums to their teaching. The percentages of teachers saying that the learning outcomes that could result from using museums were 'important' or 'very important' are very high:

•	Increase or change in Knowledge and Understanding	95%
•	Enjoyment, Inspiration, Creativity	94%
•	Change or development in Attitudes and Values	92%
•	Increase in Skills	89%
•	Action, Behaviour, Progression	81%

Analysing the difference between teachers' views in 2005 and 2003 in some depth, it would appear that teachers find Attitudes and Values slightly more important (by 4%) than in 2003, and Enjoyment, Inspiration, Creativity slightly less important (by 3%).

It has begun to become clear that teachers value museum-based learning outcomes differently according to the reasons for which they are using museums. It seems logical that purpose and outcome should be strongly related.

The importance of museum-based learning outcomes to teachers was investigated in relation to teachers of different Key Stage groups and also in relation to the link to the curriculum. Primary teachers were much more likely to rate the GLOs highly than secondary teachers. The relationships of the museum work to the curriculum seemed to be an important factor in the ways in which teachers think about the importance of museums, with teachers using museums for curriculum-related purposes much more likely to say that museums were very important to their teaching.

Two key elements in the value of museums to teaching are that museums provide something that the classroom can not, and that the quality of the provision is reliably and consistently high. Teachers' satisfaction levels, discussed below, suggest that they have found these elements in the museum provision they have experienced.

## 9.7 The achievement of specific learning outcomes

The consensus amongst the teachers we spoke to as part of the qualitative research was that museums could be a very powerful teaching tool for all pupils regardless of socio-cultural or ability background. While teachers used the museum in different ways with different objectives, there was an overwhelming agreement that the museum experience could result in very positive learning outcomes for pupils.

Teachers were particularly articulate about Enjoyment, Inspiration and Creativity as an outcome of museum-based learning. They also talked about emotional engagement that could not really be called enjoyment but which was to some extent inspirational. Data from the questionnaire confirms this enthusiasm:

- 99% of teachers thought it 'likely' or 'very likely' that their pupils would have enjoyed the museum visit, with 88% ticking 'very likely'
- 95% thought new interests would be aroused and pupils would be inspired to learn more
- 93% thought pupils would be excited by new ways to learn
- 88% of teachers expected to be exploring new ideas with their pupils as an outcome of the museum visit.

In discussions, teachers were explicit about the causal link between enjoyment and learning, saying, for example:

- 'Enjoyment opens children up to learning'
- 'Enjoyment leads to a heightened sense of awareness'

Above all, teachers felt that the museum could impact on learning outcomes to the extent to which it engaged the pupils' emotional responses. This is regarded as of major importance and achievable for all pupils.

Knowledge and Understanding remain of key importance to teachers:

- 95% of teachers think it is 'likely' or 'very likely' that their pupils would have gained in subject-specific facts
- 92% think pupils will feel more positive about learning as an outcome of their museum visit
- 94% of teachers thought pupils would increase in subject-related understanding.

In discussions, it seemed that teachers understood progression as something that would happen in the middle to long term, and thus they were uncertain about what could be identified in the short-term, immediately following a museum visit. Even so:

- 78% of teachers think it 'likely' or 'very likely' they will be undertaking new activities with their pupils following the museum visit
- 78% of teachers think it 'likely' or 'very likely' their pupils will be using new skills

- 68% of teachers think it 'likely' or 'very likely' their pupils will work with their peers in new ways
- 61% of teachers think it 'likely' or 'very likely' they will be working in other new ways in the classroom.

#### In relation to Skills:

- 92% of teachers anticipating an increase in thinking skills
- 87% of teachers expected an improvement in communication skills
- 86% expecting an improvement in social skills.

The least likely skills-related area for learning to occur was in the area of ICT, and here it is very clear that unless teachers are deliberately using the museum to work on and around ICT, these skills are unlikely to be encouraged. The relationship of intention to outcome is again raised by these results.

Teachers' views about what their pupils had achieved did not vary greatly across the 69 museums. Their expectations in relation to their pupils' learning outcomes seemed to be much the same in nearly all instances.

## 9.8 Teachers' attitudes and purposes

In considering how teachers value museums and the learning that may result from their use, it is vital to differentiate between primary and secondary teachers, and between the purposes for which those teachers are using museums.

Teachers in the research undertaken for this study in 2005 appeared more reflective about the types of learning their pupils experienced during a museum visit, and were able to analyse and examine this more effectively than during the 2003 study, where teachers frequently merely described the activities that took place during the museum visit. Teachers were also more focused on the impact of the museum on their students in relation to issues around ethnicity, socio-economic deprivation, cultural entitlement, aspiration, class mobility and inclusion than in 2003. It is likely that government policies and strategies, especially the focus on outcomes and the drive to inclusiveness, may have influenced the ways teachers think about and use museums, and also the very different ways in which teachers were able to discuss their pupils' learning in this study compared to the 2003 study.

These changes in schooling culture may also lie behind the reduction of use of museums for curriculum-related work. In addition, as reported below, museum education staff have worked hard to integrate museums and schools more closely, and as teachers understand better what museums can offer, their expectations rise and this may contribute to their analysis of the value of museums.

In their discussions of the value of museums to their pupils, teachers highlighted the importance of emotional engagement and the resulting personalised response from pupils. This was perceived as highly significant in stimulating learning. Some very original and successful ways of provoking emotional engagement were observed in museums, and this capacity of museums may be something that should be explored and reviewed further.

#### 9.9 Teachers are satisfied and confident

- 96% satisfied or very satisfied
- 90% confidence in using museums increased

Very large percentages of teachers (74%) across all museums are 'very satisfied' and a further 22% are 'satisfied' with their museum experiences, although some important issues were raised about the difficulties teachers face in visiting museums with their classes. Ninety percent (90%) of teachers left the museum feeling 'confident' (30%) or 'very confident' (605) about using museums in the future. This is an enormously positive endorsement for museum education staff as a whole, especially considering the very large proportion of schools where children may face challenges in learning.

## 9.10 The importance of museums to teachers

Museums appear to have become somewhat less important to teachers than in 2003. While 95% of teachers stated that museums were 'important' (49%) or 'very important' (46%) for their teaching, which was much the same as in 2003, the percentage stating 'very important' has fallen from 58% to 46%.

This is a puzzling finding, which is contradicted by all the other evidence in the research study. Probing for possible reasons for this, it was found that while Key Stage had no bearing on teachers' views of the importance of museums for their teaching, whether or not the work at the museum was linked to the curriculum was a major factor. Forty eight percent (48%) of teachers whose work was linked to the curriculum rated museums 'very important' for their teaching, compared with 33% of those whose work was not so linked. As the percentage of teachers using museums for curriculum-related work has dropped since 2003, this may account for an apparent drop in the importance of museums in teachers' eyes.

## 9.11 Pupils' views of their own learning

The evidence from the pupils confirms the findings of the 2003 study. Twenty-six thousand seven hundred and ninety-one (26,791) pupils completed Form Bs, with 82% of these (21,845) at KS2 or below and 18% (4,946) at KS3 and above. In terms of gender there was a fairly even division for pupils completing Form B KS2 and below(48% female and 49% male), while at KS3 and above there were more girls (55%) than boys (42%). This was virtually identical to the 2003 study. The age range of pupils is also very similar to the earlier study, with most pupils concentrated in the 8-12 age range.

Pupils are, as in 2003, both very enthusiastic about their museum experiences, and confident about their own learning. Bearing in mind that approximately one third of the schools in which these pupils are based are located in areas of considerable deprivation, and 12% of the schools are special schools, the positive response from pupils is extremely impressive. This is strong evidence that museums have the potential to be effective in working towards social inclusion and in working with children at risk.

#### At KS2 and below:

- 93% enjoyed today's visit
- 90% learnt some interesting new things
- 80% could understand what they did
- 86% thought museums were exciting places.

#### At KS3 and above:

- 86% enjoyed today's visit
- 85% discovered some interesting things
- 83% thought museums were good places to learn in a different way to school
- 71% said the visit had given them a better understanding of the subject
- 68% said the museum/gallery visit makes school work more inspiring

The pupils responses were very much the same as in 2003, except for two significant differences; older pupils seem to be much more enthusiastic about the inspirational impact of museums (up from 58% to 69%) and also about potential for skills learning (up from 62% to 68%).

Case-studies revealed some of the factors that influence a productive visit that is likely to result in good learning outcomes. Where all of these factors were in place, the Form Bs yielded more positive responses, and evidence was found of enhanced success levels in assignments.

The study has also found that although the numbers of teachers who are not convinced that their pupils have learnt during their museum visits is very small, the pupils of these teachers are convinced that they have learnt something. A similar result was found when this matching of views was explored in the

study for DCMS that paralleled the 2003 MLA study<sup>28</sup>. One case-study that was, in the researchers' views, less than optimum, led to more learning than the researchers expected. Both of these facts, in their different ways, suggest that there is more learning potential to be exploited as a result of museum visits.

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<sup>&</sup>lt;sup>28</sup> Hooper-Greenhill, E., Dodd, J., Phillips, M., O'Riain, H., Jones, C., and Woodward, J., 2004, What did you learn at the museum today? The evaluation of the impact of the Renaissance in the Regions Education Programme in the three Phase 1 Hubs, MLA, London, <a href="http://www.mla.gov.uk/resources/assets//l/id1185exec\_pdf">http://www.mla.gov.uk/resources/assets//l/id1185exec\_pdf</a> 6623.pdf

## 9.12 The impact of Renaissance funding in regional museums

It is clear from the information given by museum staff (in Form D) that in their view Renaissance has had a very strong impact on museums and education. Staff numbers have increased by almost 50% (46%) in the last two years (2003-2005). From other data given by museums (Form C), a large increase in numbers of contacts between museums and school-aged children is reported; a 29% increase in the Phase 2 museums and a 47% increase in the Phase 1 museums.

Museums and schools seem to be developing more integrated ways of working together, and this is having an impact on the way teachers think about museums. All museums report that their relationships with schools have developed through increased number and range of activities, new or enhanced relationships and partnerships, and more positive attitudes from schools, which are using museums more as museums work harder to respond to school needs. Some museums report that because relationships are closer and more collaborative, teachers now have a much better understanding of what museums can offer.

All but one of the museums reported that their support for teachers has improved through new and improved advisory services for teachers, better provision for workshops and taught sessions, up-grading and improvement of teachers' materials and the introduction of new materials, better training for teachers, and a greater awareness on the part of museum staff of teaching and learning. Some reported that in the museum, education staff were more closely integrated into museum culture, contributing to exhibition development and working more closely with curators. Museum education websites are also improved, as is the provision of information in general.

Some changes in school use of museums have been observed. Teachers are more confident and expect more from museums, as their knowledge and understanding of how museums can be used increases. Schools are broadening and deepening the way they use museums, getting involved in longer term relationships and projects. This increase in confidence and the development of critical appreciation of how museums can be used seems to chime well with evidence from other sources. There are some suggestions that Renaissance is beginning to impact on other areas of museum work, although, from the evidence of Form D, this impact is not as strong as it might have been.

Form D revealed few differences between Phase 1 and Phase 2 museums. Educational provision in museums across England is at different stages of development, and in museums in both Phase 1 and Phase 2 Hubs there are both new and well-established services. Because of this, there seems to be very little difference in the ways in which the additional resources involved in Renaissance have been used. As the detailed report in Section 8 showed, there seems little distinction in the use of the additional funding in museums in either Phase 1 or Phase 2. Phase 1 museums continue to use the funds well, and most Phase 2 museums have quickly set plans in motion to enhance educational delivery, especially for schools.

## 9.13 Reviewing the research processes

The research study involved 69 museums in all; 47 museums in the three Phase 1 Hubs and 22 museums in the Phase 2 Hubs, more than had been planned. It has been considerably larger than the first study in 2003. The research involved a full range of research methods which produced different kinds of evidence that could be linked to produce a broad and deep picture of the learning outcomes of pupils visiting museums.

The research was commissioned in May 2005 and the final report submitted in February 2006, with a full draft submitted by December 15<sup>th</sup> 2005. Museums gave out Evaluation Packs between the beginning of September and the end of October. Case-studies and focus groups were set up and carried out between September and November. The period of time over which the research was carried out, although stretching across many months, would have been easier for researchers and research participants to manage had it been longer.

The Generic Learning Outcomes approach has been used to shape this research study and its analysis, and the GLOs have proved adequate to encompass, describe and analyse all dimensions of the evidence of learning generated by the research methods. This is the third very large national study that has used the GLOs and together with the other two studies, this report provides evidence and examples of how the GLOs can be successfully used to both provide numerical data concerning the impact of learning (which is required for the purposes of accountability) and also to describe the complexities and detail of museum-based learning. This study has shown that while each individual GLO can be identified for the purposes of research and analysis, they are closely interwoven in practice. There is a great deal that can be learnt from a close study of these reports.

It is also interesting to note that in 2005, teachers were much more attuned to an outcome-based approach to learning than they were in 2003, and had far fewer difficulties in responding to outcome-based questions. In part, this was because we could show them evidence of what we were looking for from the earlier studies, but it is also probably an effect of current government requirements.

During the research processes, we became more alert to a distinction between the GLOs as a conceptual and theoretical framework and how researchers can talk to teachers about learning outcomes. The GLOs provide a conceptual framework for research design and analysis, and while this conceptual framework provides the structure of research tools, the language used to relate the conceptual structure to teachers' understanding can and should vary. There is no reason why teachers have to understand the GLO approach to research and evaluation. The approach can be used to probe teachers' (and others') understanding, but the language used to do this can relate more closely to language that teachers use and recognise. This became very clear when we asked teachers about Skills as a learning outcome. It was not until the expression 'skills audit' was used that teachers could see what we meant and give us the information that we were looking

for. The GLOs work very well indeed as a conceptual and reporting structure, but the language used in classrooms may change, and researchers need to understand this and develop a view of the relationship between current expressions (which will change over time) and the names used for each of the five Generic Learning Outcomes, which (because they are very basic) will remain stable.

The research team would like to acknowledge with thanks the co-operation and help they received during this research study from the museum participants and from MLA.

## 9.14 Museums and government agendas

This research study has been carried out at a time when education policies and strategies have been developing rapidly. Some of these policies and strategies were outlined in Section 1 and there are references to government agendas throughout much of the report. The many diverse ways in which museums can contribute to government strategies is explored below, focusing on how museums promote creativity, how museums can help build personalised learning and how museums can help deliver Every Child Matters.<sup>29</sup>

## 9.14.1 Museums promote creativity and this could be further exploited

Creativity is high on the agenda of educational policy-makers and schools, but considerable development is still needed for creativity to be embedded into classroom teaching and learning. Museums are seen by teachers, and by pupils, as places where creativity can flourish, where new ideas are generated and where experiences can be inspirational.

Some schools are incorporating teaching for creativity into classroom work, and a small minority have policy statements on the encouragement of creativity and have developed a collective understanding of this complex concept. However, there are also a considerable number of schools where teachers do not know how to develop creativity in their pupils, are uncertain about the meaning of the term, and do not know how to adapt their teaching.<sup>30</sup> Many teachers assume that creativity is inherently connected with art and design, and do not understand that creativity is a generic quality.

Museums are already valued by some schools for their expertise in promoting creativity.<sup>31</sup> Much museum-based teaching is itself creative, using a range of skills and strategies that harnesses the enquiry and enthusiasm of pupils. In addition, however, the planning and development of museum-based workshops are designed to promote creative responses in participants.

This research study shows how highly both teachers and pupils value and are using museums for their capacity to stimulate creativity. When asked 'To what extent will you be using the museum to promote creativity?' teachers responded:

Enjoyment, Inspiration, Creativity	'Very likely' and 'likely' all museums 2005	
Exploring new ideas	88%	
Creative writing	74%	
Designing and making	76%	
Other forms of creative work	70%	

<sup>&</sup>lt;sup>29</sup> Department for Education and Skills, Every Child Matters, http://www.everychildmatters.gov.uk

<sup>&</sup>lt;sup>30</sup> Office for Standards in Education (2003) Expecting the unexpected: developing creativity in primary and secondary schools. HMI 1612, e-publication, 17-19.

<sup>31</sup> Ibid: 5, 16.

Dance/drama	49%

The work that children do in museums is imaginative and purposeful, setting the scene for innovation and valuable outcomes. While some schools are already using museums as external partners to promote creativity, this research suggests several ways in which this could be extended.

In many schools, cross-curricular opportunities are used to stimulate creativity<sup>32</sup> and some of the most creative work observed by HMI was interdisciplinary<sup>33</sup>. The use of museums for cross-curricular work has increased tremendously since 2003 but this is mainly by primary teachers on historical themes. Museums have a much wider cross-curricular potential than this. Museums displays are thematic and cross-curricular and objects are inherently interdisciplinary. This study shows how, using museum displays and collections, children can make connections and see relationships, reflect critically, and understand how their ideas and feelings have changed during the museum visit.

Museums and galleries are already synonymous in the minds of many teachers with creativity; teachers use museums because of their potential to stimulate the imagination, to raise questions in children's minds, and to engage pupils of all ages in critical reflection and emotional responses. This view of museums could be built upon to develop discussions between teachers and museums which reflected on creativity to develop a more complex understanding of what this can mean and how it can be promoted.

Museums can enable teachers to broaden their range of teaching styles and develop further their disposition and pedagogy for creativity. Museum educators routinely use a range of teaching styles during one school visit and experienced museum educators use objects, buildings, sites, materials and specialised individuals such as actors, artists or curators as part of their teaching repertoire. In addition, museum educators are highly skilled at teaching for multiple personalised outcomes through adopting an openended, enquiry-based and activity-led approach. Demonstrations and team-teaching could be used to enable teachers to explore some of these creative teaching methods. The secondment programme sponsored by DCMS offers opportunities and could be taken as a model for expansion.

#### 9.14.2 How museums can help in the development of personalised learning

Personalised learning focuses on the drive to tailor learning to the needs, interests and aptitudes of individual learners. It is a key issue in debates about current educational strategies<sup>34</sup> and this research suggests that museums should be part of this conversation. While museums have already developed strong and effective partnerships with schools, the character of museum-

<sup>33</sup> Ibid. 18.

<sup>&</sup>lt;sup>32</sup> Ibid. 13.

<sup>&</sup>lt;sup>34</sup> Department for Education and Skills, (2004) A national conversation about personalised learning, DfES/0919/2004

based learning could be further considered within the contexts of personalised learning.

What did you learn at the museum today? Second study 2005 contains strong evidence that museums capture the enthusiasm of pupils of all ages and abilities, regardless of their social or cultural backgrounds. In part, this enthusiasm stems from being able to make an individual emotional investment in a museum experience which results in a personalised response to a collective event. Personalised responses lead to the development of individualised relevance – ideas, objects, relationships, events become meaningful. Through this, pupils can flourish as individuals.

One of the key findings of this research study is the very high level of enjoyment and inspiration that pupils of all ages experience in museums:

- 68% of pupils at KS3 and above find museums inspiring (an increase of 10% in two years)
- 86% of pupils at KS2 and below thought museums were exciting places

The most important outcome for teachers, and the one they most expect to find in their pupils is enjoyment:

- 99% of teachers thought their pupils would have enjoyed the museum visit
- 95% teachers thought new interests would be aroused
- 95% thought their pupils would be inspired to learn more

Teachers appreciate the generative qualities of museums - how museum experiences generate learning through enjoyment and curiosity. In many museums, the atmosphere induces behaviour for learning, and behaviour for progress and enjoyment.

Diverse learning styles can be used in museums, and this is a major strength of a museum visit. The varied learning styles to be found in museum and gallery settings for learning frequently arise through physical activity, and can include object handling, analysis of visual displays, drawing, drama, group discussion, questioning, listening, team-work, and problem-solving. Through choosing from the diverse range of learning styles which are on offer during most museum workshops or visits, pupils can respond in ways that confirm their individual learning strategies, some of which are not always validated in classroom situations. This is particularly effective in the case of those who are not strong in conventional academic skills.

This research has found evidence of personal responses which take the form of:

- Active making of meaning and taking ownership of learning
- The use of prior knowledge to make events meaningful and significant in an individual way
- Making links with family circumstances.
- Use of preferred learning styles
- Aesthetic response to specific objects or buildings

- Building of confidence in individual capacity to understand and perform
- Stronger relationships between individual pupils and their peers as the result of shared experience

Pupils are aware of the potential of museums for learning, and are frequently confident that they have indeed learnt something. They have also been observed expecting their learning to be manifested in assessed work for which they expect to, and sometimes do, achieve higher grades. Teachers are less consistently confident about their pupils' learning, and this research shows that even where teachers are not confident that their pupils have learnt, those pupils are. The learning potential of museums could be further exploited, especially in relation to the development of strategies to personalise learning.

## 9.14.3 The contribution of museums to Every Child Matters

In Every Child Matters the government set out their proposals for working towards ensuring that every child had the chance to fulfil their educational potential through:

- being healthy
- staying safe
- enjoying and achieving
- making a positive contribution
- economic well-being

Every Child Matters underpins all government strategy to do with children and young people. What did you learn at the museum today? Second study 2005 provides strong evidence of how museums are able to contribute to enabling all children to succeed.

The tangibility of the experience and the opportunity to access information and feelings through the senses, combined with the possibility of individual emotional engagement makes the museum a powerful teaching tool, especially for those that find more academic approaches difficult. Pupils are able to deploy a broad range of learning styles, and respond to open-ended events in diverse ways. While this makes learning exciting and enjoyable for all pupils, it is an essential pathway to progression for those that find learning a challenge.

Every Child Matters understands that organisations must broaden opportunities for all children to reach their individual potential and museums can be very effective at this, particularly with older pupils. While pupils at KS2 and below are frequently spontaneously enthusiastic, older pupils find this more difficult. However, the research found many instances of older pupils talking about how they found museums cool and interesting, rather to their surprise, and how they would need to change their views about museums. Sometimes older pupils reported their emotional responses to their experiences in museums, again, to their own amazement. The Key Stage 3

National Strategy<sup>35</sup> suggests a climate for learning that contains two elements which are important for effective learning. These are the use of diverse learning styles and the acknowledgement of pupils' prior knowledge as a basis from which to build. While museum educators cannot be aware of the prior knowledge that each pupil brings to the museum experience, learning in museums is sufficiently open-ended and interdisciplinary for all young people to use what they already know to make sense of their experience at the museum.

The use of objects and of learning in a rich and tangible environment, while providing enjoyable, effective, and stimulating pathways to learning for all children, has long been acknowledged as especially valuable for pupils with special needs and for those who find learning difficult. This research has found that special schools are very much over-represented as museum users in relation to their distribution in England. Where special schools make up 5% of all schools in England, they made up 12% of the schools using the 69 museums in September and October 2005. There is a long-standing and successful relationship between special schools and museums, which this research confirms. Many special schools use museums frequently, and it may in some ways be easier for them to do so because they work with smaller groups of pupils, have easier access to transport than other schools, and have amore flexible timetable.

Museums are significant players in working towards social inclusion, as these findings demonstrate. According to our analysis of schools in relation to the deprivation indices, the 69 museums in this 2005 study are working with schools that are located in areas at all levels of deprivation, but disproportionately more schools than would be expected are located in the most deprived areas. Of school visits to museums, 32% are located in the 20% most deprived areas (SOAs) in England. Considering the actual schools visiting museums in relation to the percentages of pupils eligible for free school meals, museums are working across schools with pupils from all social backgrounds, but 38% of these visits are made by schools where more than 25% of the pupils are eligible for free school meals.

Museums are already making a strong contribution to inclusiveness in educational provision. With the new emphasis on education outside the classroom<sup>36</sup>, this contribution can be extended.

<sup>&</sup>lt;sup>35</sup> Department for Education and Skills, 2003, Key Stage 3 National Strategy: introducing the third year, 23.

<sup>&</sup>lt;sup>36</sup> Department for Education and Skills, 2005, Education Outside the Classroom Manifesto,

http://www.dfes.gov.uk/consultations/conDetails.cfm?consultationId=1370

## 9.15 Final conclusions

- **9.15.1** Museums are providing increased services that are highly valued by teachers, and are contributing powerfully to government agendas.
- **9.15.2** Renaissance funding has enabled increased provision for schools which on the whole remains of high quality. Contact numbers with school-aged children have increased by 40% in two years. Although museums are used by schools across the social spectrum, disproportionately large numbers of pupils at risk of deprivation and with special educational needs are being reached by museums. Teachers from all types of school are convinced of the value of museums for their pupils' learning. Satisfaction levels of teachers remain very high, though it is not always easy for them to take pupils out of school and in some cases more could be done by museums to help. Pupils are very enthusiastic and more could be done by teachers to follow up on museum-based learning.
- **9.15.3** This research shows clearly the enormous potential of museums to successfully generate the full range of learning outcomes; however, there is still a great deal more that could be done by museums, given the resources.