THE IMPACT OF PHASE 2 OF THE MUSEUMS AND GALLERIES EDUCATION PROGRAMME
(Volume 1)

submitted by
The Centre for Education and Industry
University of Warwick

Centre for Education and Industry
University of Warwick
Coventry CV4 7AL

Tel: 024 7652 3909
E-mail: cei@warwick.ac.uk
THE IMPACT OF PHASE 2 OF THE MUSEUMS AND GALLERIES EDUCATION PROGRAMME
(Volume 1)

Julian Stanley, CEI, University of Warwick
Sheila Galloway, CEDAR, University of Warwick
Prue Huddleston, CEI, University of Warwick
Craig Grewcock, CEI, University of Warwick
Faith Muir, CEI, University of Warwick
Andrew Newman, International Centre for Cultural and Heritage Studies, University of Newcastle
Sue Clive, Independent Consultant

31 July 2004

CEI at the University of Warwick, Impact of Phase 2 of the MGEP, Vol. 1
PREFACE

The intention of Volume 1 of this final report is to provide a summary of the types of project that featured in Phase 2 of the Museums and Galleries Evaluation Programme and of the types of institution that participated. Analysis of the findings is intended to reveal the extent to which the general objectives for the programme were achieved and to discern any patterns or significant distribution in that performance. The learning from the qualitative research is brought together to support general statements about the evidence for learning outcomes, the types of museum and gallery learning achieved and about the conditions for successful projects of this kind. The conclusions and recommendations follow from this programme should be read in conjunction with those from other research in this area. An Executive Summary is available as a separate document.

Volume 2 of the report contains case studies of individual projects and of the work of individual funding agencies.

All these documents are available from www.teachernet.gov.uk/m gep2

The images used in this publication are copyright to the various organisations whose activities they document.
CONTENTS

Acknowledgements
Preface

SECTION 1
1.1 Background 6
1.2 Evaluation Methodology 7

SECTION 2 Types of Data
2.1 Project Forms 11
2.2 Questionnaires 11

SECTION 3 Quantitative Analysis
3.1 The Projects 14
3.2 Analysis of Questionnaires 17
3.2.1 Key Stage 2,3,4: All Learning Objectives 17
3.2.2 Analysis by Key Stage and Year 34
3.2.3 Analysis by Gender 39
3.2.4 Key Stage 1: All Learning Objectives 41
3.2.5 All Adults: All Learning Objectives 43
3.2.6 Aggregates 44
3.2.7 Comparison between different kinds of project 46

SECTION 4 Thematic Analysis
4.1 Partnership between Museums/Galleries and schools 50
4.2 Communication 56
4.3 Planning and Time Management 57
4.4 Learning Outcomes 57
4.5 Differences between Projects with regard to outcomes 65
4.6 Styles of Teaching and Learning 66
4.7 Teacher Learning 78
4.8 Volunteers 80
4.9 Staff and Human Resources 81
4.10 Interaction with other Projects 83
4.11 Sustainability 83
4.12 Project Type 89

SECTION 5 Regional Agencies/engage
5.1 Management and Coordination 98
5.2 Structure and Posts 99
5.3 Use and distribution of resources 99
5.5 Contribution to Evaluation 100
Acknowledgments

The evaluation team would like to thank all those involved in MGEP2 – museum and gallery staff, freelancers, teachers, pupils, assistants, parents – for their contribution to this evaluation. In particular, the team are grateful to the efforts of project leaders and national, regional and engage co-ordinators who worked hard to support evaluation throughout the programme.
SECTION 1

1.1 Background

The second phase of the Museums and Galleries Education Programme (MEGP2) has been concerned to foster and develop the work of museums and galleries in supporting learning in schools. In particular, the programme has been concerned with how museums and galleries can support the National Curriculum. MEGP2 builds upon a well-established culture of museum and gallery education. Many, but not all, museums and galleries employ education officers or can draw upon experienced freelance practitioners.

Museum and gallery educators have, for some time, sought to deploy their collections, buildings, skills and other resources to meet the demands of the National Curriculum. In particular, there is a strong tradition of using an object-based learning pedagogy to enhance learning. Many of the projects within the MEGP2 programme reflect this tradition while others reflect other more recent trends within the museum and gallery world such as the use of performance, the growth of digital and web resources, the development of visual literacy and the revival of interest in drawing and mark making.

MEGP2 was funded by the Department for Education and Skills (DfES) and has been jointly managed by the Museums, Libraries and Archives Council (MLA), the new regional Museums, Libraries and Archive Councils (MLACs) and by the National Association for Gallery Education, engage, working with the gallery sector. It is a distinctive feature of the second phase of the MEGP, as against the first phase, that each of the 9 regional agencies and engage (in the case of galleries) were invited to bid for a tenth share of MEGP2 funds and the chance to co-ordinate MEGP2 in their domain. The 10 intermediate funding agencies were asked to frame an overall strategy for MEGP2 in their domain, to allocate MEGP2 resources between alternative projects and to play a role in supporting and evaluating those projects. Many MLACs have encouraged smaller, less experienced museums and galleries to run educational projects which has provided an opportunity to widen participation and develop professional skills.

MEGP2 got underway in the autumn 2002 when museums and galleries were invited to bid for funds to their local regional agency and engage respectively. Agencies proceeded at different paces, but in most cases projects had been selected and goals set by January 2003. The projects themselves were timed to run over different periods, mostly in 2003 with a few extending into the winter and spring of 2004.

MEGP2 took place at the same time as a number of significant programmes and developments. Of particular significance has been Phase 1 of the museum modernisation programme, Renaissance in the Regions, the impact of which has been evaluated by RCMG at the University of Leicester (RCMG, 2004a). Also relevant are the National/Regional Museum Education Partnerships (jointly sponsored by DfES and DCMS). An interim evaluation report was been published by RCMG in 2004 (RCMGb). Another important parallel programme has been the development, consultation and piloting of the Inspiring Learning For All by MLA, in partnership with RCMG, which sets out a framework for planning, recognizing and recording learning outcomes in museum education (www.inspiringlearningforall.gov.uk). Also significant has been development and research in preparation for a joint DCMS/DfES Museums and Galleries Education

CEI at the University of Warwick, Impact of Phase 2 of the MEGP, Vol. 1
Strategy and the publication of *Excellence and Enjoyment – a strategy for primary schools* (DfES, 2003).


CEI’s Interim Report on MGEP2 was published in early 2004(CEI, 2004) and DfES published a summary document, *Learning through Culture is Working!* (DfES, 2004)

### 1.2 Evaluation Methodology

It was a distinctive feature of MGEP2 that the museums and galleries bidding to participate in the programme were required to set their objectives in terms of a set of learning outcomes for pupils and teachers and in terms of specific access objectives (the numbers and types of pupils they intended to involve).

The intention of the evaluation has been to try to make well founded judgements about the extent to which the learning and other outcomes agreed for each project have been achieved.

In order to carry out this task the evaluation team has worked closely with the project co-ordinators, regional MLACs, engage and the MLA in order to put into place a number of tools for defining targets, tracking progress, recording and capturing and analysing evidence. The evaluation has created challenges for everyone involved. Project leaders have been asked to set targets using a language of learning outcomes which many of them found new and some found alien. Project participants, in both museums and galleries and schools have been asked to reflect upon and record progress in terms of learning outcomes, which again has been a new and demanding expectation in relation to museum and gallery learning for many.

The external evaluators sought to design a variety of evaluative processes, underpinned by corresponding documents and questionnaires, which would comprehend the variety of purpose, style and outcome of the 130 projects and permit not only the evaluation of any of one of them in terms of their agreed objectives but also the overall evaluation of the programme as a whole. This task has been shaped by a number of factors:

- Most of the projects were relatively small (the mean value of funding per project is £6403) with a relatively short period of use by any given group of learners. This implies that the overall impact of the programme will consist of the sum of a large number of much smaller impacts.
- Many of the museums involved are very small, some are run entirely by volunteers. These museums often had little experience of formal educational activity or of formal evaluation.
• Setting learning outcomes, which include academic, personal and social benefits, was a new requirement for some, but not all, of the project leaders in MGEP2. Successfully setting appropriate objectives and evaluating learning outcomes requires a close partnership between museums and galleries and schools – which was itself a stated aim of the programme.

• The co-ordination of MGEP2 programme was delegated to the new regional MLACs and engage. This delegation permitted relative autonomy to the way that each agency chose not only to co-ordinate projects but also in what kinds of evaluative work they supported or expected.

These factors led to an evaluation methodology which has sought to be comprehensive in the way that it has included all of the projects and all of the partners but flexible in that, so far as possible, participants have been able to contribute to the evaluation in a way that is meaningful and practicable for them.

A set of evaluation tools was designed, in consultation with engage and the MLACs, which were to be used by every project. All projects were asked to submit a detailed project description, regular quarterly monitoring reports and, at the end, a final report which included data on access (See Appendix 6 for these forms). All projects were asked to carry out exit questionnaires with teachers and at least a sample of their learners and, where appropriate, entry questionnaires as well. In addition each project was asked to keep a project portfolio which would contain qualitative materials such as pupil responses and work, images, records of meetings, news cuttings etc. The purpose of the portfolio was to inform and provide evidence for reports and case studies.

However, these common instruments formed only one strand of the national evaluation. The second strand consisted of individual evaluations of 53 of the projects and of the involvement of the ten funding agencies using a variety of qualitative techniques. The evaluation toolkit, in terms of interviews with teachers, pupils and facilitators, observations, examination of work and resources, was tailored to individual projects. These individual evaluations have resulted in short case studies which are published in volume 2 of this report. The case studies provide access to the variety and range of MGEP2 and they provide a way of testing, contextualising and unpacking findings which arise from aggregated data. In particular, the case studies are the source of findings and conclusions about how, as opposed to where, learning has occurred, how the museum and education sectors can learn from the experience of MGEP2, how those who participated in the programme can continue to develop professionally as individuals and in organisational terms, and how those who did not participate can draw on the experience of MGEP2.
The objectives of Phase 2 of the MGEP are to:

2.1 Promote sustainable partnerships between schools and local museums and galleries which:

- contribute to raising pupils' standards of achievement in the classroom
- link to specific aspects of the National Curriculum
- demonstrate learning outcomes for pupils and, in some cases, teachers.

The learning outcomes which DfES wishes to measure are:

For pupils:

fulfilment and satisfaction from achievement  
increased learning within the subject area  
increased understanding of connections between subjects  
increased learning across subjects  
increased self-confidence and self-esteem  
increased cultural understanding and respect and tolerance of others  
increased ability to work with others  
increased involvement in class, school community events  
the ability to make informed choices within and beyond the planned experiences  
positive attitudes to the experience and a desire for further experiences

For teachers, where relevant:

increased confidence  
increased expertise  
increased professional satisfaction

2.2 Ensure that more pupils and, where relevant, teachers, benefit from access to objects and images from museums and galleries during the school day.

_Criteria for Funding the Department for Education and Skills (DfES) Museum and Gallery Education Programme (MGEP) Phase 2_

Note on Entry and Exit Methodology

The research methodology included a strong emphasis on baseline identification as a means to identifying learning gain. This took a number of forms including entry and exit interviews, periodic reports and entry and exit questionnaires. The clear advantage of this methodology is that pupil responses relating to their learning in the evaluated activity can be judged in the light of attitudes, understanding and behaviour prior to that activity. However, questions before and after could not be identical and still make sense. Where
pupils are often being asked to make judgements about the quality of their experience we cannot be sure that they had in mind some kind of common scale which informed their two responses. Another concern is that this methodology seeks to identify progress in terms of the selection of stronger rather than weaker options, e.g. the progress from fairly confident to very confident. It will fail systematically to pick up on progress for those who were already at the top of the scale at the baseline. For example, progress for those pupils who reported themselves as very confident at entry and very confident at exit will be hidden. In the analysis that follows some attempt is made to explore this added value added by looking particularly at the progress of those with relatively “lower” baselines. This should not be taken to imply that those with “higher” baselines did not progress as much – it is only that evidence for their progress has not been generated by this methodology.
SECTION 2: TYPES OF DATA

2.1 Project Forms
130 projects which received grants submitted project descriptions though a minority failed to use the standard form to submit this information. This arose mainly because many projects had completed their process of bidding and approval before the standard project description form was agreed and museums and galleries were unable or unwilling to complete the additional paperwork.

116 projects submitted Final Reports.

2.2 Questionnaires

Four types of questionnaire were designed in consultation with engage, MLA and the regional MLACs. These consisted of a general exit questionnaire (B) and a corresponding entry questionnaire (A). In addition there was an alternative simpler exit questionnaire (C) for Key Stage 1 pupils or for those pupils for whom questionnaire B would be judged unsuitable.

During the design phase questionnaires were repeatedly modified in response to suggestions from museum and gallery educators, representatives of regional and national MLACs, experienced evaluators and analysts. The intention was to provide the means of reliably capturing simple and complex responses to common questions across a wide variety of projects. The questionnaires included open and closed questions. Museums and galleries were given the opportunity to customise parts of the questionnaires in order to ensure that they took into account the main objectives of each project. Guidance was prepared on how to use the questionnaires which allowed for some flexibility with regard to the place and timing of completion.

Rather than ask pupils general questions about learning it was decided to give them the opportunity to reflect upon the particular learning addressed in their project. This was done because it was an aim in this evaluation to evaluate learning described in terms of the national curriculum. Project leaders were given the opportunity to customise the questionnaires used on their projects by specifying just what kinds of learning pupils might make progress in. Other questions on the questionnaires ranged across the other possible learning outcomes such as group work, self-confidence and choices about learning. The entry questionnaire was intended to be administered at the start of the project and its purpose was to provide a base line against which to measure progress. Finally there was an adult questionnaire (D) for teachers, school learning support staff, facilitators, museum educators and other adults.

The variety and number of the projects involved led to some variation in the way that questionnaires were used. Some museums and galleries worked closely with partner schools to ensure that all pupils completed questionnaires. Others, some of whom were working with very large numbers of pupils, opted for a sample asking one or more schools to return questionnaires. In some cases questionnaires were completed at the end of a museum visit, however, frequently the projects involved extended work in the classroom. In such cases teachers administered questionnaire completion.
A total of 8810 valid questionnaires were submitted by the deadline of 14th May 2004. 1700 questionnaires of all kinds were submitted by the deadline but could not be entered for analysis usually because an entry questionnaire for a pupils was submitted but no corresponding exit questionnaire. Some of these questionnaires could not be included in the formal analysis because the questions had been changed to suit the individual project and were no longer compatible with other questionnaires, however, where possible these questionnaires were used to inform the writing of case studies. 355 questionnaires were submitted after the deadline but before the end of June 2004; these could not be included in the aggregate analysis though they have informed the writing of case studies and the qualitative analysis.

Table 2.1: Total respondents by questionnaire

<table>
<thead>
<tr>
<th>Type of Respondent</th>
<th>Code</th>
<th>Number of valid questionnaires received by deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Stage 2,3,4; Pupil entry</td>
<td>A</td>
<td>2745</td>
</tr>
<tr>
<td>Key Stage 2,3,4; Pupil exit</td>
<td>B</td>
<td>4093</td>
</tr>
<tr>
<td>Key Stage 1 Pupil</td>
<td>C</td>
<td>1436</td>
</tr>
<tr>
<td>Adults/Teachers</td>
<td>D</td>
<td>536</td>
</tr>
</tbody>
</table>

Final reports suggest total pupil participation in MGEP2 of about 30,644 which suggests a respondent sample of about 18%. The composition of the sample is provided below.

Table 2.2: Respondents by gender

<table>
<thead>
<tr>
<th>Type of Respondent</th>
<th>Total n</th>
<th>Male %</th>
<th>Female %</th>
</tr>
</thead>
<tbody>
<tr>
<td>B: Key Stage 2,3,4; Pupil exit</td>
<td>4093</td>
<td>48.9</td>
<td>51.1</td>
</tr>
<tr>
<td>C: Key Stage 1 Pupil</td>
<td>1436</td>
<td>49.3</td>
<td>50.7</td>
</tr>
</tbody>
</table>

A more detailed breakdown by age is available of the 2745 pupils who completed both entry and exit questionnaires. This is shown in tables 2.3 and 2.4. 70% of these respondents were in Key Stage 2, 24% in Key Stage 3 with only 6% in Key Stage 4. Appendix 2 provides an analysis of total participants in MGEP2 according to the final reports returned by almost all projects. These suggest that total participation was 16% Key Stage 1, 51% Key Stage 2, 16% Key Stage 3 and 4% Key Stage 4. These differences suggest care should be taken when aggregating responses across all of the sample since age is a significant factor affecting impact.

Table 2.3: Breakdown of those respondents who completed entry and exit questionnaires by key stage and gender

CEI at the University of Warwick, Impact of Phase 2 of the MGEP, Vol. 1
### Table 2.4 Breakdown of those respondents who completed entry and exit questionnaires by school year and gender

<table>
<thead>
<tr>
<th>School Year</th>
<th>Count</th>
<th>Col %</th>
<th>Count</th>
<th>Col %</th>
<th>Count</th>
<th>Col %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Stage 2</td>
<td>933</td>
<td>66.6%</td>
<td>968</td>
<td>74.1%</td>
<td>1901</td>
<td>70.2%</td>
</tr>
<tr>
<td>Key Stage 3</td>
<td>367</td>
<td>26.2%</td>
<td>275</td>
<td>21.0%</td>
<td>642</td>
<td>23.7%</td>
</tr>
<tr>
<td>Key Stage 4</td>
<td>101</td>
<td>7.2%</td>
<td>64</td>
<td>4.9%</td>
<td>165</td>
<td>6.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1401</td>
<td>100.0%</td>
<td>1307</td>
<td>100.0%</td>
<td>2708</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

### Table 2.5 Respondents by funding agency (Key Stage 2 and above)

<table>
<thead>
<tr>
<th>Funding Agency</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Midlands</td>
<td>342</td>
<td>6.1</td>
</tr>
<tr>
<td>West Midlands</td>
<td>777</td>
<td>13.8</td>
</tr>
<tr>
<td>South West</td>
<td>1658</td>
<td>29.4</td>
</tr>
<tr>
<td>North West</td>
<td>542</td>
<td>9.6</td>
</tr>
<tr>
<td>London</td>
<td>365</td>
<td>6.5</td>
</tr>
<tr>
<td>South East</td>
<td>296</td>
<td>5.3</td>
</tr>
<tr>
<td>Yorkshire</td>
<td>240</td>
<td>4.3</td>
</tr>
<tr>
<td>North East</td>
<td>529</td>
<td>9.4</td>
</tr>
<tr>
<td>East of England</td>
<td>415</td>
<td>7.4</td>
</tr>
<tr>
<td>Engage</td>
<td>472</td>
<td>8.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5636</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>99.00</td>
<td>32</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5668</td>
<td></td>
</tr>
</tbody>
</table>
The museums and their partner schools in the South West returned significantly more questionnaires than other regions. This reflects the relatively large participation in MGEP2 in the South West (See Appendix 1) Table 2.6 shows a considerable variation in the age composition of respondents who completed entry and exit questionnaires between regions. These differences are not always reflected by differences in the composition of participation by agency which means that care must be taken in analysing impact at agency level.

Table 2.6 Respondents by age and by region

<table>
<thead>
<tr>
<th>Region</th>
<th>Key Stage</th>
<th>Total</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Row %</td>
<td>Row %</td>
<td>Row %</td>
</tr>
<tr>
<td>East Midlands</td>
<td>56.6%</td>
<td>13.9%</td>
<td>29.6%</td>
</tr>
<tr>
<td>West Midlands</td>
<td>69.1%</td>
<td>18.5%</td>
<td>12.4%</td>
</tr>
<tr>
<td>South West</td>
<td>93.1%</td>
<td>3.7%</td>
<td>3.2%</td>
</tr>
<tr>
<td>North West</td>
<td>.2%</td>
<td>94.3%</td>
<td>5.4%</td>
</tr>
<tr>
<td>London</td>
<td>55.2%</td>
<td>32.3%</td>
<td>12.5%</td>
</tr>
<tr>
<td>South East</td>
<td>63.5%</td>
<td>36.5%</td>
<td></td>
</tr>
<tr>
<td>Yorkshire</td>
<td>68.6%</td>
<td>31.4%</td>
<td></td>
</tr>
<tr>
<td>North East</td>
<td>99.5%</td>
<td>.5%</td>
<td></td>
</tr>
<tr>
<td>East of England</td>
<td>66.8%</td>
<td>29.2%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Engage</td>
<td>60.3%</td>
<td>26.2%</td>
<td>13.5%</td>
</tr>
</tbody>
</table>

SECTION 3 QUANTITATIVE ANALYSIS

3.1 The Projects

130 distinct projects received separate grants. Two additional projects were initially granted funds but were unable to carry out the projects and refunded their grants. The number of museums involved was larger, estimated at 165. 126 of these projects were funded as museums through regional MLACs and 16 were funded as galleries through engage. The following analysis includes the two organisations that subsequently dropped out.

Table 3.1: Projects by funding agency
### agency

<table>
<thead>
<tr>
<th>Agency</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Midlands</td>
<td>10</td>
<td>7.6</td>
</tr>
<tr>
<td>West Midlands</td>
<td>9</td>
<td>6.8</td>
</tr>
<tr>
<td>South West</td>
<td>21</td>
<td>15.9</td>
</tr>
<tr>
<td>North West</td>
<td>12</td>
<td>9.1</td>
</tr>
<tr>
<td>London</td>
<td>22</td>
<td>16.7</td>
</tr>
<tr>
<td>South East</td>
<td>7</td>
<td>5.3</td>
</tr>
<tr>
<td>Yorkshire</td>
<td>14</td>
<td>10.6</td>
</tr>
<tr>
<td>North East</td>
<td>14</td>
<td>10.6</td>
</tr>
<tr>
<td>East of England</td>
<td>7</td>
<td>5.3</td>
</tr>
<tr>
<td>Engage</td>
<td>16</td>
<td>12.1</td>
</tr>
<tr>
<td>Total</td>
<td>132</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*NB: Where projects were jointly managed or treated as an umbrella project they have been counted as a single project for the purposes of this table.*

### The Institutions

97 of the institutions running projects described themselves as museums, 20 as galleries and 8 as archives. 49% of the institutions were local authority bodies, 33% independent, 8% university and 4% as national organisations. 3% described themselves as arts centres.

#### Table 3.2: Projects by organisation type

<table>
<thead>
<tr>
<th>work of organisation</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid national</td>
<td>5</td>
<td>3.8</td>
<td>3.9</td>
</tr>
<tr>
<td>local authority</td>
<td>64</td>
<td>48.5</td>
<td>50.0</td>
</tr>
<tr>
<td>independent</td>
<td>44</td>
<td>33.3</td>
<td>34.4</td>
</tr>
<tr>
<td>university</td>
<td>10</td>
<td>7.6</td>
<td>7.8</td>
</tr>
<tr>
<td>arts centre</td>
<td>4</td>
<td>3.0</td>
<td>3.1</td>
</tr>
<tr>
<td>studio</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
</tr>
<tr>
<td>Total</td>
<td>128</td>
<td>97.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>99.00</td>
<td>4</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td>132</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

*NB: Missing implies that this information was not provided by the project*

62% were registered museums and 10% were regional hubs. There were more institutions involved than projects because a number of projects actually involved two or more museums or galleries. 17% of institutions had participated in MGEP1 the first phase of this programme.
In terms of employment, the single largest group of the museums or galleries involved were relatively small: 38% employed fewer than 6 individuals. Taken together with the relatively large proportion of independents involved (33%) this suggests that MGEP2, in comparison to MGEP1 and to other museum education initiatives such as Renaissance in the Regions, did extend involvement to smaller museums which have in the past participated less in educational activity. Undoubtedly this was connected with the fact that the funding agencies disbursing MGEP2 funds chose, for the most part, to distribute the resources in relatively small parcels. (The programme required agencies to distribute 50% of funds in the form of “small grants” but most agencies distributed most of MGEP2 resources in this way) Some agencies explicitly sought to involve small, independent and volunteer run museums because these were regarded as untapped potential for educational activity.

Table 3.3: Numbers of full time employees in project museums and galleries

<table>
<thead>
<tr>
<th>full time employees</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 0-5</td>
<td>47</td>
<td>35.6</td>
<td>37.6</td>
</tr>
<tr>
<td>6-10</td>
<td>18</td>
<td>13.6</td>
<td>14.4</td>
</tr>
<tr>
<td>11-20</td>
<td>18</td>
<td>13.6</td>
<td>14.4</td>
</tr>
<tr>
<td>21-60</td>
<td>30</td>
<td>22.7</td>
<td>24.0</td>
</tr>
<tr>
<td>61-150</td>
<td>7</td>
<td>5.3</td>
<td>5.6</td>
</tr>
<tr>
<td>150 plus</td>
<td>5</td>
<td>3.8</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>94.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>99.00</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>132</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

NB: Missing implies that this information was not provided by the project

Projects

74% of projects involved museum or gallery visits, 28% involved loans, 15% were web based and 33% involved artists. 8% were “other” (n=130).

In terms of the types of learning addressed, History ranked most popular at 62% followed by Art (51%), Literacy (45%), Citizenship (41%), English (32%), ICT (32%), Geography (25%) Science (23%) Spiritual, Moral & Cultural (23%) Technology (20%) Numeracy (20%), PHSE (18%) Maths (8%), R.E. (6%), Modern Languages (3%) Cross-curricular learning was targeted in 22% of projects (n=130).

Aside from learning defined in terms of the curriculum, popular learning goals were self esteem (80%) positive attitudes towards future learning (76%) fulfilment and satisfaction from achievement (75%), increased ability to work with others (68%).
Less popular targets were the ability to make choices within and beyond planned experiences (45%), increased cultural understanding and respect and tolerance (46%) and increased involvement in school or community events (44%) (n=130).

A number of regional MLACs did make it a feature of their grant allocation process to seek to encourage projects which addressed a relatively wide range of curriculum areas. The above figures suggest some success in this respect.

34% of projects targeted KS1 learners, 62% targeted KS2 learners, 45% targeted KS3s and just 25% targeted KS4s (n=130). A number of projects were cross-phase. Some projects reported that they were targeting special groups: Special Educational Needs (16%), English as an Additional Language (8%), cultural groups (16%), disadvantaged (27%), Gifted and Talented (14%), urban schools (41%), rural schools (28%) (n=130).

It was an objective of a number of regional MLACs and of some particular museums and galleries to use the opportunity of MGEP2 to work with older and younger pupils rather than, to remain with what some saw as the tried and tested field of KS 2.

50% of the project leaders (n=130) reported that they were breaking new ground because they had not addressed their MGEP2 objectives in previous work. 17% of project leaders regarded their MGEP2 project as a way to continue previous work while 35% regarded their MGEP2 project as an addition to other educational projects.

A complete list of all of the projects together with some details on participation, grants and costs is provided in Appendix 2.

3.2 Analysis of Questionnaires

3.2.1 All Key Stage 2, 3 & 4 Respondents: All Learning Objectives

Enjoyment

Pupil enjoyment was not a formal objective of any of these projects. However, it is generally held that pupil enjoyment is associated with pupil engagement and learning and research with teachers suggests that teachers are motivated to take up opportunities for museum and gallery learning if they believe their pupils will enjoy the experience (RCMG, 2004a)

55% of pupils (n= 4093) enjoyed their experiences “a lot” and an additional 39% found them “satisfactory”; a cumulative total of 94% can be said to have enjoyable experiences from the project. The distinction between drawn between these degrees of enjoyment is subject to interpretation. There is some evidence from interviews that pupils, particularly older pupils, are more cautious about expressing high levels of enjoyment in questionnaires than they are in conversation. Teacher respondents judged the general responsiveness of pupils somewhat more positively. Teachers were asked how well pupils responded (including key stage 1 pupils); 84% judged that they had responded very positively and another 15% judged that they had responded satisfactorily – a cumulative total of 98%.
Table 3.4: Key Stage 2 and above pupils reporting enjoyment (Question B2)

<table>
<thead>
<tr>
<th>B2</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a lot</td>
<td>2208</td>
<td>55.3</td>
<td>55.3</td>
</tr>
<tr>
<td>ok</td>
<td>1556</td>
<td>39.0</td>
<td>94.3</td>
</tr>
<tr>
<td>not much</td>
<td>176</td>
<td>4.4</td>
<td>98.7</td>
</tr>
<tr>
<td>don't know</td>
<td>53</td>
<td>1.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>3993</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Missing 99.00 1675
Total 5668

The association between enjoyment and learning is borne out by the following chart. The white section of the bars show that high learning is most likely to be found where enjoyment levels are highest.

Chart 3.1: Cross Tabulation: Enjoyment (b2) against Learning (b4) for Key Stage 2 and above (n = 3950)
Learning

The questionnaires were designed to ask pupils two questions about two specific areas of learning. In one project, for example, the general questions where customised to read:

**B4**: How much do you think you learnt about Colchester during World War 2 on this project?

**B5**: How much do you think you learnt about using primary sources on this project?

This means that responses to these questions do relate to learning about identifiable subjects.

With regard to the first item of subject learning (known as “subject”): 47% of pupils believed that they had learnt a lot while another 40% believed that they had learnt something. 10% reported that they had not learnt much. The second item of subject learning (known as “theme”) produced similar findings: 43% of pupils believed they had learnt a lot, 39% that they had some learning, 11% that they had not learnt much.

Teachers making judgements about the learning of their pupils with regard to identified subjects and themes made more positive judgements about the extent of learning than pupils. Some allowance should be made for the fact that some of these teachers were judging learning in Key Stage 1 projects where learning may have been greater than in projects for older pupils. Nevertheless, there remains a difference between pupil and teacher judgements about the extent of learning.

**Table 3.5: KS 2 and above pupils and teachers. Learning about subject (B4) and theme (B5) percentages**

<table>
<thead>
<tr>
<th></th>
<th>% Subject (Pupils)</th>
<th>% Theme (Pupils)</th>
<th>% Subject (Teachers)</th>
<th>% Theme (Teachers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a lot</td>
<td>46.7</td>
<td>43.1</td>
<td>69.7</td>
<td>62.0</td>
</tr>
<tr>
<td>something</td>
<td>39.7</td>
<td>38.6</td>
<td>21.2</td>
<td>27.2</td>
</tr>
<tr>
<td>not much</td>
<td>9.9</td>
<td>11.1</td>
<td>2.4</td>
<td>3.9</td>
</tr>
<tr>
<td>don't know</td>
<td>3.8</td>
<td>7.2</td>
<td>6.7</td>
<td>6.9</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The broadly similar responses to these two separate questions may result from the fact that many projects chose to define the two learning questions so that they addressed different dimensions of one learning activity. In the example from Colchester, which is not unrepresentative, pupils are being asked in the first question about knowledge acquisition and in the second about skill development. However, in the activity in question successful development of the targeted skill is likely to have been a condition of knowledge gain so responses to the two questions are likely to be similar.
Entry questionnaires provide an opportunity to examine progress in relation to pupils’ claims of knowledge of identified subject and theme at the start of the project. Comparison of simple aggregates between entry and exit responses with regard to knowledge and learning about the two specified subjects reveals some learning gain:

Table 3.6: Key Stage 2 and above. Comparison between reported knowledge and learning for respondents completing both entry and exit questionnaires (n=2923)

<table>
<thead>
<tr>
<th></th>
<th>Subject Entry %</th>
<th>Subject Exit %</th>
<th>Theme Entry %</th>
<th>Theme Exit %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>lots</td>
<td>16.8</td>
<td>46.7</td>
<td>13.9</td>
</tr>
<tr>
<td></td>
<td>something</td>
<td>41.0</td>
<td>39.7</td>
<td>31.6</td>
</tr>
<tr>
<td></td>
<td>not much</td>
<td>32.2</td>
<td>9.9</td>
<td>38.0</td>
</tr>
<tr>
<td></td>
<td>don't know</td>
<td>10.0</td>
<td>3.8</td>
<td>16.4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The table shows that while only 17% of pupils claimed to know “lots” about the targeted subject knowledge at the start of the project 47% claimed to have learnt “a lot” by the end.

Another way of exploring learning is to calculate the number of individuals who experienced “learning gain” where these pupils are defined as those pupils who report a level of learning on the project greater than their baseline learning in school. “No learning gain” does not imply that pupils did not report low or high learning on the project; “no learning gain” means that learning on the project was at the same level or lower than baseline learning.

Chart 3.2: Proportion of all respondents who completed entry and exit questionnaires (minimum n=1338) reporting “Learning Gain” for various learning outcomes
According to this measure 64% of respondents who completed entry and exit questionnaires reported higher learning in relation to their base line in terms of the specified “subject” of the activity and 67% in terms of the specified “theme” of the activity. Value added in this sense appears to be relatively strong where the impact is on learning and less strong for social and personal learning. (See appendix 8 for an explanation of the value added measure)

Another way to explore this learning gain is to examine the progress of particular groups of pupils with different baselines. In the chart below the white areas show learning gain for pupils with different starting points: 58% of those who reported high knowledge of the subject went on to report high learning. These students had a good foundation and are likely to have been generally “good” learners. More remarkable is the learning gain of the 46% of the 843 pupils who reported that they knew little about the “subject” at the start of the work and then said they had learnt a lot about it at the end, as did 44% of the don’t knows, and 43% of those who said that they knew something.
Chart 3.3: Percentages of respondents reporting the extent of learning about “subject” at exit grouped in terms of extent of knowledge at entry. (n=2617).

(A1*B4 Cross-tabulation)

Confidence

As reported above, 80% (n=130) of all of the projects adopted the DfES objective of pupil self confidence or self-esteem. In fact 58% of learners reported that they felt more confident as a result of their involvement in the project. The questionnaire did not seek to distinguish between pupils feeling more confident about particular activities and a general sense of confidence or self-esteem. Many of the activities that pupils were involved in were relatively short and it would be surprising if they had resulted in a revised self-image. The significance of changes in perceptions of confidence is explored further in Section 5.

Table 3.7 : Key Stage 2 and above. Pupils reporting on their own confidence as a result of work they have done on the project. Question B6.
Teachers were even more positive in their judgements about the impact on pupils’ confidence. 36% of teachers judged that “generally pupil confidence had been increased” while another 41% “judged that some pupils had gained in confidence.”

Comparison between entry and exit responses reveals that while those students who at entry described themselves as very confident were most likely to exit feeling more confident, nevertheless 41% of those who at entry described themselves as “not very confident” described themselves at exit as “more confident” as did 37% of the don’t knows and 58% of those who were “fairly confident”. These gainers in confidence are shown as the white sections of the bars in chart 3.4.

**Chart 3.4: Percentages of respondents reporting changes in confidence at exit grouped in terms of how confident they were at entry (n=2609)**
Satisfaction

75% of projects set themselves the objective of pupil fulfilment and satisfaction from achievement. 49% of pupils described themselves as very pleased with the work that they did themselves on the project and another 42% were satisfied – a cumulative total of 91% who were at least satisfied.

At entry, 39% of pupils described themselves as usually very pleased with what they achieve in school and another 51% as satisfied. This analysis does register some increase of satisfaction; however, the margin is more modest than that reported by many individuals in interviews.

Chart 3.5 examines satisfaction for different groups of pupils in relation to their own baseline. The white sections of the bars show those pupils who were very pleased with the work they did on the project; the four bars represent groups of pupils with different levels of satisfaction about their school work. Again the pupils with high general satisfaction with their own work are most likely to have been very pleased by their work on this project. However, there were again significant gains for other groups: 39% of those who at entry described themselves as being “satisfied” with their learning in school declared themselves “very pleased” with their own work on the project and 71% of those who described themselves as being “often disappointed” by what they usually achieve in

CEI at the University of Warwick, Impact of Phase 2 of the MGEP, Vol. 1
school described themselves as being either “satisfied” (=OK) or “very pleased” by their project work.

Chart 3.5 Percentages of respondents expressing satisfaction with their own work at exit grouped in terms of how satisfied they were with their own school work at entry (n=2630)

Personal Commitment

41% of projects targeted increased involvement in class, school community events. Furthermore, teachers and educationalists routinely identify engagement as a condition of learning and research into museum and gallery learning (RCMG, 2004a) has explored this connection.

39% of pupils reported that they had been “very engaged” in the activity while another 47% reported that they had been “quite engaged”. Overall, these figures were not significantly different from those reported at entry when pupils were asked how engaged they were in school work in general: 37% said that they were “very involved in most schoolwork” and another 37% reported they get “very involved in some school work” while 16% were “sometimes involved”.

However, overall teacher responses suggested strong engagement relative to what might be conventionally be expected of pupils. 84% of teachers (n=516) said that pupils
responded very positively and another 15% said they responded satisfactorily. 82% said that 100-75% of their pupils were “fully engaged in this project” and another 13% said that 75-50% were “fully engaged”.

Chart 3.6 identifies the impact of projects upon different groups of pupils. The white sections of the bars shows that while those who “usually get involved in most school work” were most likely to report “I was very enthusiastic and got very involved” of their museum and gallery learning activity, 35% of those who sometimes get very involved and 25% of those who sometimes get “quite involved” and even 23% of those who “rarely get involved” with school work were all highly engaged. In the case of this last “disengaged group” the percentage rises to a total of 60% if we add together those who were very involved and those who were quite involved by the project.

The analysis suggests that in general museum and gallery learning, like other learning experiences, is most likely to engage pupils who have a track record of being engaged in learning. However, it also suggests that museum and gallery learning does engage a significant proportion of those pupils who are less consistently engaged by learning or who are, by their own admission, disengaged.

**Chart 3.6: Percentages of Key Stage 2/3/4 pupils describing the extent of personal engagement with their project at exit grouped in terms of their general levels of engagement with school work at entry (n=2570) (A8 * B7 Cross-tabulation) (i = involved)**
Working with other Pupils

52% of pupils believed that they had worked very well with other pupils and another 35% believed that they had worked reasonably well. An overall total of 87% implies that pupils believe that learning in groups and museum and gallery learning go together well. However, group learning is well established in many schools and the aggregate performance of pupils in group work shows modest progress against entry when 46% of pupils agreed that they “usually found it very easy to work with other pupils when you are learning” and another 38% found it OK to work with other pupils.

The responses of teachers suggest that there may have been a more significant impact on the ability of pupils to work in groups than is revealed by these aggregates. 35% of teacher and other adult respondents (n=535) agreed that “generally student ability to work with others has increased” while another 28% agreed that “the ability of a few students to work with others has increased.”

The Chart 3.7 explores the development of group work for different groups of pupils. The white sections of each bar identify the most positive experiences of group work for KS2 and older pupils in MGEP2. Added value or progress can be identified for the 45% (n=427) of pupils who usually find group work satisfactory but working on these projects had a very positive experience of group work. A number of teachers commented on questionnaires and in interviews on particular pupils who had worked better with others than they usually did. This appears to be confirmed by the fact that 36% of those who found it difficult to work with others (n=137) said that they worked “very well” with others on these projects and another 42% (n=158) of the same group said that they worked “reasonably well” with others.

Chart 3.7: Percentages of Key Stage 2/3/4 pupils with positive experiences of group work through their project at exit grouped in terms of their general experience of working with others at entry (n=2480) (A5 * B8 Cross-tabulation)
Working with Teachers and other Adults

48% of pupils reported that they had worked “very well with adults” on their MGEP2 project and another 37% said that they worked “reasonably well with adults.” This suggests good pupil-teacher relationships in MGEP2 projects but it does not provide evidence that these relationships were significantly better than usual: 45% of pupils said, at entry, that they usually found it very easy to work with teachers and another 41% said they found it “OK”.

Teachers and other adults (n=481) were more positive in identifying an increase in this capability. 35% agreed that “generally student ability to work with adults has increased” and another 28% said that “the ability of a few students to work with adults has increased.” Qualitative responses of pupils and teachers also suggest that working with new adults in new ways was valued in many projects.

The white sections of the bars in chart 3.6 show the percentages of different groups of pupils who judged that they had worked very well with adults on the project. Most significant among these are the 34% of the pupils (n=272) who reported at entry that working with teachers “can sometimes be difficult or frustrating.” Another 43% of this group said that “they worked reasonably well with adults” on their project.
Choice

This question was designed to investigate whether a less structured style of learning with more control over learning by the pupil would impact upon learning. It also related to the DfES learning outcome for pupils, adopted by 45% of the projects: “the ability to make informed choices within and beyond the planned experiences”.

44% of pupils believed that they had often been able to make their own choices on their MGEP2 project and another 37% said that “Sometimes I had the chance to make choices about my work.” This contrasted with the 24% who, at entry, reported that they “often” get the chance to make choices in their school work and another 52% who said that they “sometimes” get to make choices in their schoolwork.

Chart 3.9 shows that 40% of those who believe that they only sometimes make choices in their school work and 34% of those who believe that they hardly ever make choices in their school work did, through their projects, get frequent opportunities to make choices about their learning.
Comparing the way that pupils reported their satisfaction with their own work in MGEP2 and the extent to which they made choices while doing it we find that the greater the degree of choice they experienced the more likely they were to be satisfied with their own learning as can be seen in Chart 3.9. This relationship was confirmed by the association between high levels of choice and positive judgements about the amount of learning pupils achieved shown in Chart 3.10.
Chart 3.11 Percentages of Key Stage 2/3/4 pupils reporting various amounts of learning on their project grouped in terms of their experiences of making choices on their project at exit (n=3741) (B4 * B11 Cross-tabulation)
Future Plans

Pupils were asked about future behaviour partly as a general indication of how much they valued their experiences but partly to assess whether their MGEP2 project did achieve the specific learning outcome, adopted by 76% of the projects, namely: *positive attitudes to the experience and a desire for further experiences.*

68% of pupils declared that they would like more learning that involved galleries or museums, 15% said they would not and 16% said that they didn’t know. 56% said that there was other learning or activities that they would like to try as a result of involvement in their project. Many pupils went on to spell out what it was that they would like to learn or try on their questionnaires.

An example of how the curiosity of a Year 5 pupil has been stimulated by something that she saw in passing at The American CEI at the University of Warwick, Impact of Phase 2 of the MGEP, Vol. 1
Teachers were asked whether the project had any effect upon students’ attitudes towards learning: 39% said that “generally students’ attitudes towards some kinds of learning had become more positive” and another 31% said that “A few students have developed more positive attitudes towards learning.” 26% said they did not know.

Chart 3.12 shows a strong association between the experience of having choices and the desire to follow up an MGEP2 learning experience. Pupils who experienced frequent choices in their MGEP2 learning were roughly 3 times more likely to express the desire for further learning. Pupils who only experienced some choice making in their learning were about twice as likely to desire further learning. Pupils who experienced hardly any opportunity to make choices (only 339 pupils) were only as likely to desire future learning as not.

**Chart 3.12** Percentages of Key Stage 2/3/4 pupils expressing the desire for further learning or activities in the light of their MGEP2 projects grouped in terms of their experiences of making choices on their project at exit (n=3729) (B10 * B11 Cross-tabulation)
3.2.2 Analysis by Key Stage and Year (Key Stages 2, 3 & 4)

Research into Museum and Gallery Learning regularly shows a reduction in impact as pupil age rises. (RCMG 2004a) MGEP2 was no exception. It is important to remember that the number of Key Stage 4 respondents (n=165) is very small.

Chart 3.13 Enjoyment of project by Key Stage – all respondents who completed entry and exit questionnaires (n=2708)

The variation of satisfaction with own work, as shown in chart 3.13 is somewhat less than the variation in enjoyment as is the variation in learning (chart 3.14) leaving aside the very small group of Key Stage 4 respondents.
Chart 3.14 Reported satisfaction by Key Stage – all respondents who completed entry and exit questionnaires (n=2708)
Chart 3.15 Reported learning by Key Stage – all respondents who completed entry and exit questionnaires (n=2708)
Chart 3.16 suggests that there was little difference between the impact on the confidence of KS2 and KS3 respondents while chart 3.17 suggests that there was a perception of greater opportunities for choice with Key Stage 3 than Key Stage 2 pupils. This apparent anomaly may result from the attempts of project designers to build in more choice for older pupils and it may be that this factor helped to make these projects appropriate for older pupils. There is qualitative evidence that pupils reported less learning if they judged that activities were more suitable for younger pupils.
Finally chart 3.18 suggests that pupils in Key Stage 2 and 3 experienced a variation in levels of personal engagement similar to variation in reported learning.

In general the all of these charts show the same pattern: the impact on older pupils is less than the impact on younger pupils. The case of confidence, where there was no differential impact, is interesting. It is possible that it older pupils are more susceptible to activities intended to raise their confidence than they are to those aimed to increase their learning. Alternatively it may be that older pupils are more used to the assessment of learning in relatively formal terms and therefore less likely to highly rate the learning they get from museums and galleries as opposed to the gains in personal development.
3.2.3 Analysis by Gender

Analysis by gender suggests that the museum and gallery projects had a greater impact on every aspect of the performance of girls as against the performance of boys. The table below shows the impact on satisfaction: 55% of females as against 45% of boys were very pleased with the work that they did on the project. Similar or smaller gaps can be found for every other indicator of performance: learning, confidence, personal engagement.

Although many teachers reported that boys had responded particularly well in some projects this is not well supported by the quantitative data. Not only was the impact on girls greater, with a difference of up to 10%, but girls progressed further in relation to their own baseline. For example 43% of the girls who were satisfied with their own achievement at school generally were very satisfied with their MGEP2 work while only 35% of satisfied boys became very pleased with their own work.

It follows that girls gained more – but boys still did gain. It may be that those teachers who remarked on relatively high impact on boys should not be understood as claiming a high impact relative to girls but rather a high impact relative to boys’ relatively low baseline.
The same picture is shown using the value added measure. Table 3.8 shows a valued added gain for 49% of girls as against 42% of boys with regard to expressing satisfaction in their own MGEP2 project work as against their school work in general.

**Table 3.8: Proportion of boys and girls who completed entry and exit questionnaires reporting a gain in satisfaction with regard to their own work (n=1597) (Questions A3 and B3)**

<table>
<thead>
<tr>
<th></th>
<th>Own school work (a3b3)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No gain</td>
<td>gain</td>
</tr>
<tr>
<td>Row %</td>
<td>Row %</td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>51.4%</td>
<td>48.6%</td>
</tr>
<tr>
<td>male</td>
<td>58.3%</td>
<td>41.7%</td>
</tr>
</tbody>
</table>

Table 3.9 shows 68% of girls having added value in learning as against 61% of boys:

**Table 3.9: Proportion of boys and girls who completed entry and exit questionnaires reporting a gain in learning about “subject” (n=2178) (Questions A1 and B4)**

<table>
<thead>
<tr>
<th></th>
<th>Learnt about Subject on Project (a1b4)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No gain</td>
<td>gain</td>
</tr>
<tr>
<td>Row %</td>
<td>Row %</td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>32.4%</td>
<td>67.6%</td>
</tr>
<tr>
<td>male</td>
<td>39.4%</td>
<td>60.6%</td>
</tr>
</tbody>
</table>

Table 3.10 shows the same pattern in the case of confidence, a personal development rather than an academic objective: 60% of girls as against 53% boys gained in confidence through participation in MGEP2. Clearly these results might be interpreted as due to a greater caution or wariness on the part of boys in their responses. However, the results may suggest some further potential for improvement in the design of museum and gallery learning to meet the needs and interests of boys.

**Table 3.10: Proportion of boys and girls who completed entry and exit questionnaires reporting a gain in confidence (n=1825) (Questions A4 and B6)**

<table>
<thead>
<tr>
<th></th>
<th>Confidence (a4b6)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No gain</td>
<td>gain</td>
</tr>
<tr>
<td>Row %</td>
<td>Row %</td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>39.6%</td>
<td>60.4%</td>
</tr>
<tr>
<td>male</td>
<td>47.4%</td>
<td>52.6%</td>
</tr>
</tbody>
</table>
3.2.4 Key Stage 1 Respondents

It was an intention of MGEP2 to include pupils aged from 5 to 16. Consultation with all of the regional MLACs showed that there was a strong desire that the learning of Key Stage 1 and Foundation Pupils should be evaluated but it was agreed that young pupils could not be expected to use the same questionnaires as older pupils. As a result an alternative questionnaire, featuring smiley faces, was developed for KS1. This questionnaire had only 6 closed questions though it did provide opportunities for 4 further open responses. The four closed questions were designed to permit aggregation with the responses from older pupils. There was no entry questionnaire for KS 1 pupils.

It was anticipated that in most cases Key Stage 1 pupils would need some support in completing the questionnaires. Many teachers, for example, chose to read the questions to their classes. The Key Stage 1 questionnaire did raise some comments and concerns from project leaders. These are discussed in the section Evaluation Issues.

Many KS1 pupils did provide open responses on their questionnaires. Where appropriate these are discussed in the case studies in volume 2.

Some project leaders and teachers took the view that the C Questionnaire, which was designed primarily with the interests of KS1 pupils, would better suit the needs of some Year 3 or Year 4 pupils than the B questionnaire. As result not all C Questionnaires can be assigned to Key Stage 1. In the following, however, those who returned C Questionnaires are described as Key Stage 1 pupils in order to avoid circumlocution.

1436 valid C questionnaires were returned by the deadline, 14th May 2004.

Enjoyment

78% of Key Stage 1 pupils (n=1422) reported that they enjoyed their activity with the museum/gallery “very much”. 17% expressed satisfaction and 2% said that they didn’t much enjoy it.

Satisfaction

68% of KS1 pupils (n=1400) were very pleased with the work that they had been able to do on the activity and another 21% were satisfied with their own work.

Learning

Key Stage 1 pupils were asked about their learning in two separate questions. In both cases the project leaders were asked to specify the particular “subject” or “theme” of learning in question. 61% reported that they had learnt “a lot” and 19% reported that they had learnt “something” about the specified “subject” of their learning activity (n=1413). 68% of pupils said that they had learnt “a lot” about the specified theme and another 18% said that they had learnt “something”. (n=1380)

Future Plans
Pupils were also asked whether they would like to do more learning which involved museums or galleries. 85% of pupils replied “Yes” and 8% replied “No”. (n=1376)

### 3.2.5 Teachers and other Adults

A separate questionnaire was designed for adults involved in the projects. This was completed by teachers, assistants, facilitators, museum educators, artists and others. The purpose of the questionnaire was twofold: firstly, to gain another perspective on benefits to pupils and, secondly, to collect evidence about benefit to teachers.

Mention of teacher judgements has already been made in the sections on pupil learning above. In the following section (3.2.4) comparison will be made between teacher and pupil judgements. In this section the focus is on quantitative evidence of the benefit to teachers.

The MGEP2 criteria defined desirable outcomes for teachers as follows:

- increased confidence
- increased expertise
- increased professional satisfaction.

Analysis of those D questionnaires completed by teachers and by teacher assistants suggested considerable success in achieving these targets. 93% of teachers and assistants reported that they were satisfied with their role in the project. A slightly higher proportion of museum staff expressed the same view.

**Table 3.11 Teachers, Teacher Assistants/ Helpers and Museum Staff reporting a gain of satisfaction from their role within the project**

<table>
<thead>
<tr>
<th></th>
<th>teacher</th>
<th>assistant</th>
<th>museum staff</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>93.7%</td>
<td>92.5%</td>
<td>96.8%</td>
<td>94.4%</td>
</tr>
<tr>
<td>no</td>
<td>3.8%</td>
<td>2.8%</td>
<td>1.3%</td>
<td>2.8%</td>
</tr>
<tr>
<td>don't know</td>
<td>2.5%</td>
<td>4.7%</td>
<td>1.9%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Total</td>
<td>237</td>
<td>107</td>
<td>157</td>
<td>501</td>
</tr>
</tbody>
</table>

Table 3.12 shows the proportions of teachers, assistants and museum staff reporting an increase in confidence about participating in museum and gallery educational projects. The figures show significant gains for teachers.
Table 3.12 Teachers, Teacher Assistants/Helpers and Museum Staff reporting again in confidence as a result of their involvement in the project

<table>
<thead>
<tr>
<th></th>
<th>teacher</th>
<th>assistant</th>
<th>museum staff</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>78.3%</td>
<td>70.0%</td>
<td>87.2%</td>
<td>79.5%</td>
</tr>
<tr>
<td>no</td>
<td>18.1%</td>
<td>23.0%</td>
<td>9.0%</td>
<td>16.2%</td>
</tr>
<tr>
<td>don't know</td>
<td>3.5%</td>
<td>7.0%</td>
<td>3.8%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Total Count</td>
<td>226</td>
<td>100</td>
<td>156</td>
<td>482</td>
</tr>
</tbody>
</table>

Finally Table 3.13 shows teachers and museum staff reporting similar gains in expertise about making use of this kind of project. Significantly fewer teaching assistants reported this gain though this may have been because projects where not designed to achieve this benefit for assistants. Increasing the expertise of teacher assistants and helpers represents another potential target of museum and gallery learning improvement. The numbers of assistants and helpers involved in MGEP2 were significant. If the total numbers involved were proportionate to respondents there were about 2 teachers to every 1 assistant or helper.

Table 3.13 Teachers, Teacher Assistants/Helpers and Museum Staff reporting a gain in expertise in making use of “this kind of project” as a result of their involvement in the project

<table>
<thead>
<tr>
<th></th>
<th>teacher</th>
<th>assistant</th>
<th>museum staff</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>83.9%</td>
<td>64.1%</td>
<td>86.7%</td>
<td>80.9%</td>
</tr>
<tr>
<td>no</td>
<td>9.2%</td>
<td>10.9%</td>
<td>4.0%</td>
<td>7.8%</td>
</tr>
<tr>
<td>don't know</td>
<td>6.9%</td>
<td>25.0%</td>
<td>9.3%</td>
<td>11.3%</td>
</tr>
<tr>
<td>Total Count</td>
<td>218</td>
<td>92</td>
<td>150</td>
<td>460</td>
</tr>
</tbody>
</table>

3.2.6 Aggregates

The following tables simply summarise responses to those questions which were common between two or three of the questionnaires. They give an account of the overall impact of MGEP2 and also flag up the overall differences between the responses of KS 1, KS 2-4 and adult respondents.

Table 3.14 shows that 61% of all pupils (n=5415) enjoyed their museum or gallery learning a lot and another 33% found it OK – a total of 94%. Only 4% of pupils did not enjoy it.
Table 3.14 How much did you enjoy your activity? (Questions C1 & B2)

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>All Bs &amp; Cs %</th>
<th>Key Stage 2-4 Bs</th>
<th>Key Stage 1 Cs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A lot</td>
<td>3316</td>
<td>61.2</td>
<td>55.3%</td>
<td>77.9%</td>
</tr>
<tr>
<td>Ok</td>
<td>1793</td>
<td>33.1</td>
<td>39.0%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Not much</td>
<td>209</td>
<td>3.9</td>
<td>4.4%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>97</td>
<td>1.8</td>
<td>1.3%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Total</td>
<td>5415</td>
<td>100.0</td>
<td>3993</td>
<td>1422</td>
</tr>
</tbody>
</table>

Table 3.15 Shows the 54% of all pupils were very pleased with the work that they carried out on the project and that another 37% were satisfied – a total of almost 91%(n=5378). Only 4% of pupils expressed disappointment.

3.15 What do you feel about your own work that you did on the project?(C2,B3)

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>All Bs &amp; Cs %</th>
<th>Key Stage 2-4 Bs</th>
<th>Key Stage 1 Cs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Pleased</td>
<td>2883</td>
<td>53.6</td>
<td>48.5%</td>
<td>68.0%</td>
</tr>
<tr>
<td>Ok</td>
<td>1981</td>
<td>36.8</td>
<td>42.4%</td>
<td>21.1%</td>
</tr>
<tr>
<td>Disappointed</td>
<td>213</td>
<td>4.0</td>
<td>4.1%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Not sure</td>
<td>301</td>
<td>5.6</td>
<td>4.9%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Total</td>
<td>5378</td>
<td>100.0</td>
<td>3978</td>
<td>1400</td>
</tr>
</tbody>
</table>

Table 3.16 showed that 54% of all respondents (pupils and teachers, n=5886) judged pupils to have learnt a lot and another 33% judged that pupils had learnt something – a total of 88%. The table also shows the different judgements of Key Stage 1, Key Stage 2-4 pupils and of teachers.

Table 3.16 How much do you think that you learn about “subject” on this project?
How do you judge students’ learning about “subject” on this project? (B4, C3, D2)

<table>
<thead>
<tr>
<th>Valid</th>
<th>All</th>
<th>Key Stage 2-4</th>
<th>Key Stage 1</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A lot</td>
<td>54.5%</td>
<td>46.7%</td>
<td>70.8%</td>
<td>69.7%</td>
</tr>
<tr>
<td>Something</td>
<td>33.0%</td>
<td>39.7%</td>
<td>18.7%</td>
<td>21.2%</td>
</tr>
<tr>
<td>Not much</td>
<td>7.9%</td>
<td>9.9%</td>
<td>4.5%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Don't know</td>
<td>4.6%</td>
<td>3.8%</td>
<td>6.1%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Total</td>
<td>5886</td>
<td>3964</td>
<td>1413</td>
<td>509</td>
</tr>
</tbody>
</table>

CEI at the University of Warwick, Impact of Phase 2 of the MGEP, Vol. 1
Table 3.17 shows that 73% of pupils wanted to do more learning that involves museums or galleries.

Table 3.17 Would you like to do more learning that involves galleries or museums? (b12, c5)

<table>
<thead>
<tr>
<th>Valid</th>
<th>All Frequency</th>
<th>All %</th>
<th>Key Stage 2-4Bs</th>
<th>Key Stage 1Cs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3742</td>
<td>72.6%</td>
<td>68.2%</td>
<td>84.9%</td>
</tr>
<tr>
<td>No</td>
<td>692</td>
<td>13.4%</td>
<td>15.4%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Don't know</td>
<td>718</td>
<td>13.9%</td>
<td>16.4%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Total</td>
<td>5152</td>
<td>100.0</td>
<td>3776</td>
<td>1376</td>
</tr>
</tbody>
</table>

3.2.7 Comparisons between different types of Project

The performance of projects was compared by type. Project leaders where asked to define their projects at the design stage as involving visits or loan materials or being web or artist based or other. In practice many projects shared two or more of these characteristics which reduces the capacity of this simple typology to distinguish between projects.

74% of projects (n=132) involved museum or gallery visits, 28% involved loans, 15% were web based and 33% involved artists. 8% were “other”. In examining comparative performance there is a greater chance of identifying distinctive impact in the case of loan, web or artist based projects since these comprise relatively small proportions of the total.

In practice the differences between the impact of projects when analysed by type do not appear, in general, to be significant. This may be because there are indeed no differences in the relative effectiveness of different types of project in relation to the pupil learning outcomes investigated. However, it may be that there were differences which the research instruments failed to register. For example, different types of project may achieve their impact in different ways or they may indeed have a differential impact on different learning outcomes but the effect may be masked by other factors, such as the quality of teaching or of the resources involved.

However, there are some exceptions to the general absence of correlation. Artist-based projects were relatively successful at generating the experience for pupils of working well with adults. The table below shows the numbers and percentages of pupils whose responses showed a gain between entry and exit in terms of how easy they found it to work with teachers. A gain is only reported if at exit learning with teachers was judged to
be easier than at entry. Of the 801 responses for projects classified as “artist based” 41% showed “no gain” and 59% showed “gain” whereas for all other projects 49% of respondents were non-gainers and 51% were gainers.

**Table 3.18: Proportion of pupils who completed entry and exit questionnaires showing a gain in “working well with adults” (n=2421)**

<table>
<thead>
<tr>
<th>Work with teachers * artist Crosstabulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work with teachers</td>
</tr>
<tr>
<td>Count</td>
</tr>
<tr>
<td>% within</td>
</tr>
<tr>
<td>Work with teachers</td>
</tr>
<tr>
<td>Count</td>
</tr>
<tr>
<td>% within</td>
</tr>
<tr>
<td>Work with teachers</td>
</tr>
<tr>
<td>Count</td>
</tr>
<tr>
<td>% within</td>
</tr>
<tr>
<td>Work with teachers</td>
</tr>
</tbody>
</table>

**Impact of Experience**

There is some evidence that those museums and galleries which already had experience of tackling the specified learning outcomes had a greater impact on curriculum learning than museums and galleries without this prior experience though experienced institutions were not generally more successful with other outcomes, e.g. raising confidence, working with others. 51% of those pupils working with museums and galleries which reported they had already pursued the specified learning outcomes (n=1793) reported the highest level of learning against only 43% of those working with museums and galleries that had not. (n=2082).
Table 3.19: Amount of learning by pupils about “subject” on projects with museums reporting prior experience in this kind of learning and for pupils working with museums without such experience (n=3875)

<table>
<thead>
<tr>
<th></th>
<th>baseline</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>b4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a lot</td>
<td>Count</td>
<td>913</td>
</tr>
<tr>
<td></td>
<td>% within baseline</td>
<td>50.9%</td>
</tr>
<tr>
<td>something</td>
<td>Count</td>
<td>732</td>
</tr>
<tr>
<td></td>
<td>% within baseline</td>
<td>40.8%</td>
</tr>
<tr>
<td>not much</td>
<td>Count</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>% within baseline</td>
<td>5.5%</td>
</tr>
<tr>
<td>don't know</td>
<td>Count</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>% within baseline</td>
<td>2.8%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>1793</td>
</tr>
<tr>
<td></td>
<td>% within baseline</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Similarly 55% of those pupils who participated in projects with museums and galleries who had participated in MGEP1 (n=506), the first of phase of this programme which ran from 2000-2002, reported the highest level of learning as against only 45% of pupils participating in projects with museums and galleries which had not (n=3326). Unfortunately, this finding is based on a relatively small number of respondents. Participation in MGEP1 was generally associated with good performance in MGEP2 though in the case of some learning outcomes this advantage was very slight. This may be evidence of institutional learning since many of the museum staff involved in MGEP1 have changed employment over this period.
Chart 3.20 Learning about “subject” for pupils participating in projects which where part of MGEP1 and for pupils participating in projects which were not part of MGEP1

Size of Museum or Gallery

Number of employees can be taken as a crude proxy for the size of the museum and gallery involved. The quantitative data provides no evidence that the size of the institution affected the performance of projects in terms of the specified learning outcomes for pupils. This is certainly surprising since, in general, larger museums have more specialised staff and more experience of educational work. However, the proposals of museums and galleries were subjected to a selection process and project leaders received support from their funding agency. This evidence suggests that the size of an institution was not permitted to disadvantage any project that had successful gained funding for its work.

Organisational Status

62% of the institutions involved were registered museums and 10% were regional hubs. There was no significant relationship between organisational status and performance. Learning outcomes for pupils appeared to be broadly similar for regional hubs and other
kinds of museums. Bearing in mind that the first phase of Renaissance in the Regions was contemporaneous with MGEP2 it is probably reasonable to regard this parity in performance as a baseline position.

**Setting Targets**

Where projects had set themselves particular learning outcomes it would be reasonable to expect them to focus on that outcome. If their success in terms of that outcome was greater than average across all projects this would suggest that the target may have shaped the outcomes of the project to some degree.

In general this was not the case. So for example the 77% of projects which targeted self-esteem and confidence appear to have been no more successful at achieving this outcome (57% were more confident) than the 24% of projects that did not (60% more confident).

Similarly the projects that targeted increased ability to work with others appear to have had a similar impact on this goal (52% of pupils worked very well with others) as the projects that did not (52% of pupils worked very well with others).

This negative finding is open to several interpretations. One is that these particular learning targets had no influence on outcomes or that their influence was overwhelmed by other factors. Alternatively it may be that project leaders do not regard such learning objectives as exclusive. Qualitative evidence from interviews with project leaders suggests that in many cases projects were equipped with a wide range of objectives partly because it was believed that some of these at least would be achieved and that more objectives would impress purse-holders. Another perspective, also supported by qualitative evidence is that many project leaders do not regard these learning objectives as discrete: they believe that the learning outcomes are bound together so that a project which is successful in terms of achieving learning is also likely to be successful in terms of personal growth or social skills. As a result their selection of particular learning objectives may not imply that their projects will be relatively successful at achieving those objectives rather than any other ones.
SECTION 4: THEMATIC ANALYSIS

This section and Section Five that follows draw more from the qualitative analysis contained in the case studies which are published in Volume Two of this report. References, usually in brackets, are made to particular case studies where appropriate. Evidence has also been drawn from other MGEP2 projects for which there are no case studies.

4.1 Partnership between Museums/Galleries and schools

If museums and galleries are to contribute to formal education then they will have to enter into partnership with schools. The importance that the strength and the character of this kind of partnership plays was recognized in the evaluation of MGEP1 and in many other similar programmes so that partnership formation was explicitly built into the brief of MGEP2:

<table>
<thead>
<tr>
<th>Criteria for Funding the Department for Education and Skills (DfES) Museum and Gallery Education Programme (MGEP) Phase 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>• contribute to raising pupils' standards of achievement in the classroom</td>
</tr>
<tr>
<td>• link to specific aspects of the National Curriculum</td>
</tr>
<tr>
<td>• demonstrate learning outcomes for pupils and, in some cases, teachers.</td>
</tr>
</tbody>
</table>

MGEP2 projects were funded and conceived by museums, galleries or by MLACs. It follows that the museum or gallery was likely to be the leading partner, though over time more equal relationships did sometimes emerge. A few partnerships were more equal with one or more school taking on development and managerial responsibilities, occasionally even becoming the leading partner. Most of the funding agencies asked bidding institutions to identify partners, usually particular schools, in their bids. However, not all agencies were equally strict in insisting that partnerships were formed at conception stage. Furthermore, many of these early partnerships were tentative; museums and galleries had to find replacement partners when schools backed off or proved in some way unsuitable.

Nevertheless, it is an achievement of MGEP2 that all of the 130 projects had some involvement of school partners and that in many of these school partners were involved from start to finish. Since MGEP2 consisted of a large number of small projects the scope for involving large numbers of schools through development was good. 203 schools submitted valid questionnaires but the total number in partnerships is likely to be over 300.

It is possible to distinguish some different types of partnerships:

First Stage Partnerships
In this case, the museum or gallery has a broad commitment to commence or expand its educational activity. It then conceives of a project starting with its collection or a current exhibition or some other theme closely associated with its mission and it seeks one or more partners with a learning need which matches the context or resources that it has to offer. In many MGEP2 projects this intention was longstanding but the arrival of MGEP2 provided the catalyst to accelerate the realisation of this ambition. Establishing or extending a lasting partnership with schools may be secondary goal for the museum or gallery.

Second Stage Partnerships

The museum or gallery has identified a need on the part of teachers or schools which it believes that it can meet. This institution may already have a relationship with the schools or teachers and they have communicated this need. The museum or gallery acts as an entrepreneur obtaining or developing the resources required to address the need. This approach sometimes characterises museums or galleries that already have a conventional programme of school visits and activities but want to take the opportunity to contribute further to formal learning, for example they may want to address a new phase or a new subject – sometimes in an innovative way. Such a partnership may be developed particularly for a project.

Umbrella Partnerships

These usually involve a number of museums which share a common geography or administration. Here the educational need or opportunity may have been identified by another institution, say the MLAC or a City Museum Service. The museums are encouraged to join a joint collaborative project with an educational character. In this case the educational ambitions may be stronger in the brokering agency than in the individual museums. An attempt to build a collaborative approach between a group of institutions, who perhaps have only recently come to share a connection, is sometimes a secondary goal of this kind of partnership. Umbrella partnerships have the scope to strengthen partnership between museums though in practice the emphasis on this dimension of partnership varied across MGEP2 projects.

These different kinds of partnership represent paradigms: clearly not all of the 130 projects fit neatly into one category or another. None of the three types of partnership represents the perfect model. They reflect different degrees of experience, different institutional backgrounds and different ambitions.

Nevertheless the case studies do suggest some experiences which are common for the different types of partnership:

Museums or galleries seeking to build first stage partnerships can sometimes experience frustration in finding school partners. They may be dependent on personal connections or immediate proximity. Where a museum or gallery has a very specialist focus, a modest collection, a small building or little experience in educational work it may find that it is hard work to get schools to commit staff, lesson time or energy. However, MGEP2 shows that such museums can build new relationships with one or two schools or exploit existing relationships to create together with teachers learning materials or activities which not only meet the needs of pupils in that teacher’s class but of many other pupils too.
The suitor museum or gallery may have a considerable distance to travel from its own mission and its own collection to meet the learning needs of pupils and teachers. There can be an element of luck about this. A museum with some Tudor artefacts and a set of nearby primary schools will find the journey easier and shorter than a regimental museum or an isolated rural museum. However, the fact that such an extraordinary range of museums did manage to develop successful learning offers through MGEP2 does suggest that in principle it is possible for any museum or gallery.

In second stage partnerships the museum or gallery may already have a large number of pupil users or it may already have some kind of network with local teachers or a with local LEA Advisors. These pre-existing relationships make the development process easier. Experience of working with schools and of developing learning or teaching resources makes it more likely that the project leader will have a good understanding of the formal and informal curriculum. The project can draw upon schools and teachers who have worked with the institution in the past which makes it easier for the project to recruit the teachers and schools who will fit a particular project. A number of successful MGEP2 partnerships were not new – they were continuations of existing partnerships which could build upon and existing rapport and trust (Thackray, Colchester, Fitzwilliam, Museum of London).

Nevertheless, some museums and galleries still encountered difficulties in gaining and retaining the right partner for second stage partnerships. This was partly due to issues arising from the demands and pressures of schools. For example, Ofsted inspections were cited as reasons for delays on a number of projects. In other cases the difficulties arose because the museum or gallery was seeking to win new kinds of partners, e.g. secondary schools, or offer a different kind of service, e.g. support for homework.

Umbrella partnerships have shown themselves to be a way in which small museums, lacking experience in education, can progress reasonably quickly and surely. (Richmondshire) They also show how the experience and dedicated time of a consultant or freelancer can be shared between a number of small projects and museums and how a variety of smaller projects can be combined to create a greater impact, for example by bringing together the responses of pupils in a combined exhibition and performance (Buxton) or by creating a suite of resources which can be used by all of the participants (KELI, Richmondshire, Manchester Museum/Museum of Science and Industry in Manchester). However, some umbrella partnerships faced problems where individual museums and schools had varying degrees of ownership and commitment to the project and parts of the project had to be trimmed. Communication and co-ordination were often challenging. Occasionally, some aspects of the design of umbrella projects seemed to be more influenced by goals which had to do with building links between museums than in delivering immediate maximum learning for pupils. In such cases there may be compensating longer term benefits. Some umbrella projects suffered at times from the common weaknesses of large, loose organisations: confusion about responsibilities, breakdown in communications, reduced motivation at the periphery. In some umbrella projects it appears that the opportunities for sharing and collaboration were not fully exploited.

**The Value of School Partnership for the Project**
The school partner can help the museum or gallery at all stages of the project: in identifying which area of the curriculum to support, in selecting resources, in producing activities and guidance for use, in trialling, refining, evaluating and disseminating. Early, continuous and extensive involvement with one or more school partners encourages the museum or gallery to become more responsive to pupils and teachers and the curriculum. Involvement of a particular school in early consultation helps to engage the school so that they help out on later stages such as trialling and refining. This can contribute to what is described as embedding (see 4.9 below).

Teachers can bring to the partnership an understanding of the formal and the informal curriculum. They are likely to have already taught those areas of the National Curriculum which the museum or gallery aspires to address and have a considerable experience of how different pupils respond to different styles of teaching and learning. Perhaps most importantly they have an up to date understanding of where the priorities for development are. In other words they will know which parts of the curriculum are most in need of support. This is vitally important for sustained use since if a museum creates a learning resource which only does something that existing resources do satisfactorily it is less likely to win repeated use.

The experience and skills that teachers brought to MGEP2 projects were very much valued by museum and gallery educators. Feedback from “medium sized” projects in SEMLAC, for example, showed that project leaders were extremely positive about collaborating with teachers. There are, however, disadvantages to using schools as partners for the development of all stages of a learning resource. The principal constraint is the limited time that teachers and pupils have to give to such development. A considerable number of projects reported frustration that teachers failed to attend meetings or were difficult to communicate with. Some of the projects that were most successful at securing valuable teacher contributions throughout the development process used MGEP2 resources to pay for cover for teachers (Cecil Higgins House and Bedford Museum, Carisbrook Castle, Northampton). One project leader made a principled decision not to pay cover for two teachers who had initially been part of the project whereupon the two schools withdrew.

In a number of cases a school-based teacher became a key consultant taking a leading role in design and producing an educational resource. This was unusual. In some projects this was the result of specific planning and funding. (Carisbrooke). In two projects (South West Film and TV Archive and Melton Carnegie) an Advanced Skills Teacher made a particularly significant contribution.

There was sometimes frustration when teachers did not deliver as much as expected by the project manager who then had to take on more herself. These problems sometimes arose when unrealistic assumptions were made about the timetables of teachers and museum or gallery education officers. While involvement in MGEP2 projects almost invariably generated good will and the commitment of extra hours by professionals, this did add to the pressure for some and contributed to strains and slippages.

A number of projects did manage to create and sustain a group of teachers, from different backgrounds, who met regularly through the life of the project, providing advice, guidance. (Cecil Higgins, Carisbrooke, Norwich, Leicester). This appears to be a particularly successful strategy; not only does it increase and broaden the school input into a project but it also encourages teachers, through their extended and corporate
involvement, to embed the project into their schools and to make the most of the opportunities that it may offer.

The Involvement of Senior Teachers

A number of projects showed the importance of headteacher or senior teacher involvement in projects. Clearly senior teachers are likely to be highly experienced and have a relatively extensive understanding of the curriculum. Further they generally have more control over their own timetable, more non-contact time and are easier to communicate with. Perhaps the most important factor is that they are likely to have a grasp on the strategic developments in their schools and therefore a good understanding of which curriculum areas or which styles of teaching and learning are a priority for their school at any point in time. Clearly in practical terms a commitment from the headteacher or another senior teacher implies that the activities will gain recognition and retain priority in the busy environment of a contemporary school. Senior teachers are also in a position to sanction risk-taking and to legitimise change.

The Use of Consultants

A common arrangement was where a consultant or project officer was employed to design and sometimes deliver the museum or gallery resource working with teachers and education officers. This was often very successful. Where a consultant had up to date knowledge of the curriculum phase in question and experience of the kind of museum or gallery learning involved and dedicated time for the job, they were in most cases able to produce a resource which satisfied users – at least during the lifetime of the project. If, however, the consultant’s knowledge of the curriculum was out of date or lacking in an understanding of the dynamics and behaviour of pupils and teachers working together then the usefulness of the resource was affected. Sometimes this was corrected by feedback from teacher advisors or from users; sometimes it was not though teachers trialling the resource made it work by adapting and developing it in the classroom.

The disadvantage of this kind of post-hoc teacher input is that it is often not recorded and shared – so it is not available to every teacher. In one of the projects that was externally evaluated, concerns were expressed about the experience of a particular consultant, who was judged by some to lack sufficient experience of learning in a museum environment.

Involvement of LEA advisors and specialists

A number of projects solicited and gained the involvement of LEA subject and other advisors. (Tatton Park, Museum of Science and Industry in Manchester, River and Rowing Museum, Waterfront Museum, Carisbrook) This proved extremely valuable both as a means of negotiating a complex curriculum, particularly in the case of cross curricular projects, and as a means of raising the credibility and profile of the project and giving it access to networks for dissemination. The involvement of Advanced Skills Teachers with projects at Melton Carnegie Museum and in Lincolnshire brought expertise, confidence and networks – all of which facilitated innovation and dissemination. In one case, a project suffered because it became over-dependent on an LEA advisor who became ill and was regarded as irreplaceable which substantially held up progress. The extent to which museum and gallery learning can take advantage of
the expertise and networks of the LEA Advisory and Improvement Teams will depend on their capacity to take on these opportunities and the priority they give to museum and gallery learning (see 4.6)

How many partner schools?

In some projects a simple one-to-one partnership between one museum or gallery and one school was turned to an advantage. In some of these cases the single school was able and ready to make an extensive contribution and establish a particularly strong partnership (Northampton). When this bilateral partnership was sufficiently open to the needs of the other schools then it could create a pilot project which has relevance to other schools and is being taken up (Segedunum, Thackray, Melton Carnegie, Study Gallery, Waterfront, SWFTA). In other cases take up by other schools remains to be achieved and it is unclear whether design and budget have adequately addressed the demands of wider users even though there may have been considerable success with a single initial partner. This is particularly so in the case of those projects which centre on the opportunity to stage a particular performance or exhibition or involve close work with artists or other creative professionals which often involved partnerships with only 1 or 2 schools. An innovatory project which involved the loan of artefacts and artists working with four schools has attracted enquiries from further schools who have been told that while the museum can offer outreach visits it can't offer the whole project without further funding.

Other Partners

Apart from schools and LEA advisors a number of projects sought to bring in further partners. In many cases this extension of the partnership represented an imaginative way to bring in new skills, resources and networks. Examples include Derybshire's Rural Education and Arts Project (REAP) the Heritage Services Social Inclusion and Access Unit in Lincolnshire, the Ethnic Minority Achievement Service in Plymouth and universities in Keele and Manchester and the South Yorkshire Passenger Transport Executive in Sheffield. These projects show how other partners can add value and that museum and library learning projects carry identifiable benefits for other organizations as well as schools and museums and galleries. However, increasing the variety, scale and complexity of partnership composition brings with it attendant problems. Where 3 different types of organization were involved there appears to be more danger of confusion about control and responsibilities, breakdown of communication and failure to deal quickly and effectively with contingencies, e.g. illness or staff changes.

4.2 Communication

Some project leaders reported that the co-ordination of projects was disrupted by the difficulty of communication with schools and with teachers. In some cases museums were not informed that key members of staff had moved on or they were unable to get any response from a teacher partner. Communication with class teachers who had limited access to email or even telephones was, sometimes, difficult. Communications appear to improve when individual teachers have a relatively long term involvement in the project and when they are receiving some formal time allowance towards the time they spend on the project. One museum reported a breakthrough in communication once trust had developed to the point that mobile phone numbers were exchanged.
Another museum was disappointed that even though it paid funds to schools to release staff to attend meetings a significant number did not attend.

4.3 Planning and Time Management

4.3.1 Calendars

There appears to be a difference between the usual time frame for planning and delivery in museum/gallery sector on the one hand and schools on the other. A significant number of museums and galleries reported that they were held up or frustrated by the fact that schools had rigid timetables and schemes of work, defined the year ahead, and could or would not fit in with the shorter term exigencies of projects which were juggling with current exhibitions, the availability of freelancers and MGEP2 deadlines. In practice, many schools were prepared to relax their plans. Examples were found of schools which ran schemes of work for an additional half term, because they were working so well; that rotated Year 5 and Year 6 topics or that put on extra visits or sessions in order to trial or evaluate materials.

However, it seems clear that if museums and galleries want to participate in formal education they will have to learn how to work with the long term planning regime that schools are adopting. Since museums and galleries usually want to work with a number of schools they will need to co-ordinate take up from schools working with long term curriculum plans in order to avoid over-crowding in particular terms. This has implications both for the development of new resources and for the marketing of existing resources.

Some museums also reported that more time was needed to set up partnerships and prepare and develop resources with teachers (SEMLAC). Other projects experienced difficulties where changes in post or unfilled vacancies meant that carefully prepared plans could not be fulfilled.

A considerable number of projects failed to deliver all that was planned. For example, only 3 rather than 4 e-learning activities were produced by Cecil Higgins and Bedford Museum. Leicester City Museums dropped one of their four components primarily because of staff changes and service cuts. Projects are encouraged by the bidding process to set what may be unrealistically high targets in terms of the quantity of resources they will produce or the number of partners they will work with. This overload may contribute to a sense of strain and failure and may lower the quality of what is produced if the energy of project workers is dissipated. Grantham Museum’s ConnectED project dropped one of their three themes in order to concentrate on maintaining the quality the remaining two, in the light of changes in the commitment of schools and of staffing changes in their Museum Service. Tiverton Museum had to withdraw because of a lack of commitment from partner schools and the heavy teaching commitments of the part-time project leader.

4.4 Learning Outcomes

Every project in MGEP2 had defined in advance its learning outcomes or objectives. As explained in section 3.1 the bidding process, combined with the novelty of setting formal educational objectives, may have inflated the number of objectives set. In practice,
teachers and gallery and museum educators tended to focus on a much small set of learning outcomes when they were interviewed early in the project. The evaluation process brought about another shift of emphasis as attention turned to those outcomes which were best evidenced. While formally it is logical to expect that one and the same set of outcomes should guide design, delivery and evaluation this was not the case in the actual practice of MGEP2. This is partly because for many of the project leaders and co-ordinators a full understanding of why and how to use learning outcomes was only acquired in the course of the programme but also because these “learning outcomes” do have different values at different stages in the life of a project.

**Evidence for Learning Outcomes**

A key objective of the evaluation was to encourage the collection and review of evidence that could substantiate claims about learning outcomes. The following provisional matching was prepared by the evaluation team to inform this collaborative pursuit:
LEARNING OUTCOMES
Increased learning within the subject area
Increased understanding of connections between subjects
Increased learning across subjects

Possible evidence
Teacher assessment of student work – level changes
Quality of student work – before and after
Comparison with learning with classes not in project
Teacher and student judgments
Observation of activity
Evidence of response to different learning styles, e.g. object handling, thinking skills
New concepts, skills, knowledge
Greater complexity/challenge

LEARNING OUTCOMES
Increased self-confidence and self-esteem
Increased ability to work with others
Increased involvement in class, school community events

Possible evidence
Observation and recording of participation – video
Student reports, dated notes
Teacher observation, dated notes
Developmental work
Group self-evaluation
Engagement – how personal is response, how complete
Concentration – how long was activity sustained for – how does this compare for individual or group

LEARNING OUTCOMES
The ability to make informed choices within and beyond the planned experiences
Positive attitudes to the experience and a desire for further experiences
Increased self-confidence and self-esteem

Possible evidence
Developmental work – notes, sketchbooks, drafts
Creative and original work – how varied is group response, how does response compare to conventional work
Student plans for learning – research or action plans
Response or requests for further opportunities – evidence of independent learning
Independence – what tasks/skills may have been carried out with no or less teacher support

Stanley, 2003
The case studies provide a cross section of the kinds of evidence that were in fact collected. These can be grouped in the following categories.

**Teacher Assessment: quality of work before and after**

Teachers report in some case studies that pupils produced more work than they usually do and would be likely to get better marks. Some teachers did encompass these particular projects within the assessment systems that they used in their schools. The teacher involved in the project at Melton Carnegie Museum assessed pupil progress using the school’s individual pupil targets. A project in Northampton used a series of key questions which were administered to pupils as a class before and after (see below). Year 9 pupils at Davenant Foundation School (Epping Forest) were assessed on an extended piece of work that they produced as an outcome to the project and their NC levels were compared to their end of Year 8 levels. Teachers commented on the quality of discussion and question and answer work on a number of projects but this was not formally assessed. In a few cases external evaluators were able to interview or talk to the same pupils at different stages in the process and these case studies produced some evidence of particular learning in terms of knowledge, attitudes and skills. (Keats House)

While there were examples of teacher assessment being used as evidence, the quality and quantity of this kind of evidence across MGEP2 as a whole was disappointing. In many cases this was because the project work was of relatively short duration or did not lead to pupil work that was formally assessed or if it was formally assessed it was difficult to establish a baseline or a control against which to judge performance. Collection of assessment data was also disrupted by timing – assessments had not always been completed or marked at the time of formal evaluation. If teacher assessment is to be used in any more rigorous way, closer collaboration between schools, museums/galleries and evaluators will be needed to develop practicable ways of collecting and analyzing it. This may create further challenges for museums working with several or many schools with different assessment practices.
A number of schools made use of mind maps or key questions before and after the project in order to evaluate progress in terms of subject knowledge. At Spring Lane School in Northampton responses to a number of questions about Victorian times were recorded, including for example a question about Victorian children. This kind of evaluation has the potential to reveal more accurate or more detailed knowledge.

PreProject Questions and Answers

What was life like for Victorian children?

They were servants in rich peoples houses.
Life was not very nice for Victorian children.
They had to work, and wash clothes
They had different toys to us.
They didn’t go to school
Only rich children went to school.
The master would have whipped them.
They had punishment at school, they would be hit.

Post Project Questions and Answers

What was life like for Victorian Children?

It was quite scary, teachers were very strict
The rich children had to play with rope with wooden handles the poor children just had rope
In school children had a rough time they got the cane
The Victorians earned 1p a day to pay for school
If you didn’t know the answer you got the cane
Some children had to work in factories. some in coalmines with adults

Comparison with non-project classes: teacher and pupil judgments

The case studies provide frequent examples of teachers and pupils making favourable comparisons between their learning experience in MGEP2 projects and routine classroom learning. An RE teacher in London unfavourably contrasted her own conventional text book delivery with a parallel class to the project group. A teacher in Croydon said “There was one child who would cry if their picture was no good. This (project) has given them the confidence to realize that it was good.”

Observation of Activity: response to different learning styles, independence

The case studies are rich in examples of pupils working in sophisticated ways which imply the learning of new skills, attitudes and knowledge. Pupils participating in a role play based on Keats’ relationship with Fanny Brawne were observed to overcome their own embarrassment at the strangeness of the situation and throw themselves into the novel and demanding task of writing a nineteenth century, romantic letter of reassurance to the poet. Less able Year 9 pupils examining reproductions of archival material showing Sandown on the Isle of Wight 100 years ago were genuinely excited to discover
how the town had changed and keen to make sense of old maps. The case study of a project at The Thackray Museum in Leeds reports:

“All of the pupils entered fully into the drama of the “journey” into the Crimea. When, on reaching the Crimea, they were told that they had been refused entry to the hospital by the doctor in charge, they were visibly crestfallen and mightily exuberant when Florence Nightingale roused them up to insist that they would jolly well go in anyway. It was a vivid experience which took advantage of the readiness of these 6 year olds to imaginatively re-live history.”

Unusually high levels of motivation and enthusiasm were frequently reported. “It made the children beam,” said one deputy headteacher in Buxton.

New concepts, skills, knowledge: greater complexity/challenge

There were many good examples of pupils successfully tackling new subject matter or using new technologies or working in more complex or sophisticated ways. For example, Year 9 pupils on a gallery project at The Study Gallery, Poole were observed planning their own exhibition in a professional well informed way – drawing upon a variety of learning they had acquired through the project. Year 9 pupils on a photography project in York were able to respond to a sophisticated contemporary film and relate it to their own work. A cross phase primary group were able to interpret archival material at The Women’s Library in London and make connections between the history of the suffragettes and the work of their own school council. The Arts Manager at Hengrove School in Bristol, talking about a project with the Arnolfini Gallery said: “They were able to articulate their ideas and feelings about their work… by the end of project” According to the gallery staff pupils were “contributing ideas about drawing….. its breadth and complexity.” Operahouse, a project at Lotherton Hall in Leeds, permitted 3 classes of Year 2 pupils, with modest instrumental skills and virtually no composition experience, to write, rehearse and perform an opera. Teachers at a Northampton School were impressed that Year 5 pupils were, with the support of a local historian, able to access and make use of historical census data and engaged fully with the details of ‘their’ allocated 1881 family.

Observation and recording of participation: inclusion, concentration, cooperation

Attendance and co-operativeness are preconditions for the success of museum and gallery learning. In their absence pupils cannot begin to learn.

Evidence of high levels of co-operation were found in all of the case studies. Pupils were enthusiastic about participating. Pupils visiting Bedford Museum were keen to answer questions, pupils were enthusiastic about entering into role plays of Victorian classrooms or voyages with pirates. Pupils were pleased to climb onto buses, explore Roman forts, fill in work sheets, walk to museums, play with replica Victorian toys and dress up in historic costumes. At New Walk Museum, Leicester, KS1 pupils revelled in the novelty of exploring a new gallery designed for young children.

Concentration was judged to be exceptionally high for Reception and Year 1 pupils following a series of activities in the course of a day at the De la Warr Pavilion. Pupils visiting an unheated bus and tram museum in Sheffield on a bitterly cold January morning were able to absorb the enthusiasm of the volunteer guides. A number of the
case studies record relatively high and consistent pupil attendance (Birmingham Museum & Art Gallery, Waterfront Museum, Poole). One case study records unusually high teacher attendance! There is a large volume of qualitative evidence that confirms the questionnaire responses of teachers and pupils that museum and gallery learning tended to raise the proportion of pupils with higher levels of engagement in learning activities. The case study of a project at the Royal Pavilion and Brighton Museum reports:

“Two of the eight secondary pupils interviewed declared that they felt that they were more confident as a result of their achievements on the project. These pupils’ teacher confirmed that both of these two pupils had participated more strongly than they were wont to do. One in particular had become far more vocal – confidently speaking up for the group when in the past this student had been the victim of bullying and had experienced difficulty in speaking out without interruption or comment from other pupils.”

Teachers and project leaders were usually able to identify particular individuals who had responded particularly well to the projects and the people involved in them. One boy with a record of difficult behaviour, on a York project, developed a remarkably trusting relationship with the professional photographer who led workshops, which led him to make a serious commitment to this project far beyond his conventional commitment to school work. A girl on a project in Wolverhampton was observed over the course of week when she overcame her own anger and frustration and became willing to participate. On a Northampton project two boys, otherwise usually at loggerheads, found that they could work together. In Peakdale, a storyteller inspired two boys with low literacy skills to open up through a novel approach to literature.

Developmental work: progress, group self-evaluation

This kind of evidence is of its nature more ephemeral but was observed by evaluators, teachers, facilitators and museum and gallery educators. A writer-in-residence working on a literacy and visual arts project at the Northern Gallery for Contemporary Art was able to lead Key Stage 2 pupils in a session where each pupil read out his or her own creative work and then criticized one another’s writing in a constructive and respectful way. A teacher working on a project in Buxton commented: “Dance meant co-operative groups working together, evaluating what they were doing.” A number of projects did collect video and photographic records of sessions which were then used by teachers and project leaders to review progress.

Pupil work or response: how personal is response, how complete?

The quality of pupils’ work was appraised in a variety of ways: by the pupil him or herself, by other pupils, by teachers, by other adults working on the project and sometimes by members of the public in an exhibition or by an institution which “selects” a pupil’s work for exhibition. Many comments by pupils express pride and sometimes surprise in what they achieved. This was particularly likely to be the case where a project resulted in a product such as an art work, a slide show presentation or a performance or a particular piece of writing. It was less commonly expressed when a project gave fewer opportunities for a substantial pupil output.
A number of gallery projects, Croydon Clocktower’s Peg 119, York Gallery’s Intrigue, Impression’s Connect 4, took portraiture and issues of identity as a particular focus of their projects. These projects did produce examples of pupils progressing from the conventional to the less conventional. Artists and photographers showed pupils how alternative drawing, art or photographic techniques (such as mark making and collage) could be used to create different kinds of image which expressed different kinds of meaning. Projects that combined literacy work with art also helped pupils develop more personal responses. The development of visual literacy was an objective of several projects (Middlesborough Museums, Norwich Museum, York Art Gallery). All of these projects produced some evidence of pupils becoming more able to articulate individual responses to paintings and other art works.

A girl on a project at The Waterfront Museum in Poole, which was specifically intended to support independent learning, commented: “My idea is based on things that are important to me in a special, certain year.” The artist working on this project judged that the pupils had managed “varied interpretations of their brief”

Pupils on a project at the Holst Birthplace Museum, Cheltenham were judged to be responding very imaginatively to musical stimuli. A problem solving science/technology group task that was observed as part of a project at the Fitzwilliam Museum generated distinctive solutions which resulted from group experimentation and discussion. The final report of the East Midlands Oral History Archive notes positive response to oral accounts of early immigrants to the UK which allowed students to empathise and reflect.

In some cases projects facilitated an original response at a collective or communal level. Back to the Beginning – The Opening of Spring Hall School was an intensive one week project for Year 5s which tackled Victorian history through a variety of school and museum based activities the focus of which was the school’s Victorian foundation, its buildings and records and the memories and heritage of the local community. The variety of authentic historical and contemporary material brought in to school testified to the engagement of these pupils and discussion at home.

Expressions of empathy and ownership were common responses. Local museums, galleries and archives often set out to provide a particularly local context for some aspect of the National Curriculum. KS3 pupils working on the Merseyside Industry Archives Project in Liverpool were excited to find their own streets on old maps and younger pupils were captivated by performers who, in a variety of museums, recreated historical characters: Florence Nightingale, Captain Cook’s mother, and historical types such as Victorian School Ma’m’s and Scurvy Sailors. An individual child participating in a project about Travellers at the Bromyard Heritage Centre took one of the facilitators aside to confide to her his Romany roots and proudly display the Romany gold chain that he wore. This child evidently regarded the project, as it was intended to be, as a recognition of a heritage to which he belonged.

**Response or requests for further opportunities: behaviour, decisions**

Evidence of a desire for further learning experiences or actions taken by pupils as a result of project learning would suggest a lasting impact from projects and also the development of a capability for more independent learning.
A considerable number of projects planned-in some kind of exhibition or performance to which participants could return, sometimes bringing parents and friends. For many participants this was the first time that they had independently attended such an event (e.g. an opera) or that kind of venue (e.g. a photographic gallery). That such independent visiting represented a big step for some pupils, their friends and families is shown by the fact that some individuals would or could not persuade their families to attend or had to overcome some resistance before they would. Not all final exhibitions/performances were well attended though some were. In Buxton a cross-phase project culminated in a combined exhibition and performance which was well attended and significantly raised visitor numbers to the museum during the 6 weeks it showed.

The history department in one school working with the Lincolnshire project reported more than double usual the number of pupils opted for GCSE History three weeks after their MGEP2 project.

Many pupils expressed an interest in exhibits that they may have glimpsed on a museum visit and decided to return, often with parents, to investigate further (Fitzwilliam, Bedford). Pupils were generally able to suggest other museums that they would like to work with or opportunities that they would like to have. A pupil who had used a World War 2 loan box expressed the desire to have a Viking Loan box (Richmondshire).

Pupils’ judgement and feedback: attitudes, satisfaction

Pupils expressed high levels of satisfaction with their work. There was good evidence of pupils reflecting upon their own learning and extracting an understanding of what they valued in it:

“The artist gives you independence he trusts your work he treats us like adults so that we work harder” (Year 9, Poole)

“I really enjoyed dressing up; I've learned lots of things!” and “Thank you, if we hadn't done something fun we wouldn't have remembered”. (Pupils, Nottingham, Brewhouse Yard)

A number of projects sought to address pupils’ attitudes towards cultural differences and values. Year 8 pupils involved in a project involving different faith communities organized by the Museum of London discovered that: “Jews and Christians share some common values…in a synagogue they give a lot of respect to scrolls – 7-8 men carry them, they are not allowed to touch the bible.” Another set of Year 8 pupils in Plymouth had the chance to learn about immigration, refugees and asylum seekers through the medium of documentary film, video and drama. Pupils progressed from exploring their own attitudes through historical and local studies to go on to interview a group of invited asylum seekers and refugees. Pupils confirmed their own shift in attitudes: “We're OK. It's our parents we have to worry about now.”
4.5 Differences between Projects with regard to outcomes

Qualitative evidence reinforces the quantitative evidence that the learning outcomes of projects varied considerably. Variety in the kinds of outcomes achieved appears to be related to the character and design of the project, its duration, intensity and the capability and experience of those delivering the project. Not surprisingly projects which provided an intensive and extended learning experience for relatively small groups of pupils produced relatively good qualitative evidence of learning – though it is less obvious that there were differences in the quantitative evidence.

Of course this does not imply that the more concentrated projects are more effective or more efficient. However, it does raise the issue of equity. Where museum and gallery learning is available to schools in a generally unsystematic and accidental way it follows that not only will some pupils be able to access top quality experiences, some mid-quality and many none at all but that there is no explanation or justification of why this should be so. In many cases projects are intended to function as pilots and it is planned to make them available to more schools in the future. This implies, however, that there are ways in which those projects will be extended to others.

What Characterises Successful Museum and Gallery Learning?

A wide range of factors can be identified which influence learning in general and learning in informal environments (“free choice learning”) such as museums and galleries. Falk and Dierking have distinguished 11 sets of factors in three broad categories which have been shown to influence the extent or character of learning. (Falk and Dierking, 2000) Without doubt it would be possible to identify examples of all 11 of these factors having an impact in the 52 project case studies contained in Volume 2. However, the focus here is not to provide a comprehensive explanation of impact but to identify those factors which are particularly significant to projects which operate across the boundary between formal and non-formal learning. These are dealt with in the following section.

4.6 Styles of Learning and Teaching

Object Handling

Many of the case studies contain evidence of how object handling in particular but more generally teaching and learning focused on a particular artefact or image proved to be popular and effective with pupils and teachers alike. It is not the business of this report to explain why this should be though some writers have argued that direct experience of an object represents an alternative and powerful kind of knowledge while others believe that kinaesthetic and sensory learning is favoured by some individuals (Gardiner, 1993) Touching, holding, manipulating, examining and playing with artefacts was shown in many case studies to be an engaging and meaningful activity. Pupils wanted to do it and when they did it their body language and comments showed that they were noticing how the object felt, what it looked like, how it was different from what they expected or what they were used to. Not only did objects demand attention and provoke examination but they also stimulated discursive responses. Objects provoked questions posed by a guide or teacher: “What is it made of? What is it an image of? What was it used for?” Further examination of an object might suggest one or more possible answers: “It might be made of leather or maybe wood.” The answer then leads to
further questions which might determine whether it is leather or wood. Object handling leads naturally into object interpretation which is observed to take the form of an alternation and combination of talk about and physical examination of an object.

“The artefacts did inspire them. Just having that quality of physical resource was really good… Having real things to handle and look at in quantity. It was a rich resource.”
(Teacher, Buxton)

Observation showed that object learning can be effective in a variety of different social milieus. Experienced museum educators, enthusiastic volunteers, less experienced teachers, less confident parent helpers and other pupils were all observed to participate in productive questioning and answering around objects. In some projects, where this process was closely observed, pupils were judged to have sustained an enquiry for longer than expected with a higher level of complexity than normal. (Bedford, Norwich)

Pupils also learned when they brought existing knowledge to bear on objects that they encountered in a museum. Pupils at the Fitzwilliam were pleased that they recognized the shape of a cartouche which they had already learnt about at school. Pupils at Keats House enjoyed the task of constructing a sales pitch for a nineteenth century four poster bed they found in one of the bedrooms. Applying (or even misapplying) known concepts or names revealed to learners and teachers that they were able to make use of concepts and recognized particular instances of a kind.

Handling was not always necessary and pupils were observed to be stimulated by close observation of artefacts in cases or on stands and also of paintings. Though the handling of objects was observed to be particularly stimulating, other ways of presenting objects in dramatic ways through the use of lighting, getting children to sit on the ground beneath large objects or placing objects together in a mis en scene did, on occasion, contribute to the learning impact of objects.

Pupils were not always observed to be very sensitive to whether an object was a replica or an original and did not always appear to take in the difference, though in the Lincolnshire project museum staff did report that pupils treated genuine World War 1 artefacts (e.g. bayonet, helmet) with great respect and recorded their “wonder and surprise” when the loan box was unpacked. This authenticity was what teachers most valued, speaking of how handling the real objects gave “a sense of reality to learning”. There was no evidence of damage or loss of such artefacts. Packaging and presentation was thought by teachers to contribute to the impact on pupils; teachers in Richmondshire also commented on the excitement of unpacking loan boxes in the classroom. Pupils were on occasions sensitive to the aura of an object or a work of art.
which curators or teachers pointed out to them; even if only as an anxiety about the fragility and sensitivity of old artefacts. On a project at the Womens’ Library pupils enjoyed putting on handling gloves before they touched historic documents and the exercise communicated to them something of the preciousness of archival materials and importance of their survival.

Costume handling and dressing up represent a good example of how popular kinaesthetic learning can be extended into discussion, interpretation and performance. Work with costumes stimulated historical empathy and writing at The American Museum and historical empathy at Winchester Military Museum. Dressing up, object handling and carefully planned sensory experiences stimulated lively responses from pupils with special needs at Melton Carnegie Museum.

Since museums are organized around their collections it is not surprising that, even when projects did not take place in museums, objects were still at the centre of many projects. This was particularly the case with many loan material or loan box projects. As the objects went into the classroom, teachers were able to extend and develop the use of them – sometimes over a whole term. Many teachers admitted to inexperience or lack of confidence in using objects and there were limitations on what objects could be sent out to schools. Nevertheless, the same kinds of engagement, stimulation and discussion as found in museums were reported. (Epping Forest) In addition, pupils and teachers were excited by the sense of something extraordinary entering into the otherwise familiar classroom.

Another important feature of loan box and some other projects was the way that it influenced the general scheme of work and lesson organization. A conventional history lesson was likely to be more teacher centred with more emphasis on the communication from teacher to pupils of facts or concepts. A scheme of work developed around a loan box was more orientated around investigation, interpretation, discussion and peer communication. In these activities pupils were less dependent on their teacher. Moreover, this resource based learning often stimulated learning from other sources as pupils and teachers naturally tended to bring in other artefacts (Northampton)

Pupils try on Roman armour at the Royal Albert Museum, Exeter
Museums’ thinking about learning tended to be object oriented so even when objects were absent or subordinated to another technology, as they sometimes were in web-based projects, the visual presence of an object remained centre stage and learning was designed to follow the same alternation between physical examination and discursive interrogation. (Bedford).

**Immersion in Context**

Another common feature of many projects, which appears in the case studies to contribute to their impact, is way in which projects were able to situate subject learning in some kind of coherent context. The distinctive value of situated learning is familiar from other research (Lave & Wenger, 1991) and the value of out-of-school situated learning, for example through work experience, has been documented.

The impact of “situated learning” can be readily recognized when learning was indeed taking place in an alternative physical location. A sense of place was exploited for KS2 pupils working at Keats House in London who were able to enter into the private life of the poet and his girl friend and at Lotherton Hall, where rehearsals and explorations of a grand 19th century mansion, helped pupils to enter imaginatively into the world of Laura, their opera’s heroine but also to put behind inhibitions which might hold them back from the challenges of opera making and performance. (See also Holst Birthplace Museum) In many museums and galleries pupils responded positively to the internal and external architecture of the buildings. In the first place pupils were impressed by the way galleries and museums successfully “stage” the works of art and artefacts they contain with their grand entrance halls, bold designs, striking facades and large internal spaces. At the De La Warr Pavilion, pupils went on to observe and respond to the building itself. Many museums and galleries were able to offer work spaces within galleries or had dedicated schools’ rooms. This permitted pupils to carry out their own creative or investigative work close to works of art or objects from which they were drawing inspiration. It also provided an implicit recognition or endorsement of the value of their activity by the museum or gallery.

However, this immersion in context is not equivalent to physical location. Pupils in Colchester researched documents, images and artefacts in order to learn about the impact of World War 2 upon their home town. In addition to documents and images pupils had access to local historians and the memories of their families and others. The events and experiences they researched related to buildings, streets and the countryside in which they lived so the project made it easier for them to connect their learning with their own experiences – which appeared to enhance both. In Northampton, Spring Lane School ran an intensive Victorian Week for Year 5s which included school-based and museum based experiences, investigating the immediate locality and the school buildings at the time of the school’s opening. In a number of creative projects, pupils were given relatively high levels of exposure to exhibitions or to the work of contemporary artists – in some cases they had the chance to be supported by active creative professionals. This had the effect of informing or transforming the way pupils worked (Arnolfini, Croydon Clocktower, Buxton), the genres, materials or technologies they experimented with and of raising the status and social meaning of their activity.

**The Social Dimension to Museum and Gallery Learning**
The social character of situational learning has already been alluded to above. It is a principle of this way of thinking about learning that the status of teachers and the social relationship between learners and between learners and teachers and with other social groups affects the character and outcomes of learning. In a sense then, the impact of museum educators or of professional artists working on MGEP2 projects is an integral part of the context created. However, it is useful to highlight this impact since the “addition of museum and gallery educators”, of one kind or another, was pretty much a universal feature of all MGEP2 projects.

Qualitative evidence suggests that pupils responded positively to these alternative teachers who could bring a variety of skills, personal styles, experience and aspirations to pupils and teachers. A storyteller bowled over pupils and staff at Peak Dale Primary in Derbyshire as the deputy head recalled:

“[He] was so motivating. His approach was so different from what the children are used to. He sat cross-legged with nothing on his feet and a long pony tail…. The message was: ‘Don’t judge a book by its cover’. That was fantastic”

“I can picture the children’s faces now”.

A storyteller at work with aboriginal artefacts
High expectations were set by poets and authors running writing workshops and by professional musicians and dancers running performance classes. Pupils were interested and impressed by the fact that they were working with professionals who had status and a vocation in the field that pupils were learning about. Creative artists encouraged pupils to be more experimental and personal in their approach. They de-emphasized the acquisition of skills and the quality of the finished product and encouraged pupils to focus on the motivation and inspiration behind making art and the process of making it. This message was liberating and encouraging, particularly for those pupils who either had relatively poor arts skills or believed that they did. Museum education officers could bring great skill and experience to the interpretation of artefacts and works of art and helped pupils and teachers to do the same. Volunteers were sometimes able to play a role acting as guides, leading groups or preparing materials. Volunteers could bring an enthusiasm and specialist knowledge and combine this with a non-professional identity as a member of the local community which helped pupils to be receptive to them.

There were some disadvantages associated with the use of freelancers. Sometimes, late changes brought about confusion or discontinuity. Project co-ordinators sometimes contrasted the effectiveness of the different animateurs that they had used. The capacity of animateurs to work well with pupils of different ages varied as did their interest and skill in working in partnership with teachers. A few cases were reported of poor skills in managing bad behaviour.

In general many of these adults other than teachers brought enthusiasm, fresh interest, alternative personal style and novelty to the learning process. They often brought a special energy because of their commitment to this particular project. Their particular background and their position in the project helped to equip them to provide pupils with immediate, wider recognition for their learning. For example pupils were pleased to be able to demonstrate what they knew about Florence Nightingale to a freelance education officer dressed up as a School Ma’m and they were impressed to learn that a particular transport enthusiast had lavished labour and money to buy and immaculately restore the bus that he had travelled on as a school child (Thackray, Sheffield Bus).

Many museums and galleries extended this endorsement by exhibiting pupils work in the museum or gallery (Dulwich Picture Gallery, Geffrey Museum, Buxton Museum, Waterfront, Study Gallery). Pupils were very proud that their work received this recognition. This then was a kind of reciprocation: just as schools had permitted museums or galleries to enter into the educational world and had recognized the formal educational contribution that museums could make so museums and galleries recognized the cultural or creative contribution of learners.

Asked what was special about a project in Buxton, Year 10 responses centred on the exhibition:

‘I had done well and tried hard. And in the end my painting looked O.K.’
‘Having it on the wall for everyone to see my work.’
‘That we had the chance to see our work in the museum.’
‘My work on the wall in the museum.’
‘That I had done it and it got put in a museum.’
‘The public got to see my work.’
Performance

Performance was used as a style of learning in a wide variety of projects. A dance piece devised in response to a Turner exhibition in Birmingham, succeeding in engaging a group of 25 Key Stage 3 pupils whose initial reactions to Turner were unenthusiastic. SWFTA’s project on refugees and asylum seekers used role play, performance and documentary making to explore and develop attitudes and to give voice to a set of experiences. Many projects used costumed, in-role interpreters to bring objects to life, tell stories and involve pupils dramatically in the recreation of lived situations in which they could learn. A project at the National Maritime Museum developed a promenade, led by an actor, specifically targeted at hearing-impaired pupils; a project at the Captain Cook Birthplace Museum in Middlesborough involved a number of performers who led pupils in role play and hands on workshops.

The outcome of a public performance or exhibition was also strongly motivating. Pupils who helped plan and organize exhibitions and those who put on dance and musical performances were motivated by the prestige and challenge of preparation within a pre-determined time frame. Teachers reported improvements in commitment, motivation and team working by pupils who took on performance goals. Performances, as at Buxton Museum, proved one way of sharing and disseminating learning arising in MGEP2 projects – parents and friends were drawn in as an audience and took pride and interest in what was achieved.

Creativity

Many projects were intended to support a creative response from pupils. This was particularly the case with the gallery projects funded by engage, many of which centred on making some particular kind of art, usually in response to an exhibition and with the support of an artist or freelancer of some kind. Pupils of all backgrounds and phases responded well to this strategy. Very young pupils at De La Warr Pavilion were impressed by the paintings and architecture and stimulated by the range and experimental nature of the art activities they experienced. Pupils experimenting with photography at York Art Gallery and Impressions discovered that they could make choices about how they composed, framed, staged and developed photographs.

In general much creative work was aimed at equipping pupils with the attitudes and the technical and observational skills required to use art, writing or drama to communicate in an expressive and personal way. In many of these projects pupils did enjoy the opportunities that they had to make art and they expressed satisfaction about what they had learnt to do and with the artwork they had produced. This emphasis on creativity supports learning in the performing and visual arts and it also appears, in some case studies, to have a positive effect on confidence, engagement and participation.

A project led by Buxton Museum and Art Gallery was unusual in that it sought to use a number of creative professional practitioners (musicians, choreographer/dancers, artists, storytellers) to facilitate creative projects with schools which were intended to enhance a wide range of subject learning beyond the visual and performing arts. Teachers and pupils reported learning in history and geography, as well as drama, art and music, which had arisen through the project. A Loan Box project led by the Museum of London
used story tellers and story telling as a way of exploring different religions and different communities.

These learning styles were less effective if pitched at the wrong level for the age of pupils or if animateurs became too preoccupied by their own creative ambitions and insufficiently responsive to the learning needs of individual pupils.

Intensity and Duration

Some projects offered relatively intensive experiences which contrast with the one hour or less sessions which are common for much curriculum delivery in schools.

On PEG119, a school-based project led by a professional photographer, pupils worked in a half-group of 16 rather than 32 for 5 successive days. Their teacher commented:

“As a result the drawings that they – most of them did – at the end showed more evidence of observation. They all gained confidence. They all appreciated each others’ work. Because they had whole day – they had more time to discuss – unfortunately there is not usually time. And they had all the materials there.” (PEG 119)

In one of the three schools involved in this project, the teacher of the 16 pupils who were left out of PEG 119 ran an alternative, intensive week long arts project. This project appeared to share some of the benefits of the gallery supported project: the teacher was very pleased with the pupils’ response and their finished art work was incorporated into the exhibition.

Birmingham’s dance performance and Northampton’s Victorian project also used the form of a full week programme. Visits to museums usually involved a full day of activities with a variety of different kinds of learning which consolidated and developed themes. Fighting Fit at Segedunum Roman Fort, Baths and Museum included a series of activities dealing with medicine, herbs, surgery, food and beliefs in several different parts of the museum. Can You Hear Me at the American Museum in Britain included story telling and costume based sessions as well as a further writing session in which pupils were helped to respond creatively to the experiences they had. A day at the Winchester Barracks Museum included dressing up in uniforms, working with a portfolio of historical documents relating to World War 2, investigating military artefacts and insignia and exploring the buildings and memorial garden.

Even loan boxes, which were designed to fit in with the school's timetable, appear on some occasions to have won more time for a particular learning activity. A teacher using a project box in North Yorkshire reported that she had retained them for longer and made greater use of them because they proved so successful in the classroom. Pupils at another North Yorkshire school said that they had done more history while they were using the loan box and had enjoyed the opportunity to follow through their work and create an extended piece of work in response of which they were proud.

The success of the museum-led one-week Victorian project at a school in Northampton has led the school to run other 1 week learning activities for history and geography.
Cross Curricular Learning

A large number of projects provided opportunities for cross-curricular learning. In particular ICT and literacy, both media of learning, were also identified as a distinctive focus of learning in projects whose main focus was another curriculum subject. For example, a number of projects (Norwich, Middlesborough, York Art Gallery) were concerned to develop visual literacy, but in doing so they made explicit provision to develop oral skills of discussion and response to art works. ICT provided pupils with a medium through which to respond. Because computer software makes it easy to combine images of objects and written pupil responses and affords the means to communicate information to a real or virtual audience, electronic presentation was sometimes designed into projects as a particularly appropriate way of getting pupils to learn from objects and images (Kent IT Project, Bedford Bytes). However, some schools freely chose to integrate their pupils’ response to projects with ICT learning – though this was not designed into the project (Topcliffe School, Richmondshire).

As mentioned above, a number of projects used performance, drama or film as a medium for learning. Performance showed itself as a versatile form for learning: in different projects it served to facilitate outreach work (Mary Rose), to give a point of access to relatively inaccessible artwork (Birmingham), to develop empathy and affect attitudes (SWFTA), to engage very young children (Polly’s Story at the Ragged School Museum) and to provide the means by which pupils can engage with a historic place, person or event (Lotherton Hall).

A minority of projects exploited the extra-curricular character of museums and galleries to target other kinds of inter-subject or cross subject learning. A project at Keele University made connections between art, science and psychology; a project at the Holst Birthplace Museum explored science in the context of music; a number of projects explored medicine or science in history (Segendunum, Apothecary Museum, Thackray Museum, Fitzwilliam Museum). The reported benefits for this kind of cross-curricular learning appear to be that one subject offers an accessible context for learning in another subject. So for example, the Holst Birthplace Museum was able to provide pupils with a lesson about sound waves making use of real and improvised musical instruments. This heightened the importance of the visual and kinaesthetic component in the teaching and learning of this topic and generated opportunities for hands on, participative and interactive teaching and learning. It also provided a concretization of general scientific principles – providing an example of their significance (the theory explains what we hear in music) and making the connection between scientific learning, on the one hand, and an artefact which carries cultural status or value (Holst’s composition, “The Planets”). A similar logic applies to a problem solving activity at The Fitzwilliam where pupils are asked to solve the technological problems faced by ancient Egyptians.

A project at The American Museum near Bath used a historical context to stimulate and situate literacy work. A teacher commented that the “project provided an excellent foundation for applying English skills in the context of historical learning - it reinforces the need for good quality stimulus in literacy”

However, in a relatively large number of projects learning was largely confined to a single subject. This may in part be dictated by the nature of the collections involved, the expertise of museum and gallery educators or by the demands of schools and pupils.
Museums and galleries were expected to work in partnership with schools and most schools appear to have viewed the partnership as an opportunity for learning in a particular curriculum area. Some of the more genuinely cross-curricular projects were more entrepreneurial and involved museums who had advisors or freelancers to lead or contribute to projects which cut across a number of school subjects. (Darlington, Buxton, Henley)

Some cross-curricular projects experienced difficulties in their reception or take up by schools. One project which created a generic electronic tool to support the development of research skills, particularly with relation to homework, was, during piloting, able to demonstrate its relevance in the classroom and the school library. However, partly because the resource does not closely serve any particular curricular area it has been difficult for it to find a place within the school curriculum and there is uncertainty about whether it can, without modification, gain adoption. Another project which addressed science objectives through the investigation of a collection of historic engines led one teacher to comment that “the science was blocked out by the history” implying competition rather than synergy between the two areas of learning. Another project which addressed technology through the investigation and demonstration of historical industrial processes was judged to “have lost pupils’ interest” suggesting that historical re-creation does not necessarily bring history to life and can prove to be “turn off” rather than a motivator for learning in another subject.

**Special Places**

In many projects it was clear that teaching exploited the distinctive qualities of the space provided by the museum or gallery. Projects in the garden of Harewood House and in historic buildings such as Claverton House, Lotherton Hall, Cecil Higgins House, Tatton Park, the The Herb Garret and Apothecaries Museum and Tinsley Tram Shed exploiting the history of the building and its furnishings.
Pupils’ understanding of the history of the building and their experience of the building as a historical artefact in its own right helped pupils to imaginatively enter into a context and a state of mind which were favourable to learning. In some cases, museums had historical associations with individuals, such as Holst, James Cook, John Keats, Elgar, or with a community (such as Segendunum) which were exploited to help pupils empathise with them. Sometimes the historical effect appears to have been mediated: the historical environment stimulated the performers or the facilitors in the first instance but their enthusiasm appears to have been picked up by at least some pupils.

In a number of projects it was clear that design, scale, grandeur or position of the building contributed to the learning experience. In the case of a traditional museum, such as The Fitzwilliam, this may be partly due to the enduring rhetorical power of neo-classical architecture and the compelling impact of an accumulation of treasures traditionally displayed in glass cases, gilt frames and upon marble pedestals. Modernist gallery spaces, such as the Study Gallery, Poole, also impressed pupils: pupils enjoyed the amount of space, the modern design values and the way galleries exhibited works of art. Pupils enjoyed using museum and gallery spaces as spaces for learning activities whether they were looking at and talking about artefacts or art works or whether they were carrying out their own creative work. The appeal of museums and galleries as learning places appears to be due to a number of closely related factors: the proximity to objects which stimulate pupils, the fact that in a museum or gallery pupils can interact in a more sustained or extended manner with artefacts or works of art, the fact that museums and galleries may be attractive or engaging buildings which were designed to (or have been socially recognized as giving) status to the artefacts within them and because pupils have made a journey from the routine world of their classroom to an extraordinary and unfamiliar environment which stimulates attention and encourages pupils to think and behave differently.
In concrete terms the environment of a museum or gallery may make a performance more credible (Tatton Park) or an activity like dressing up or role playing nursing more meaningful (Thackeray). One of the schools working on a project at the De La Warr Pavilion negotiated more time in the museum so that pupils could carry out planned creative tasks in the gallery rather than in the classroom because pupils were responding so well to the gallery environment. Many pupils were visibly excited by artefacts that they glimpsed in passing and expressed the intention of returning to see them. Brewhouse Yard in Nottingham reported “a general curiosity amongst pupils as to ‘what else’ the museum sites might hold”. On a number of projects museum and gallery learning ushered in wider out-of-school learning: Robert Wilkinson School in York extended its out-of-classroom experience by including extended work in the school grounds; pupils on a project run by the York Museum Trust were able to visit two museums, a gallery and the photographic studio of the local FE College.

In some projects teachers and pupils reported that museums and galleries had become less alien for them. One teacher reported that her pupils had learnt: “that going to an exhibition is not a scary thing.” Because of the visits which pupils with special learning needs made to Melton Carnegie Museum, the Curator felt that she and a colleague had become “the human face of the museum”
Some aspects of the otherness of museums and galleries militated against learning. At least one museum lacked good access to toilets, while the time, cost and logistics of transporting pupils proved, in many cases, a considerable burden to teachers, assistants and parents. Pupils seemed largely untroubled by the annoyances of the journey. On a few projects sessions were curtailed because time had been lost due to delays or confusion about travel. The difficulties of working with large numbers of KS3 pupils in the open environment of a museum discouraged one secondary school from a visit to a partner museum and, on another Key Stage 3 project, open learning led to crowding around particular exhibits which interfered with learning. In some projects mistakes were made about best way of allocating tasks between the classroom and the museum. For example, in an ICT project at a small local museum, pupils and facilitators struggled against the constraints of limited time and equipment to digitalise, download and process images of artefacts at the museum when much of this activity would have been more easily executed in the classroom.

Some galleries and museums were attracted to outreach work because of the permanent or temporary constraints in their own buildings. The De La Warr Pavilion, the Arnolfini and museums in Leicester, Cambridge and Middlesborough were all closed or undergoing restrictive building works during the period of MGEP2. Some projects experienced particular difficulties when working in schools rather than in museums or galleries. Sometimes pupils in schools found it more difficult to respond in a creative and unconventional way when they were on their home territory. On other occasions project leaders reported more practical constraints: inadequate rooms, noise from other groups, lack of adequate equipment, ICT failures.

4.7 Teacher Learning

The case studies contain much evidence of gains in expertise, confidence and satisfaction by teachers. Every teacher interviewed reported that they had gained an improved understanding of how to make use of museum and gallery learning.

A significant minority of teachers were inspired by their involvement in the project: they were excited by the difference in the way their pupils responded and by the new opportunities presented to them to teach and to learn. (Richmondshire, Croydon Clocktower, De La Warr Pavilion) MGEP2 had taught them about new ways of teaching and learning and its success gave them the motivation to transform their own teaching. Some of these inspired teachers were relatively young and relatively open to trying out new ways of teaching. For a number of them the less structured, more thematic approach and longer time block was a new experience. Some teachers reported that they gained access to an environment or resource for learning that they would not have accessed otherwise. A teacher in Bexhill said that she “saw the exhibition in a different light. Had I had seen it on my own I would have walked out. The work we did together opened my mind.”
Some teachers were relatively experienced in museum and gallery learning and that was why they had chosen to get involved. They did not need to be persuaded of the benefits of museum and gallery learning so MGEP2 could not have such a transforming effect. However, these teachers generally were confirmed in their approval of museum and gallery learning and usually they reported that the project had been an opportunity for them to improve their understanding and capability in this area. In a number of schools, teachers who already had experience of working with museums or galleries were able to draw in other teachers and extend the benefits. (Colchester)

Even for experienced teachers it was sometimes a new experience to work closely with a non-teacher either with pupils or on other aspects of the project. Teachers particularly valued the opportunities to learn from other professionals: artists, museum educators, facilitators. A teacher working with a photographer at a school in Croydon said “in school as a teacher you don’t get much impact from outside world – this kind of impact was particularly valuable in this project.” Teachers reported learning from observing how these other adults worked with pupils but also they learnt directly from the professionals themselves.

A few teachers went into partnerships with relatively well formed objectives of their own. A teacher may have wanted to develop some resources or a scheme of work to fill a known gap and MGEP2 offered them the opportunity to do this. This additional sense of ownership seems to have particularly satisfying for teachers and it was an advantage of the essentially decentralised, partnership driven organization of MGEP2 that it was able to perform this “midwife” role for some teachers. In many cases MGEP2 gave an opportunity for teachers to develop from simply being consumers of museum and gallery learning to be active participants in museum and gallery learning.
learning to sharing in design, development and evaluation. This also increased the sense of ownership and achievement for teachers.

Many teachers valued their MGEP2 project because it gave them the opportunity to make aspects of the National Curriculum more relevant to them and their pupils. This was particularly the case where local museums were able to identify resources that helped the school to deliver local history (Colchester, Carisbrook, Epping Forest).

It was relatively unusual to find schools where involvement in MGEP2 had a large impact beyond one or two particular classes that had direct involvement. However, many teachers planned to repeat learning activities with future cohorts. In two secondary schools, MGEP2 led to a new scheme of work backed by a new set of resources which was in use across the whole year. At Epping Forest Museum, the museum education officer provided INSET in object handling for the history department of one school and visited every Year 8 class to work with pupils and teachers using a loan box. The Head of Department at that school believes that his department is now better equipped to carry forward this kind of teaching. Brampton School received a whole school INSET at the Fitzwilliam Museum and saw their involvement as part of a broader strategy to move to more thematic, cross-curricular teaching and learning styles. Spring Lane School in Northampton was remarkable in that it took a key role in shaping the project, an intensive history week in and about the school itself, and that it has already replicated this way of teaching in other parts of the curriculum.

In a few cases teachers felt that their own skills or experience had been underused and that mistakes were made that they could have helped avoid. There was some evidence that opportunities of teacher participation and learning where underexploited. One teacher said, “I had a back seat. I was maybe wasted in not teaching – I had lots to do in organisation. I could have had an opportunity to play at being Mike [the artist on this project]. I spent a lot of time organising things that they could have.”

4.8 Volunteers

A few projects managed to provide a medium through which volunteers were able to contribute to education. Exemplary in this respect was Journey through History at Sheffield Bus and Tram Museum where an educational programme was devised and delivered by volunteers and resources and training were designed to give volunteers the skills and understanding to communicate their knowledge and enthusiasm to pupils. In this particular case the volunteers were able to bring their distinctive experience and outlook to the educational activity which was picked up on by the pupils involved. Volunteers were also able to contribute to teaching at the Holst Museum, Bedford Museum, Winchester Military Museums and others.

Yorkshire Museums Libraries and Archives Council organized an additional training opportunity which brought volunteers from the tram museum together with education officers from a neighbouring industrial museum in Sheffield to extend knowledge of the National Curriculum and of different teaching strategies. Yorkshire Museums Libraries and Archives Council also worked with a number of small, volunteer run museums, particularly in North Yorkshire. By grouping the museums together into an umbrella partnership and providing professional co-ordination and educational consultancy,
YMLAC was able to find a strategy for these museums to contribute to a set of historical loan boxes which are now available for all local schools.

Another group of volunteers involved in museum and gallery education are parents. Class groups visiting museums and galleries routinely include parental helpers and volunteers. In a few projects the role of these helpers was restricted to helping with transportation but very often parents worked with groups of pupils leading and supporting them in their educational tasks. Parents and grandparents contributed greatly to many of these projects since their role enabled pupils to work in small, supported, free-roaming groups. Where learning was organized around the investigation of objects, rather than the transmission of knowledge, parents were observed to have the skills and confidence to support, manage and respond to pupils in museums. A few parents were interviewed and they reported that they enjoyed the experience, valued the learning that their own and other children had and were pleased with their own role in the activity.

Parental involvement in museum and gallery learning is well established – up to Key Stage 2. The value of parental involvement is accepted by parents, pupils and teachers. The open learning environment of museums was shown to be a good place for parents to work with pupils. In many museum learning projects parent helpers were able to play a supportive role, alongside teacher assistants. However, in some projects little use was made of parents or the role in teaching and learning was under-exploited. Museums and galleries usually leave the role of parent assistants up to the school. The experience of projects where parents participated fully in museum and gallery learning suggest that there are further opportunities to exploit a contribution which, at its best, both supports, confirms and extends the learning of pupils.

4.9 Staffing and HR issues

Museum and gallery staff were usually very positive about projects. Those who were education specialists within museums and galleries were positive that MGEP2 gave
additional resources and public recognition to their role. Some commented that DfES involvement had raised the profile of museum or gallery education within their institutions. Museum and gallery educators were positive about opportunities that they had enjoyed to innovate and to work with partners. Some said that they thought they had a better understanding of the curriculum and of how to best to carry out such projects. Some reported particular learning about particular kinds of museum or gallery learning, such as e-learning, loan box learning or about how to run partnerships with schools.

A number of projects used funds to contribute to staff costs (Warwickshire, Ironbridge and Henley); many gallery projects used a substantial part of their MGEP2 funds to employ freelancers. A number of projects bought in expertise – web designers, performers or facilitators. These staff then produced resources or delivered activities. In other museums, MGEP2 projects were delivered by existing museum or gallery staff and the money went on equipment, other resources and consumables. This implies that some museums were effectively contributing more professional staff time to MGEP2 projects than others. In the case of some small projects, a large proportion of the budget was consumed in paying for the time of the project officer which meant that those projects had fewer resources for teacher time or marketing, for example.

Where permanent staff have led projects then confidence and expertise acquired through projects is more likely to remain within the museum. However, a significant number of museums and galleries, education staff changed employment at the end of the MGEP2 programme taking with them valuable experience and knowledge of partners. The learning of freelancers and mobile staff is not necessarily lost to the sector since many freelancers do regularly work on gallery or museum projects and mobile education staff carry their experience to new institutions. One individual, who had already worked on MGEP1, worked on two quite different MGEP2 projects – in one case as a part-time employee and in the other as a freelance consultant.

A major issue for a minority of projects was turnover of staff during the lifetime of an MGEP2 project. This sometimes had the effect of a loss of information, interrupted communications and even a loss of purpose and direction. The Holst Birthplace Museum changed its project leader twice during the course of MGEP2 and WMLAC employed three different MGEP2 co-ordinators. Regrouping to accommodate staff changes was a real concern for some institutions. In the East Midlands, example, Leicester City Museums and the East Midlands Oral History Archive, Northampton, Nottingham Castle, Nottingham Brewhouse Yard and Lincolnshire all experienced some degree of disruption in the lead institution, with staff taking on additional responsibilities to see the project through.

Freelancers and other short-term staff made a very substantial contribution to MGEP2. They provided the flexibility to museums and galleries to expand provision quickly and without long term commitments. They brought a very wide variety of skills, experiences and teaching styles into education. Many of these freelancers were experienced museum and gallery educators but a significant number were inexperienced or beginners.

One project reported difficulties in integrating regular museum staff and freelancers concluding that a written partnership document might help clarify the position in the future.
Museums and galleries play a valuable role as an “employment agency” for non-teachers who have the skills and interest to make a contribution to education. Staff in museums and galleries often have the contacts and past–experience to identify, support and quality assure the right person for the right job. However, a number of museums and galleries did report that some of their freelancers were less effective than others at this kind of work and one temporary project officer was judged by some, in retrospect, to lack appropriate experience. The personal and informal channels used to recruit freelancers help to draw in people who might otherwise play no role in education and they often provide a backbone of trust. However, the absence of an open market for this kind of work, the short-term nature of the projects and the paucity of formal training and of opportunities for networking with other freelancers are likely to make this kind of employment even more transient and insecure than it need be. There are opportunities to build upon the work of gallery and museum organizations to improve career opportunities and professional development for part-time and temporary gallery and museum educators.

4.10 Interaction with other Projects

In some areas there is evidence of greater co-operation between museums or galleries because of opportunities created by MGEP2. Regional co-operation is dealt with in Section 5. Every region saw groups of museums working together to deliver MGEP2 projects and in many cases there were examples of expertise being shared. In London, for example, the London Museum of Transport shared its expertise on promenade tours with the National Maritime Museum who in turn shared its expertise in working with hearing impaired pupils. Projects in Leicester and York saw new city wide museum trusts building collaborative ways of working. In the North East, MGEP2 combined with Creative Partnerships to fund two Heritage Education Officers who worked with a number of museums.

A number of projects are informing educational projects which are now taking place through regional hubs, for example a library education project in the East of England and a number of projects in the East Midlands.

However the multiplicity of distinct programmes and projects, with different timetables, bureaucracies and objectives, brings its own pressures for museum staff. In one case competition from another programme disrupted MGEP2 plans for an exhibition which was described as being “dumbed down”.

4.11 Sustainability

It is too early to come to firm conclusions about the sustainability of MGEP2 projects although there is some evidence for their prospects. It is useful to distinguish between some of the different ways in which projects may claim to have a sustained impact, lasting beyond the immediate lifetime of MGEP2. While most MGEP2 projects will have some influence beyond the immediate lifetime of MGEP2 the quality and extent of that impact is likely to vary.
**Full Provision:** some projects were planned to sustain full provision of a museum or gallery learning offer into the indefinite future without additional funding. For example, the loan boxes created in Richmondshire and Lincolnshire will be a permanent resource for local schools. Furthermore, a small cost will be charged to schools in order to pay for ultimate replacement of replicas or boxes. MGEP2 resources have enabled the Mary Rose Museum in Portsmouth to make the costumes, obtain the props and design the performance piece which they are now taking to schools that are willing to pay enough for a show to cover direct costs.

A project may create a website (Bedford Bytes, Nottingham Galleries of Justice) or design and test museum based activities (Leicester, Melton Carnegie) which represent a permanent addition to a museum or gallery’s educational activity. Royal Albert Museum in Exeter will use their CD Rom and new museum workshops to deliver sessions on the Romans to the many schools who regularly visit for this purpose.

A project may plan for full provision but not necessarily achieve it. Thackray Museum in Leeds has received heavy bookings for a Florence Nightingale museum activity so its future seems assured. However, one learning pack project, had not, by the end of MGEP2, succeeded in attracting any schools, beyond a single pilot, to use the educational resources that it had created. While the resource had been created, which was offered at low cost to local schools, there was no evidence that the project would be sustained in the sense of being used by pupils.

**No long term provision:** at the other end of the spectrum there were projects which were not planned to last beyond the immediate MGEP2 timeframe. This was usually the case with projects that depended upon artists and freelancers, many but not all of which were run by galleries and funded through engage. Once the money was spent there was no prospect of the offer being sustained unless further funding could be found. This is not necessarily a criticism since some projects were intended to be unique experiments by the artists or freelancers who ran them – and it is unlikely that these artists would want to repeat a particular workshop. Such activities were sometimes related to temporary exhibitions or to particular ideas for collective artistic activities. Some galleries have considerable experience at accessing separate funding to support a succession of educational activities – each one of which is relatively short-lived. Some project leaders commented on the need for sustained funding at a modest level and some (Melton Carnegie, Lincolnshire) hoped to allocate small sums from their mainstream budget to extend further resources which had been created through MGEP2.

This absence of a lasting provision, did in some cases leave a sense of frustration that successful activities would be lost and an uncertainty on the part of teachers of how they might carry forward new kinds of teaching and learning without their partners. In some projects, this disappointment was avoided because galleries planned from the start to build a lasting partnership or network and, with this in mind, they were able to identify new projects with which they could work with their partners (The Study Gallery, Arnolfini).

**Pilots**

Sometimes projects were characterized as pilot projects. That is they were not intended to last but rather to show how something might be done. That being the case one might expect that such projects would invest in communicating lessons from the project to...
other possible developers. One museum that did this was the Dulwich Picture Gallery. Wonderful Pictures involved two Year 5 classes at a local school in a project which combined artist-led creative work, learning from professionals at Dulwich about what they do and putting on a large scale school exhibition at Dulwich. This was a genuine pilot in the sense that project featured on BBC’s S\textit{M}{	extit{a}}rt a childrens’ art programme and Dulwich have gone on to produce a brochure to describe and disseminate the model. (Dulwich Picture Gallery) Other pilot projects have drawn attention to their activities through exhibitions and newspaper cover. Lotherton Hall’s Operahouse received national attention through an article in The Guardian. (Prince, 2004)

Desmond Shaw Taylor, Director of Dulwich Picture Gallery, receiving a guided tour of an exhibition, Wonderful Pictures, created by Year 5 pupils from Bessemer Junior School at Dulwich is filmed with the children for S\textit{M}{	extit{a}}rt a childrens’ art programme

However, extensive dissemination of pilot projects was unusual though such projects did take advantage of regional or agency conferences and publications to describe and disseminate their projects. It is too early to say whether these pilots will actually have an impact on other museums and galleries.

CEI at the University of Warwick, Impact of Phase 2 of the MGEP, Vol. 1
It remains possible, even when projects terminate, that they have some lasting influence on the teachers, pupils or other gallery or museum educators who participated.

**Lasting Influence:** a project can be said to have a lasting influence if teachers, or anyone else can carry forward innovation or learning due to it. For example, a project at the Waterfront Museum in Poole has been replicated at a neighbouring museum. A project involving oral history at Colchester Museum is to inform similar projects in Suffolk. A successful e-learning project at Bedford Museum has encouraged the education officer to use the same model to create other e-learning resources and helped her gain the resources she needs to do that. An intensive Victorian week at a school in Northampton has already reused the model for Tudor and Geography weeks. Lincolnshire's loan boxes are now being used as a model for outreach resource boxes across the county planned under the EPDP.

**Relationship:** a project may be sustainable in the distinct sense that it has helped to form or sustain a partnership or a network which may now go on to create or develop other educational work. Where good will, trust and a readiness to work together have been established this may be the foundation for further work. Carter CS College has already repeated a gallery learning experience at the Waterfront Museum with another group of pupils. A number of museums and galleries plan to do further projects with particular schools as an outcome of MGEP2. York Art Gallery and their local secondary MGEP2 partner school have agreed to work together to support a related extra-curricular project. De La Warr Pavilion has, through MGEP2, established a regular termly forum for local art teachers through which the gallery can facilitate networking, sharing of good practice and, as the opportunity arises, recruit partners for future gallery learning projects. The Melton Carnegie project has already contributed to two teachers’ inset sessions and the county’s history and geography teachers group intends to continue to invite museum staff to their future sessions.

**Partial Continued Provision:** sustained impact is less clear when a museum or gallery does not have the resources to sustain a particular activity or event but may be able to offer an alternative activity or visit which has some elements of the MGEP2 project within it. In a number of cases schools had no experience of working with a particular museum until MGEP2 and now plan to find ways of making visits or using collections in other ways:

“I did know the museum was there but I didn’t know it was so good. I would take another group there definitely.” (Teacher at American Museum, Bath)

Buxton teachers discovered a treasure trove during their visit to the Schools Lending Service collection as part of MGEP2. A high profile, successful project involving Dulwich Picture gallery at a local school, Bessemer Primary School is being sustained by sixth formers from a local secondary school who are working with the next Year 5 cohort to repeat the experience.

**What factors contribute to sustainability?**

The case studies provide some evidence as to what factors contribute to sustainability. Judgements in this area are provisional and more extended and longitudinal research is desirable to fully explore this area.
Market Orientation

A fundamental factor is the extent to which a project really does meet a curriculum need which is not already well resourced. Where project originators did research with teachers to find out what teachers wanted, then projects were more likely to have a lasting value. A project at Thackray Museum in Leeds identified Florence Nightingale as a key topic at Key Stage 1. The museum, which specializes in the history of health and medicine, was well placed to develop a learning activity and pack to support this part of the curriculum. Piloting provided an opportunity to test and improve the activity which is now heavily booked.

Some imaginative projects are unlikely to gain lasting take up, because they do not closely match with curriculum needs.

Ready Made Market

At Bede’s World learning activities were designed which will be available to all school visitors. Since Bede’s World is visited by 120 schools p.a. it estimates future, annual cross phase use at 21600 pupils. Royal Albert Museum estimates high access for similar reasons.

Flexibility

Some resources take account of the constraints which may bar teachers from bringing pupils to museums or from completing a project in its entirety. Resources which permit teachers to select some activities or, if necessary, to deliver learning or activities in school rather than off site are more accessible. Fighting Fit, a project about Roman food and medicine, was delivered at Segedunum Roman Fort, Baths and Museum during MGEP2, however, it is planned to provide training and resources so that teachers can carry out the project in their schools. Flexibility was certainly key to the success of the Buxton project and has been built into the e-learning resource produced by Galleries of Justice, Nottingham.

Transfering to new Markets

Some projects will be suitable for a variety of users. Activities designed as part of Fighting Fit will be offered to weekend and holiday visitors and can be said to support lifelong learning.

Embedding

Some teachers spoke of the importance of “embedding” learning activities within a school’s curriculum. This concerns the coherence of learning: the extent to which a museum visit or gallery project connects with prior and subsequent learning experiences and with learning in other subjects. A teacher working with Bedford Museum on an e-learning project was enthusiastic about her participation because she believed that the activity would be embedded. This teacher knew that she would have access to an
electronic whiteboard the following term and had understood this project as modelling a
teaching and learning style that she planned to make normal in the immediate future.

A history department of Sandford High School on the Isle of Wight had been able to
design and resource a unit of work on local economic history for their Year 9 curriculum.
The history department of Davenant Foundation School in Essex has established a
module involving object handling for Year 9s which is planned to be a permanent fixture.
Without embedding, museum and gallery learning will only have a limited impact on
learning and may not be repeated at all if, the next year, teachers have changed classes
or coaches have become more expensive or there is difficulty with dates. It is
embedding which gives museum and gallery learning a lasting position in the school
curriculum. In one case, a perceived incoherence between MGEP2 and conventional
schoolwork undermined even the immediate value of the project, the teacher believing
that the project undermined concentration during literacy and numeracy sessions.

The embedding of museum and gallery learning appears to be more likely where project
development is informed by a good understanding of current practice and current
opportunities within schools. Involvement of senior teachers may, as suggested above,
contribute.

**Professional Development for Teachers**

Some projects included the provision of professional development for teachers. *Art on
Tour – A closer look*, involved the loan of replica paintings from Middlesborough
Museums and Galleries to schools to support interpretative work in the classroom. As
the project progressed, teacher training days were developed, based upon feedback
from the schools. Sessions on how to use art in the classroom, language/literacy
development, practical techniques and art discussion were delivered. 100 KS 1 and 2
teachers took up this training and it is estimated that some 500 KS 1 and 2 pupils will
use the loan materials.

Teachers learnt about project management, resource design production and evaluation
through their partnership role. For example, Leicester City Museums’ consultative panel
enabled teachers to work closely with museum staff on the planning, trialling and
evaluation of their active learning sessions.

Teachers also learnt informally through working alongside others, working in new
environments and having the opportunity to learn with and observe their pupils learning.

**Cost and Charging**

Projects with relatively low running costs, after the initial investment, such as loan box
projects, appear to have relatively good prospects for sustainability. Where museums
are compelled to increase charges for schools, demand is likely to fall away. Porthcurno
Museum which can no longer provide free coach travel for local schools after the lifetime
of MGEP2 anticipates a halving of demand for its programme.
A teacher working alongside pupils on a project at The Study Gallery, Poole.

However, in some schools a lack of expertise and confidence on the part of teachers proved to be a barrier to successful use of museum and gallery resources. In one observed lesson, the teacher relied too much on her own experiences and re-appropriated what was intended as an open ended discussion for pupils into a teacher-led pursuit of right rather than wrong answers.

Finding the right Client

The success of some projects is connected to the special character of their partners. A project at the Sheffield Bus and Tram Museum, for example, would have had a much more extensive take up, if, as was planned, its partner, the South Yorkshire Passenger Transport Executive, had recruited and transported schools to the project.

Marketing

Planning and budgeting for marketing also contributes to take up and sustainability. For some small projects, the production and distribution of a leaflet to local schools which described their offer was a considerable step. A number of projects invited teachers to special dissemination meetings or participated in larger events that were organized regionally or sub-regionally by their MLACs. The marketing contribution of MLACs is discussed in section 5.
4.12 Type of Project

This final part of section 4 examines the qualitative evidence in relation to certain types of project. It is possible to classify projects in a variety of ways. Use was already made of a classification of partnerships at the start of this section. Projects could also be classified by scale, by subject or by learning medium. This last appears to be worth undertaking as it appears that there are experiences which were common to projects which shared a fundamental strategy. In practice, projects often combined a number of strategies or learning media. Nevertheless, even where a project contained a portfolio of learning strategies it can be helpful to understand that the different components worked according to different principles and depended for their success on different factors.

**IT/digital**

Martin Bazley has suggested that museum digital learning projects may be distinguished by the role given to pupils. In **creation** projects to the pupil uses computer software and other digital technology to record, organize, present or communicate knowledge obtained from working with museums. In **consumption** projects it is the museum that uses the technology and pupil or teacher learning comes through the use or consumption of the new resource.

Both creation and consumption projects have some advantages in terms of remote learning though these advantages are likely to be greater in consumption projects. A few projects seek to combine elements of both.

**Creation Projects**

Creation projects provide pupils with a medium for developing and communicating their responses to and learning about artefacts. Digital technologies are well suited to combining image and text so they fit naturally with object based learning. The Kent IT project included a large number of largely creation projects. At Sevenoaks Museum pupils carried out an object handling session and then selected an object, took a digital image of it and then added some simple explanatory text. A similar exercise was carried out by Year 5 pupils on a different project at a school in North Yorkshire using Microsoft Powerpoint with objects from a loan box. Pupils in both schools were pleased with the professional appearance of their work and enjoyed learning and applying further ICT skills. Using ICT as a medium helped to motivate and gave pupils an appropriate structure for their response. Similarly, secondary pupils at Buxton explored the use of Photoshop, incorporating digital elements into their art work.

However, ICT did not always encourage a very open ended investigation into objects. On one project relatively young pupils spent much of their time trying to master software rather than investigating artefacts while on another some observers judged that an interactive learning activity was popular but rather limited in the extent of learning offered. Older pupils on another project, who already had good skills with the chosen software, were able concentrate more on communicating what they had learnt or thought about the objects. A project at the Gasworks Gallery involved older pupils in designing simple animated screen savers. This appears to have been popular with pupils and the relatively simple technology empowered pupils to respond creatively.
These examples suggest that there is a balance to be struck between ICT and other kinds of learning and if high levels of ICT learning are required other learning may be limited.

Consumption Projects

Three case studies involve the creation of interactive learning resources: Bedford, Fitzwilliam and the River and Rowing Museums. Two of the Kent IT projects involved smaller dedicated interactive websites. A number of other projects include some element of digitalization of museum resources which will can be distributed by CD or website. (Carisbrooke Castle) These projects are concerned to exploit the power of ICT to communicate and reproduce information for pupils and to organize and present it in ways which makes it easy for them to learn from. Sometimes, in Nottingham’s Galleries of Justice resource for example, interactive learning tools are built into the resources to stimulate and direct responses. This provides some element of a creation project where pupils have the opportunity to create their own response or create their own outcome using a form or elements provided by the resource.

These resources provide a strong context and well defined environment for learning. They are accessible from a well equipped classroom or ICT suite and can be accessed by very large numbers of learners. For the designer they provide the opportunity to carefully plan and structure learning. However, some MGEP2 projects found the management and creation of e-learning resources challenged their own expertise and their time and budget constraints. Two substantial interactive learning projects remain incomplete at time of writing. A number of smaller projects have been delayed.

Home Page from Take a Seat, part of the Bedford Bytes website

CEI at the University of Warwick, Impact of Phase 2 of the MGEP, Vol. 1
Teachers and pupils enjoyed using Bedford Museum’s *Bedford Bytes* which provided extensive opportunities to explore and investigate a wide range of objects as well as write about them. Some pupils found The River and Rowing Museum’s *I’ve Got Homework* a useful planning tool and librarians and teachers agreed that it would be a useful resource to help develop research skills. Pupils trialling the Fitzwilliam’s *Appliance of Science* were able to use simulations to successful solve technological problems. The Galleries of Justice team reported that all pupils trialling Artefacts On-Line were on task throughout their session and engaged in a high level of discussion among themselves. They also found that “we underestimated how much they would be prepared to contribute when they realized that their ideas and suggestion for improvements and developments were being taken seriously”.

In general, however, the learning outcomes of consumer digital projects within MGEP2 were less certain for present than the outcomes of creation projects or of museum and gallery projects generally. While the potential benefits are enormous, museum and gallery educators are still learning how to master this learning technology and do not always have the experience, or access to independent expertise, which will enable them to design projects which are realistic and practicable for a given budget, timeframe and market. Consumption of such resources in schools continues to be hampered by insufficient technology, slow connection speeds, system difficulties and deficiencies in understanding and experience.

**Loan Box Projects**

Loan boxes are now a well established learning resource for the museum sector. MGEP2 saw a substantial expansion of loan box projects: loan boxes were created for the secondary sector, loan boxes were created for small volunteer run museums, loan boxes were created to be used in conjunction with creative writing, creative art work and creative story telling. Loan boxes were shown to be a relatively cheap and efficient way for museums and archives to bring learning from objects, images and documents into schools. The impact of loan boxes was reinforced by using various facilitors, creative writers and artists to help interpret the artefacts or to help pupils make creative responses. In a number of cases these facilitors have shown teachers how to use the artefacts so some teachers are now equipped to carry forward this style of teaching.

The Museum of London’s loan box project took object handling into the R.E. curriculum. Teachers were able to fully integrate the resource into their teaching of National Curriculum R.E. Furthermore, during the lifetime of MGEP2 the significance of the objects was enhanced by a rich diet of visits to various places of worship and visitors representing different religious communities.
A loan box from Lincolnshire’s ConnectED project proved extremely topical during 2003. Careful packaging added to the interest of the objects.

Loan box projects were successful with secondary schools; in some cases more so than projects that involved museum based activities. This was because loan boxes fit better with the demanding timetable of secondary schools, particularly for extended projects, and because secondary teachers found it easier to build sophisticated learning activities on to loan boxes than they did for some other activities. Secondary teachers with little experience of using objects recognised that objects do “something over and above books”. A Lincolnshire teacher commented that there are innumerable publications about World War 1 and teachers are themselves capable of devising learning activities, but having the genuine artefacts in school was “the jewel in the crown”.

In some cases the impact of the contents was enhanced by careful and attractive packaging. The value of loan boxes could be enhanced by the inclusion of guidance on how to use the materials, schemes of work, information about the artefacts, comments from teachers about how they had used the artefacts and training given to teachers on teaching from objects. A number of projects created a suite of boxes so local schools would have a choice and, over time, the opportunity to build up the skills which come with the handling and discussion of a variety of objects. The existence of such a suite meant that museums were in the position to satisfy the demand that they created. A number of museums planned to add to their suite of loan boxes in the light of feedback from schools.

Some loan box projects or other resource generation projects sought to involve pupils in the design and construction of the resource itself. The intention was that pupils would prove to be useful judges of the kinds of artefacts or materials which would be valuable to pupils and teachers generally. While there is evidence that those pupils who had the opportunity to think about the learning potential of objects, documents and images did gain from it (Colchester, Carisbrook Castle) it is less clear that pupil involvement is an efficient way to compile a loan box. In practice this kind of involvement tends to slow down the process and it may limit the time and resources available for testing and modifying resources once they have been designed. It may be that some of the learning for pupils which can be contrived through thinking about the teaching potential of artefacts could be programmed into schemes of work which accompany loan boxes.
Loan boxes depend for their effect on the capability of teachers to use them. In some schools teachers lacked the confidence to use loan boxes and they needed support and additional training. In other schools, loan boxes arrived at the wrong time or without adequate notice.

**Projects employing animateurs, artists or other creative people**

This type of project has already been discussed in the section on creativity above. These projects were particularly successful at inspiring and exciting learners and teachers. They were often quite intense and very different from conventional classroom learning. The focus was on learning from different people rather than learning from different objects. Teachers were impressed in some projects by the considerable impact that particular performers or artists had on particular pupils particularly where pupils and animateurs worked together over an extended time period as for example at the Waterfront Museum, The Study Gallery and York Art Gallery.

With intensive support from highly skilled professionals pupils were able to achieve creative works of all kinds which were a lot more complex, less routine and more ambitious than they could have achieved otherwise. Parents, pupils and teachers attested to this achievement which was often witnessed through public exhibitions and performances which themselves increased the sense of achievement.

In this kind of project a museum or gallery might provide no more than the context for the work and the management for the project as a whole. A gallery might identify the artist-facilitator, an exhibition might define the theme for the creative work, a museum might provide the venue for a performance, its collection might provide inspiration for creative work. The role of the museum or gallery is to act as a cultural, educational entrepreneur: it makes use of its networks and experience to mobilize resources, hire creative personnel, bring in skilled artist-educators as needed and, in this way, meets the needs of pupils and teachers.

Such projects may experience a tension between the creative or professional demands of the creative people who run them and the capabilities and learning needs of the pupils. These projects are also relatively expensive which limits access to relatively small groups of pupils. Sustainability beyond project funding is not usually possible.

**Visit Based Projects**

In these projects, learning centres around an encounter with objects, works of art or the whole environment of a museum or gallery. Learning may take the form of tasks which require pupils to investigate objects. Museum educators or other experts may provide a talking tour and there may be opportunities to interact with exhibits, e.g. climb onto buses in a transport museum, operate machines in an industrial museum. A museum educator or teacher may choose to deliver extended question and answer sessions with the whole class or a group in the museum. In some museums a tour was enhanced or transformed by using costumed interpreters or more extended role plays.

The success of visits was critically dependent upon the skills and experience of key teacher-interpreters which at their best were inspirational. Where pupils are well prepared and a visit forms part of a larger unit of study, pupils were able to participate more fully in question and answer sessions and opportunities could be planned for them
to make use of what they had learned in the museum in their classwork. Key Stage 2 pupils were generally enthusiastic about this kind of learning though some less confident pupils were sometimes discouraged by the traditional, didactic teaching styles of some interpreters. Sometimes Key Stage 1 and Key Stage 3 pupils were less well targeted.

### Museum based Activities

Many museum projects developed particular learning activities which could form part or all of a museum visit. The Royal Albert Museum developed a Roman Domestic Life session, Melton Carnegie Museum developed sensory activities for pupils with special educational needs in museum-based sessions, with other work taking place in their classroom. In some projects the activity took the form of literacy work (The American Museum) in others the form of creative work (Brighton Museum and Royal Pavilion).

Museum based activities gave opportunities to pupils for more extended responses to objects and works of art which contributed to well recognized curriculum objectives and could be extended through into classroom work. Activities could also be designed to include other inputs, such as documents or talks, which helped pupils make more sense of objects or works of art.

Museums sometimes experienced difficulty in finding appropriate spaces for large groups of children to work. Where pupils were cascaded through several different activities, time could become tight. At times there was insufficient co-ordination with schools so pupils were asked to complete tasks in museums, where they lacked time and equipment, which might have been better tackled in schools.

### Performance Based Activities

Many projects used costumed interpreters to enhance the interest of tours. In Northampton a freelance educator delivered a Victorian schoolroom experience, where pupils and some teachers also dressed in Victorian costumes (and the session took place in the school's one remaining Victorian building). Such interpreters regularly involved pupils in some kind of role play in order to increase their sense of participation and their empathy with the people they were learning about. (James Cook Birthplace Museum, National Maritime Museum, Sevenoaks Museum)

### Learning Packs

Learning packs or learning resources are teaching or learning materials which have been produced to support learning and teaching in the museum or gallery or outside of it. Some learning packs consist of tasks which could be carried out on a visit or in preparation or as a follow up. Learning packs may consist of worksheets (Apothecary Museum) or they may contain schemes of work (Epping Forest, Leicester City Museums) or they may contain documents and images on a CD (Carisbrook Castle Museum) or film/video clips (SWFTA) or teaching guidance (Sheffield Bus Museum) or some combination of these.

Creating a learning pack provides museums and galleries with the opportunity to influence teaching and learning over a substantial block of time. It provides the means to influence teachers and pupils who were not directly involved in visits or in creating the materials. However, researching, designing, testing and finishing such a pack is a...
lengthy and costly business. It requires up to date knowledge of both the curriculum and of current practice in schools. It also requires some knowledge of existing resources to avoid duplication and to benefit from best practice.

**Documentary, Community and Oral Projects**

A number of MGEP2 projects were concerned with the collection and interpretation of alternative voices, memories and perspectives. Colchester Museum and Wensleydale both charged pupils to conduct interviews with members of the community and to use these memories to inform local history studies. The South West Film and Television Archive used archived video and pupil interviews to explore and develop thinking about race, refugees and asylum seekers. The Sheffield Bus Museum project used documentary film and the memories of volunteers to inform pupils’ understanding of local transport history. East Midlands Oral History Archive provided source material from immigrants to the UK to support discussion of citizenship issues.

These projects exploited the power of personal memory to communicate experiences and engage the interest and empathy of pupils. These projects sought to integrate learning from peoples’ memories with learning from historical documents and artefacts.

One class of pupils have produced a collaborative record of oral evidence which can be accessed by all schools in the area. Colchester Museum explicitly sought to give pupils the skills to carry out interviews, equipping them with a capability to carry out further research.

This kind of project reaches beyond existing collections and archives and adds to the store of material from which pupils can learn. At times there may be a tension between the learning of pupils in collecting and preparing such evidence and the imperatives of producing a finished resource for use by schools.
SECTION 5: REGIONAL AGENCIES AND ENGAGE

This section is concerned with the distinct contribution of the funding agency whether it was an MLAC or engage. The purpose of this section is to try to tease out what such agencies may have been able to contribute to the success of the particular projects that they co-ordinated, to compare the differences in approach between these agencies and to assess what opportunities exist for agencies in this area of activity. This section draws upon the 10 case studies of agencies contained in Volume 2.

5.1 Management and Co-ordination

It may be helpful to distinguish 3 approaches to the management of MGEP2 projects: A, B and C. These 3 styles are associated with different ambitions and a different self-understanding by funding agencies. While the 10 funding agencies cannot be neatly sorted into these 3 categories; the distinction provides one way of understanding some of the differences in approach and impact. This distinction should not be taken to imply that one of these styles is to be preferred to the others.

**A Agencies**

Agencies following the approach A concentrated their efforts on the end and the beginning of the programme. They invested time and money in awarding grants and in disseminating outcomes but, by and large, they let projects get on with the job of designing, delivering and evaluating projects. These agencies usually spent much of their co-ordinating time on reporting and administrative tasks such as collecting and chasing paperwork, processing spending claims and dealing with mediating requests for information between the top and the bottom of the MGEP2 hierarchy.

A agencies sometimes, but not always, distributed virtually all of the MGEP2 funds holding back nothing to pay for a co-ordinator. In such agencies the MGEP2 co-ordinator had other responsibilities and relatively little time to dedicate to co-ordination. A agencies often distributed their resources in relatively small parcels. Some agencies funded more than 20 projects. This made it almost impossible for them to have much involvement in the day to day life of these projects.

**B Agencies**

B agencies aspired to have a more extensive involvement with projects in their domain. They were likely to employ a dedicated MGEP2 Co-ordinator or MGEP2 Steering Group, who had the time and the responsibility to remain in close communication with project leaders. B agencies were more likely to have a relatively small number of projects which made it easier for their co-ordinators to focus their support.

B agencies sometimes intervened to help redesign projects and they provided extensive advice and support for projects which experienced difficulties. Where project leaders are relatively expert and have experience of running educational projects independently, these agencies have tried to find ways of identifying and meeting their needs or of
sharing their expertise with others. They have been extensively involved in evaluation: in some cases devising alternative evaluative tools or doing observation and interviews. MGEP2 co-ordinators in agencies using approach B can be said to have taken on a responsibility for quality assurance and have sought to make sure the projects delivered quality outcomes and generated the evidence to support such claims.

C Agencies

C agencies fall some way between the above two categories in terms of activism. These agencies have identified MGEP2 as an opportunity for them to achieve their own strategic, advocacy and professional development ambitions for their domain. These agencies were particularly active in the area of professional development – running 3 or more sessions for the whole of their domain. These agencies identified MGEP2 as an opportunity to fulfil a long term objective to share and extend educational skills within their sector and combined this with a commitment to improve networking and collaboration. These agencies were also active in the field of advocacy and dissemination where they believed that they had a particular role to play. Generally such agencies did not aspire to provide a quality assurance role or intervene in projects which were running into difficulties. They saw their contribution as concerned with capability, relationships and communication rather than operation and outcomes.

5.2 Structure and Posts

Many agencies created a new post to co-ordinate MGEP2. This was variously known as a National Curriculum Policy Adviser, a Museums and Schools Adviser or a Learning Development Officer. Usually this role, in the case of MLACs, was subordinate to the Learning and Access Manager. Spending on the post varied, ranging from £20k for one day per week in one region through £15k for about two days per week in another, to £28k for four days in another. Some agencies did not spend any MGEP2 money on posts but simply charged an existing education officer to take on the co-ordination role. In one MLAC, further MGEP2 resources, over and above the £20k spent on the programme co-ordinator, were used to employ a management group which provided additional advice and support to project leaders.

In those regions where a post was created, MGEP2 can be said to have added to the agency’s capacity to support and develop educational work. However, the use of MGEP2 resources for this purpose meant that there were fewer or smaller projects for pupils. The expectations from post-holders were partially defined by job descriptions but they were partly worked out in practice. In this respect there appear to be considerable differences in the level and kind of activism. It is not clear that these differences were set out in the bids that agencies made to participate in MGEP2 at the start. They may be said to be adaptive and can be attributed to differences in personality, background and circumstance as much as policy.

One permanent MLAC education officer believes that she will be able to build on networks and experience established through MGEP2 and has been able to make connections between MGEP2 tasks and other projects. For example, case studies of MGEP2 projects will form the basis for a general database of good practice. Where a temporary post was created to co-ordinate MGEP2 there is a danger that valuable experience and networks will be lost at the end of MGEP2. Three funding agencies lost their MGEP2 co-ordinators at the end of March 2004. The temporary nature of the post...
has also caused characteristic labour problems. A number of agencies did not manage to appoint co-ordinators until the bidding process was well underway, or in some cases complete, and in one agency the post was occupied by three different individuals. However, in two agencies a temporary co-ordinator was subsequently appointed as a permanent member of the education team at the MLAC.

5.3 Use and Distribution Of Resources

All of the agencies were able to devise their own systems to disburse their £100k share of MGEP2 funds. Agencies were required to spend at least 50% of the resources on small grants; in fact only two agencies supported a single project funded in excess of £30k and in both cases they were umbrella projects. Some agencies appear to have been guided by earlier research and strategy decisions. YMLAC was determined to support small independent volunteer run museums which it regarded as educationally underused and it funded 15 projects comprising 25 museums. SEMLAC had identified an opportunity and a need for greater activity in Kent so it chose to lead an umbrella project in that area. NEMLAC was able to secure match funding with support from Durham County Council, the Heritage Lottery Fund and Creative Partnerships. These additional funds were used to support additional posts located in various parts of the region: a Schools Development Officer and two Heritage Officers. It has been difficult, at this point in time, to evaluate the impact of these posts against MGEP2 criteria. Other agencies had a less strategic focus. Rather they sought to get a fair spread of projects in terms of geography and type of institution, to take account of other resources and grants and to award funds to projects that met the criteria and were likely to succeed. Some agencies were anxious to spread the benefits and maximize involvement: low bids were encouraged and a relatively large number of grants made. (London, South West)

In general, agencies did not appear to make distribution decisions as a consequence of larger strategies. Either they did not believe they were permitted to do this or they had not built such strategies into their proposals. Since most agencies had only commenced their existence as cross-domain Museum, Library and Archive Councils at the start of MGEP2 it would, perhaps, been surprising if this had been otherwise.

5.4 Communications, Meetings, Support and Training

The number of meetings held by agencies for projects leaders within their domain varied between 4 in the North East to 1 in the West Midlands. In Yorkshire there were no such meetings – although there were two training sessions each of which involved two museums in the north and the south of the region.

Most agencies saw MGEP2 as an opportunity to fulfill their own mission to develop collaborative working between different institutions. In the South East, for example, considerable effort went into the consultation and communication necessary to build up a collaborative network; engage which co-ordinated a national network organized three conferences in London and one in Manchester.

Meetings at regional level were partly driven by the immediate needs of the MGEP2 programme: what was required, what other projects were doing, how to evaluate, how to sustain, how to prepare case studies. However, a number of agencies built upon immediate needs to include sessions which reached beyond MGEP2 to develop skills and understanding of wider issues such as e-learning, project management and to give
MGEP2 project leaders the opportunity to learn about other initiatives outside of MGEP2 and to hear from education inspectors and other from other relevant players in MLACs and other agencies.

Some, but not all, agencies saw professional development as a particular opportunity in the MGEP2 programme. Engage’s Contemporactive conference, for example, sought to address a wide range of developments and issues in gallery education; YMLAC provided focused training for volunteer education officers on how they could address National Curriculum learning. EMMLAC sought to share experience by putting MGEP2 on the agenda of many other meetings in the region.

SEMLAC invested time and energy in consulting with its MGEP2 project leaders in order to define the agenda for all three day-long meetings. Each meeting was formally evaluated and the feedback shared. In order to increase ownership, the meeting place rotated between 3 of the museums participating in the programme. As a result the days were well attended and highly valued by participants, even though lengthy journeys were involved for many (particularly for the session on the Isle of Wight). The SEMLAC co-ordinator saw network building as a key objective of her role. Some other agencies experienced some resistance to meetings from project leaders who doubted the value of these sessions.

MLA held 6 meetings in London to facilitate communication and collaboration between regions. One co-ordinator reported that she had found these meetings very useful. However, attendance to these meetings declined over the lifetime of the project and some concerns were expressed that the agenda was overly dominated by descriptive reports from the periphery back to the centre and insufficient discussion about how to overcome problems and how to relate MGEP2 to other issues.

All agencies sought to monitor the progress of their projects to some degree. For some agencies (type A), this was a light touch operation largely restricted to the formal business of reports, finance and other necessary documentation. Email and telephone contact were used to stay in touch. Such co-ordinators did not have time to visit all of the projects, though they might be able to attend a particular exhibition or performance. Other co-ordinators (type B) made two or three visits to each project during the MGEP2 and provided detailed advice, support, guidance as required. Two co-ordinators kept detailed logs of their visits and contacts which documented their monitoring and support role. Type A and C agencies did not generally monitor projects closely and were not able to offer regular opportunities for reflection and review. However, some of them did offer additional advice and support to those projects which, for one reason or another, seemed to be losing their way.

5.5 Contribution to Evaluation

The contribution of regional agencies was varied. Those agencies with relatively large numbers of projects and relatively little co-ordination time provided a core function: briefing as to what was required, distributing questionnaires and pro-formas, chasing up of projects that slipped behind. Some agencies worked hard to monitor returns and were relatively effective at getting good responses. Some agencies were hard pushed to get inexperienced museums and overburdened schools to complete and return evaluation documents. In one case the agency felt that it could only manage to support those projects which were being externally evaluated in this respect.
All of the agencies highlighted the importance of evaluation in MGEP2 and most agencies organized training which specifically sought to explain requirements and develop an understanding of how projects could be evaluated.

In EEMLAC the regional co-ordinator was able to play an active role in the evaluation of six of the nine projects in the region participating in observations and focus groups. Evaluation was a major focus in professional development and in face-to-face support and was explicitly built into the process of case study production and dissemination which led to the publication of a regional MGEP2 report, Excellence Enjoyment and Engagement (EEMLAC, 2004)

In EMMLAC the creation of a “Management Team” consisting of experienced museum and gallery educators led to alternative views and strategies for evaluation but gave extra support to some project leaders who had less experience in evaluating educational activities.

NEMLAC provided a complementary service by employing a consultant to evaluate some aspects of those projects which were not externally evaluated as part of the national evaluation. (NEMLAC, 2004)

5.6 Dissemination, Advocacy and Sustainability

The extent and manner in which agencies have tackled these tasks was also varied. London’s original bid included the plan for a dissemination conference for teachers and museum staff and a brochure containing case studies, contact information and general findings. The brochure is being distributed to every school in London through LEAs. YMLAC’s strategy was similar but something of an add-on since it was only fixed upon when a small surplus was identified towards the end of the programme. YMLAC was able to commission a directory of educational offers, available from museums in North Yorkshire, including MGEP2 derived offers and was also able to contribute to the cost of leaflet production for museums. YMLAC also organized a small twilight session for teachers. It is difficult to judge, at this point in time, the impact on take up of this work.

In the South West, South East and the North East local conferences were limited to sharing learning between MGEP2 participants. However, SEMLAC has worked with project coordinators to produce case studies which will be used by both the individual museums and the agency for advocacy work. In EEMLAC a regional evaluation and advocacy report was launched at a conference attended largely by the museum sector (education officers and museum development officers) but with some teachers and LEA advisors. In a celebratory event, EMMLAC brought together the project staff, all the freelancers, the management team, two LEA advisors and some teachers, who suggested the value of doing further work with teachers. EEMLAC has also sought to gain wider educational recognition for museum learning by negotiating the inclusion of two regional MGEP2 projects in the National Primary Strategy and the by developing the involvement of Suffolk and Bedford education advisors.
Other regions such as SWMLAC have used other regional events to disseminate learning from MGEP2. The West Midlands MLAC worked in partnership with the Group for Education in Museums (GEM) who organised a one day seminar for some 40 participants to disseminate learning from MGEP2 projects in this region.

A number of regions are using or plan to use their experiences from MGEP2 to inform educational work around regional hubs. In EEMLAC the co-ordinator was able to pair project leaders who, it was known, would in the future work together on hub projects and EEMLAC will itself take on an advocacy role for museum learning within the regional EPDP. Regional agencies have not always found it easy to co-ordinate MGEP2 with developments arising from EPDPs because the identity of the hubs was not known when MGEP2 grants were made and because of the different organizational responsibilities in the two programmes.

SEMLAC ran a valuable seminar where project leaders received consultation from senior officers (the Head of Learning and Access, the Head of Development and Funding and the Head of Workforce Development) within SEMLAC on how they might take their projects forward. In a number of regions, agencies have been able to make connections between MGEP2 and successor programmes. In Yorkshire, for example, one MGEP2 museum has won funding for a further project through Creative Minds, a regional STEM programme. Creative Minds will, building on YMLAC’s own experience of MGEP2, fund four part-time, sub-regional posts to support and co-ordinate smaller and volunteer run museums. Agencies which do not have access to successor educational programmes may find it difficult to sustain progress in this area.
SECTION 6: EVALUATION ISSUES

The evaluation of MGEP2 has been a complex and demanding exercise, dependent for its success on contributions from all participants. As mentioned in the section on Methodology above, the research was designed to combine a flexibility with regard to the diversity of participants with communality in order to provide a common framework for comparison and understanding.

It is appropriate to list some of the issues that have arisen in the evaluation though it is not possible to fully explore their significance:

1. Total return of questionnaires represents around 20% of total participation. This is statistically adequate in total but implies that many projects have not had the benefit of this kind of evaluation.
2. 2055 questionnaires were “wasted” because they were either received after the deadline or had been modified so that they could not be entered into the database.
3. Some regional co-ordinators reported concerns about the C questionnaire which was produced for KS1 pupils or for older pupils who might find the standard questionnaire too demanding. Concerns were expressed that pupils might be discouraged if they could not answer certain questions and also that the questionnaire did not provide sufficient information to inform the development of particular projects.
4. Some museum staff expressed concerns about the D questionnaire because they did not feel competent to answer some questions.
5. One region was concerned that they had not received questionnaires until May ’03.
6. Some museums were concerned that MLA asked for information in addition to the information collected in the standard quarterly reporting forms.
7. A number of regions expressed concern that CEI asked for key information about projects (e.g. specific objectives in terms of access and curriculum) when projects had already submitted related information in the 10 distinct bidding processes.
8. One project designed an alternative instrument for recording pupil feedback. Its findings could not be integrated into aggregate results.
9. Some of those involved in a project which had commissioned additional external evaluation as part of its original bid considered that the project had been over-evaluated.

Most of these problems arise from the general tension between doing justice to individual projects working with particular aims and individuals and designing common instruments and a common framework for all of the 130 projects that made up the programme. The instruments were subjected to a lengthy process of consultation and were modified accordingly. They were made available to regions in February 2003. Individual projects had the freedom to commission additional evaluation; however, they did so with knowledge that University of Warwick had been given the role of national external evaluator. However, there is no doubt that rigorous evaluation of the scale and specificity required by MGEP2 is time consuming and there may be opportunities in the
future, building on what has been learnt from MGEP2, to make evaluation simpler and more selective. MGEP2 has itself contributed to an increased understanding of the significance and techniques of evaluation amongst practitioners and professional development is currently being addressed through the dissemination of *Inspiring Learning for All*.

The MGEP2 programme allowed for, indeed encouraged, diversity at regional, sectoral and institutional levels. Such diversity commonly leads to both dissonance and overlaps between project evaluation and programme evaluation.

---

An example of open comments from a Year 1 pupil with suggested improvements to a Victorian Street at Thackray Museum, Leeds.
CONCLUSIONS

The following conclusions are drawn from the forgoing research into MGEP2. Taken with other research in the area of museum and gallery learning they contribute to a more general understanding of this kind of activity.

Learning Outcomes for Pupils

1. The research suggests some progress on all of the learning outcomes explored. For example, 91% of all pupils were either very pleased or satisfied with the work they did within MGEP2 projects. 88% of all participants, including teachers, judged that pupils had learnt either something or a lot about a specified topic and 73% of all pupils wanted to do more learning that involved museums and galleries.

2. Projects were particularly successful at achieving measurable learning outcomes associated with subject specific learning with relatively high proportions of pupils reporting high learning and relatively high value added between baseline and exit responses in comparison with social or personal development outcomes.

3. Analysis revealed some close associations between distinct outcomes; in particular between enjoyment and subject learning and between the experience of making choices, satisfaction with one’s own work and making plans for the future. This suggests that, from the pupil’s perspective, different learning outcomes may be closely bound together.

4. Value added analysis revealed that for most learning outcomes the greatest gains were experienced by those pupils with the highest baseline. For example, pupils who were generally most satisfied with their school work were most satisfied with the museum or gallery learning and benefits were distributed similarly for subject learning and confidence. However, the analysis reveals significant gains for pupils with lower starting points. This suggests that museum and gallery learning, like much other learning, does depend upon a foundation of knowledge and learning skills, but that it can provide an alternative rapid progress route for intermediate and foundation learners.

5. Analysis of responses by gender and by age confirmed the results of other research in this area; in general the impact of museum and gallery learning is greater for younger than older pupils and greater for girls than boys. However, qualitative evidence suggests that museum and gallery learning can be extremely successful with boys and older pupils if appropriately designed.

Outcomes for Teachers

6. Very high levels of increased confidence and expertise were reported by teachers, museum and gallery staff and assistants.
7. Teachers participating in MGEP2 were, in general, extremely positive and reported strong increases in confidence, expertise and readiness to do more museum and gallery learning. Teachers were stimulated by new ideas, new styles of teaching and learning, working with new people, the opportunity to create new resources, access to original artefacts, and being involved in piloting and evaluating new materials. While some teachers where deeply inspired by MGEP2 and others felt confirmed in their own approach to teaching and learning, it was relatively unusual to find schools where the MGEP2 partnership had an impact beyond the one or two classes that had enjoyed direct involvement.

Factors which affect the impact of projects

8. There was evidence that projects run by museums and galleries which have past experience in museum and gallery learning have a greater impact, i.e. museum and gallery educator capability is developing.

9. The size or institutional status of a museums and galleries in MGEP2 did not, in general, appear to have a measurable impact upon performance.

10. While projects did generally show gains in terms of the specific kinds of subject learning targeted, gains in other learning outcomes (confidence, satisfaction, social skills etc.) did not correspond to the particular targets set by projects. For example, projects targeting confidence were no more likely to achieve gains in confidence than projects generally. This fact is open to interpretation but it is possible that those designing MGEP2 projects did not see learning outcomes as discrete goals. Another possibility is that if projects are successful then they are likely to achieve a package of goals rather than one outcome or another.

11. Different kinds of partnership can be characterised according to their level of complexity. Primary Stage Partnerships may involve a museum working with one or two schools using its collection or an exhibition to meet an identified learning need. Second Stage partnerships will generally be better suited to more experienced museums and galleries and are likely to involve a gallery or museum co-ordinating additional partners or resources to meet the needs of schools. Umbrella Partnerships, which bring together a large number of museums or galleries and schools, can be effective model to share resources and experience.

12. Some partnerships were able to successfully include other organizations such as LEA advisory teachers, Advanced Skills Teachers (ASTs), school improvement teams, Creative Partnerships and other specialist agencies (School Libraries Services, Social Inclusion Units, Ethnic Minority Achievement Services).
What is the evidence for the impact of these projects?

13. MGEP2 has produced some assessment evidence of the impact of projects and offers some examples of how this might be done: recording of grades on a related piece of extended work, before and after questions with the group, assessment in relation to individual targets. However, the use of assessment in relation to museum and gallery learning is at an early stage and will require close cooperation between schools and museums and galleries if it is to advance.

14. There are a variety of ways in which evidence for the impact of museum and gallery learning can be documented. Evidence includes observation of activity, pupils' work, pupils’ and teachers’ comments and developmental work. Such evidence can be drawn together in a case study to communicate the achievements and character of a museum and gallery learning project.

15. The following characteristics of museum and gallery learning have all been shown to contribute to the impact of this kind of learning: object handling and interpretation; situated learning or immersion in context; a distinctive social context to learning; use of performance; opportunities to develop creativity; relatively long blocks of time and an extended treatment of a particular topic or activity; cross curricular learning; learning in special places.

The Sustainability of Projects

16. Projects may be sustainable in several different senses. In the fullest sense pupil activity and learning will continue after the end of piloting and external funding in March 2004. Alternatively some aspects of the project may continue. Projects may be sustainable in the distinct sense that they have a lasting influence upon teachers or museum or gallery educators or that they may constitute a pilot. MGEP2 projects seem likely to have different prospects for sustainability.

17. The following factors appear to have an influence on sustainability: the extent to which a project is perceived, by teachers, to meet a curriculum need; the extent to which a museum or gallery has a ready schools market; flexibility of the project; cost and future funding of the project; charging for the project; professional development for teachers, the extent to which a project becomes embedded in school practice and the quality and the targeting of marketing.

Impact upon Capacity

18. Artists, creative professionals (such as storytellers, poets, authors, dancers etc), facilitators and volunteers made a distinctive and valued contribution to MGEP2; teachers, pupils and permanent museum and gallery staff were stimulated, supported and taken forward by the opportunity to work together with outsiders.
19. MGEP2 caused a substantial increase in the number of person hours devoted to museum and gallery education. It did this by contributing to the cost of posts in museums, galleries and MLACs and by making possible the employment of many consultants, freelancers and short-term contractees to manage projects or deliver parts of them. In this process, museums and galleries play a valuable role as an “employment agency” which can identify non-teachers, who have the skills and interest to contribute, and match them to the right opportunity. However, the insecurity and uncertainty of short-term contracts led to a relatively high level of labour mobility, particularly in the new regional agencies, and this does appear to have disrupted the smooth working of MGEP2.

**Different Kinds of Museum and Gallery Learning Projects**

20. It is possible to distinguish different types of museum and gallery learning projects. This is helpful since it leads to a better understanding of the factors necessary for their success. Types of project include: IT/digital; loan box projects; projects using animateurs and artists; visit based projects; museum based activities; performance based activities; learning packs; documentary and oral projects. In practice some projects may be hybrids.

21. There is no evidence in this study that different types of project are generally more or less successful or that they are more successful at achieving particular objectives. However, projects which provide an extended and intense experience for a relatively small number of pupils can have a more concentrated effect than projects that aim for shorter experiences for many pupils. The only exception to the above generalization is that there is quantitative and qualitative evidence that projects which involve working with artists, performers, freelancers or some other museum or gallery educator over an extended period do seem more likely to have an impact on the capacity of pupils to work successfully with adults.

**Barriers to Museum and Gallery Learning**

22. If projects are to gain take up by schools and match pupils’ needs it is vital that teachers are consulted and materials are trialled. However, the extensive use of teachers and pupils to co-produce materials may be impractical and burdensome. It may be possible to negotiate and budget for the time necessary for co-production as in the cost of cover for teachers during the school day. Alternatively, there may be other partnership methods to explore such as secondments of teachers, use of consultants or teaching placements for museum and gallery educators.

23. Some gallery and museum staff and teachers have expressed frustration at the formality and rigidity of the school curriculum which they believe is limiting learning opportunities and constraining teachers. However, MGEP2 has demonstrated on a considerable scale that teachers and museum...
officers can, together, find ways of joining together parts of the school curriculum with parts of what is available through museums and galleries.

24. Many schools and museum staff found the logistics and practicalities of organising additional activities, journeys, meetings, cover and specialised resources challenging. These factors appear, in some cases, to have limited or held back school participation in MGEP2 projects.

25. Where museum and gallery learning is available to schools in a generally unsystematic and accidental way it follows that not only will some pupils be able to access top quality experiences, some mid-quality and many none at all but that there is no explanation or justification of why this should be so. In many cases projects are intended to function as pilots and it is planned to make them available to more schools in the future. However, it is not clear that this will actually happen.

26. Difficulties of communication with schools and teachers are a barrier to partnership work. These difficulties included issues around appropriate lead times, attending meetings out of school, teachers’ workload, access to telephones and email and identifying the right person in schools with whom to communicate.

27. Effective marketing and advocacy work continues to be a challenge at museum or gallery and at funding agency level. Individual museums and galleries, engage, the Museums, Libraries and Archives Council and other organisations like the Group for Education in Museums (GEM) have all contributed to this task.

The Role of the Funding Agencies

28. Where a funding agency had identified clear regional or sector priorities, they were, in a number of cases, able to utilise MGEP2 in order to advance those regional or sectoral goals.

29. A funding agency may be able to improve the quality and quantity of support by grouping projects together and/or by splitting co-ordination between sub-regional posts. Working closely with Local Authority Museum Officers, working with existing networks like Education Business Partnerships, setting up partnerships between more experienced and less experienced museums and galleries or working with trusts that unite groups of museums are some of the ways in which funding agencies have been able share learning and increase support.

30. Supporting small, volunteer run museums with a limited involvement in educational work does appear to generate relatively high participation by pupils and museums and good sustainability in relation to spend.

31. Over this period of time a number of closely related initiatives in museum and gallery learning ran in parallel: MGEP2, EPDP research and development as part of Renaissance in the Regions, National/Regional
Museum Education Partnerships, Creative Partnerships. These initiatives are being delivered through different organisational channels. The extent to which particular funding agencies sought and were able to make connections between these initiatives and exploit synergies for raising the profile of museum and gallery learning, sharing learning, accessing networks and sustaining progress in the future appears to have been variable.

32. More professional and experienced project leaders see less need for the co-ordinating role of the MLACs and value the contribution (e.g. meetings, advice, support) of the MLACs less. They may resist a perceived increase in accountability and fail to take up discretionary services. Less experienced project leaders valued the MLAC contribution more and took up more one-to-one support, advice and contact time. More experienced education officers appear to benefit more from collaborative work with their peers, that may be facilitated by MLACs, which supports reflection, problem solving and quality assurance. MLAC co-ordinators are more likely to cite projects led by less experienced project leaders as those where they have been able to significantly improve outcomes, e.g. by redesigning the project or remotivating the leaders in the light of changed events or setbacks.

33. MGEP2 provided an early opportunity for MLACs and engage to enhance their functions: their advocacy role for museum and gallery learning, their management role in securing success and accountability in public programmes, their experience in developing and supporting partnerships, their professional development role, their co-ordination role in building and sustaining networks and their confidence and reputation in finding appropriate strategies for all of their member institutions to contribute to learning. Some agencies have progressed more in some of these fields than others. However, some agencies were more advanced in their own development in autumn 2002 at the start of MGEP2.
RECOMMENDATIONS

1. Organisations looking to encourage the development of partnerships between schools and museums or galleries may find it useful to adopt an evolutionary model whereby they seek to progress inexperienced museums or galleries on to first stage partnerships and only then onto more ambitious second stage partnerships. Umbrella projects may help to facilitate this progress particular for smaller, less well positioned museums or galleries. Clearly any such model would have to be operated in a flexible manner.

2. Close partnership work with schools demands good communications which cannot be taken for granted. Museums and galleries planning to work in close partnership with schools should plan and budget for communication since classroom teachers usually lack the time and technology for good communications.

3. Schools, museums and other agencies should explore and share strategies for making more use of assessment to record and communicate outcomes from museum and gallery learning.

4. As museum and gallery education moves to a phase of more comprehensive provision, thought should be given about how museum and gallery learning experiences can be fairly shared between all schools and pupils who want them.

5. Schools may want to explore opportunities to exploit the stimulation which comes from working in museum and gallery spaces. Schools may find that some of these benefits can be obtained by developing museum or gallery-like spaces in schools, for example, through the loan of artefacts, replicas or exhibitions to schools or through the exploration of other alternative learning environments. Museums and schools need to plan carefully the distribution of learning between museum or gallery and classroom. There may be ways in which museums and galleries can extend the positive influence of their special spaces by combining outreach work with some visits.

6. More work needs to be done to embed museum and gallery learning into the broader curriculum of schools. Schools, museums and agencies may want to consider how partnership work can be extended beyond the level of a particular project. The role of cultural ambassador might help to improve brokerage. Such a role might be school based rather than gallery or museum based. The post-holder would require the experience and skills as well as the time and access to networks to extend the cooperation between schools and museums, galleries or other cultural bodies. Such post-holders might work with more than one school, for example they might work cross phase with one secondary and a group of primary schools, and might be associated with a beacon or specialist college institution. There are opportunities for museum and gallery education to
work together with other school improvement programmes and organisations: LEA school improvement teams, Advanced Skills Teacher Networks, Initial Training Institutions.

7. Museum and gallery education is a means to draw a range of professionals, arts practitioners, freelancers, volunteers and parents into education. Further planning and investment could help to encourage recruitment, retain involvement, improve teaching skills and improve the communication of opportunities and interest between those in education and those who would like to contribute. There is already some good practice in this area which could be built upon and shared.

8. Where sustainability is formally desired by a programme more guidance could be given as to what kinds of sustainability or lasting impact are expected. If, for example, a project is intended to be a pilot then planning can take place so that others do have the opportunity to gain from it.

9. Teachers, museum and gallery educators should work together to build upon successful curriculum-related activities to extend the relevance of the museum and gallery offer across the curriculum.

10. More strategic thinking about how all pupils in schools are to benefit from museum and gallery learning should examine the opportunities available through smaller local museums as well as regional and national institutions.

11. Funding agencies should seek to evaluate the impact of marketing strategies such as leaflets, promotional fairs or brand development. Where sustainability is a priority, funding agencies may want to consider ways of building marketing work into the design and budgeting of individual projects.

12. Evaluation of the impact of museum and gallery learning would benefit from further research into the nature of learning in question. It may prove worthwhile to investigate learning in relation to formal learning outcomes that may have been set by project leaders but also to explore individual and group experiences and then to compare intentions and experiences. In this way it may be possible to extend our understanding of the extent and limits of impact. For example, pupils may have been highly engaged by a freelancer on a project but express reservations about going further with this kind of activity because they found the experience too demanding.

13. Constructive and credible evaluation work in museums and galleries which are relatively new to educational work requires considerable support. Agencies may want to explore opportunities for sharing expertise between museums and galleries, for continued professional development and for making evaluation appropriate and worthwhile for all and for working collaboratively with the education sector.

14. Evaluation practice and responsibilities should be negotiated early on. More professional development is required to understand the purpose and
use of evaluation. Work needs to be done to develop flexible evaluation instruments and strategies which can accommodate different projects and different pupils but still permit general comparisons and conclusions. The Inspiring Learning Framework provides impetus and a framework for such work.

15. Long term impact of the funding agency is likely to be greatest where there is a continuity in personnel and networks and where there are close connections being made between the experience of MGEP2 and new tasks and priorities.

16. Partnership at museum or gallery and school level needs to be matched by partnerships at regional and national level. Some work has already been done on building a shared understanding of the value of museum and gallery learning nationally and this is likely to be carried forward with the Joint DfES/DCMS Museums and Galleries Education Strategy. However, take up at school level is likely to increase if this kind of learning is endorsed nationally and through regional and local education organizations.

17. Regional and national agencies and departments that have a strategic responsibility for the development of museum and gallery education need to plan and coordinate new initiatives so that good practice can be passed on, momentum and trust can be sustained and networks and systems built up. In particular it is important that the educational role of museums and galleries becomes established as a permanent and predictable centre of activity and interest.

18. Funding agencies in museum and gallery education must carefully research the needs and level of existing development among the museums and galleries they seek to support. Their interventions will be most effective if they are closely matched to the aspirations and capabilities of museums and galleries.

19. Engage and the Museum, Library and Archive Council have a continued role to play in helping to share and promote good practice between local agencies and related sectors. Engage and MLA should work together with local agencies, one another, other representative organisations and other stakeholders to identify, share and jointly develop expertise and capability.

Volume 2, a collection of case studies, and further copies of this report are available at www.teachernet.gov.uk/mgep2