

**Family use of Activity Boxes  
at the  
Royal Albert Memorial Museum, Exeter**

**Qualitative Evaluation Report  
March 2005**

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# Family use of Activity Boxes at the Royal Albert Memorial Museum in February 2005

## Introduction

The Royal Albert Memorial Museum has used Activity Boxes (the Boxes) to enhance visitor experience in the galleries for several years. *The aim of this evaluation is to provide qualitative, learning impact data to compliment existing quantitative data about the use of the Boxes.*

**Aims** relevant to this report are for the boxes:

- To become a relevant and useful resource for school age children, their teachers, parents, siblings and carers out of schools hours
- To provide high quality learning experiences, learning environments and learning materials using resources of museum.
- To promote thinking skills and creativity as key principles in all we do

**Objectives include:**

- To encourage a wider range of parents and carers to use the museums with their children and understand their value as learning resources  
*Outcome: Parents from more C2DE backgrounds use the museum and say the museum is a valuable learning resource*
- To enable participation of school aged children in creating the museum experience  
*Outcome: Children express their views on existing experiences and suggest new ones*
- To Increase active independent learning within the museums  
*Outcome: Independent learning in the museum is better supported*  
*Outcome: Users feel there is more to do in the museum*
- To ensure that a variety of thinking skills are developed across all our taught sessions, activities and resources  
*Outcome: New resources promote the use of thinking skills*

## The Boxes

There are 10 numbered family activity boxes or wooden chests in 3 different galleries, distributed as follows:

Natural History (NH)	4
Cultural Worlds (CW)	4
Decorative Arts ( <i>including clocks</i> ) (DA)	2

Instructions are given on the lids of the boxes, with a stated target age of 5 –7 years olds. Access is through collection of a key to a specific box, which is then for the use of that family/group who are responsible for locking the box and returning the key. The boxes are placed close to related objects in the galleries, so that links may be made between objects and the contents of the boxes. The precise contents of the boxes are listed elsewhere

## Evaluation

### Method

One half-term day (Thursday 17<sup>th</sup> February, 2005) was spent in the galleries, observing the families and/or talking with family members. Information was collected about 17 uses of boxes out of a possible 25 by 19 families. Six families gave permission for photography, one of which made an emphatic caveat regarding non-use on any website.

It has to be noted that the presence of an observer/ interviewer, however user-friendly, will have an effect on the families. To minimise this, the evaluator used a small notebook and worked sitting on the floor at the same level as the families, or at least the children. She explained who she was (using her first name) and why she was there as soon as she was noticed, inviting comments from all members of the family. She made sure each family had some unobserved time too. There were no objections made to any of this.

**Photographs** were often posed, as families tended to expect them immediately after filling in the permission sheets and surprise is difficult when it's obvious the 'researcher' is holding a camera rather than a notebook. Waiting for more relaxed shots unfortunately would have used up too much time.

**Evaluator experience:** The Cultural Worlds gallery was the most accessible for evaluation purposes in that it was possible to see what four families were doing at the same time while being able to stay fairly still and become more 'part of the furniture'. At the same time through traffic (other visitors) was far less there than in the Natural History gallery.

Staff in the galleries were helpful at all times, which was greatly appreciated.

## Findings

### Overview

While families related the contents of the Activity Boxes to the surrounding displays to varying degrees, there is no doubt that the activities enhanced their learning experiences and positively influenced the way they regard the museum as a good place to visit both for the children to learn through play and – for most families observed - for all the family to share learning experiences together.

**\* Evidence of learning impacts is to be found in detail in the five GLO pages which form the core of this report.**

### In General

Some adults felt the Boxes were good for a wider age-group. 3 – 9 years was suggested. Others thought 7 was probably the right upper limit; two found the Decorative Arts Boxes the most challenging/ best for 7 year olds because there were things to work out/ problems to solve. But more than one 9 year old enjoyed the Cultural World Boxes, either because their adults found extra challenges for them or because they were relaxed and enjoying eg the musical instruments in their own way. Several 3-4 year olds were engaged with the boxes, and worked hard with the letters on templates activities, which parents were encouraging them to do. The quality of the adults' mediation between children and Boxes was often a key part of the learning experience, but children exploring on their own were quite capable of discovering things for themselves.

The boxes were a key part of many visits eg one family came and used a NH Box and looked round the museum and then went for a walk in the middle of the day, down to the Quay, and then returned to the museum to 'do' a CW Box.

### How Families found out about the Boxes

Most learned about the Boxes from others. Some had come to the museum because they had been told of the boxes, or had used them before. Often passing groups asked already-engaged families about the boxes in situ – usually because a small child dived into someone else's box and so explanations had to be made. [A few children looked quite anxious when 'their' box was invaded in this way]. One parent said he had been to the museum several times but never read the tops of the boxes and had not understood how to use them until today.

There was a general feeling that the boxes were great once you knew how the system worked, but that it took time to find out; more than one asked why it wasn't clear at the entrance what there was to do and how they could do it.

Some of the boxes were being sat on, which made it impossible for the lids to be read. Box 4 in particular, in the Natural History section, was frequently covered with children/ bags/ coats etc, despite there being more comfortable seating nearby.

I found no reference to the Boxes and how to use them on the museum website.

At the start of the day families were slow to collect keys for the Boxes. Only previous users would be likely to come in and ask for a key. Otherwise families have to read the boxes in the galleries and come back for a key. Some families did more than one box in the same gallery and were disappointed to find that they were more or less the same. This needed explaining to them too. A 'What can we do Today?' board, immediately visible on entering, or a flier explaining boxes and trail sheets handed to all visiting families (with a coloured museum plan on it too?) would enhance the visiting experience.

**Ways in which the boxes were used:**

- To carry out the activities in turn (eg word-making, camouflage identification) where there was a clear end to the task (and often praise from the adult), then moving on to the next. (All boxes)
- To experiment in an open-ended way eg with dressing-up objects:
  1. NH Boxes: dressing up as an animal and imitating the animal's behaviour or imagined behaviour in some way (eg trying to drink with the elephant's trunk), or changing the voice to indicate a change of identity and doing a little role play or dancing, liberated by the 'disguise'. For shy children, dressing up in a public space was a learning experience. (NH boxes)
  2. CW boxes : As with the NH boxes, but this time the dressing up encouraged empathy with people of another culture. A few children discovered that dressing differently can mean moving differently. There were discussions about the right way to wear the sari/sarong/cloth. One girl who had dressed in a sari before at the museum, had identified saris in news items about the Tsunami, and her mother commented that this helped her understand that the people on the TV screen were people like her.
  3. To combine the use of the dressing up objects with other items in the box creatively (*As in GLO 1, second piece of Evidence*)

**The diversity of the learning** in progress can be demonstrated by considering the use of the musical instruments in the CW Boxes. The following were observed or evidenced in the gallery:

1. finding out how the instruments worked, often with family discussion, as with the finger piano – problem solving
2. demonstrating individual discoveries to each other – shared learning
3. experimenting e.g. with different part of the surface of the drum, tapping in different ways to get different sounds
4. experimenting with rhythms and regular beats - listening and adapting
5. playing in time with someone else, with awareness of others' playing and of performing in a pair or group - a strong shared experience
6. competing in some way and learning from the effect or the consequences
7. playing alone, absorbed in the activity and being creative.
8. singing to the rhythms (being creative)
9. discovering the reactions of others in the gallery and learning where the 'noise'/ space boundaries need to be (social skills)
10. discovering which sounds elicit praise from adults, siblings, passers-by;
11. experiencing pleasure through music-making
12. wondering where such instruments come from – discussion usually encouraged by adults.
13. Children seeing 'their' adults demonstrating learning role models eg at least two sets of parents appreciated looking at the words in other languages and learning for themselves

Families clearly visit 'differently' over time, according to interests/ school projects/ abilities of their children. Visits will also take into account the adults' agendas (eg their own social needs, as the Boxes afford a safe place to chat to other parents in a way that does not usually happen around display cases, where people keep moving on).

## **Recommendations and Suggestions**

### ***Recommendations***

- To maintain the Activity Boxes for future use, as they support and enrich learning in the museum and encourage family visits and return visits, and to build on the excellent reputation that the Boxes are acquiring among families.
- A 'What can we do Today?' board, immediately visible on entering, or a flier explaining boxes and trail sheets handed to all visiting families by the staff member greeting them, would enhance the visiting experience.
- To feature the Boxes on the Museum Website in an easy-to-find format.
- To consider including a coloured museum plan with the location of the boxes on it. (The Decorative Arts boxes seem to be in a quieter area of the museum. Perhaps more families would go there if they know there was a Box).

### ***Suggestions - based on one day's observation only***

- Bearing in mind the ages of children generally engaged by the boxes, and that a family can visit with children of various ages, to consider extending activities in the Natural History Boxes for older children. (Under-5s seemed happy to use the Boxes as they are – both the Cultural Worlds Boxes and the Natural History ones).
- To make the wording on the Cultural Worlds Boxes indicate that the contents can be engaging for a wider range of ages, perhaps 3 – 9 years.

**For detailed evidence of learning please see the GLO tables on pages 6 - 10**

Evidence of Generic Learning Outcomes: Family Activity Boxes 1

Outcomes:	Kinds of Learning	Evidence
<p><b>Knowledge and Understanding</b></p>	<ul style="list-style-type: none"> <li>• <b>Children’s increased subject knowledge:</b></li> <li>• <b>Learning about natural history, animals and insects, footprints and camouflage, bones and teeth, etc</b></li> <li>• <b>Learning about other cultures, musical instruments, costumes and customs, patterns and beadwork etc</b></li> <li>• <b>Learning about decorative arts:</b></li> <li>• <b>clocks and cogs; designs and shapes; sounds and weights etc</b></li> <li>• <i>Understanding eg what other people’s customs mean to them</i></li> </ul>	<ul style="list-style-type: none"> <li>• Girl, 5, was surprised by holding an animal tooth – her eyes widened as she looked at it – and by its size – <i>‘I didn’t think they were that big!’</i> Her grandfather asked if it was like her teeth. She looked doubtful. He held it up to his face to see if it would fit him. She laughed – it was much too big. (NH Box)</li> <li>• Two boys looked at how elephants drink with their trunks, drawing on a range of resources (models and background board, costume and referring to the full size elephant nearby in the gallery.) The 3 year old had a model elephant which had its trunk raised so the only way it could drink from the pond on the floor was by being upside down (he demonstrated this with the model). His brother said the trunks hung down too – as in the full-sized elephant. They both tried trunk bending with the costume elephant head and drank noisily from the pond. So the 3 year old grasped something about how a trunk works and the 7 year old produced an explanation referring to a gallery object. No adults intervened.</li> <li>• Discussion about the footprints in the box included mention of flamingo (Girl), heron, badger, and hedgehog until they were all identified. (Girl, 5)</li> <li>• The child had looked more carefully at animals in the gallery because of the box (Girl, 5)</li> <li>• (Girl, 5) said she’d remember about the bones and teeth.</li> <li>• Carer with 4 children: ‘She ( has been teaching us all about the mat and about Islam’. A five year old agreed that they all knew about the mat now and what it’s for. (Girl, 5 or 6)</li> <li>• ‘This helps them understand different parts of the world. My daughter recognised saris on the news reports about the Tsunami – they know what it feels like to wear saris.’ (Empathy). (Mother + Girl, 7)</li> <li>• They worked on the bead patterns and eventually began to notice bead patterns on some of the objects around them in the cases, (Girls 6,7)</li> <li>• They had been surprised by the finger piano, which they hadn’t seen before, and the 8 year old demonstrated how to use it.</li> <li>• Two small girls discovered that it was difficult to guess the colours of things by feeling them in a feely bag. (NH Box)</li> <li>• One three year old was not talkative but watched intently as his brother laid a footprint trail to a hedgehog and then looked very carefully at the hedgehog.</li> <li>• Mother and daughter (6) had both liked the cogs and wheels (DA box)and saw <i>how one cog can turn another a few wheels away.</i></li> </ul>

Key to the three types of boxes:  
 NH = Natural History  
 CW = Cultural Worlds  
 DA = Decorative Arts

## Evidence of Generic Learning Outcomes: Family Activity Boxes 2

• Outcomes:	• Kinds of Learning	• Evidence
<p style="text-align: center;"><b>Skills</b></p>	<ul style="list-style-type: none"> <li>• Investigative</li> <li>• Literacy</li> <li>• Observation</li> <li>• Matching, comparing and identifying</li> <li>• Craft work</li> <li>• Problem-solving</li> <li>• Social skills</li> <li>• Thinking</li> <li>• Musical</li> <li>• Using the box as a source</li> </ul>	<ul style="list-style-type: none"> <li>• The girl, 5, experimented with the different coloured acetates to find which made the best butterfly. (NH)</li> <li>• Girl, 5 and grandparent worked together to sound out b-o-n-e and b-i-r-d (NH)</li> <li>• Girl, 5, experimented by moving the magnifying glass nearer and further away to find which distance was best for seeing clearly. (NH)</li> <li>• Girl, 5, looked carefully at the giraffe-skin picture and went eagerly with her grandfather to check it against the real thing (NH)</li> <li>• The girl (8) had found a finger piano – and worked out how to use it. She also had to work out how to use the board with string and beads. (CW)</li> <li>• The 3 year old was enjoying putting the letters on the templates and made ‘tiger’ and ‘bird’ with mother’s help. Mother felt this was helping him with his letters – ie developing a skill he had already begun to acquire. (NH)</li> <li>• The older boy did the camouflage activity and enjoyed matching the cards up, trying the animal cards on different backgrounds and changing his mind a few times in the process as he re-assessed initial choices. He had to look very carefully at the detail, especially when the backgrounds were similar. (NH)</li> <li>• The 3 year old was proud of identifying the ‘2’ banana (NH)</li> <li>• Another of the girls liked the drum and had learned to play it gently so that other people could ‘still look at things and talk to each other because it wasn’t too noisy’. (Girl, 5) (CW)</li> <li>• Father: ‘She’s enjoying it and she’s learning as she plays. There’s problem-solving and handiwork and repeating patterns and culture... We related it (<i>the drum</i>) to the Jungle Book, which makes it more real.’</li> <li>• About the NH Box – Mother thought this had been brilliant when her daughter was 4/5 years old. ‘She used to learn the spellings when she was younger.’ ‘She’d try to find the animal she was dressed up as.’</li> <li>• A boy (3) was determined to close the padlock on the box. Several minutes and lots of encouragement later he succeeded to a family chorus of approval. (CW)</li> <li>• One father said it all made the children look more carefully. He said they had gone to look at how a deer’s hoof works, how it looks split. (Perhaps because of this the 9yr old said his best animal was the Roe Deer).</li> <li>• Mother preferred the DA box ‘<i>because it taxed her (daughter’s) brain more. You had to think about what you were doing to do it</i>’.</li> <li>• Girl (6) was trying out combinations of multi-coloured cogs while her father asked her questions, eg are they all turning the same way? She discovered that alternate ones were turning the same way. (DA Box)</li> </ul>

### Evidence of Generic Learning Outcomes: Family Activity Boxes - 3

Outcomes:	Kinds of Learning	Evidence
<p><b>Attitudes &amp; Values</b></p>	<ul style="list-style-type: none"> <li>• <b>Children: changes in attitude to the museum/ gallery</b></li> <li>• <b>Changes in attitude towards themselves as learners</b></li> <li>• <b>Parents: changes in attitude to the museum/ gallery, for themselves and/or for their children</b></li> <li>• <b>Changes in attitude towards people of other cultures/ religions</b></li> <li>• <b>Changes in attitude towards learning</b></li> <li>• <b>Seeing the world differently because of a museum experience</b></li> </ul>	<ul style="list-style-type: none"> <li>• Mother thought the boxes were an excellent idea and was surprised and delighted that it was free. They had got a key from reception and then enjoyed looking for <i>'their'</i> box.</li> <li>• <i>'It's been a long time since I've been to a museum - apart from Museum x which was small and there was nothing to do... probably before I had children, and it was a surprise to find this</i> (indicating the box). (satisfied Mother)</li> <li>• <i>'The good thing about it (the DA box) is the clocks is usually a section of the museum we'd just sail through normally, but this made us look... We liked the magnifying glasses and looking at the detail in particular.'</i> Mother + 2 girls 6,7)</li> <li>• Two parents looked at the words from other languages and shared them with their two respective children (<i>'In the Andes a baby is called a waa-waa'</i>). The children were busy but half listening and aware that their parents were learning things from the box, responding when asked: eg <i>Do you know what 'father' is in Maori?</i>. This was learning about adults enjoying learning too, and just one example of various instances when adults did not know the answers, had to look things up or admit defeat, and demonstrated learning role-models.</li> <li>• Parents helped each other about the boxes. Seeing a family engrossed in a box, sometimes a parent would ask about the activities and how to join in; more often one of their younger children simply dived in. Either way, questioning or embarrassed parents discovered that they could use a box and that they could use too.</li> <li>• Girl, 11, liked the words from other languages in the CW box – she couldn't remember any of the words but her awareness of those languages was raised. She could link the contents of the boxes to items on display, both cultural and religious <i>'Muslim, Hindu..'</i></li> <li>• Two Grandparents appreciated that the two children in their care were engaged, which gave them a bit of recovery time later in the day.</li> <li>• One father with four children, aged 3 – 9 years, was very appreciative of the boxes (<i>'We came all the way from Sidmouth because of the boxes'</i>). He had heard about them from a friend and not been disappointed and had a very positive attitude to the museum because of them.</li> <li>• One girl (5/6) wearing a sari said she felt <i>different</i> with it on and she was moving differently – in a self-conscious way but enjoying it without showing off – and then adjusting it regularly while drumming.</li> <li>• Girl (5) was hesitant at first – unsure that she could really play with all the contents of the box. Adults encouraged her.</li> </ul>

Evidence of Generic Learning Outcomes: Family Activity Boxes 4

Outcomes:	Kinds of Learning	Evidence
<p><b>Enjoyment, Creativity and Inspiration</b></p>	<ul style="list-style-type: none"> <li>• <b>Participants saying they had enjoyed it</b></li> <li>• <b>Participants identifying whatever they had liked the most about the boxes</b></li> <li>• <b>Observation of families engaged and enjoying the activities</b></li> <li>• <b>Clear observed evidence of parents spending quality time with their children</b></li> <li>• <b>Learning to use objects as a source of inspiration</b></li> </ul>	<ul style="list-style-type: none"> <li>• <i>'We've done the Cultural Worlds box about half a dozen times. Both girls enjoy the music and doing the beads.'</i> (Mother)</li> <li>• Her grandparents indicated that the girl (5) needed constant activities to keep her interested, and appreciated her engagement with the box. (They used another box over 3 hours later, in Cultural Worlds, having left the museum and returned)</li> <li>• <i>The drum had animals' fur on it and a rope and sounded good – like the jungle</i> (Boy, 6) (CW)</li> <li>• There were two elephant tails in the box so one boy used them both at once and they thought that was very funny. (Boys 3 &amp; 7)</li> <li>• The boy (7) took responsibility for getting his 3 year old brother dressed up. He had some difficulties and it didn't work the first two ways he tried, but he was happy with it in the end. (NH Box)</li> <li>• (Girl 6) <i>'My best thing is the stick with gold on which shows it's special'</i>. She held it as if it were special, excited by its possibilities... (CW)</li> <li>• Parents with 4 children were all greatly enjoying playing together, sitting in a circle and sharing findings from the box. <i>'Listen to this'</i> etc. Father made a mask and everyone laughed. Mother <i>'You could spend all day doing these and still not finish!'</i> The high quality of this family's shared experience with the box was evident (CW)</li> <li>• Mother said that the girl (6) had enjoyed matching the clocks to the pictures and dropping cards saying 'ding' 'tick' etc through the right slots. (DA box)</li> <li>• <i>We liked the boxes enough to try another one anyway.</i> (Mother and girl (6))</li> <li>• Girl (6) enjoying wearing a sari decided to draw a picture of a girl wearing a sari, to take with her. (CW)</li> <li>• One 5 year old liked dressing up as a monkey and a giraffe and <i>'finding the animals'</i> (Big grin). (NH)</li> <li>• Girl (4½) liked dressing up as an elephant, and especially liked the trunk. She also liked drawing animals, but didn't want to show what she had drawn. She ran up and down with detailed pictures of parts of birds and animals, delighted each time she identified one in the gallery. (NH)</li> <li>• Girl, 5, was so pleased with the shimmering butterfly she'd made she immediately wanted to do the bird template too. (NH)</li> <li>• <i>It was fun'</i> (Girl, 5)</li> </ul>

Evidence of Generic Learning Outcomes: Family Activity Boxes 5

Outcomes:	Kinds of Learning	Evidence
<p><b>Activity, behaviour, progression</b></p>	<ul style="list-style-type: none"> <li>• <b>Intentions to visit the museum again as a family</b></li> <li>• <b>Intentions to use the boxes again</b></li> <li>• <b>Increased curiosity eg having things to look up later</b></li> </ul>	<ul style="list-style-type: none"> <li>• <i>'We will do it again'</i> (ie use the boxes). They came back to the museum 3 hours later and did another box (G'Parents + Girl, 5)</li> <li>• Mother was really impressed with the box and intended to use other boxes on their next visit.</li> <li>• <i>'...I'm more likely to visit other museums with the children now, to see what they've got.'</i> (Mother)</li> <li>• <i>'Yes, we'll do a box again'</i> (Mother)</li> <li>• One girl, aged 11, visiting for the first time, and using a CW box said she <i>'would recommend it for others'</i> – pointing out that some of the activities were clearly for younger children. Her mother, who teaches students with special needs/ learning difficulties, said she would definitely bring them to use the CW boxes.</li> <li>• Questions about what would happen if the cogs were different sizes were stored away to <i>'look up later'</i>... Father and Daughter (7)</li> </ul>
<p>Most families indicated that they would use the boxes again.  <i>(Further information about visiting intentions may be available from the Feedback Forms)</i>                      NB Progression is less easy to evidence in one day's observation and would show up more clearly from monitored repeat visits.</p>		

