ENGAGING OR DISTRACTING?

Visitor responses to interactives in the V&A British Galleries

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Engaging or Distracting?: Executive Summary

CONTEXT The new British Galleries have attracted a great deal of attention and many visitors. The change that excited most comment was the number and range of interactives, they way in which they are integrated into the display and the way they are juxtapositioned with objects up to 400 years old. Whilst they are designed to deepen visitors' engagement with the collections, some commentators expressed profound concerns that the interactives may be distracting, intrusive, anachronistic or patronising. What was needed was an informed debate. This research aims to provide robust evaluation of whether the interactives are meeting both the visitors' needs and museum's objectives.

METHODOLOGY We developed a range of bespoke methodologies to analyse how different visitors responded to each interactive, how each visitor responded to different interactives and how the experience affected their visit and met their needs.

USAGE The interactives are popular with a range of visitors. We found that ninety percent of visitors used at least one interactive exhibit and, overall, visitors used an average of five different ones. More than half of all interactions were made by adults without children. Different types of visitors used different types of interactives, with families preferring those that involved physical activity and making things.

ENGAGEMENT The interactives significantly enhanced the visit. Rather than offering a substitute experience, visitors are clearly using the interactives as a tool to enhance their appreciation and understanding and to deepen their engagement with the real objects on display. Interactives provide contextualisation; they are giving information and insight; they animate objects and bring the past to life.

DEVELOPMENT The interactives develop visitors' knowledge and confidence. During interactions, visitors move quickly from browsing to searching behaviours drawing them from a casual interest to deeper levels of engagement and involvement.

DISTRACTION Fifteen months after opening, we found that only 6% of visitors expressed negative views about the interactives. Further analysis revealed that these visitors didn't need interactives (eg academic study), couldn't use the interactives (eg very limited time) or were worried that other people might not like them.

PERFORMANCE We measured the performance of a wide range of interactives to identify those that are most successful, least successful and how visitors use them.

IMPROVEMENTS We identified a number of ways, mainly ergonomic, in which these success rates could be improved still further.

CONCLUSION The British Galleries successfully use interactives to deepen visitors' engagement with real objects. There is no significant negative response. This provides a model for the development of other galleries within the V&A and nationally. There is room for further improvement in the way that interactives are integrated, ergonomically and conceptually, into the design of new galleries from an early stage.

CONTEXT: An informed debate about a new kind of gallery

The opening of the British Galleries in November 2001 attracted a great deal of attention. It provoked a debate amongst critics and within the sector and continues to attract a huge number of visits from the public.

The reason for this attention was not just the return to display of one of the V&A's most significant collections, or the aesthetics of its comprehensive redisplay. The change that excited most comment was the inclusion of interactives, designed to deepen visitors' engagement with the collections.

The presence of interactives in galleries has become commonplace. However, there are four unusual things about the use of interactives in the British Galleries:

- The sheer **number** of interactives – they are in every room on two floors.
- The **range** of different interactives – visual and tactile, low and high tech, activity and information based.
- The way they are **integrated** into displays rather than semi-detatched.
- The **juxtaposition** of modern interactives with objects up to 400 years old.

Whilst these features certainly made the British Galleries distinctive, they made some commentators uneasy. Many expressed profound concerns about the impact of the interactives on the visitor experience. The most common fears were that:

- **Interactives would be distracting** – visitors' primary engagement would be with the interactives themselves, rather than with the real objects.
- **Interactives would be intrusive** – the aesthetic experience would be spoilt, sight lines would be cluttered and noise pollution would irritate.
- **Interactives would be anachronistic** – the modernity of the interactives would clash with the antiquity of the objects, detracting from the chronological and period design focus of the displays.
- **Interactives would be patronising** – the objects could and should 'speak for themselves', additional interpretation is not required and underestimates the knowledge and abilities of the visitors.

To address these fears, inform the debate and ensure that the Galleries met both the visitors' needs and museum's objectives, robust evaluation was needed.

An initial quantitative survey reported high levels of general usage and satisfaction but questions remained about how visitors were actually using the interactives and what impact they were making on the visitor experience.

This report sets out the key findings of a substantial programme of qualitative evaluation that answers those remaining questions. In particular, it:

- Describes and analyses how interactives are used
- Evaluates what visitors get from the interactive experience
- Outlines the critical success and failure factors of interactives
- Investigates negative attitudes to interactivity

METHODOLOGY: How we evaluated visitors' interactions

Interactions, with both objects and the interactives themselves, are highly complex, personal experiences in which the visitor employs a range of skills from looking, watching and reading, through touching and examining, to speaking and active physical participation. They can interact alone or in groups, briefly or for extended periods and with many exhibits or just a selected few.

Whilst there are some obvious physical signs of their interaction, much of the process takes place in the visitor's mind. What they have understood or learnt and how they have reacted or responded is not always immediately obvious, sometimes not even to the visitor.

The task of the evaluator, then, is not an easy one. The methodology we designed strikes a balance between a structured analysis of processes and outcomes and an open-ended exploration of visitors' own experiences.

We used three distinct techniques:

■   Interaction Matrices
By setting a hierarchy of engagement (how deep, sustained and successful was the interaction?) against a hierarchy of intervention (what kind of external guidance, if any, did they use?) on different axes of a matrix, we created a tool that can record, simply through observation, the quality and nature of a visitor's interaction. Examples of these matrices can be found towards the end of this report. This qualitative classification also produces quantitative measures of success and pinpoints the nature of failed interactions. These success and failure factors are further informed by the recording and analysis of overheard comments associated with particular behaviours and outcomes. We observed 965 interactions with a wide range of interactives: 358 by adults and children together; 489 by adults without children; and 118 by children without adults. (Children are defined as being under 16 years old, a categorisation based on the judgement of the observer). This gives us very robust data.

■   Observation
Whilst the Interaction Matrices helped us understand how a large number of visitors interact with each exhibit, observation tracking helped us understand how each visitor interacted with many exhibits as they moved through the Galleries. We observed over 1,000 visitors.

■   Exit Interviews
The Exit Interviews allowed us to identify visitors' motivations and agendas and how these frame and filter their experience. We explored the overall impact of all the interactives in the wider context of the whole British Galleries. In particular the interviews allowed us to probe the interactives' impact on the visitors' enjoyment and experience. We interviewed 100 visitor parties.

Whilst each of these techniques produced useful outcomes in their own right, the most useful insights came from cross-analysis of the data. The patterns that emerged give us confidence that we have gained a real understanding of visitors' needs and responses.

USAGE: Interactives are popular with a range of visitors

Based on our observations (1,000 visitors) and formal interviews (100 visitors) we found that ninety percent of visitors used at least one interactive exhibit. Most used more than one of the interactives. On average five interactives were used by each party of visitors.

Adults, on their own or in a pair, were the most intensive users of interactives. Families, (at least one adult and one child) were also high users but children independent of adults were the lowest users.

USAGE OF INTERACTIVES
Percentage of interactions made by each visitor type:

CHILDREN 12%

ADULTS 51%

FAMILIES 37%
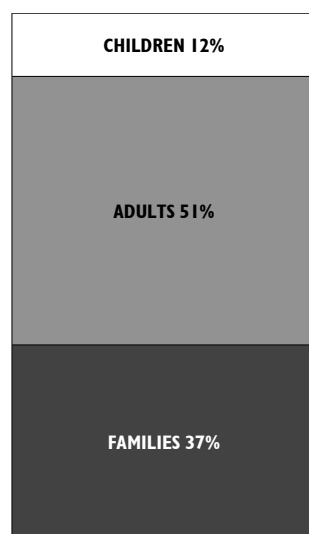
Of the 12 interactives we studied, those most frequently used by adults were:
- Great Bed of Ware - video
- Wilkes Detector Lock - video
- 17th Century Ceramics – handling collection
- Mini Saga – visitor response
- Spot the Difference: English or Chinese? (lift the flap)

Family groups were most frequently using:
- Design a Coat of Arms – computer interactive
- Dressing Up Ruffs
- Style Guide – computer interactive
- Boxed Activities in the Discovery Area (e.g. make a rubbing, dress a figure)
- Construct a Chair

Adults tend to use the interactive as individuals, searching for more information about a particular object or personal interest. Families use the interactives which allow multiple users. They gave children initial guidance but allowed them to complete the process with minimum intervention. Families also tend to favour those interactives that produce a tangible or distinct result, which is not necessarily information based.

ENGAGEMENT: Interactives significantly enhanced the visit

Different interactives work in different ways and offer visitors different kinds of experiences. In turn, different visitors respond to the range of stimuli in different ways. This diversity of response is clear from visitors' choice of their 'favourite' interactive:

- Object in Focus video (14%)
- Dressing up (Ruffs, Gauntlet, Hats) (14%)
- Handling Objects (Ceramics) (13%)
- Design (Coat of Arms) (12%)
- How was it made video (10%)

The range of reasons visitors gave for their choice of favourite demonstrate that the interactives significantly enhanced the visit and, crucially, deepened their engagement with the real objects on display:

 'Adds clarity and more information about the object'

 'Easier to understand the object and I get deeper learning with the information from the video'

'I can relate to it better with a moving video'

'It's fun for the kids to experience what it was like'

 'It's nice to interact with things that wouldn't normally be encountered'

'You can feel the people before you (historically)'

'You can get a better sense of things'

'You get a sense of the real objects at the time'

Rather than the interactives offering a substitute experience, these visitors are clearly using the interactives as a tool to enhance their appreciation and understanding of the real objects.

Interactives are providing a point of reference and contextualisation; they are giving information and insight; they are animating objects and bringing the past to life.

In short, they are deepening engagement with real objects, enhancing and enriching the visitor experience.

DEVELOPMENT: Increased knowledge and confidence

Our research has led us to broadly segment visitors and users to the V&A into three general behaviour categories when using information and interpretation:

Browsers   Casual, incidental or non-specialist interest visitors motivated by leisure, aesthetic, family, social, informal educational or self-improvement drivers.

Searchers   Intentional visitors, focused and self-motivated, exploring and pursuing a developing formal or informal interest or hobby.

Researchers   Intentional visitors driven by academic, professional or strong personal interest.

SEPARATE FUNCTIONS MODEL
Many traditional forms of museum display, even those attempting some kind of multi-layered interpretation, adopt a 'Separate Functions Model' of these visitors.
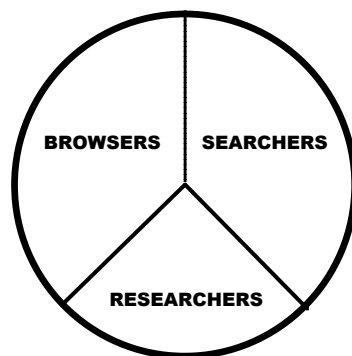

This approach is based on the belief that each group has separate needs requiring separate provision.

Whilst this is a genuine attempt to meet a range of visitors' needs, it is not a developmental model. Visitors get 'stuck' in one behaviour with little encouragement or opportunity to develop their knowledge, confidence and engagement beyond the limited provision made for them.

INTEGRATED PROGRESSION MODEL
A more progressive model of interpretation arranges the functions as stages in a hierarchy. By providing 'rungs' on a ladder of progression, the museum can encourage visitors to develop knowledge, confidence and engagement.
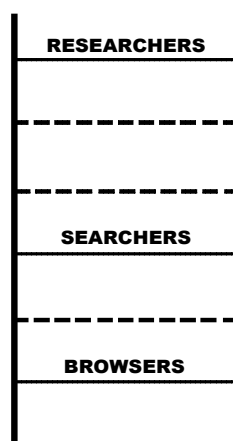
This is particularly pertinent to the British Galleries because many interactives have the ability to quickly move visitors between browsing and searching behaviours. It is the engaging nature of sequential interactive steps that draw visitors in from a casual interest to deeper levels of engagement and involvement.

The Interactives present the visitor with
- Different levels of content
- Different media
- Radial, rather than linear, information

"you can't understand something from reading about it alone, you need to have the choice to find out more about the thing that interests you"

"so rewarding to be able to take something away" (Design a coat of arms print out)

"Engaging your brain with the 'What is it?' is a welcome break from the rest of the museum and gives you a chance to get involved and get active with the exhibitions"

DISTRACTION: Very focused visitors don't need interactives

During the initial quantitative survey, visitors were read a list of statements with which they were asked to agree or disagree. One of those statements was:

"My pleasure at seeing the wonderful objects was spoiled by all the interactive exhibits"

The headline figure for agreement with this statement was 17%, suggesting that whilst five out of six visitors were happy with the interactives, one out of six were not happy.

Further analysis of the headline result reveals that most of this 17% did not have particularly strong views on the subject. In fact, only 2.5%, or one visitor in forty, strongly agreed with the statement.

We repeated testing of this statement in our exit interviews. Fifteen months after opening, we found that agreement with the statement had dropped to just 6%, with hardly any of these strongly agreeing. However, the context was different, with this statement being presented on its own rather than part of a longer list, a factor that may have impacted on the findings.

We explored the reasons why these 6% did not respond well to the interactives. We found their non-use of and attitudes towards interactives were directly related to their personal motivations for visiting.

Most were very focused visitors with clear, pre-set agendas:

■ **Academic or professional visitors**
They were visiting to see particular objects or to study a particular aspect of the collection. As they were Researchers, they simply did not require interactives that offered gateways to Browsers and Searchers. However, they all agreed that they were able to access the objects and information they were seeking. *"I'm here to do a project"*

■ **Time-limited visitors**
Those who wanted to fit a quick tour of the British Galleries into a limited schedule found that the interactives were constantly encouraging them to slow down and spend more time engaging with individual objects. This frustrated their attempt to fit as many galleries as possible into their visit.

"It can be disturbing when you've only got a couple of hours"

Others were not reporting a negative impact the interactives had actually had on them, personally, or during this visit. Rather they were anticipating problems on behalf of others or on some other occasion.

*"It **could** get too noisy and a bit intrusive"*

We conclude that these objections are not particularly substantive. Researchers interested in objects on public display will always have to mix with the general public and not everyone will want to slow down and engage more with the objects.

PERFORMANCE: How visitors responded

We used the following matrix to record the visitors' depth of engagement and interpretation used.

Depth of Engagement	None	Reference	Human
Immersion	%	%	%
Discovery	%	%	%
Exploration	%	%	%
Orientation	%	%	%

Interpretation Used

The definitions of Depth of Engagement are set in relation to the objectives and outcomes the museum hopes for and are linked to visitor behaviours such as physical actions, group dynamics and length of time spent.

For example:
Orientation – perhaps looking but not touching
Exploration – touching but not learning
Discovery – learning something as a result of the interaction
Immersion – longer engagement, making links, discussing discoveries

As the Depth of Engagement is defined by the objectives of the individual interactive each exhibit is different. The following definitions were used for the Construct a Chair:
Orientation – brief look
Exploration – touch parts/read instructions/aborted try
Discovery – substantial construction
Immersion – reference to real chair

The interpretation used is determined through observation. Human intervention can be provided by a member of staff or by a knowledgeable fellow visitor.

The headline measure of success is the percentage of visitors whose interaction is recorded in the top half of the matrix, i.e. those who have achieved Discovery or Immersion by whatever method.

Rows and columns can be totalled to summarise outcomes and processes. Areas of the matrix can be grouped to summarise behaviours.

The results for each interactive analysed are summarised as follows:

Coat of Arms	43%	21%	36%	
Immersion	6%	6%	19%	88%
Discovery	31%	10%	16%	
Exploration	1%	4%	0%	13%
Orientation	6%	2%	0%	
	None	Reference	Human	

Boxed activities	60%	3%	37%	
Immersion	8%	1%	28%	71%
Discovery	24%	0%	9%	
Exploration	0%	1%	0%	29%
Orientation	28%	0%	0%	
	None	Reference	Human	

Braid	31%	35%	35%	
Immersion	0%	8%	13%	58%
Discovery	2%	17%	17%	
Exploration	19%	10%	4%	42%
Orientation	10%	0%	0%	
	None	Reference	Human	

Style Guide	67%	16%	16%	
Immersion	7%	3%	5%	55%
Discovery	19%	10%	11%	
Exploration	32%	4%	0%	45%
Orientation	10%	0%	0%	
	None	Reference	Human	

Dressing Up - Ruffs	47%	5%	48%	
Immersion	1%	0%	2%	54%
Discovery	21%	4%	26%	
Exploration	10%	0%	18%	46%
Orientation	14%	1%	2%	
	None	Reference	Human	

Great Bed of Ware video	29%	47%	24%	
Immersion	1%	6%	7%	41%
Discovery	5%	12%	10%	
Exploration	8%	23%	7%	59%
Orientation	15%	6%	0%	
	None	Reference	Human	

Ceramic Fragments	63%	24%	13%	
Immersion	0%	6%	3%	36%
Discovery	11%	11%	5%	
Exploration	30%	6%	5%	64%
Orientation	22%	1%	0%	
	None	Reference	Human	

Chair	53%	29%	18%	
Immersion	0%	18%	18%	35%
Discovery	0%	0%	0%	
Exploration	4%	0%	0%	65%
Orientation	49%	12%	0%	
	None	Reference	Human	

English/Chinese	69%	16%	16%	
Immersion	0%	6%	0%	34%
Discovery	13%	0%	16%	
Exploration	22%	2%	0%	66%
Orientation	34%	8%	0%	
	None	Reference	Human	

Scaling up drawing	80%	20%	0%	
Immersion	20%	5%	0%	30%
Discovery	5%	0%	0%	
Exploration	30%	15%	0%	70%
Orientation	25%	0%	0%	
	None	Reference	Human	

Wilkes Detector Lock video	46%	33%	21%	
Immersion	0%	5%	12%	28%
Discovery	4%	4%	2%	
Exploration	9%	14%	7%	72%
Orientation	33%	10%	0%	
	None	Reference	Human	

Mini saga	43%	35%	22%	
Immersion	0%	7%	6%	22%
Discovery	0%	3%	6%	
Exploration	9%	21%	10%	78%
Orientation	34%	4%	0%	
	None	Reference	Human	

With so many interactives, it is not reasonable to expect that all visitors will interact successfully with all interactives. They will browse at some and engage more deeply at others, depending on their level of motivation and interest and the dynamics within their party. Some, like the Mini Saga and Scaling Up drawing for example, require time and sustained concentration which may not appeal or may not be available to all visitors.

However, there are some, such as the Wilkes Detector Lock video, Ceramic Fragments handling and the Great Bed of Ware video, that could achieve higher rates of success if their positioning and sightlines were more ergonomic, and others that could have better instructions and information. The points of exit for unsuccessful interactions indicate where the problems might be.

IMPROVEMENTS: Ergonomics could deepen engagement

Through observation of visitor behaviour and ergonomics, we identified a number of critical success factors for interactives:

- Obvious to visitors in terms of the position in the gallery
- Easy relation to the object
- In eye line with object e.g. Royal writing box video; Construct a chair
- Allow collective usage
- Facilitate behaviour modeling
- In a familiar format i.e. touch screen or computers which visitors are used to

Similarly, we identified a number of critical failure factors that inhibit both use and outcomes. Interactives will have less of an impact if they are:
- Hidden from visitor flow
- So discreet that they are missed altogether e.g. not seeing / looking out for Discovery Areas
- Easily Disconnected with object e.g. Wilkes Detector Lock video
- Restrict access in tight spaces e.g. Great Bed of Ware video
- Single user
- Not explicit that interactives are a whole 'layer' of information e.g. Style Guide computer interactives
- Instructions are not seen or read by visitors

Many of these issues were simple design and build decisions that moved interactives slightly out of the eyeline or assumed a particular direction of visitor flow.

The solution to these problems is threefold. First, interactives should be conceived as part of the overall design and interpretation scheme from the very beginning with clear outcomes and objectives articulated. Secondly, interactives should be rigorously prototyped and tested in the gallery. Finally, because visitors behave in ways that even extensive formative evaluation cannot predict, there must be sufficient flexibility in the design and layout and a sufficient contingency budget to make post-opening changes that fine-tune performance (e.g. relocate signage or screens to face visitor flow).

Interactive exhibits tested:
- Wilkes Detector Lock – video
- Great Bed of Ware – video
- Mini Saga – visitor response
- Design a Coat of Arms – computer interactive
- Style Guide – computer interactive
- Construct a chair
- Scaling up drawing
- Dressing Up Ruffs
- Boxed Activities in the Discovery Area (e.g. make a rubbing, dress a figure)
- 17th Century Ceramics – handling collection
- Spot the Difference: English or Chinese? (lift the flap)
- Make a Plaited Card