British Museum Gallery Study

An Analysis of the Effectiveness of Select Galleries for Families

An Interactive Qualifying Project proposal to be submitted to the faculty of Worcester Polytechnic Institute in partial fulfilment of the requirements for the Degree of Bachelor of Science

Submitted by:

Christopher Cleary
Christina Ernst
Michael Moscardini
Robert Stanford

Submitted to:

Project Advisors:

Professor Wesley Mott
Professor Guillermo Salazar

Project Liaison:

Dr. Catherine Cooper, the British Museum

26th April 2007
Abstract

The British Museum in London wants to strengthen the effectiveness of its galleries for family visitors. Evaluation of the Egyptian Sculpture and HSBC Money galleries proceeded through the use of oral surveys, visitor tracking, and participatory sessions with visiting families, followed by the creation of a data report and recommendations for potential gallery improvements. As the first to focus on family groups, this evaluation will enable the Museum to cater to a broader range of visitors.
Authorship

This report represents the combined efforts of each member of the IQP team. We contributed equally to the project and all the group members helped to complete the evaluations, analysis, and report writing. However, each member had his or her primary role or ‘niche’ in the group that related to their particular strengths as an individual. Christina was the main report writer of the group and took control of the constant revisions that the document went through. Robert was the foremost evaluation collector, performing the majority of the surveys and other forms of data collection. Christopher had the most experience with creating Excel graphs and as a result he became the most important person organizing and analyzing the data collected. Michael was the everyman of the group and performed a significant amount of data collection, analysis, and report writing.
Acknowledgements

First and foremost, we would like to thank our liaison, Dr. Catherine Cooper, and her colleagues at the British Museum for being incredibly helpful, motivated, and accommodating. We would also like to thank Rebecca Richards and Laura Philips for helping us obtain information specific to the evaluated galleries.

In addition, we would like to thank our advisors, Professors Wesley Mott and Guillermo Salazar for guiding us through the project, providing feedback, and buying us coffee at the early-morning on-site meetings. We would also like to thank Professor Scott Jiusto for helping us prepare for the project throughout the previous term.
Executive Summary

The British Museum, a traditional and prestigious institution, lacks a comprehensive understanding of how families interact with and experience its galleries. As the Museum wishes to cater more appropriately to a broad audience, this information is essential. The Museum is currently in the process of renovating and refreshing its galleries, and is thus open to the possibility of minor modifications to achieve this goal. This has presented an ideal opportunity to evaluate the effectiveness of select galleries for visiting families. At present, two specific galleries are due to be either refreshed or renovated in the near future: the Egyptian Sculpture gallery will likely receive new informational panels and labels, and the HSBC Money gallery is due for new panels, along with the addition of experimental objects and displays.

Our main goal has thus been to evaluate these two galleries in terms of their ability to educate and entertain family visitors. The two primary methods of data collection were oral surveys and tracking families through the galleries, complemented by one participatory session with a family. Attendance counts were also conducted in the HSBC Money gallery. Initially, we familiarized ourselves and spoke with members of staff in the relevant galleries, and based the design of our evaluation on what we learned. After two rounds of pre-testing and revisions to the surveys and one round to the tracking forms, the evaluation commenced. Data collection and analysis resulted in two stand-alone documents for presentation to the British Museum: a summary of the collected data and a set of recommendations for gallery improvements with supporting data.

The scope of the evaluation included one hundred surveys and one hundred observations for each gallery, along with one participatory session. Calculated from the attendance counts, an average of twenty-one families pass through the Money gallery per hour, with 85% of them stopping to interact with at least one object. Much of the quantitative data from the observations yielded valuable conclusions about the popularity and engagement levels of the various objects in each gallery, while the surveys collected both quantitative and qualitative data regarding visitor preferences. The participatory sessions complemented this data by providing an in-depth view of the family experience.
Some of the most significant conclusions were actually not specific to either gallery. The most prominent issue for families in the British Museum is that there is a lack of advertisement of family-oriented materials, including activity backpacks and trails. Specific to the Egyptian Sculpture gallery, the most common comment is their displeasure with the informational labels. In the HSBC Money gallery, most families are satisfied, but many would appreciate the addition of more hands-on activities. In terms of the lower panel replacement plan in the Money gallery, families would like them to be geared more toward children and to include integrated activities.

These conclusions and recommendations have been created with an eye toward practicality for the British Museum, with the primary goal of optimizing the family experience while minimizing the changes to the overall character of the galleries. Most revolve around the addition or replacement of signs, panels, and labels. Although they may seem minor, such changes can significantly enhance the family experience. Modifications such as these are minimal in cost, as compared to other changes that could be made to the galleries, and are also within the scope of the Museum’s refreshment and renovation plans. These recommendations will thus allow the British Museum to cater to and better satisfy its family visitors.
# Table of Contents

Abstract ................................................................................................................................. i
Authorship ............................................................................................................................ ii
Acknowledgements ............................................................................................................... iii
Executive Summary ............................................................................................................... iv
Table of Figures ................................................................................................................... vii
Table of Tables .................................................................................................................... vii

1. Introduction ....................................................................................................................... 1

2. Background ....................................................................................................................... 3
   2.1. History of the British Museum .................................................................................. 3
   2.2. The Galleries .......................................................................................................... 5
   2.3. Learning & the Museum ........................................................................................ 6
       2.3.1. History of Education and Museums .................................................................. 6
       2.3.2. Educational Theory in Museums ....................................................................... 7
       2.3.2.1. Catering to Learning Styles ........................................................................ 8
       2.3.2.2. Museum Communication Strategy ............................................................. 9
       2.3.2.3. Families in Museums ................................................................................... 9
   2.4. Gallery Design .......................................................................................................... 10
       2.4.1. Limiting Factors Related to Exhibitions ......................................................... 11
       2.4.2. Gallery Layout ................................................................................................ 12
       2.4.3. The Museum Exhibit as Art ............................................................................ 12
       2.4.4. Exhibition Visual Aids ..................................................................................... 13
       2.4.5. Designing Galleries for Different Age Groups ................................................ 14
   2.5. Evaluation Methods ................................................................................................... 14
   2.6. Statistics .................................................................................................................... 15

3. Methodology ..................................................................................................................... 17
   3.1. Analysis Goals ......................................................................................................... 18
   3.2. Preliminary Research in London ............................................................................ 19
   3.3. Collecting Data for the Evaluation ........................................................................ 20
       3.3.1. Pre-testing ........................................................................................................ 20
       3.3.2. Surveys ............................................................................................................. 21
       3.3.3. Observations ................................................................................................... 22
       3.3.4. Attendance Counts ......................................................................................... 23
       3.3.5. Participatory Data Collection .......................................................................... 24
   3.4. Data Analysis ............................................................................................................ 24
       3.4.1. Evaluation of Quantitative Data .................................................................... 25
       3.4.2. Evaluation of Qualitative Data ...................................................................... 25
       3.4.3. Evaluation of Data Collection Process .......................................................... 25

4. Results and Analysis ....................................................................................................... 27
   4.1. Family Demographics ............................................................................................. 27
   4.2. The Family Experience ............................................................................................ 31
       4.2.1. In-Depth Observations of the Family ............................................................. 32
       4.2.2. Family Preferences ........................................................................................ 33
       4.2.3. How the Family Moved Through the Galleries ............................................. 34
   4.3. Egyptian Sculpture Gallery .................................................................................... 35
   4.4. HSBC Money Gallery ............................................................................................. 42

5. Recommendations ............................................................................................................ 49

6. Conclusions ....................................................................................................................... 50

References ............................................................................................................................ 52

Appendix A: Surveys ............................................................................................................. 54
Appendix B: Observation Sheets ............................................................................................ 59
Appendix C: Attendance Count Form .................................................................................... 63
Appendix D: Participation Data Collection Form ................................................................. 64
Appendix E: Numbered Layout of HSBC Money Gallery .................................................... 65
Appendix F: Catalogue of Objects in the Egyptian Sculpture Gallery ................................... 66
Table of Figures
Figure 1: Visiting Family in the Egyptian Sculpture Gallery ............................................. v
Figure 2: Queen Elizabeth II Great Court ........................................................................... 4
Figure 3: North and South Wing of Egyptian Sculpture Gallery........................................ 5
Figure 4: HSBC Money Gallery .......................................................................................... 6
Figure 5: Project Flow Chart ............................................................................................. 17
Figure 6: Project Timeline ................................................................................................. 18
Figure 7: Distribution of Families' Nations of Origin ....................................................... 28
Figure 8: Distribution of Families' Reasons for Visiting the British Museum ................. 29
Figure 9: Families' Reasons for Declining to Take Surveys.............................................. 30
Figure 10: Reasons for Not Using Family Materials ....................................................... 31
Figure 11: Relative Levels of Interest in the Top 20 Objects [Egyptian] ......................... 36
Figure 12: Relative Levels of Engagement with the Top 20 Objects [Egyptian] .......... 37
Figure 13: Average Family Engagement Level by Age Group [Egyptian] ...................... 38
Figure 14: Average Family Engagement Level by Family Size [Egyptian] .................... 39
Figure 15: Instances of Reading per Family Visit [Egyptian] ........................................... 40
Figure 16: Distribution of Learning Outcomes [Egyptian] .............................................. 41
Figure 17: Relative Levels of Interest in Objects [Money] ............................................... 42
Figure 18: Relative Levels of Engagement with Objects [Money] .................................. 43
Figure 19: Average Family Engagement Level by Age Group [Money] .................... 44
Figure 20: Average Family Engagement Level by Family Size [Money] .................... 45
Figure 21: Preferences for Informational Panel Audiences [Money] ............................... 46
Figure 22: Preferences for Informational Panel Content [Money] ................................... 46
Figure 23: Preferences for Addition of "Family-Friendly" Logo [Money] ....................... 47
Figure 24: Preferences for Addition of National Curriculum Material [Money] .......... 47
Figure 25: Preferences for Addition of Integrated Activities in the Gallery [Money] ..... 48

Table of Tables
Table 1: Weighting Scheme for Calculating Engagement Levels ............................. 23
Table 2: Distribution of Families' Primary Languages ...................................................... 28
Table 3: Top 20 Interest Object Descriptions [Egyptian] .............................................. 36
Table 4: Top 20 Engagement Object Descriptions [Egyptian] .................................... 37
Table 5: Case Panel Usage by Families [Money] ............................................................... 45

Stand-alone Documents

British Museum Gallery Study: The Data
British Museum Gallery Study: Family-Based Recommendations for Improvements to the Egyptian Sculpture and HSBC Money Galleries
1. Introduction

Museums are important educational tools, maintaining and presenting the wealth of human culture. However, with the quickly progressing educational methods and standards utilized in school systems, museums may be apt to fall behind in their ability to inform and entertain in an effective manner. Primary educational methods used to consist of the highly-structured, step-by-step teaching of facts, and demanded equally structured memorization and recitation by the students. Currently, these standards are evolving toward a more intimate, interactive approach to teaching. However, many museums, which most people consider to provide an informal type of education, have, until recently, retained their structured, static style of exhibition, as there has not been significant momentum in adapting museums’ educational styles to those of more recent times. As these techniques and standards evolve, it becomes essential that museums evaluate the educational effectiveness and enjoyment of their exhibits, if they wish to maintain the goal of educating and entertaining their visitors.

The United Kingdom is well known for its esteemed museums and their extensive collections. Consequently, these museums are expected to provide both an enjoyable and appropriate learning environment for adults and children alike. The more traditional types of museums in the UK may be somewhat lacking in these areas, especially as the educational paradigm evolves. Although science and discovery museums, such as the Museum of Science in London, take advantage of highly interactive exhibits that adhere to these new standards, it is not essential that traditional museums follow suit. However, it does become more challenging for them to assess and modify their galleries so that their visitors may make the most of their museum experiences, both in terms of education and enjoyment.

To the British Museum, a prestigious and traditional institution in London that receives over five million visitors per year, it is of great importance that its patrons are able to make the most of their experiences (British Museum website, 2007). Its visitors range from tourists and school groups to British elders and world-renowned scholars. It is a challenge for the Museum to cater to every visitor type, but it is possible. One of the most successful educational theories that has been put to use in museums is constructivism, which relies heavily on making personal connections with the material in order to create a memorable, educational experience (Mayer, 2005). This can be adapted relatively easily even in a traditional setting, as that of the British
Museum, through the reorganization of exhibit halls, the modification of informational panels, and the addition of activities or reflective opportunities within the exhibits. So far, the Museum has conducted preliminary examinations of some of its thematic galleries, and has received much positive feedback and constructive recommendations (British Museum: Money Gallery Report). However, more in-depth analyses are necessary to obtain a true perspective on the effectiveness of its exhibits. With its continuous, rolling renovation plan currently in action, it is an appropriate time to conduct these examinations.

The family group is one particular patron classification that the British Museum has yet to thoroughly examine. Families have a unique group dynamic in museums, often conversing amongst themselves about the exhibits, relating them to personal knowledge and experiences, and thus creating a meaningful, personalized, and often educational museum experience. In the British Museum’s traditional galleries, however, it is not well known whether families are able to create these unique and important experiences. It is therefore appropriate to focus current examinations on these exhibits so that the Museum may cater to family groups more appropriately.

The primary goal of this project is to aid the British Museum in evaluating the educational effectiveness of select galleries by gathering information from and about its visitors. The team has created and conducted brief visitor surveys, focusing entirely on family groups. Observational and participatory analyses were also conducted to further complement the visitor questionnaires and complete a well-rounded examination of the chosen galleries. The data obtained was then quantitatively and qualitatively analyzed, focusing on significant relationships between exhibit characteristics and visitor reactions, while keeping in mind the goals of a constructivist type theory. Finally, a data report and set of recommendations were created and presented to the British Museum that included potential improvements to both current and future galleries. The Museum has thus gained insight into the overall effectiveness of its exhibits and is now able to better accommodate the educational needs and expectations of its patrons, and also improve upon the interest and enjoyment factors of its galleries.
2. Background

It is of concern to the British Museum that its visitors may not understand the themes and subjects of some of its galleries. To complete a thorough evaluation of these galleries, it is important to develop several key concepts. The following chapter provides the background research that has shaped the project. Information on the Museum itself focuses further research by establishing the setting and motive for the study. To evaluate the educational value of the exhibits, knowledge of both education theory and exhibit design is vital. This information is fundamental to the establishment of evaluation criteria and has guided observations during the execution of the study while also shaping future recommendations. Lastly, the various methods of performing the evaluations were examined to develop the means by which evaluation data would be collected.

2.1. History of the British Museum

Sir Hans Sloane (1660-1753), a wealthy physician and collector, wished that his 71,000-item collection be preserved after his death. Sloane offered his collection to King George II in exchange for £20,000 to be given to his heirs. The king denied his request, threatening the integrity of the collection. Unable to continue his quest, a group of trustees were given the task of saving the collection. The trustees went to Parliament to plead their case and gained the support of the Speaker, Arthur Onslow. Parliament accepted the original proposal and the British Museum was established on 7 June 1753. The collection, which consisted of books, manuscripts and natural history artefacts, was to be shared with the public (British Museum Website, 2007).

On 15 January 1759, the collection opened to the public for the first time, housed in the 17th-century style mansion Montagu House. The Montagu House, designed by the French Architect Puget, sat prominently in the heart of current-day London. As the neighbourhood began to become more middle class, the owner, the 2nd Duke of Montagu, decided to sell the house (British Museum Website, 2007).

The Museum remained in the Montagu House, after several additions had been built, until it was razed in the 1840s in order to create a more spacious building on the same plot. With
the creation of the new building in the 1840s, the museum flourished with expansion during the 19\textsuperscript{th} Century. Even with two world wars and the funding issues that followed, the 20\textsuperscript{th} century brought a sales counter, guided lecturers, and in 1962, the first full-time exhibition designer. During the 1970s the museum began to offer educational and publishing services, and in 2000 the Queen Elizabeth II Great Court opened, becoming the largest closed court in Europe (Figure 2). The new facilities provided the public with access to a restored Reading Room and Paul Harnlyn Library (British Museum Website, 2007).

![Figure 2: Queen Elizabeth II Great Court](wikipedia.org)

The British Museum was created to be unlike any other museum of the time: free and accessible to everyone. The Museum’s trustees have always wished to help educate the public by showcasing significant pieces of art, history, and science. The Museum follows three important principles: “That the collections are held in perpetuity in their entirety, that they are widely available to all who seek to enjoy and learn from them and that they are curated by full-time specialists” (The British Museum Website, 2007). Through these principles, the British Museum has established itself as one of the finest museums in the world.
2.2. The Galleries

The evaluation focuses on two galleries in the British Museum: the Egyptian Sculpture gallery and the HSBC Money Gallery.

The Egyptian Sculpture Gallery, a division of the Ancient Egypt and Sudan Department, houses statues and other artefacts of ancient Egypt. The Gallery consists of two wings: the north and the south (Figure 3). The artefacts are arranged chronologically from the south to north, except for the Rosetta Stone, which is prominently placed at the entrance (British Museum Website, 2007). Because the artefacts in this gallery are so large, there are no plans to move anything. However, the museum plans on replacing all displays and labels this year (Cooper, 2007a).

![Figure 3: North and South Wing of Egyptian Sculpture Gallery](British Museum Website)

The HSBC Money Gallery contains over half of the coins displayed by the museum (Figure 4). The aim of the gallery is show the transformation that money has undergone through the ages, from metal to digital (British Museum Website, 2007). This gallery is due to be refreshed this year with the adding of new panels and photos, as well as testing and removing
some items. The physical orientation of the gallery will remain mostly the same (Cooper, 2007a).

Figure 4: HSBC Money Gallery

2.3. Learning & the Museum

“Education as a crucial museum function has been recognized as long as there have been public museums” (Hein, 1998, 3). Established in the eighteenth century, public museums have always had a unique role in societies. The original purpose of these museums was to further the “equality of opportunity of learning,” as their collections were previously limited to the upper class citizens of Europe (Hudson, 1975, 6, qtd. in Hein, 1998, 3). This remains true today, as museums continue to function as important educational tools. What has changed, however, is the further development of educational theories, including communication strategies and demographically-catered teaching methods.

2.3.1. History of Education and Museums

Many of the first museums housed items obtained during conquests and gifts from wealthy travellers, a prime display of the nations’ riches and supremacy. Others, such as the British Museum, were originally private collections that were eventually opened for public viewing. In the nineteenth-century, the focus shifted from primarily showy displays toward more informative exhibits, including those on health, industry, technology, and simple entertainment. Concurrently, public schools became more prevalent in developed nations,
reflecting the rise of industrialism and the working class. However, the momentum of the school system movement quickly surpassed that of museums. While schools created standardized curricula and teaching methods, the museums remained very informal and self-guided, as “it was assumed that people would learn, be enlightened, and be entertained by their visits to museums without any reference to the study of visitors’ experiences,” a notion that remains intact in many museums today (Hein, 1998, 5). As Hooper-Greenhill (2000, 1) explains:

Part of the reason for this uncertainty about what museum and gallery education might be, and what form museum pedagogy should take, is a lack of knowledge within the museum of the profound changes that have occurred over the past century in educational processes and structures outside museums.

As a result, the formal, didactic conception of education is still present in many museums today (Hooper-Greenhill, 2001).

As the theory of education has evolved, the theory behind learning in museums has slowly evolved as well. In recent times, educational theory has pushed towards interaction with the environment to stimulate the formation of meaningful knowledge and memories, while moving away from the rote memorization of facts and figures. Despite these advances, however, museums will most likely continue to take an informal approach to education, as compared to the formal, structured methods instated by the school systems. However, simply because museum-based education is denoted as “informal” does not mean it is less influential or important than formal education; significant learning can and will occur in such an informal environment, provided that the museum presents its collections in a way that is informative and memorable. Unfortunately, many museums do not provide these factors in an effective manner, as they do not adhere to one specific educational theory, if any. Without maintaining a uniform theory, exhibits and galleries, though still educational, may send confusing or mixed messages (Hein, 1998).

### 2.3.2. Educational Theory in Museums

A museum’s adherence to an educational theory can be one of the most important components of a program. Although the term “educational theory” is not strictly defined, in terms of its use in a museum, it often encompasses “what the educational intention of the
museum might be, how the institution considers education, how it believes that people learn, and what education consists of” (Hein, 1998, 14). Whether it be a straightforward, traditional didactic or stimulus-response theory, or a more modern discovery-based or constructivist theory, it significantly affects both how the museum designs its galleries (e.g., in terms of the objects themselves, their arrangement, and other exhibit components) and the learning outcomes the visitors can achieve (Hein, 1998). Although the British Museum does not follow a specific theory of education, general theory, communication strategies, and demographic-specific learning styles can be put to use in our evaluation and subsequent recommendations (Cooper, 2007a).

### 2.3.2.1. Catering to Learning Styles

Even without a prescribed educational theory, a museum can learn from and make use of the elements of constructivism, one of the newest theories. As Mayer explains, the main principle behind constructivism is that a museum’s visitors primarily learn from its exhibits when they can connect the provided material to their own personal knowledge and experience (2005). Although the British Museum does not wish to convert their exhibits to interactive stations (the most common way of instating this style), the active learning process, its first requisite component, can still occur via informational panels or curator’s questions that will provoke the visitors think for themselves (Cooper, 2007a). The second essential element is that the museums must allow the visitors to come to conclusions on their own based on what makes sense, rather than forcing them to conform to known standards or outcomes (Mayer, 2005). This is also possible in the British Museum. A third, closely related component is derived from Housen and Yenawine’s Visual Thinking Strategies, or VTS. Their theory is based on the principle that individuals progress through different stages of aesthetic development to reach visual literacy, defined as “the ability to interpret relationships, content and meaning in works of art” (Mayer, 2005, 14). Both exhibit arrangement and reflective opportunities will aid museums in accommodating these stages (Mayer, 2005).

Complementary to the constructivist theory is Falk and Dierking’s Contextual Model of Learning, or CML. This model integrates three main contexts: personal, socio-cultural, and physical. Personal context is provided by the visitor him- or herself, the socio-cultural aspect is
provided by the people with which the visitor interacts, and the physical context is provided by the museum itself. CML also advocates the concept that a museum allows free-choice learning, which “tends to be nonlinear and personally motivated and to involve considerable choice on the part of the learning as to when, where, and what to learn” (Falk and Dierking, 2000, 13). These theories and models will likely prove useful in determining specific criteria for our evaluations, and again in executing the evaluations and reporting our recommendations to the Museum.

2.3.2.2. Museum Communication Strategy

Complementary to a museum’s educational theory is its communication strategy. Whittle provides an informative compilation of a series of previously used communication strategies. There are several interlinked components: the visitor, the visitor’s response to the exhibits, the intrinsic properties of the object(s) in the exhibits, the opportunity for the visitor to create personal meaning, the manner of presentation, and the opportunity to provide constructive feedback to the exhibit designers (1997). The visitor and his or her response to the exhibits are the main foci of this model, as well as of our project. If the visitor has a positive experience, he or she is likely to either return or encourage others to visit; in contrast, if the visitor’s experience is negative, he or she will likely not return and may discourage others from visiting (Whittle, 1997). This may appear obvious and unimportant, but it creates a visible effect on museum attendance, and thus can provide feedback to the exhibit designers. This feedback “drives the exhibition communication process,” as it informs the designers as to how the gallery can be improved (Whittle, 1997, 22). Our main goal is to aid the British Museum in this essential feedback process by determining what, if anything, the visitors are getting out of its exhibits.

2.3.2.3. Families in Museums

Our main focus in this project is on families: how they interact with the exhibits and what they can take away from their museum experiences. A family is defined by the Museum as a group containing at least one adult and one child under the age of sixteen. Making up at least ten to twelve percent of the total visitors at the British Museum, families have proven to be one of the largest and most important groups of visitors, as they generally perceive museums to be excellent places to learn (Cooper, 2007a). Of the many visitor classifications, families are likely
one of the most interactive, as they question and speak to each other throughout the visit, inadvertently creating an interactive museum experience. It has been noted that families often draw from their previous experiences and knowledge to reinforce the material they are currently learning (Falk and Dierking, 2000). Interestingly, it has also been observed that “[a]lthough [families] talk about topics described in labels on exhibits, they do not read/pay attention to the entire text if doing so interferes with the group’s ability to enjoy and maintain social relationships” (Falk and Dierking, 2000, 94). It is thus important for museums to arrange their exhibits and the accompanying information carefully in order to inform visitors but not overwhelm, confuse, or deter them from learning and enjoying the experience.

For an ideal family experience, it is essential that museums design exhibits in such a way that collaborative learning can occur. This means that the parents and children should perceive the same learning goal when interacting with or viewing an exhibit. This way, each individual can constructively add his or her own thoughts and perceptions to a common pool of knowledge, and thus build toward a common learning goal (Falk and Dierking, 2000). Within this scheme it is also important that the exhibit is not overly-directed, as excess structure and direction may prevent family members from having a personalized experience (Hein, 1998). In addition to careful exhibit design, it is essential that the parents are aware of the availability and utility of any other activities or learning aids that the museum provides. This will allow a family to have the most fulfilling museum experience possible (Falk and Dierking, 2000).

### 2.4. Gallery Design

Museums do not wish to merely display their works, but also to allow visitors to understand the subject matter and context of the pieces. The way in which exhibits are presented in a gallery has a strong effect on what people learn and take away from the museum. Using established criteria for gallery design, a museum can educate and entertain visitors at the same time.

Exhibitions are often designed to encourage visitors to use as many of their senses as possible. This gives visitors a more memorable experience and also helps the exhibit to communicate with a broader range of people (Belcher, 1991). In order to appeal to as wide a range of people as possible, museums can use many different types of exhibit styles. An exhibit
can be static or animated, real or replica, and interactive or non-interactive. Many different types of modern technology, such as video displays or audio clips, are often used by museums to help create or explain the exhibit. The British Museum has a rolling-renovation program in which a single gallery is always being renovated at any point in time. However, the museum currently has no specific guidelines as to how galleries should be designed in order to educate and entertain family groups. During our project we will first establish what the British Museum wants families to get out of each exhibition by interviewing the directors and other employees in charge of the galleries. The museum’s goals will then be used along with the established museum design criteria to formulate questions and ask families for input on the gallery. The families’ responses combined with our criteria will make it possible to develop a set of recommendations for improving the galleries.

2.4.1. Limiting Factors Related to Exhibitions

The creation of a successful gallery is a very time-consuming, complex, and often expensive process for a museum. The various details that go into making a museum display, including the lighting, display cases, audio-visual equipment, and so forth can be very costly. The location of exhibits in museums is another limiting factor to their success. Michael Belcher explains that “[t]he fact that visitors have to journey to an exhibition is a limiting factor which immediately becomes an obstacle for anyone reluctant to travel” (1991, 40). Another limiting factor that Belcher points out is the size of exhibits, since with larger exhibits, the visitors may become exhausted with the subject matter it contains. Exhibitions are also limited by the need to make sure the historical pieces are protected from theft and damage. Too much ultraviolet light, fluctuating heat, and humidity are just a few examples of conditions that can damage exhibits.

In addition to education, entertaining the public and making the galleries relevant to visitors are important goals for any museum. Often the most important factor that limits the ability of museums to educate and entertain is the average person’s willingness and ability to learn (Belcher, 1991). People can have many preconceived prejudices towards museums, assuming that museums are only for experts in the subjects it contains, or that museums are cold, dreary, and irrelevant to modern times. The Museum of Croydon in London addressed these types of prejudices and was successful at drawing in a more diverse audience by making its
galleries more relevant to different age groups and ethnicities. They built new social history galleries that appealed to other major cultural groups, and ensured that the galleries would include past, present, and future ideas (Hooper-Greenhill, 1994). Museum directors cannot always expect people to respond to exhibits in the way they anticipate or to understand the subject matter being presented to them. Visitors are not forced to read the labels on exhibits and learn something from the exhibit even if the museum would like them to.

### 2.4.2. Gallery Layout

Overall gallery layout is another vital aspect of gallery design that museums consider in their attempts to educate the public. Gallery layout refers to the way in which exhibits are arranged within a gallery in order to present the major themes and subjects it contains. Oftentimes, museums arrange a gallery so that people learn more about the subject matter as they walk along a predetermined route. In order to create an appropriate environment for learning, exhibits in a gallery need to be well-organized. To make an organized gallery, museums must always take into account the amount of attention each exhibit in the gallery attracts and give them the proper position and amount of space (Belcher, 1991). Museums often make the most interesting exhibits visible from the gallery entrance to draw people in. While there are countless variations on gallery layout used throughout the world, most analyses on gallery layout agree that it is disadvantageous to allow people to enter and exit galleries from two different locations as if it is a thoroughfare to another gallery. To learn from a gallery, visitors have to be immersed in the world that the gallery creates, and this is not possible if visitors become distracted by the next gallery in the museum. While collecting and analyzing the input from family visitors, we kept in mind the criteria for successful gallery layout and made recommendations accordingly.

### 2.4.3. The Museum Exhibit as Art

The major purpose of any museum exhibit is to help communicate something about its objects. Many museums overlook the fact that the gallery design can be made into artwork itself, in order to help people understand the subject matter being displayed (Belcher, 1991). Making an exhibit into a piece of art is accomplished through the use of lighting, colour, audio recordings, and numerous other methods. By arranging certain pieces together in an exhibit,
museums can tell a story about them. For example, the famous British painting “Rain, Steam, and Speed” by J.M.W. Turner is often displayed at the National Gallery alongside the painting “The Hay Wain” by John Constable. These two famous paintings are displayed together because they show the two contrasting sides of England during the mid 1800s: the rural and the industrial (Rees, 1982). By arranging these two works next to each other, the impact they have on the visitor is greater than each piece alone, and the exhibit itself becomes art. It may be possible for the British Museum to arrange some of their exhibits in this way, in order to give them a greater impact in terms of what visitors take away from the gallery. The data we collect on visitors will give us an idea of which exhibits in a gallery are the most powerful and how they could be repositioned in order to maximize the overall effect of the gallery.

2.4.4. Exhibition Visual Aids

It is now quite common for museums to see education as their primary mission and obligation to the public. To aid in these attempts to educate people, museums often use visual aids of various kinds. Visual aids such as photos can help answer questions people may have about the work, and provide information and detail that the work itself cannot show. Labels and other forms of informational panels are another common way in which museums try to educate their visitors.

The design and content of labels also has an important effect on how effective they are at teaching and entertaining the visitor (Belcher, 1991). When museums make labels for their exhibits, they must keep in mind the viewpoint of the visitor so as to maximize the educational value. If label descriptions are poorly written, visitors looking at the exhibit may become confused and not get much out of it. If labels are too small or poorly positioned, visitors might not notice or bother to read them. Another problem with writing labels is that while experts may be very knowledgeable about a subject, they often write the labels in a manner that does not draw visitors in and make them interested in the exhibit. The British Museum started to recognize this problem in the 1970s and began hiring professional writers to make their labels (Belcher, 1991). Labels should not contain information that is irrelevant or boring to the viewer or they will lose interest (Belcher, 1991). The input we receive from visitors about the galleries will allow us to find out whether there are deficiencies in the design of labels and other exhibit visual aids.
2.4.5. Designing Galleries for Different Age Groups

When designing a gallery, a museum must take into account the audiences that it is trying to reach. This means catering the design of galleries to the different interests and learning abilities of various age groups. Some museums approach this problem by designing separate galleries for each age group, while others, such as the Philadelphia Museum of Art, have attempted to design galleries that will help educate and entertain all ages. The Philadelphia Museum of Art was able to make its galleries interesting to everyone by creating three separate programs for children, teenagers, and adults, while keeping them within a single gallery. The children’s program was designed to be very entertaining as well as educational, since children are easily distracted and bored by museum subjects. The teenagers’ program was more open-ended to appeal to the typical young adult’s sense of individuality. The third program engaged adults and their fascination with more serious and in-depth subjects through a series of lectures given by experts on different relevant issues (Jensen, 1994). This is just one example of the many different ways in which museums can attempt to educate and entertain visitors of all ages. In order to effectively reach different age groups, museums must take the education, learning ability, and different interests of these groups into account when designing exhibits.

The British Museum may be able to better interest and teach visitors if it creates more programs geared towards specific age groups. Programs for different age groups could be overlaid on the same galleries without altering the design of the galleries themselves. This would make the galleries more appealing to both the young and old, while maintaining the traditional style of the museum. During our project we will analyze the different interests of children and adults with respect to the galleries and suggest how the museum can make them more engaging for all ages.

2.5. Evaluation Methods

It is especially important to consider which method is to be used when designing a museum visitor evaluation. There are three main types of evaluation that can be put to use when assessing the learning factor in a museum: summative, formative, and front-end. Summative evaluations are generally the simplest; they examine the effects of current programs. Formative
evaluations are similar, except that they occur during the exhibit development or redevelopment 
process and the results are returned to the museum in an effort to improve the program. Front-
end evaluations occur relatively early in the gallery development process, and analyze how well 
the current product is modelling the original plans (Hein, 1998). In our study, we will be using a 
formative style of evaluation in order to aid the British Museum in obtaining information 
pertaining to the effectiveness of its traditional and thematic galleries. Also of note, Hein 
mentions that, “the [formative evaluation] process is most useful when it is iterative; something 
is tried out, modified, and tried again,” which has occurred throughout the course of our project 

It is also essential to understand the potential uses of the two main evaluative styles: the 
experimental-design strategy and naturalistic research. The experimental-design strategy, often 
used in psychological experiments, generally includes a specific hypothesis that will either be 
supported or refuted by experimental data, in which randomized test groups and controls must be 
used in order to ensure the validity of the data. Although this strategy is used with great success 
in psychological and scientific settings, it is difficult to put it to appropriate use in such a 
situation. There are often too many variables, not enough controls, and creating randomized test 
groups is nearly impossible. It is also difficult to form a specific hypothesis and then collect data 
that can definitively support or refute that hypothesis. Naturalistic research, on the other hand, is 
based in the natural setting and uses its characteristics to its advantage. Data is collected more 
casually, in an attempt to answer questions about specific behaviours, instead of trying to support 
or refute a hypothesis. In this case, “the data are not analyzed in terms of previously determined 
categories,” and are instead, considered more broadly (Hein, 1998, 74).

2.6. Statistics

Statistics are the mathematical methods used to describe a population from a 
representative sample. The quantitative data produced through the team’s evaluations can be 
analyzed using various statistical techniques, providing information that can be used to develop 
conclusions. The simplest techniques are known as descriptive statistics (Fink, 2006). These 
include such numbers as the mean, median, and variance. Most significant to our project is the
mean, which is directly applicable to ordinal values – ratings, agree/disagree scales, etc. (Fink, 2006).
3. Methodology

This project is intended to help the British Museum assess and improve the effectiveness of selected exhibits in educating and entertaining its family visitors. With information collected from the visiting families, the team has developed a set of recommendations for gallery improvement by the British Museum.

The team worked from 11 January 2007 to 1 March 2007 researching information concerning education in museums, gallery design, and quantitative and qualitative evaluation techniques, culminating in a proposal for submission to the British Museum. The team worked at the Museum from 12 March 2007 to 27 April 2007, evaluating the galleries and creating the final deliverables.

In order to fulfil the goals of this project, the team completed a number of objectives. Our methodology is represented in Figure 5 below:

Figure 5: Project Flow Chart
As outlined by the methodology flowchart, the team completed the following tasks in order to guide the museum in improving its galleries:

- Establish the experimental design and criteria.
- Familiarize team with museum
- Interview museum staff regarding desired learning outcomes and goals
- Create evaluation criteria
- Design evaluation
- Collect data from family visitors in the selected galleries.
- Conduct evaluation: surveys, observations, participation
- Modify evaluation as necessary
- Assess the data collected from the evaluation.
- Compile data
- Analyze data both quantitatively and qualitatively
- Make a set of recommendations regarding current and future gallery improvements.

With our assessment complete and our recommendations established, the British Museum will implement changes as it deems appropriate. The following is a timeline that we have followed, commencing with our arrival on-site (Figure 6):

<table>
<thead>
<tr>
<th>Goal</th>
<th>Task</th>
<th>Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Familiarize with Museum</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Interview Staff</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Create Design Criteria</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Designing Evaluation</td>
<td>2</td>
</tr>
<tr>
<td>Collect Data</td>
<td>Conduct Evaluation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Modify as Necessary</td>
<td>3</td>
</tr>
<tr>
<td>Assess Data</td>
<td>Compile Data</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Analyze Data</td>
<td>5</td>
</tr>
<tr>
<td>Recommend</td>
<td>Create Plan</td>
<td>6</td>
</tr>
</tbody>
</table>

**Figure 6: Project Timeline**

### 3.1. Analysis Goals

Throughout the course of this project, we have collected data from surveys, observations, and participation within four general categories, as defined by our liaison at the British Museum, Dr. Catherine Cooper: visitor profiles, visitor expectations, visitor pattern, and visitor behaviour,
preferences, and understanding. Specific details within each category are summarized below (2007b):

**Visitor Profiles:**
- Where visitors are travelling from
- Age ranges of family members

**Visitor Expectations:**
- Reasons for visiting the Museum
- What visitors expect to find in the Museum’s galleries

**Visit Pattern:**
- Which galleries visitors visit
- How long visitors stay in each gallery
- How many visitors make use of “family-oriented materials”

**Visitor Behaviour, Preferences & Understanding:**
- What the visitors like about the gallery
- What the visitors dislike about the gallery
- What additions/improvements the visitors would like to see
- Whether visitors can define what gallery is about
- Whether visitors can define how gallery is organized
- Which kinds of informational aids the visitors use
- How the “gallery narrative” affects visitors’ understanding
- What learning outcomes the visitors obtain from their experience
- What physical and intellectual barriers may exist in the gallery

These criteria formed the basis from which our evaluations were created, which were further complemented by the preliminary research on-site, as discussed in the following section.

### 3.2. Preliminary Research in London

Upon arriving on-site, we completed a series of initial tasks before beginning the data collection process. First, the team familiarized itself with the relevant galleries; the first day on-site consisted entirely of experiencing the galleries. While in the galleries, the team identified potential themes and learning outcomes for each gallery, along with areas that may need improvement. Second, we met with and interviewed museum staff involved with the relevant galleries. Through these interviews, we established the learning goals for each gallery, which were used in developing the evaluation criteria. The final tasks of the preliminary research phase involved combining the research performed in the PQP with the information obtained from museum staff to construct the actual evaluations. This included writing up the survey
questionnaires and observation forms, as well as consulting with museum staff to plan interviews and groups for participatory research.

### 3.3. Collecting Data for the Evaluation

In order to accomplish our main goal of providing the museum with insight into how well their galleries are educating and entertaining visiting families, we collected data using various methods. The British Museum presented the team with a set of questions it wished to answer regarding the demographics of family visitors, visitor expectations, visitor behaviour, and visitor understanding and enjoyment of specific galleries [Section 3.1]. By using the methods outlined in this section, the project team provided answers to these questions.

#### 3.3.1. Pre-testing

Before the evaluations could begin, the various methods of data collection had to be pre-tested to ensure that the data collected was valid and reliable. Observation sheets were tested first. The original form contained a small map of the given gallery with numbered entries in which to take notes. After pre-testing, we found this method to be too difficult and revised the forms to contain only a large map on which we could trace the family’s path and make notations. The coding guidelines also evolved during pre-testing, with the addition of codes for picture taking and special interest in an object, along with a simplification of the reading codes.

The next evaluation methods to be tested were the two surveys. We quickly discovered that many of the questions were too wordy or indirect. This was an especially noticeable problem for the HSBC Money gallery survey, in which the multiple-choice questions and answers were almost entirely rewritten to improve clarity and brevity. The surveys were also reformatted to fit on two pages, as we found that the apparent length of the survey intimidated visitors, regardless of how long the survey took to complete.
3.3.2. Surveys

Oral surveys were one of the primary methods used to collect data on visitors. The surveys were designed to be completed in less than five minutes so as to disrupt the visitor’s experience of the museum as little as possible. Longer surveys result in a smaller sample size, both by discouraging visitors from participating and by consuming more of the supervisor’s time.

After two rounds of pre-testing and revision to the surveys, the team collected data on one hundred visiting family groups for the Egyptian Sculpture gallery and one hundred families in the HSBC Money gallery. The surveys were conducted over a period of twelve days spread throughout each day. The group used one survey per family group, administering the survey to an adult member of the family that could speak on behalf of the other members. All visible families were approached, and if they declined to take the survey, the reason was noted. The method used to approach each family remained consistent; the team member explained the purpose of the study and asked the family if they would consent to taking a short survey (Appendix A). If they declined, their reason for refusing was noted. Each survey began by obtaining demographic information in order to establish a visitor profile. The remaining questions were divided between two of the categories established in the analysis goals section [3.1]: visitor expectations and visitor behaviour, preferences, and understanding. Copies of the Egyptian Sculpture and HSBC Money gallery surveys are presented in Appendix A.

The type of data collected from these surveys was a mix of quantitative and qualitative data; the Egyptian Sculpture gallery survey collected mostly qualitative data, whereas the data from the HSBC Money gallery survey is primarily quantitative. The analysis goals of the galleries reflect the two types of data collected: the Egyptian Sculpture gallery required mostly qualitative data to answer more open-ended questions about the families’ experiences, while quantitative data was more relevant to the HSBC Money gallery, as the staff had very specific questions to be answered.

Our sample size was one hundred families per gallery. We calculated the total number of family visitors over the duration of our sixteen-day evaluation period to be approximately 22,500, based on the previous year’s figures for March and April (Morris Hargreaves McIntyre, 2006). Assuming an average family size of three people, this means we will have surveyed 1.3% of the population. With these population and sample sizes, we have a confidence interval of
9.8% at a confidence level of 95% (Creative Research Systems, 2003). This was a large enough data set that conclusions could be reached, and is in line with sample sizes used in visitor evaluations by other organizations (Hilke, 1993). Previous evaluations performed by the British Museum have experienced survey participation rates of approximately 33% of approached visitors (Cooper, 2007a).

### 3.3.3. Observations

Observational data collection is a valuable method of data collection, as it allows us to gather large quantities of quantitative data that can be used to evaluate a visitor’s experience. The team collected observational data one hundred families in the Egyptian Sculpture gallery and one hundred families in the HSBC Money gallery, after one round of pre-testing and revision. These observations were conducted over the course of twelve days. While observing visitors interacting with an exhibit, the project team determined which elements of an exhibit they interacted with, for how long, and how quickly they moved through the gallery. This information is one of the most valid and accurate methods of determining visitors’ reactions to an exhibit, as trying to obtain similar information through surveys tends to result in exaggerated responses (Serrell, 1993).

The observations were conducted using forms specific to each gallery (shown in Appendix B), featuring a map of the gallery, a brief section for gathering demographic information, and space for observations. Using the form and a standardized coding sheet (Appendix B), the observer was able to trace the visitors’ movements through the gallery and record how long they spent at various objects. In the Egyptian Sculpture gallery, an “object” refers to a single item, while in the HSBC Money gallery, an “object” refers to an entire case, as the individual items were too small to distinguish between during observation. We initially used two team members to conduct each observation in the Egyptian Sculpture gallery, as it is difficult for a single person to accurately track a family due to the gallery’s cluttered nature. The HSBC Money gallery only required one team member for each family observation, as it is much smaller and simpler.

By combining numerous observations the group was able to establish which elements of the gallery were being used and how much of the gallery the average family interacted with. As
this is more of a pure “attraction” factor, an “engagement analysis” also proves useful; the two sets of data can vary significantly. Engagement is a measure of how thoroughly the family interacts with any given object. Each type of interaction with an object must be given a certain weight to calculate the engagement level. The following weighting scheme was used to calculate the engagement levels of families with each object (Table 1):

<table>
<thead>
<tr>
<th>Weight</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pt.</td>
<td>G</td>
</tr>
<tr>
<td>2 pts.</td>
<td>L1</td>
</tr>
<tr>
<td>3 pts.</td>
<td>L2</td>
</tr>
<tr>
<td>4 pts.</td>
<td>L3</td>
</tr>
<tr>
<td>2 pts.</td>
<td>R</td>
</tr>
<tr>
<td>0.5 pts.</td>
<td>D</td>
</tr>
<tr>
<td>0.5 pts.</td>
<td>P</td>
</tr>
</tbody>
</table>

Table 1: Weighting Scheme for Calculating Engagement Levels

Although this scheme is quite subjective, we did take into account the relative values of each action in terms of overall engagement. The most “engaging” action would be looking at the object for an extended period of time, as denoted by the high point values. Reading also receives a relatively high point value, as the visitor must be interested in an object to a certain degree to desire more information about it. Discussion and taking pictures receive relatively low values, as it is difficult to determine the nature of the discussion, and in terms of pictures, it must be taken into account that the object may just “look good” rather than stimulate interest to learn more about it.

3.3.4. Attendance Counts

Attendance counts were used only in the HSBC Money gallery, as requested by gallery curator, Laura Phillips. As the Money gallery is a rather low-traffic gallery, the staff were interested in how many family groups were making use of it. Data produced by attendance counts is purely quantitative, consisting of the number of families that have passed through the gallery in a given time period, along with the composition of each family. To get a truly accurate estimation of how many families visit the gallery, counts were taken at many different times on
each day of the week, including weekends. These counts were conducted over the course of 14.5 hours throughout the week. The attendance count form is presented in Appendix C and the results are discussed in the Results & Analysis chapter [Section 4.1].

3.3.5. Participatory Data Collection

Participant-observation is a method that combines the benefits of an interview with those of an observational study. One participatory session was conducted with a visiting family, lasting approximately three hours. By attaching a project member to a visiting family group, the team was able to acquire insight into how groups behave throughout their museum experience. While travelling with the family, the project member made observations and asked questions to determine the thoughts and feelings of the visitors. The participant was able to record any comments or suggestions the families had. An example of the participatory data collection form is located in Appendix D. Most significantly, this method provided deep insight into the parent-child dynamics that are vital to understanding family groups (Macdonald, 1993).

The data produced from this method was primarily qualitative, in the form of general notes taken by the project member, rather than in the form of responses to direct questions. As such, this method provided unique problems for data analysis, and was thus used more as a measure of the family’s overall experience.

3.4. Data Analysis

The data analysis process began as soon as data collection commenced, and continued until the project was complete. The major tasks in completing this objective were to sort and organize the data, while at the same time evaluating the collection methods to try to detect any problems with bias, reliability, or accuracy early enough that the method could be corrected and retried. The final results of the data collection and analysis are discussed in the Results and Analysis chapter.
3.4.1. Evaluation of Quantitative Data

The organization of the data was important in developing effective recommendations for the Museum. We integrated numerous collection methods, each of which was capable of collecting different types of data and in different amounts. In this regard, surveys and observations were especially interesting as they were easily repeated and produced numerical results which could then be analyzed using a variety of statistical techniques. These techniques are described in Section 2.6 [Statistics]. Finding correlations between data sets was critical in developing our recommendations by providing a firm, statistical basis for our conclusions. Relationships evaluated include but are not limited to:

- Level of engagement with objects \textit{wrt.} ages of children in the family
- Level of engagement with objects \textit{wrt.} family size
- Amount of reading in the gallery \textit{wrt.} ages of children in the family
- Amount of reading in the gallery \textit{wrt.} family size

These relationships are displayed graphically in the Results and Analysis Chapter [Sections 4.3 and 4.4]

3.4.2. Evaluation of Qualitative Data

Some survey questions and the participation of a group member in a family tour of the museum provided valuable qualitative data, but were less easily analyzed compared to quantitative data. For each specific method, a set of criteria was established to break down visitor responses into useful information. This was especially vital for survey responses, where a large quantity of qualitative data needed to be analyzed in as uniform a manner as possible.

For each participant-observation performed, the notes were analyzed with an eye toward applying the information to answer the various questions the Museum has about its visiting families.

3.4.3. Evaluation of Data Collection Process

To obtain the most accurate and understandable data, we needed to continuously observe and alter our data collection guidelines and techniques. The survey was under the greatest
scrutiny, as it provided a great volume of information. Changes to the questions and the structure of the survey were based on the following:

- **How the visitor responds to the questions.** Do the questions result in any visible emotional response from the visitor, such as confusion or anger? Do the visitors tend to lose interest in the survey at any particular point?

- **Response utilization.** Do certain responses seem to be over or underutilized? This must be evaluated carefully, as this could be the result of question bias, but it could also be the result of unexpected trends in the surveyed population.

- **Visitor feedback.** Do the visitors make any suggestions during or after the surveys? While visitor feedback is unlikely to significantly alter the data collection value of the surveys, it may be used to make the process more pleasant for future visitors.

- **Effectiveness of responses.** Is the data being collected actually evaluating what it is intended to?

The observation method also required attention, as it produced extensive quantitative data. This data, including information such as group size, time of entry and exit from the gallery, and time spent at specific parts of the gallery, are purely objective and only vulnerable to error, rather than bias. This was controlled for by initially using two observers for a single group while in the Egyptian Sculpture gallery and pre-testing with two team members in the HSBC Money gallery. We evaluated the reliability of the process by comparing the results of the independent observations of the same subjects. If the two sets of observations deviated significantly, the criteria used to evaluate the visitors were refined.
4. Results and Analysis

Our findings reveal that the British Museum does a satisfactory job of providing for family visitors but identifies several areas in which the Museum can improve. The data collection process revealed much about the demographics, behaviours, and preferences of visiting family groups in terms of the individual galleries. The data, as well as the resulting trends and relationships, are summarized in the following chapter. The analysis is broken down into family demographics and the family experience, followed by data that is relevant to each of the two evaluated galleries: the Egyptian Sculpture gallery and the HSBC Money gallery. Summaries of the raw data from the surveys, observations, and participatory methods are located in the stand-alone document titled *British Museum Gallery Study: The Data*.

In general, the Museum lacks signage for elements of their program that have the potential to make the family experience more enjoyable. Specific to the Egyptian Sculpture gallery, the results reveal that the layout of the gallery has a significant effect on how families travel through it. There are also problems with some of the informational panels and labels. For the HSBC Money gallery, the experimental family-oriented display case was noticeably successful in its purpose, and it was also noted that families appeared to enjoy the more modern collections. Unfortunately, there are significant differences between the two galleries, including size, setup, location, and content, thus making it difficult to draw useful comparisons between the two.

4.1. Family Demographics

Demographic data is vital to the project, as the British Museum lacks demographic information specific to its family visitors. In addition, it serves as a basis for relational analysis with other data collected throughout the evaluation. The following data and analysis have been drawn from the evaluations of both galleries.

The composition of families visiting the HSBC Money gallery is important to curator Laura Philips, as they lack such information. Calculated from the attendance counts, the average visiting family size is 3.2 persons, with an average male to female ratio of 1:1.2. The average family is composed of 1.7 adults and 1.5 children.
Because the British Museum is such a major worldwide attraction, they wish to cater to as broad a range of visitors as possible. Thus, information such as families’ nations of origin and primary languages is important, as it informs the Museum of any areas in which it is not delivering its program appropriately. The following chart and table present the distribution of the nations of origin of the surveyed families and their primary languages (Figure 7 and Table 2, respectively):

![Figure 7: Distribution of Families' Nations of Origin](image)

<table>
<thead>
<tr>
<th>Language</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese</td>
<td>2%</td>
</tr>
<tr>
<td>Croatian</td>
<td>1%</td>
</tr>
<tr>
<td>Dutch</td>
<td>3%</td>
</tr>
<tr>
<td>English</td>
<td>75%</td>
</tr>
<tr>
<td>French</td>
<td>3%</td>
</tr>
<tr>
<td>German</td>
<td>3%</td>
</tr>
<tr>
<td>Greek</td>
<td>1%</td>
</tr>
<tr>
<td>Hindi</td>
<td>1%</td>
</tr>
<tr>
<td>Italian</td>
<td>1%</td>
</tr>
<tr>
<td>Japanese</td>
<td>3%</td>
</tr>
<tr>
<td>Lithuanian</td>
<td>1%</td>
</tr>
<tr>
<td>Norwegian</td>
<td>1%</td>
</tr>
<tr>
<td>Polish</td>
<td>1%</td>
</tr>
<tr>
<td>Portuguese</td>
<td>1%</td>
</tr>
<tr>
<td>Russian</td>
<td>2%</td>
</tr>
<tr>
<td>Spanish</td>
<td>5%</td>
</tr>
<tr>
<td>Swedish</td>
<td>2%</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese</td>
<td>2%</td>
</tr>
<tr>
<td>Croatian</td>
<td>1%</td>
</tr>
<tr>
<td>Dutch</td>
<td>3%</td>
</tr>
<tr>
<td>English</td>
<td>75%</td>
</tr>
<tr>
<td>French</td>
<td>3%</td>
</tr>
<tr>
<td>German</td>
<td>3%</td>
</tr>
<tr>
<td>Greek</td>
<td>1%</td>
</tr>
<tr>
<td>Hindi</td>
<td>1%</td>
</tr>
<tr>
<td>Italian</td>
<td>1%</td>
</tr>
<tr>
<td>Japanese</td>
<td>3%</td>
</tr>
<tr>
<td>Lithuanian</td>
<td>1%</td>
</tr>
<tr>
<td>Norwegian</td>
<td>1%</td>
</tr>
<tr>
<td>Polish</td>
<td>1%</td>
</tr>
<tr>
<td>Portuguese</td>
<td>1%</td>
</tr>
<tr>
<td>Russian</td>
<td>2%</td>
</tr>
<tr>
<td>Spanish</td>
<td>5%</td>
</tr>
<tr>
<td>Swedish</td>
<td>2%</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>1%</td>
</tr>
</tbody>
</table>

Table 2: Distribution of Families' Primary Languages
Forty-three percent of the surveyed families had never been to the Museum, while twenty-two percent had visited within the past two years and another thirty-five percent had visited more than two years ago. Also extracted from the surveys, the following chart displays the distribution of families’ reasons for visiting the British Museum (Figure 8):

![Figure 8: Distribution of Families' Reasons for Visiting the British Museum](image)

The visitor tracking studies have also provided valuable information about the families’ experiences in the Museum. Calculated from these observations, families spend an average of 6.21 minutes in the Egyptian Sculpture gallery and 3.48 minutes in the HSBC Money gallery. The average total family engagement level in the Egyptian gallery is 33.68 out of a possible 902 points, while the total engagement level per family in the Money gallery is 20.17 out of a possible 161 points. The maximum point values are calculated by multiplying the total number of objects in a gallery by the maximum engagement rating each object could receive. As described in the Methodology chapter [Section 3.3.3], the engagement level represents how thoroughly families interact with each object. Together, these data indicate that because the Money gallery is much smaller and contains fewer objects, families are able to experience the gallery and engage with a higher percentage of objects more efficiently.

Overall, families were very receptive to taking the surveys. We experienced approximately a 60% survey acceptance rate, which is much better than 33%, as expected by the
Interpretation Unit. This is most likely due to the fact that the introduction to the survey mentioned the Museum’s attempt to make the galleries more family-friendly, showing them that they are an important part of the process. However, it is worth noting the families’ reasons for declining to take the survey, as shown in the following chart (Figure 9):

![Figure 9: Families' Reasons for Declining to Take Surveys](image)

The combined data from the surveys and noted declines shows that, during the time period in which surveys were conducted, 33% of the families did not use English as their primary language.

One of the most significant findings is the lack of awareness of the family-oriented materials provided by the Museum. Only 9% of families used these materials, and the following chart displays the reasons of those who did not (Figure 10):
Figure 10: Reasons for Not Using Family Materials

Of great significance is the fact that 75% of families were not aware that these materials are available, especially considering the positive feedback from those who have used them. As stated family 85 in the Egyptian gallery, “backpacks make things a lot more fun.” This is likely attributed to the lack of signage for such materials within the Museum. There is little, if any signage in the Great Court, where most visitors enter, and literally no signage in the alternate North Entrance. The free visitor maps advertise the family materials, but the maps themselves are not in obvious locations. This lack of advertisement of useful materials may detract from the families’ overall experiences while at the British Museum.

Additional relationships were considered for analysis, such as a comparison between nation of origin and usage of family materials, but significant correlations between the data sets did not exist.

4.2. The Family Experience

On April 13th, one member of the project group joined a family as they visited the British Museum. The main objective of this direct participation with a visiting family was to find more in-depth information on how families interact with one another at the museum, what exhibits and
galleries particularly interest them, and their style of moving through the galleries. While it would have been preferable to closely study more than one family group, looking at just one family gave a wealth of information that could not have been obtained using the other evaluation techniques. One family cannot accurately represent the typical family, but many of the behaviors exhibited by this group could also be seen in the families that were evaluated using surveys or observations. Although no broad generalizations about families can be made from this example of direct participation, the evaluation still provided an interesting source of qualitative data that will be helpful when making recommendations.

4.2.1. In-Depth Observations of the Family

In-depth observations of the family were a significant portion of the data collected. The definition of in-depth observations in the context of this project meant studying how the family behaved, interacted with exhibits in the galleries, and interacted with one another. One of the most noteworthy observations made was the way in which the family asked each other questions about the objects. The family asked each other many basic questions like why mummification was performed, why scarabs were significant to Ancient Egyptians, and so forth. Their desire for more simple background on many of the objects showed that the museum does not have enough straightforward explanations and information on the objects. The museum could benefit from having more uncomplicated diagrams and information panels that both children and parents can look at and understand. A panel in the British Museum that is a good example of this is the diagram in the Egyptian Funerary gallery showing the process of mummification step-by-step. The family being observed really liked this panel, and it seemed that both the children and parents could easily understand it. If the museum had more simple diagrams like this, with good visuals and simple text, families would learn a lot more from the galleries.

The family’s children would rarely read the exhibit labels, and the parents would often read the labels to their kids when they were interested in the objects. Once again, these are both trends that have been noticed during the other evaluations in the Money gallery and Egyptian Sculpture gallery. However, the children were more likely to read a label if it was simple in design and had colorful visuals because they stood out more and were easier for them to understand. The children would also read labels occasionally when their parents asked them a
question about an object to see if they learned about it in school. Using the label, they would try to answer their parents’ questions. Children would be more likely to read the labels and explain objects to their parents if the labels are simple in design, and have visuals that make them interesting to look at.

One of the most noteworthy observations made about the visiting family was how much their visit to the museum was inhibited by the group’s three year old son. While the two older children in the family were very excited and interested in the galleries, the youngest child did not enjoy the galleries and repeatedly said that he wanted to go home. His parents had to take him to the bathroom four times, and carry him through much of the museum because he was too young to handle all the stairs and corridors. However, the young boy did quiet down a great deal and became interested when he got to touch coins in the HSBC Money gallery. In fact, the whole family was very interested in the hands-on display and remained at the exhibit longer than any other exhibit at the museum.

The family’s children would occasionally touch objects in the Egyptian Sculpture gallery that they were not supposed to. While the parents knew they were not supposed to touch anything and warned their kids, they still touched a few objects after being scolded. The kids most likely touched the statues and figures for the simple reason that many of the objects in the Egyptian Sculpture gallery are not covered in glass and children like to feel and interact with what they look at. This same problem has been noticed throughout the course of the observations and surveys performed in the Egyptian gallery.

4.2.2. Family Preferences

Family preferences were another significant aspect of direct participation with a visiting family. This was the only method of evaluation used in the project that made it possible to see what each member of the family really enjoyed or disliked about the museum galleries. In general the family was the most interested in the Egyptian and Aztec galleries, as well as the Sutton Hoo exhibits. The family said they were most interested in these specific galleries because they were all subjects that the older children had learned about in school. This observation matched with the results from the family surveys which showed that many British families go to the museum just to look at galleries that relate to the children’s curriculum.
Everyone in the family really enjoyed the Living and Dying gallery, and they spent a large amount of time in the room relative to its size and content. They liked the gallery so much because it contains objects and exhibits that appeal to both adults and children. The children said that they were fond of the colorful costumes, totem pole, and Easter Island sculpture in the room because they are all very interesting and somewhat awe-inspiring objects. The mother on the other hand, was very interested in the central case containing the main Living and Dying themed exhibit. She said she enjoyed it because it was a more in-depth and complex exhibit that deals with relevant and contemporary issues. These examples of the parents and children’s dissimilar preferences shows the importance of designing galleries that can appeal to all ages through the use of very different types of exhibits.

The family was very interested in any exhibits having to do with stories from the Bible. The father would often notice a bible reference on a certain object, and point it out to his kids who would then also become interested in the object. While not all families are Christian and practice religion, this observation still shows that people tend to enjoy objects more when they can relate to them on some level. Another example of the family enjoying relevant objects occurred with the family in the HSBC Money gallery, where the objects they tended to enjoy most was the old money from England. In fact, this idea was noticed numerous times in our surveys of the Money gallery, where people from a certain country would often especially enjoy the old money from their native country.

4.2.3. How the Family Moved Through the Galleries

The way that the family moved through the galleries was unique to family groups with young children. They tended to bounce back and forth between different objects that interested the children. The family moved through the galleries in this way because the children would see something that interested them and run over to it, while the parents would almost always follow to keep an eye on them. The parents would also follow them closely because the children often wanted to show what they had found to their parents. This style of moving through the galleries has been noticed before over the course of the other family evaluations in the HSBC Money gallery and Egyptian Sculpture gallery. Often times the group would miss objects that might have interested the parents or kids because of this haphazard style of moving through the
galleries. In addition, the father said that he wished the map showed where all the most interesting objects in the galleries were, because it is hard to look for specific objects while trying to watch over young children.

4.3. **Egyptian Sculpture Gallery**

The Egyptian Sculpture gallery is one of the most popular galleries in the British Museum, especially for families with children who are learning about these subjects in school. Their favourite elements and noted dislikes in the gallery were extracted from the surveys. In general, families liked the larger objects, including the Rosetta Stone, the sarcophagi, and the large statues; they also enjoyed the extensive hieroglyphs throughout the gallery. Few dislikes were noted, but the most prevalent included the crowded nature of the gallery, problems with the panels and labels, and a few mentioned their displeasure with the layout of the gallery.

Complementing the survey data regarding the most popular objects in the gallery, the visitor tracking studies revealed similar results. From this observational data, the interest and engagement levels for each object were calculated. The raw interest in each object was calculated as a simple percentage of families who displayed any type of interaction with each object, while the engagement level is a weighted measure of how thoroughly the families interact with each object. The interest levels of the top twenty objects in the Egyptian Sculpture gallery are displayed below, followed by a table of descriptions for each object (Figure 11 and Table 3, respectively):
Figure 11: Relative Levels of Interest in the Top 20 Objects [Egyptian]

<table>
<thead>
<tr>
<th>BM/Big Number</th>
<th>Object Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA 1</td>
<td>Red granite statue of recumbent lion</td>
</tr>
<tr>
<td>EA 5</td>
<td>Granodiorite statue of Amenhotep III</td>
</tr>
<tr>
<td>EA 10</td>
<td>Conglomerate sarcophagus of Nectanebo II</td>
</tr>
<tr>
<td>EA 14</td>
<td>Head of a colossal sandstone statue of a ram</td>
</tr>
<tr>
<td>EA 15</td>
<td>Head from monumental red granite statue of Amenhotep III</td>
</tr>
<tr>
<td>EA 19</td>
<td>Head and upper body of pink/grey granite monumental statue of Ramses II</td>
</tr>
<tr>
<td>EA 23</td>
<td>Grey granite sarcophagus of Hapmen</td>
</tr>
<tr>
<td>EA 24</td>
<td>Rosetta Stone</td>
</tr>
<tr>
<td>EA 32</td>
<td>Black siltstone sarcophagus of Ankhnesneferibra</td>
</tr>
<tr>
<td>EA 43</td>
<td>Granodiorite statue in the form of Mutemwia</td>
</tr>
<tr>
<td>EA 55</td>
<td>Left arm from monumental red granite statue of Amenhotep III</td>
</tr>
<tr>
<td>EA 64</td>
<td>Granodiorite column in the form of a papyrus bundle bearing cartouches of Amenhotep III</td>
</tr>
<tr>
<td>EA 74</td>
<td>Monumental diorite scarab beetle</td>
</tr>
<tr>
<td>EA 682</td>
<td>Limestone false-door and architrave of Ptahshepse</td>
</tr>
<tr>
<td>EA 684/685/686</td>
<td>Granodiorite statues of Senusret III wearing nemes</td>
</tr>
<tr>
<td>EA 1001</td>
<td>Granodiorite sarcophagus of Merymose</td>
</tr>
<tr>
<td>EA 1134</td>
<td>Granite monolithic naos of Ptolemy VIII and Cleopatra II</td>
</tr>
<tr>
<td>EA 1386</td>
<td>Monumental black basalt libation-bowl with flaring base and collared-rim</td>
</tr>
<tr>
<td>EA 1605</td>
<td>Limestone statue of a seated female sphinx</td>
</tr>
<tr>
<td>EA 71620</td>
<td>Red granite sarcophagus decorated with palace-facade panelling</td>
</tr>
</tbody>
</table>

Table 3: Top 20 Interest Object Descriptions [Egyptian]
A photographic catalogue of these objects may be found in Appendix E. The following graph displays the families’ levels of engagement with the top twenty objects in the Egyptian Sculpture gallery, again followed by descriptions of each object (Figure 12 and Table 4, respectively):

![Graph showing relative levels of engagement with top 20 objects.](image)

**Figure 12: Relative Levels of Engagement with the Top 20 Objects [Egyptian]**

<table>
<thead>
<tr>
<th>BM/Big Number</th>
<th>Object Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA 1</td>
<td>Red granite statue of recumbent lion</td>
</tr>
<tr>
<td>EA 3</td>
<td>Head and upper torso of monumental limestone statue of Amenhotep III</td>
</tr>
<tr>
<td>EA 5</td>
<td>Granodiorite statue of Amenhotep III:</td>
</tr>
<tr>
<td>EA 10</td>
<td>Conglomerate sarcophagus of Nectanebo II</td>
</tr>
<tr>
<td>EA 14</td>
<td>Head of a colossal sandstone statue of a ram</td>
</tr>
<tr>
<td>EA 15</td>
<td>Head from monumental red granite statue of Amenhotep III</td>
</tr>
<tr>
<td>EA 19</td>
<td>Head and upper body of pink/grey granite monumental statue of Ramses II</td>
</tr>
<tr>
<td>EA 23</td>
<td>Grey granite sarcophagus of Hapmen</td>
</tr>
<tr>
<td>EA 24</td>
<td>Rosetta Stone</td>
</tr>
<tr>
<td>EA 32</td>
<td>Black siltstone sarcophagus of Ankhnesneferibra</td>
</tr>
<tr>
<td>EA 36</td>
<td>Limestone statue of husband and wife seated on chairs with lion-paw feet</td>
</tr>
<tr>
<td>EA 43</td>
<td>Granodiorite statue in the form of Mutemwia</td>
</tr>
<tr>
<td>EA 55</td>
<td>Left arm from monumental red granite statue of Amenhotep III</td>
</tr>
<tr>
<td>EA 58</td>
<td>Part of the limestone beard of the Sphinx at Giza</td>
</tr>
<tr>
<td>EA 74</td>
<td>Monumental diorite scarab beetle</td>
</tr>
<tr>
<td>EA 140</td>
<td>Fragment of the head section of the lid of conglomerate anthropoid sarcophagus of Ramses VI</td>
</tr>
<tr>
<td>EA 682</td>
<td>Limestone false-door and architrave of Ptahsheps</td>
</tr>
<tr>
<td>EA 684/685/686</td>
<td>Granodiorite statues of Senusret III wearing nemes</td>
</tr>
<tr>
<td>EA 1001</td>
<td>Granodiorite sarcophagus of Merymose</td>
</tr>
<tr>
<td>EA 1239</td>
<td>Painted limestone statue of Nenkheftka</td>
</tr>
</tbody>
</table>

**Table 4: Top 20 Engagement Object Descriptions [Egyptian]**
The average level of engagement per object for the observed families in this gallery is approximately 2.64 out of 7 points. The most visited and second most engaging object is the Rosetta Stone (EA 24). Although it was not specifically evaluated, this was probably due to either its central location in the gallery or the fact that it is such a famous object. Other top objects in attractiveness included two sarcophagi (EA 10 and EA 1001), the large head of Ramses II (EA 19), and a statue of Queen Mutemwia (EA 43). The most engaging object was a sarcophagus (EA 10), followed by the Rosetta Stone, two sarcophagi (EA 32 and EA 1001), and a large stone arm (EA 55). It is not surprising that these are popular objects, as they are very large and in relatively central locations within the gallery wings.

It was also of interest to analyze the engagement levels as a breakdown of age groups and family sizes, in an attempt to find any particular subgroups that were either catered to successfully or potentially neglected by the Museum’s program. The following graph presents this division of engagement by age group, relative to the number of objects they interacted with (Figure 13):

![Bar chart showing average family engagement level by age group for the Egyptian gallery.](chart)

Figure 13: Average Family Engagement Level by Age Group [Egyptian]

This shows that families with older children tend to stay and interact with exhibits more thoroughly, which may reflect upon the presentation and content of the gallery narrative.
Although this could be explained by the relative attention spans of different-aged children, it does reflect the fact that the objects and accompanying panels are not engaging for younger children. It is also possible that this is due to a lack of interactivity in the gallery, which may prevent younger children from learning in an effective manner. As with a constructivist-type educational model, it is this interactivity that helps stimulate the formation of a meaningful and educational experience.

Similarly, the levels of engagement have been compared to the size of the families (Figure 14):

![Figure 14: Average Family Engagement Level by Family Size [Egyptian]](image-url)

The trend shown is most likely due to the fact that in a larger group, more people can be recorded interacting with multiple objects simultaneously, resulting in a higher level of overall engagement. Very few families fell into the “7 or more” category, thus discounting its validity. Also, as the group size increases, it becomes more difficult to track the entire family, especially if they split into multiple groups.

The panels and labels in the Egyptian Sculpture gallery are meant to portray the chronological progression of Ancient Egypt. Therefore, it is worth examining the amount of reading by adults and children in the gallery, as shown below (Figure 15):
As the informational labels in the Egyptian Sculpture gallery are quite small in size, it is not surprising that Families read such a small number of labels. From the data, we can conclude that the labels are especially unattractive to children, who often do not attempt to read the labels, and instead ask their parents questions about objects in the gallery. This data was also analyzed as a breakdown of reading by both age groups and family sizes, but no significant correlations emerged.

Determining what the families are getting out of their experience at the Museum was one of the key elements of the Egyptian Sculpture gallery analysis, denoted as learning outcomes. The following chart presents a distribution of the different learning outcomes that the families took from the gallery (Figure 16):
It is of note that the “overly general” category significantly outweighs any other outcome, as it shows that the families are not getting in-depth information out of their time in the gallery. This may be due to the fact that the families just wanted to experience the gallery’s atmosphere; however, it was still important to take note of specific problems the families had with certain elements of the gallery in order to determine why families’ experiences were not ideal. The most notable problem was with the informational panels and labels in the gallery. It was often noted that they were too small and were not placed in obvious locations. Their content was described as “dry,” difficult for children to understand, and significantly lacking in the amount of information they provide; families noted that they would like to see content regarding the origins of the pieces, the reasons for their current state, how they were acquired, and more background information about their subjects. Several families mentioned the fact that the labels are written in English only, which is not accommodating to such a multilingual audience. A few families also noted that they would like to see the objects in a more coherent context, as the organization to the gallery is confusing; family 55 suggested “a simple timeline of the progression Egyptian history,” as the “panels showing the different dynasties are not clear enough about that.”

Additional comments and suggestions for the Egyptian Sculpture gallery included the addition of interactive activities, such as hieroglyph rubbings and other hands-on displays, and the addition of more engaging graphics.
4.4. **HSBC Money Gallery**

Little is known about the family experience in the HSBC Money gallery, one of the newer, themed galleries in the British Museum. The curators are open to changes toward a more family-friendly environment, so it is particularly important to discover what families like and dislike about the gallery. Of particular interest to the families were the large coins, the printing press, the cash register, and the coin handler, a hands-on opportunity for visitors. Very few dislikes were mentioned, and those noted primarily consisted of suggestions, such as the addition of more hands-on activities and the opportunity to take something away from the gallery, e.g., a coin or note.

As with the Egyptian Sculpture gallery, the noted popular objects from the surveys strongly correlate with the most interesting and engaging objects derived from the visitor tracking studies. The raw measure of interest in each object is shown in the following graph (Figure 17):

![Relative Levels of Interest in Objects (Money)](image-url)
A numbered layout of the gallery may be used for comparison, located in Appendix F. The same weighting scheme used in the Egyptian Sculpture gallery analysis (Table 1) was used to calculate the engagement levels in the Money gallery, displayed in the following graph (Figure 18):

![Figure 18](image_url)

Figure 18: Relative Levels of Engagement with Objects [Money]

The average level of engagement per object for any observed family in this gallery is approximately 3.31 out of 7 points. In terms of both interest and engagement, the experimental family-oriented case ranked first. This is likely because of its bright, attractive design, and also the implementation of the small activity of searching for certain images in the case. This case proved to be a very effective manner of both capturing attention and then maintaining the level of interest by giving the children something to do. Other interest-generating objects mainly included the cases out on the floor, as opposed to those lined up along the walls (Objects 4, 6, and 13). These cases included more popular objects, such as the printing press and cash register. A similar pattern emerged with engagement, with the addition of cases that contained specimens of more recent times. This is likely because the children can form a more meaningful connection with objects from their time. This is another component of a constructivist-type educational theory, where children are better able to learn when they can form these personal connections. The objects may also be more popular because they are larger and more prominent than many of
the items in the wall cases. Additionally, Cases 11 and 12, which received nearly the lowest interest and engagement levels, contain only coins, and nothing more to stimulate younger visitors.

Similar to the Egyptian Sculpture gallery, the engagement level data was divided into families with various aged children, and is presented below (Figure 19):

![Figure 19: Average Family Engagement Level by Age Group [Money]](image)

The data for this gallery is not as conclusive as that of the Egyptian gallery, but still shows the least amount of engagement for the “Under 5” age group. Again, this implies that the gallery is not as engaging for young children. However, when compared with the data from the Egyptian gallery, the Money gallery is significantly more engaging for all age groups. This is likely because money is a more familiar concept to visitors, especially children. When they see something they recognize, they are more likely to engage with it.

The engagement levels are also broken down by family size, as presented in the following graph (Figure 20):
There is no visible trend for this data, further suggesting that no relationship exists between engagement level and group size. The lack of an upward trend with increasing group size (as seen in the Egyptian gallery) is likely due to the fact that the families tend to stay together more closely throughout their visit to the gallery.

Each case in the HSBC Money gallery contains an upper and a lower informational panel. The upper panels are meant to give a brief overview of the history of money during a specific time period, and the purpose of the lower panels is to elaborate on some of the themes presented in the cases. As a key element of the gallery narrative, it is important to determine whether families are taking the time to read these panels. Therefore, the amount of reading performed by adults and children was calculated as a percentage of all families observed (Table 5):

| Percent of families who use at least one upper panel: | 20% |
| Percent of families who use at least one lower panel: | 21% |
| Average number of upper panels read per visit: | 0.39 |
| Average number of lower panels read per visit: | 0.27 |

**Table 5: Case Panel Usage by Families [Money]**
From this data, it can be concluded that the lower panels are used less frequently than the upper panels, indicating that they are not as eye-catching or engaging as the upper panels. Also, considering the fact that there are twelve upper and twelve lower panels, constituting a large portion of the written information in the gallery, they are used to an extremely small degree.

The Money gallery is due for the replacement of these lower panels in favour of ones that are more family-friendly, and the gallery staff wished to know what families would like them to contain. A series of multiple choice questions from the Money gallery survey pertaining to these preferences were thus analyzed, as presented below. On average, the HSBC Money Gallery was rated 3.79 out of 5 points in terms of family-friendliness. The first two charts display the families’ preferences as to whom the informational panels should be directed and what they should contain in terms of content (Figure 21 and Figure 22, respectively). The subsequent three graphs (Figure 23, Figure 24, and Figure 25, respectively) present the families’ preferences for the addition of a “family-friendly” logo to relevant cases, National Curriculum-linked material, and brief integrated activities within the gallery.

![Figure 21: Preferences for Informational Panel Audiences [Money]](image1)

![Figure 22: Preferences for Informational Panel Content [Money]](image2)
Figure 23: Preferences for Addition of "Family-Friendly" Logo [Money]

Figure 24: Preferences for Addition of National Curriculum Material [Money]
To summarize, the families would prefer the panels to be directed at children, and to contain a summary of the objects or a simplified version of the current information. As mentioned by one family, the lower panels are the perfect height for a young child to look at, and as mentioned by another, even young children of other nationalities can read simplified English. In addition, families would generally prefer the addition of a “family-friendly” logo and the integration of simple activities in the gallery. However, they would not prefer the material to be geared more toward the National Curriculum standards. This question was only directed toward residents of the UK, and in general, they believed that it is not necessary to add Curriculum-linked information, as the British Museum is so multinational and the UK students are already learning enough in the schools. This data helps answer the questions curator Laura Philips has asked about families in the gallery.

Other suggestions and comments regarding the improvement of the HSBC Money gallery included the addition of more hands-on activities, e.g., a printing press to make their own money, or at least something to make and take home with them. Families also mentioned that they would appreciate the addition of more curators, interactive events, graphics, and multilingual labels in the gallery.

Using the input gathered from family groups, along with the analysis of the preceding data, it will be possible to create many constructive recommendations for ways in which the British Museum can improve its galleries for family visitors.
5. Recommendations

Using the methods outlined above, our team analyzed the data in order to determine the effectiveness of the selected galleries for families and if their expectations are met. Based on our assessment, we constructed both a summary of the raw data and a set of recommendations that the museum can use to improve the family experience in those galleries. These recommendations provide insight into what barriers, both physical and intellectual, family groups face in the museum galleries. They were also created with the essence of the Museum in mind; each recommendation aims to improve the family experience while avoiding detracting from the traditional feel of the galleries. The assessment and recommendations were presented to our liaison, Dr. Catherine Cooper, and the Interpretation Unit of the British Museum on 27 April 2007. Both documents in their entirety can be found as stand-alone documents at the end of this report, titled British Museum Gallery Study: The Data and British Museum Gallery Study: Family-Based Recommendations for Improvements to the Egyptian Sculpture and HSBC Money Galleries. The latter document includes recommendations such as the improvement of family material advertisement, the addition of more “Do Not Touch” signs in the Egyptian gallery, improvements to the panel and label content and placement in the Egyptian gallery, and family-friendly modifications to the informational panels in the Money gallery.

Whether or not these recommendations are implemented depends on many factors. The museum often goes through periods in which galleries are refurbished or refreshed. Refreshments are usually minor enhancements while refurbishments provide more substantial improvements, usually involving a complete replacing of all exhibits. Our recommendations will prove timely for both galleries, as the HSBC Money gallery is due for refreshment, and the Egyptian Sculpture gallery will receive new labels and panels after our departure.
6. Conclusions

Over the course of the project, we conducted an evaluation of the effectiveness of select galleries in the British Museum for its visiting family groups. Surveys and observations served as primary data collection methods, supplemented with valuable qualitative data from a participatory session with pre-scheduled family. The data was then analyzed, keeping in mind the questions the Museum wished to have answered about family demographics, expectations, behaviour, and understanding. From the numerous trends and relationships discovered, a set of recommendations was created for the improvement of the Egyptian Sculpture and HSBC Money galleries.

In terms of a broader purpose for the project, the team served as an essential component of the British Museum’s communication strategy. The project bridged the gap between the visiting families’ responses to the galleries and the staff at the Museum who are able to initiate the implementation process for gallery improvements. The team also broke new ground by focusing the evaluations on family groups. The Museum had yet to examine this visitor classification, making even the raw data from the evaluation valuable.

Although it is difficult to cater to all visitor types, the general consensus among family visitors is that the British Museum would be more enjoyable with the integration of more family-friendly materials within the galleries, along with a raised awareness of the availability of take-along family materials. It is up to each gallery’s respective department to approve additions or changes, but the team anticipates that the recommendations presented will be given thorough consideration and will possibly be accepted and implemented. In light of the fact that the Museum wishes to maintain its traditional atmosphere, the recommendations were created with an eye toward minimizing changes to the feel of the galleries while maximizing the addition of family-friendly components.

The team also gained a deeper understanding of how families interact with exhibits and learn from museums. True to a constructivist type educational theory, which calls for active learning opportunities and the creation of personal connections with the material, families find opportunities for interaction and hands-on learning to be the most valuable, especially for the children. This finding formed the basis for many of the team’s recommendations, especially in the HSBC Money gallery. Additional findings revealed families’ preference for the ability to
physically take something away from the exhibits (e.g., a hieroglyph rubbing or a make-your-own coin activity), further complementing interactive elements of the constructivist theory by promoting the creation of a personalized experience for each family. The team viewed firsthand the validity of this theory, especially as it pertains to younger children and their responses to specific stimuli in the galleries.

This project, in addition to enlightening both the British Museum and the team, serves as an example of how museums can obtain feedback on their exhibits and make improvements accordingly. As the educational paradigm evolves in school systems, it is important that museums remain current and reflect these changes in their programs, so that they may be consistent with what visitors experience elsewhere. Otherwise, visitors may not be able to make the most of their museum experience. Although museums are not under strict guidelines as to how to educate and entertain their visitors, they must pay particular attention to visitor response if they wish to meet or exceed expectations. Throughout the seven-week term, this project has completed a significant step in bridging the gap between visitor response and museum action, allowing them to remain as one of society’s most important educational tools.
References


Cooper, C. (Feb 1 2007a). *Phone interview*.


Appendix A: Surveys

How to Approach Families and Ask Them to Take the Survey

Excuse me, I’m conducting a study for the British Museum to help them make this gallery more family-friendly. Would you and your family be willing to answer a few quick questions about yourselves and your thoughts on this gallery? The survey will only take about 5 minutes.

If they say yes: Thank you, and please don’t feel pressured to answer in a particular way; we didn’t design the galleries and won’t be offended by any negative responses. Also, you can take your time and discuss the questions with your family if you feel it’s necessary.
Gallery Analysis Survey for Family Groups

Date:        Recorder: 
Time:        Current Gallery: Egyptian Sculpture

1. Demographics:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>0-2</th>
<th>3-4</th>
<th>5-8</th>
<th>9-12</th>
<th>13-16</th>
<th>17-20</th>
<th>21-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-59</th>
<th>60+</th>
<th>PNS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Where is your family visiting from?
   - ✔ London
   - ❑ Elsewhere in the UK
   - ❑ Overseas

3. Have you or any family members visited the British Museum before?
   - ✔ Yes, within the past two years
   - ✔ Yes, more than two years ago
   - ❑ No

4. What is your family’s first language? ____________________

5. What is the main reason your family decided to visit the museum today?
   - ❑ Leisure/Enjoyment
   - ❑ Major Attraction
   - ❑ General Educational Visit: Parents Children:
     - ✔ NC linked
     - ❑ NC non-linked
   - ❑ Specific Object
   - ❑ Special Event
   - ❑ Other: ____________________

6. Were your family’s expectations for the visit met?
   - ✔ Yes
   - ❑ Somewhat Why? __________________________________________
   - ❑ No Why not? _______________________________________

7. What galleries have your family visited or plan on visiting today?
   - ❑ Africa
   - ❑ Americas
   - ❑ Ancient Egypt
   - ❑ Ancient Greece & Rome
   - ❑ Asia
   - ❑ Europe
   - ❑ Middle East
   - ❑ Themed:
     - ❑ Enlightenment
     - ❑ Living & Dying
     - ❑ Money
     - ❑ Temporary Exhibitions

8. Did your family make use of any of the family-oriented materials, such as backpacks or trails?
   - ✔ Yes Which one(s)? ______________________________
   - ❑ No Why not? ______________________________

9. What did your family like about this gallery?

10. What did your family like the least about this gallery?
11. Did your family find any of the labels or information panels particularly helpful? If so, which ones?

12. Did your family find any of the labels or information panels unclear or poorly-written? If so, which ones?

13. If you were discussing this gallery with someone who has not seen it, what would you tell them that it is about? (Prompt if necessary; i.e., if they say it is about “Egypt,” ask “What about Egypt?”)

14. Do you or your family members have any other suggestions or comments on this gallery?
   □ Yes; Please elaborate:
   □ No
Gallery Analysis Survey for Family Groups

Date:        Recorder:        Time:        Current Gallery: HSBC Money Gallery
Hands-on: □ Yes □ No

1. Demographics:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>0-2</th>
<th>3-4</th>
<th>5-8</th>
<th>9-12</th>
<th>13-16</th>
<th>17-20</th>
<th>21-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-55</th>
<th>55-59</th>
<th>60+</th>
</tr>
</thead>
</table>

2. Where is your family visiting from?
   - □ London □ Elsewhere in the UK □ Overseas

3. Have you or any family members visited the British Museum before?
   - □ Yes, within the past two years
   - □ Yes, more than two years ago
   - □ No

4. What is your family’s first language? ________________

5. What is the main reason your family decided to visit the museum today?
   - □ Leisure/Enjoyment
   - □ Major Attraction
   - □ General Educational Visit:
     - □ Parents □ Children:
       - □ NC linked □ NC non-linked
   - □ Specific Object
   - □ Specific Gallery or Exhibition
   - □ Special Event
   - □ Other: ________________

6. Were your family’s expectations for the visit met?
   - □ Yes
   - □ Somewhat  Why? ________________
   - □ No  Why not? ________________

7. What galleries have your family visited or plan on visiting today?
   - □ Africa
   - □ Americas
   - □ Ancient Egypt
   - □ Ancient Greece & Rome
   - □ Asia
   - □ Europe
   - □ Middle East
   - □ Themed:
     - □ Enlightenment
   - □ Living & Dying
   - □ Money
   - □ Temporary Exhibitions

8. Did your family make use of any of the family-oriented materials, such as backpacks or trails?
   - □ Yes  Which one(s)? ________________
   - □ No  Why not? ________________ (skip 9)

9. Would you have liked these programs to include materials for this gallery?
   - □ Yes
   - □ No
   - □ No preference

10. What did your family like most about this gallery?
11. What did your family like the least about this gallery?

The British Museum is currently looking to make this gallery more family-friendly, and we would appreciate your feedback on this aspect of the gallery.

12. On a scale of 1-5, how family-friendly do you feel this gallery has been? (1 is not family-friendly; 5 is very family-friendly)
   - [ ] 1
   - [ ] 2
   - [ ] 3
   - [ ] 4
   - [ ] 5

13. The informational panels below the cases will likely be replaced with ones that are more family-friendly. Would you prefer that these are:
   - [ ] For children
   - [ ] For parents to teach children
   - [ ] Kept like it is (skip 14)
   - [ ] No preference (skip 14)
   - [ ] Other: ___________________________

14. Would you prefer that these panels include:
   - [ ] Summary of objects
   - [ ] More information about popular objects
   - [ ] Simplified version of current information
   - [ ] No preference
   - [ ] Other: ___________________________

15. Would you like it if family-friendly exhibits are clearly labelled as family-friendly?
   - [ ] Yes
   - [ ] No
   - [ ] No preference

16. Do you feel that the information presented in this gallery for families and younger audiences should be geared more toward the National Curriculum standards? (Skip if not from UK)
   - [ ] Yes
   - [ ] No
   - [ ] No preference

17. Would your family have more fun if we added brief activities for children within the money gallery? For example, having them search for an object.
   - [ ] Yes
   - [ ] No
   - [ ] No preference

18. Do you or your family members have any other suggestions on how to make the money gallery more family-friendly?
   - [ ] Yes; Please elaborate:
   - [ ] No
Appendix B: Observation Sheets

Gallery Analysis Observation Sheet

Date: 
Time: 
Recorder: 
Current Gallery: Egyptian Sculpture Gallery

Estimated Demographics

Under 5: ________________  5-10: ________________  
11-16: ________________  Adult: ________________
Gallery Analysis Observation Sheet

Date: 
Time: 

Recorder: 
Current Gallery: HSBC Money Gallery

Estimated Demographics

Under 5: ________________ 5-10: ________________
11-16: ________________ Adult: ________________
Observation Sheet Coding

G  Glancing without stopping

L1  Looking <5 seconds
L2  Looking 5-10 seconds
L3  Looking >10 seconds

R  Reading [in Money gallery, us RB or RT to indicate top or bottom panel]

D  Discussion w/ others in group

P  Took picture

Postfix with C, A, or E for child, adult, or everyone
Appendix C: Attendance Count Form

Start Time: ____________  End Time: __________
Date: __________________

Key: M= Adult Male, m= Male Child, F= Adult Female, f= Female Child

Family group spent time in gallery:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Family group used gallery as corridor:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix D: Participation Data Collection Form

Date: 
Time: 
Recorder: 
Family Number: 

Family Demographics

<table>
<thead>
<tr>
<th>0-2</th>
<th>3-4</th>
<th>5-8</th>
<th>9-12</th>
<th>13-16</th>
<th>17-20</th>
<th>21-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-59</th>
<th>60+</th>
<th>PNS</th>
</tr>
</thead>
</table>

Where they are visiting from
- [ ] London
- [ ] Elsewhere in the UK
- [ ] Overseas

Whether they’ve been to the Museum before
- [ ] Yes, within the past two years
- [ ] Yes, more than two years ago
- [ ] No

Which galleries they visit
- [ ] Africa
- [ ] Americas
- [ ] Ancient Egypt
- [ ] Ancient Greece & Rome
- [ ] Asia
- [ ] Europe
- [ ] Middle East
- [ ] Themed:
  - [ ] Enlightenment
  - [ ] Living & Dying
  - [ ] Money
  - [ ] Temporary Exhibitions

Close Observation Notes: (How the family interacts with one another, discuss objects, general behaviour)

Notes on how the family goes through the galleries: (Style of walking through a gallery (straight-line, zigzag, etc.); e.g., do they skip some exhibits, or try to look at all of them? How long do they typically look at something, do they just glance at some objects?)

Notes on the adults: (Which galleries did they want to see, what did they particularly like in each gallery, what did or did not interest them?)

Notes on the children: (Which galleries did they want to see, what did they particularly like in each gallery, what did or did not interest them?)

Other thoughts on the family:
Appendix E: Numbered Layout of HSBC Money Gallery
Appendix F: Catalogue of Objects in the Egyptian Sculpture Gallery

EA 1

EA 3
EA 140

EA 682
EA 684/685/686

EA 1001
EA 1386

EA 1605
EA 71620
British Museum Gallery Study
The Data

Christopher Cleary
Christina Ernst
Michael Moscardini
Robert Stanford

26th April 2007
Preface

This document is intended to aid the British Museum in their effort to improve the overall family experience in their galleries. It was created in April 2007 by a team of students from Worcester Polytechnic Institute in Worcester, Massachusetts USA, as part of their completed Interactive Qualifying Project.

This document contains a summary of the raw data collected from the evaluation. For a more detailed breakdown of background information, methodology, and detailed results, please refer to the complete Interactive Qualifying Project document, titled British Museum Gallery Study: An Analysis of the Effectiveness of Select Galleries for Families. For the set of recommendations derived from this data, please see British Museum Gallery Study: Family-Based Recommendations for Improvements to the Egyptian Sculpture and HSBC Money Galleries
Table of Contents

1. Egyptian Sculpture Gallery ..................................................................................................... 4
   1.1. Survey: Data Tables ........................................................................................................ 4
   1.2. Survey: Literal Responses ........................................................................................... 6
   1.3. Observation Summary ................................................................................................. 20
2. HSBC Money Gallery ........................................................................................................... 21
   2.1. Survey: Data Tables ..................................................................................................... 21
   2.2. Survey: Literal Responses .......................................................................................... 25
   2.3. Observation Summary ............................................................................................... 36
   2.4. Attendance Count Summary ....................................................................................... 37
3. Participatory Data .................................................................................................................. 38
4. Original Forms ..................................................................................................................... 41
   4.1. Surveys ........................................................................................................................ 41
   4.2. Observations ............................................................................................................... 45
   4.3. Participatory Notes Form ............................................................................................ 49
1. Egyptian Sculpture Gallery

1.1. Survey: Data Tables

Sample Size: N=100, unless stated otherwise

1. Demographics

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>2%</td>
</tr>
<tr>
<td>3-4</td>
<td>4%</td>
</tr>
<tr>
<td>5-8</td>
<td>20%</td>
</tr>
<tr>
<td>9-12</td>
<td>21%</td>
</tr>
<tr>
<td>13-16</td>
<td>7%</td>
</tr>
<tr>
<td>17-20</td>
<td>2%</td>
</tr>
<tr>
<td>21-24</td>
<td>1%</td>
</tr>
<tr>
<td>25-34</td>
<td>4%</td>
</tr>
<tr>
<td>35-44</td>
<td>25%</td>
</tr>
<tr>
<td>45-54</td>
<td>12%</td>
</tr>
<tr>
<td>55-59</td>
<td>0%</td>
</tr>
<tr>
<td>60+</td>
<td>2%</td>
</tr>
<tr>
<td>PNS</td>
<td>0%</td>
</tr>
</tbody>
</table>

N=339

2. Where is your family visiting from?

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>18%</td>
</tr>
<tr>
<td>Elsewhere</td>
<td>36%</td>
</tr>
<tr>
<td>Overseas</td>
<td>46%</td>
</tr>
</tbody>
</table>

3. Have you or any family members visited the British Museum before?

<table>
<thead>
<tr>
<th>Visit Duration</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, within the past two years</td>
<td>19%</td>
</tr>
<tr>
<td>Yes, more than two years ago</td>
<td>41%</td>
</tr>
<tr>
<td>No</td>
<td>40%</td>
</tr>
</tbody>
</table>
4. What is your family’s first language?

- Chinese: 1%
- Dutch: 2%
- English: 72%
- French: 4%
- German: 4%
- Hindi: 1%
- Italian: 1%
- Japanese: 2%
- Norwegian: 1%
- Portuguese: 1%
- Russian: 2%
- Spanish: 7%
- Vietnamese: 1%

5. What is the main reason your family decided to visit the museum today?

- Leisure/Enjoyment: 49%
- Major Attraction: 14%
- General Educational Visit: 29%
- Specific Object: 1%
- Specific Gallery or Exhibition: 7%
- Special Event: 0%
- Other: 0%

6. Were your family’s expectations for the visit met?

- Yes: 84%
- Somewhat: 13%
- No: 3%

8. Did your family make use of any of the family-oriented materials, such as backpacks or trails?

- Yes: 12%
- No: 88%

N=94
1.2. **Survey: Literal Responses**

6. Were your family’s expectations for the visit met?

6a. Yes

All so cool  
Always good displays here  
Backpacks make things a lot more fun  
Biggest collection of Egyptian antiquities in the world  
Cool things  
Dancing in the Great Court is nice  
Everything is great, easy for kids to understand  
Everything very well laid out, informative  
Exceeded, grandeur of everything  
Excellent, Incredible history  
Girl is interested and amused  
Going to get to see the mummies!  
Haven't been here long enough  
history for the daughter  
History that's on display  
Impressive and Famous  
It's just what we expected  
just find it all interesting  
Just seeing all the really cool stuff, daughter doing it at school  
Just so impressive  
Kid likes history, can't see stuff like this in the U.S.  
Kids like the statues  
Lots of different things, good information with every object, good spacing between objects.  
    Things are so old.  
Lots of info, lots to see  
Lots of things to see  
Love ancient history  
More for her (adult), children learn by playing  
Museum is beautiful, have to visit this place. Help teach our children.  
One of the best museums we've been to  
Overwhelmed by the galleries  
Overwhelming, such a big scale to things  
Plenty for children to see, can touch things  
Quality of the materials, being able to take pictures of things, can see stuff here that you can't anywhere else.  
Range of exhibits is fantastic  
Really liked Egypt and all the history, have a very good display here  
Roman stuff is cool  
Saw incredible things like Rosetta Stone
See many things, its fantastic
Seeing things we read about
So many things to see
So much to see
Spectacular
The entrance is beautiful, important culture and history, education
Very approachable, you can actually touch history
Very impressed by things
Very impressive objects
Very interested in Egyptian stuff, kids study it at school
Very interesting
Very nice
We don't have museums like this

6b. Somewhat

Because we thought there might be something interactive for the children
Busier than expected
Crowded
Didn't know what to expect
Don’t really know!
Just arrived, but so far very nice
Just got here (x2)
Just started
Not interested
Only just arrived
Only just got here

6c. No

A month ago, the boy got a trail, bit this time they couldn't find one, staff was unhelpful
Cannot really say yet, only been here 10 minutes
Just not too impressed
8. Did your family make use of any of the family-oriented materials, such as backpacks or trails?

8. Yes. Which one(s)?

Backpack (x4)  
Family Audio Tour  
Trail (x6)

8b. No. Why not?

Backpacks all taken  
Couldn't get a hold of it  
Did not want to use them (x2)  
Didn't (?)  
Didn't think it was appropriate for the girl's age  
Kids are too told  
Nephew is too old  
Not aware (x65)  
Not aware, but the kids do not speak English  
Not yet  
Nothing for older kids  
Too old for that  
Too young for that  
Wanted to get an activity pack but they wanted a 10 pound deposit  
Will later  
Will use later, kind of tired now
9. What did your family like about this gallery?

A lot of history and its free
Age of exhibits is impressive; getting a feel for Egypt; sense of awe
All from ages ago, can't see anywhere else
All the monuments
All the statues
All the statues and the textures. Nice lighting, nice and airy
All the statues were nice, Scarab, tall statues like the pillars
All very cool, hieroglyphs
Animal god statues
Beautifully laid out, liked the Rosetta stone and head of Ramses
Being able to touch things, big statues
Big head statue, all the stuff they read about in books, Rosetta stone
Big scarab, other statues
Big statues (x2)
Big stone pillars are impressive, hieroglyphs
Can't see these things in Japan; very interesting
Colossal size of everything, like being able to touch
Easy to get around, spacious
Enjoy seeing things they studied. Enjoyed statues
Everything (x4)
Everything is up close, Hieroglyphics are cool, Rosetta store
Everything, its so impressive, so much to look at
Everything's good
Free. Fun. Easy to get to. Scarab, bigger than the mummy
Generally very interesting, has to do with son's curriculum
Girl studied Egypt, things its all neat. Very big and impressive
Got a lot of things, nice and airy, plenty of space around the popular exhibits
Great collection here
Great, big, so many unique/original things
Hieroglyphics, Ramses 2
Hieroglyphics, sarcophaguses, Rosetta Stone
Hieroglyphs
How artefacts are displayed, the lighting
Interesting Layout
Interesting sculptures
Just amazing, lots of ancient things
Just Got Here
Just learning about the historical aspects of the pieces
Kid: Mummies!, Rosetta Stone
Like the architecture
Like them all
Liked it all, the mummies
Liked the really big statues
Loads of old things, mummies, hieroglyphics
Lots of cool stuff like mummies
Lots of different stuff
Loving the detail on the statues, Ramses II
Mummies (x5)
Nice way to show your children different civilizations and cultures
No
Not sure
Number of cool things in the gallery, in very good condition, can get so close to things
Objects like the Rosetta stone
Ok so far, more stuff than we've seen at other museums
 Plenty of different things, very famous and valuable pieces
 Ramses II (x2)
 Ramses II, Rosetta stone
 Rosetta stone, all interesting
 Rosetta stone, hieroglyphs
 Rosetta Stone, nice building
 Rosetta Stone, Ramses II, hieroglyphs, sarcophaguses
 Rosetta stone, sarcophagi
 Rosetta, Hieroglyphics
 Sarcophagi, pillars, Rosetta
 Sarcophagi, Ramses II
 Sarcophagi, Rosetta stone, we can actually touch things
 Sarcophagus, hieroglyphs, Rosetta stone
 Sarcophaguses (x3)
 Sarcophaguses, big statues of pharaohs
 Scarab, mummies, children's shop is nice
 Scarab, Rosetta Stone
 Scarab, Rosetta, big granite head
 Scarab, sarcophagus
 Scarab, senhoteps and Rosetta stones. Nice that they leave Braille
Sculptures
Sculptures of animals
Seeing such a different culture, how old and impressive everything is
Statue of Ramses
Stele, the big bowl, hieroglyphs
The big statues
The Boat
The scale of things in the gallery
Ties in with that the boy is doing at school, Rosetta Stone
Timeline is nice, Whole thing very interesting
Tombs
Touching stuff, especially for younger kids
Very impressive, liked Ramses head
Very interesting, big pillars are cool, animal head god statues
10. What did your family like the least about this gallery?

A bit busy
Crowded (x2)
Difficult to know what you're looking at unless you ready all the labels. Maybe have interactive stuff about the exhibits, like how to build a pyramid. More stuff for kids
Gallery kind of old fashioned, not enough basic explanations of things
I would enjoy more hieroglyph translations
It doesn't belong here, this stuff belongs in Egypt
Kids: That they have to walk to much
Labels are poorly positioned, would be nice if there were easier ways to walk through the galleries
Lacking in simple explanations, too precise, don't get enough explanations about Egyptian gods, hieroglyphs. Little dry
Limited information on some exhibits, more interactive information
More "don't touch" signs
More information in Russian
Need more labels for kids that explain things in a fun way
No maps at north entrance
No maps for kids in German
No, but wanted to see King Tut stuff
Not enough seats to draw from
Not so good to take the pillars
People should not touch stuff so much
Scarab - boring
Should ban photography, always blocking things
Should have the timeline at the beginning of the gallery
Some of the things don't have enough explanation, expect you to know something about it, like sarcophaguses w/ roman designs
Too many people
Very busy around Rosetta
Wasn't obvious that trails and backpacks were available. Layout of the whole museum is a bit confusing
Would be nice if someone could show them where the trail is
11. Did your family find any of the labels or information panels particularly helpful? If so, which ones?

A couple of labels
A few (x4)
A few of them (x6)
A few of them but mostly using maps + guides
A few of them, 10% of the time
A few of them, all okay
A few of them, all were interesting
A few of them, everything's helpful
A few of them, informational panels are interesting
A few of them, ones about amulets and coffins were useful
A few, all helpful
A few, all of them are good
A few, all were ok
A few, depending on object
A few, most were interesting
A little bit, Rosetta stone one was good
All
All of them
All of them, all are helpful
In a few cases
Just a few (x2)
Just a few, Rosetta stone one was good, one that helped explain hieroglyphs
Just looking
Just used map in German of galleries
Most
Most of the ones they stopped at
Most of the time
Most of them (x9)
Most of them, Rosetta stone one Cleopatra one. Ones that explain small things you can't readily identify
Most of them interesting, most were interesting
Most of them liked the label with the timeline
Most of them, all are good
Most of them, all helpful (x2)
Most of them, but kids need help understanding them
Most of them, liked how they included dates
Most of them, liked the timeline
Most of them, none stood out
Most of them, very interesting
No (x9)
No because they are all in English
None particular
None, young children don't want to
Not looking at labels
Read a few
Rosetta Stone, Syrian Marbles
Some of the labels
Some of them
They were ok
Unintelligible
Use most of them, all interesting
We will be
Yes (x5)
Yes but not very child friendly
Yes, a few of them (x3)
Yes, about the scarlet
Yes, most of them
Yes, most of them to see how old things are
Yes, most of them, explain them to children
Yes, some of them
Yes, the ones that the girl is interested in
12. Did your family find any of the labels or information panels unclear or poorly-written? If so, which ones?

A few hard words, need grown-ups to explain
A few little labels
A few of them could use phonetic explanations of Egyptian names
All of them are superficial, they don't say enough
Couldn't find #33 on audio tour
In general they are kind of dry
Kids couldn't read them
Labels for birds don't explain what they were used for, what's the point
No, but they could use more information on why certain sculptures were made
No, not really. Could be bigger
No. they are poorly lit sometimes
Not really, could use more information
Some labels could give a bit more information
Some of the pictures on labels are worn out
Some were a bit long-winded
Though label about Sun God Ra was wrong
Yes, red false door has 2 labels! Which is which? In general, bit too wordy for children
13. If you were discussing this gallery with someone who has not seen it, what would you tell them that it is about?

A bit of everything about Egypt
A combination of living and death, religion, how they lived at the time
A good overview of Egypt, their intelligence and achievements
About all the gods, and famous people who are buried
About civilizations, culture, overview of Egyptian history, in-depth information, browse through Egyptian culture
About Egyptian civilization
About history
All about the King's tombs, how they were commemorated after death
All of ancient Egypt's history. Says a lot about their culture and history
All the sculptures showing ruler's status. Importance of gods and afterlife to them
Ancient things people should visit
Artistic, religious, well educated. Very advanced people.
Basis of Ancient Cultures
Body preservation
Body preservation, hieroglyphs, history of ancient Egypt
British took everything of valuable from people
Collection of artefacts and history
Death is the main impression you get. It's heavy, because here are all these coffins, they took death very seriously, but now kids are playing all over them
Don't think that the gallery really explains what the Egyptian people are all about
Edwardian-Victorian style gallery, showing things the British took from Egypt
Egypt
Egypt 3000 years ago
Egypt and the Pharaohs
Egypt was a great civilization, made incredible things
Egyptian Art, Rosetta Stone, Big Statues of Ramses and Other Rulers
Egyptian stone artefacts
Egyptians
Egyptians were very intelligent and highly skilled
Everyday life in Egypt, sports, etc. Social history. Reminder of British Empire
Everything we managed to steal from the Egyptians
Everything well preserved and laid out. They cared a lot about death and religion
Gives an idea of the massive scale of Egyptian sculpture
Gives insight into the lives of Egyptian Royalty
Gods + Goddesses, what they worshipped, their great artistic ability, how they were buried
Have plenty of artefacts about Egypt
Hieroglyphs, how people were buried and lived in Egypt
History of Egypt, otherwise don't know
How advanced they were, the scale of things, their skill at carving stone and engineering
How artistic they were, more into life after death, very advanced for their time
How great their civilization was.
How they lived, how wonderful their culture was
It is big? That they were fantastic, ahead of us in some respects, incredible culture
It would be interesting to live in Egypt
It's about the big objects and the old things
Kid: they were strange because they believed in life after death. They liked really impressive things
Kings are important, mummification
Major History of Ancient Egypt, Didn't have much technology
Majority of things are monuments to the dead
Many important things, makes them think about the things the British Empire stole
Middle Eastern History
Monuments to people, animals
More about their beliefs and culture rather than everyday life
Portrays the detail of the writing, death rituals were very important
Quite impressive, ad a great ability for architecture
Really good architects, displays monumental nature of their architecture, ego of the Pharaohs, like Ramses II
Reflects Egypt, Real sense of Egypt from the artefacts
Relations between Ancient Greece + Egypt, Rosetta stone and its importance
Rosetta stone very important, figures of famous kings, graves of famous people, examples of gods, patchwork of different parts of Egypt
Seems like a waste of time and money to build such big things, but its great for us. Goes with animal heads, combo of humans and animals, important part of their beliefs, nature and animals are holy to them, a part of god in a way. Symbolize the power of the natural world. Belief in life after death, religion and education were closely intertwined. They used these statues of god to teach future generations
Showing you a general overview of Egypt, not exactly how they lived, but they were busy making a lot of things
Shows burial traditions
Shows mostly about the rich people and Gods, no ordinary people
Shows their beliefs after death, belief in afterlife
Shows their culture, their organization, their cult of death
So far its all about their architecture, very important to them
Stuff from long ago and far away
The age of everything -> everything is very old. The colors and beauty of some things is breathtaking
The economy of Ancient Egypt, their ability to waste lots of time and money on art and sculpture. They had the money to do it, didn't need to worry about surviving
Their burial rituals, quest for immortality
Their sophistication
They believed in different Gods and Spirits, like to worship them and make statues as a tribute to them
They were very advanced for their time
They were very artistic, beliefs about death
To put the objects in context
Unusual that they would carve all these things. I don't know, the history of Egypt.
Very artistic people, conveyed their belief through art
Very broad sense of History in Egypt
Very old, Egyptians were very devout, had a highly developed form of communication
Very technologically advanced
Very technologically advanced and civilized, takes you back to a forgotten world
What we’ve learned from the Rosetta stone
14. Do you or your family members have any other suggestions or comments on this gallery?

Advertise the Backpacks better
Be nice to know why the statues always lost their noses, why they have holes in them, why they are in their current state, how they were found
Beautiful Museum, very educational
Bigger signs for backpacks, I would have gotten one if I had known
Breakdown the pronunciation of Egyptian words, like in a dictionary
Clearer description on where things are, map is confusing, sign posting unclear
Decorate the walls with hieroglyphs
Decorations on the walls
Disappointed reading room is closed
Family materials not clearly identified by museum, gallery doesn't seem cohesive, all this stuff all together scatter about, all the labels show a theme, but when you look at an individual label you don't get that idea, and the exhibits don't reinforce these themes
For school-children, more family-friendly labels
Gallery seems a little cluttered, need bigger and more clear signs about basic Egyptian history.
    Bad lighting
Hands on would be nice. Hieroglyphic puzzles or rubbings would be fun activities
Have people, like a tour guide, that can answer questions people have about the galleries
Have the signs bigger and higher up so they are easier to read
It's a bit Spartan, maybe jazz is up w/ some colourful pictures, interactive stuff, more information on the story behind things
Kid: Get different stuff
Kids thought the gallery was boring
Liked extra bits of history on some panels. More translations and explanations of hieroglyphics. More info about different gods and that kind of stuff on information panels. They really liked the African gallery, especially since it's free.
Lots of space, good safety, barriers make it hard to get your kids back, barriers distract kids
Make it a bit more fun, more labels for children, more activities for kids
Make it easier for kids to access things
Make it more child friendly
Map is not very good, confusing. Should have sign about the backpacks.
More activities for children, more interactive
More general, simple information. A nice leaflet to take w/ us through the gallery, something that you can take at entrance and leave at other end
More information about where they found things, more info on culture itself, like why they made these sculptures. Needs more context, were these sculptures found, stolen, captured, etc. Maybe have a video where people can sit down and learn about those things.
More information for people that don't speak English
More information in other languages. Guided tours for children, have someone explain more things to them.
More informative about the objects and ancient Egypt in general
More interacting, more things for kids to play with
More interactive stuff for kids, more hands-on
More labels in other languages
More languages on the labels
More restrooms
More seats to rest your legs
More warnings not to tough things

Museum is kind of confusing. Could use clearer exit signs and better places for families to eat
Need a simple timeline to the progression of Egyptian history in the gallery, the panels showing the different dynasties are not clear enough about that
Needs highlights showing important objects on the map. Map is confusing, show the pop. sites on it, like Nat'l Gallery map
Only information in English. Asked for audio guides in French. Only works for Greek Galleries. Lighting could be improved maybe.
Panels should be more visual for children, more pictures, maybe have mirrors so kids can see more. Loads of exhibits with no protections. Kids get yelled t for touching, so why doesn’t the museum cover it up
Really like to have a little area where children can do activities like drawing. Maybe an art gallery that explains things in visuals about the gallery before you go in.
Stop people taking pictures all over the place
The ordinary inscriptions are quite small and dry. Since things are so crowded, its hard to read a label when other people are around. Bad positioning on some labels, also they could be bigger w/ bolder lettering. Upstairs mummy gallery would have been nice to have more places for the kids to sit down while they do the activity backpacks

Very nice building
Weird to not see these things in Cairo, Egypt where I used to live for 3 years. Can't stop kids from touching things.

Well, it was hard for us to find the museum, not enough street signs
Work with some of the nearby universities, find out some of the research going on in the area in museum studies
Would be good to have illustrations on how these things were made
1.3. **Observation Summary**

Sample Size: N = 100

<table>
<thead>
<tr>
<th>Object</th>
<th>Top 20 Interest (%) of Families</th>
<th>Object</th>
<th>Top 20 Weighted Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA 1</td>
<td>23%</td>
<td>EA 1</td>
<td>1.15</td>
</tr>
<tr>
<td>EA 5</td>
<td>19%</td>
<td>EA 3</td>
<td>1.17</td>
</tr>
<tr>
<td>EA 10</td>
<td>34%</td>
<td>EA 5</td>
<td>0.92</td>
</tr>
<tr>
<td>EA 14</td>
<td>22%</td>
<td>EA 10</td>
<td>2.53</td>
</tr>
<tr>
<td>EA 15</td>
<td>30%</td>
<td>EA 14</td>
<td>0.94</td>
</tr>
<tr>
<td>EA 19</td>
<td>37%</td>
<td>EA 15</td>
<td>1.77</td>
</tr>
<tr>
<td>EA 23</td>
<td>29%</td>
<td>EA 19</td>
<td>1.88</td>
</tr>
<tr>
<td>EA 24</td>
<td>51%</td>
<td>EA 23</td>
<td>1.28</td>
</tr>
<tr>
<td>EA 32</td>
<td>30%</td>
<td>EA 24</td>
<td>2.40</td>
</tr>
<tr>
<td>EA 43</td>
<td>33%</td>
<td>EA 32</td>
<td>2.19</td>
</tr>
<tr>
<td>EA 55</td>
<td>25%</td>
<td>EA 36</td>
<td>0.98</td>
</tr>
<tr>
<td>EA 64</td>
<td>23%</td>
<td>EA 43</td>
<td>1.68</td>
</tr>
<tr>
<td>EA 74</td>
<td>26%</td>
<td>EA 55</td>
<td>2.17</td>
</tr>
<tr>
<td>EA 682</td>
<td>21%</td>
<td>EA 58</td>
<td>0.94</td>
</tr>
<tr>
<td>EA 684/685/686</td>
<td>23%</td>
<td>EA 74</td>
<td>1.66</td>
</tr>
<tr>
<td>EA 1001</td>
<td>37%</td>
<td>EA 140</td>
<td>0.96</td>
</tr>
<tr>
<td>EA 1134</td>
<td>20%</td>
<td>EA 682</td>
<td>1.70</td>
</tr>
<tr>
<td>EA 1386</td>
<td>24%</td>
<td>EA 684/685/686</td>
<td>1.15</td>
</tr>
<tr>
<td>EA 1605</td>
<td>20%</td>
<td>EA 1001</td>
<td>2.19</td>
</tr>
<tr>
<td>EA 71620</td>
<td>22%</td>
<td>EA 1239</td>
<td>0.94</td>
</tr>
</tbody>
</table>

Number of Families Observed: 100

**Average Visit:**

- Number of Objects Interacted With: 12.87
- Number of Panels Interacted With: 0.39
- Amount of Time Spent: 6.21
- % Who Spend More than 10 Minutes: 17%
- Number of Adults: 1.7
- Number of Children: 1.8
- % Visit North Wing: 52%
- % Visit South Wing: 49%
- % Used the Audio Tour: 2%

**Average Weighted Engagement Levels:**

- Total Family Engagement per Visit: 33.675
- Family Engagement per Object: 2.64

**Average Weighted Engagement by Age Group:**

- Groups with Children under age 5: 2.11
- Groups with Children aged 5-10: 2.71
- Groups with Children aged 11-16: 2.91
2. HSBC Money Gallery

2.1. **Survey: Data Tables**

Sample Size: N = 100, unless stated otherwise

1. **Demographics**

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>1%</td>
</tr>
<tr>
<td>3-4</td>
<td>4%</td>
</tr>
<tr>
<td>5-8</td>
<td>18%</td>
</tr>
<tr>
<td>9-12</td>
<td>21%</td>
</tr>
<tr>
<td>13-16</td>
<td>9%</td>
</tr>
<tr>
<td>17-20</td>
<td>1%</td>
</tr>
<tr>
<td>21-24</td>
<td>0%</td>
</tr>
<tr>
<td>25-34</td>
<td>6%</td>
</tr>
<tr>
<td>35-44</td>
<td>26%</td>
</tr>
<tr>
<td>45-54</td>
<td>13%</td>
</tr>
<tr>
<td>55-59</td>
<td>1%</td>
</tr>
<tr>
<td>60+</td>
<td>2%</td>
</tr>
<tr>
<td>PNS</td>
<td>0%</td>
</tr>
</tbody>
</table>

N=320

2. **Where is your family visiting from?**

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>23%</td>
</tr>
<tr>
<td>UK</td>
<td>44%</td>
</tr>
<tr>
<td>Overseas</td>
<td>33%</td>
</tr>
</tbody>
</table>

3. **Have you or any family members visited the British Museum before?**

<table>
<thead>
<tr>
<th>Time</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 2 years</td>
<td>25%</td>
</tr>
<tr>
<td>Over 2 years</td>
<td>29%</td>
</tr>
<tr>
<td>Never</td>
<td>46%</td>
</tr>
</tbody>
</table>
4. What is your family’s first language?

Chinese 2%
Dutch 3%
English 80%
French 1%
German 1%
Greek 1%
Japanese 3%
Lithuanian 1%
Polish 1%
Russian 2%
Spanish 3%
Swedish 2%

5. What is the main reason your family decided to visit the museum today?

Leisure/Enjoyment 41%
Major Attraction 8%
General Educational Visit 25%
Specific Object 4%
Specific Gallery or Exhibition 20%
Special Event 0%
Other 2%

6. Were your family’s expectations for the visit met?

Yes 95%
Somewhat 4%
No 1%

7. What galleries have your family visited or plan on visiting today?

Africa 14%
Americas 13%
Ancient Egypt 83%
Ancient Greece & Rome 75%
Asia 23%
Europe 20%
Middle East 10%
Enlightenment 5%
Living & Dying 5%
Money 100%
8. Did your family make use of any of the family-oriented materials, such as backpacks or trails?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>6%</td>
</tr>
<tr>
<td>No</td>
<td>94%</td>
</tr>
</tbody>
</table>

N=98

9. Would you have liked these programs to include materials for this gallery?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>67%</td>
</tr>
<tr>
<td>No</td>
<td>0%</td>
</tr>
<tr>
<td>No Preference</td>
<td>33%</td>
</tr>
</tbody>
</table>

N=3

12. On a scale of 1-5, how family-friendly do you feel this gallery has been? (1 is not family-friendly; 5 is very family-friendly)

<table>
<thead>
<tr>
<th>Score</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>3</td>
<td>32%</td>
</tr>
<tr>
<td>4</td>
<td>41%</td>
</tr>
<tr>
<td>5</td>
<td>22%</td>
</tr>
</tbody>
</table>

Average 3.79

13. The informational panels below the cases will likely be replaced with ones that are more family-friendly. Would you prefer that these are:

- For children 41%
- For parents to teach children 20%
- Kept like it is 16%
- No preference 0%
- Other 23%
14. Would you prefer that these panels include:

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of objects</td>
<td>31%</td>
</tr>
<tr>
<td>More information about popular</td>
<td>28%</td>
</tr>
<tr>
<td>objects</td>
<td></td>
</tr>
<tr>
<td>Simplified version of current</td>
<td>31%</td>
</tr>
<tr>
<td>information</td>
<td></td>
</tr>
<tr>
<td>No preference</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
</tr>
</tbody>
</table>

N=90

15. Would you like it if family-friendly exhibits are clearly labelled as family-friendly?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>79%</td>
</tr>
<tr>
<td>No</td>
<td>17%</td>
</tr>
<tr>
<td>No preference</td>
<td>4%</td>
</tr>
</tbody>
</table>

16. Do you feel that the information presented in this gallery for families and younger audiences should be geared more toward the National Curriculum standards? (Skip if not from UK)

| Yes         | 35%        |
| No          | 59%        |
| No preference | 6%        |

N=66

17. Would your family have more fun if we added brief activities for children within the money gallery? For example, having them search for an object.

| Yes         | 89%        |
| No          | 6%         |
| No preference | 5%        |
2.2. Survey: Literal Responses

6. Were your family’s expectations for the visit met?

6a. Yes

A lot of things to see
A lot to see
Able to see things they have read about
All the knowledge, stuff about Egypt and Rome
All very interesting
Backpacks are good, enjoyed Egyptian gallery
Been here before, knew what to expect; found unexpected things interesting
But need more time as an adult; hard with kids getting bored
Came to see what daughter is working on at school; staff are very helpful
Can’t say
Children's activities are nice
Collections are quite substantial
Daughter is exposed to different worlds
Daughter is interested in this kind of stuff, see different histories
Didn't know what to expect
Different range of artefacts to look at
Easy to find your way around, quite spacious
Enjoy the Egyptian stuff
Enjoyed looking at the objects
Enjoying what they're seeing
Everything is so ancient and interesting
Everything is so impressive
Exceptional museum; can't see stuff like this is Sweden
Flows well, one gallery to the next
Friendly people
Have so much stuff, really plundered the whole world
How they've managed to keep stuff in such good condition
Kid didn't want to come, and now he loves it. He loves the Egyptian sculpture
Kid liked looking at how people behaved through history, liked looking at money
Kid: just looking at all the old stuff
Kids got to see what they wanted
Knew what to expect
Knew what to expect, enjoyed it
Learned a lot about the history, very educational
Library was great, it’s a national treasure
Liked mummies, cool bandage patterns
Liked that they have family materials and guides for the children
Likes the gold jewellery
Lots for the kids to learn
Lots of history, love history, tangible connection to the past; too much stuff, have to come multiple days; very famous
Lots of things never seen before
Lots to do here
Not too bad so far
Range and quality of items is staggering
Saw a lot of things the children learn about in school
So big, we enjoy it
So far been impressed with galleries
So many famous things
So much of it, really interesting, diverse, lots of themes
So much to see, lots of variety
Son got a book on how to translate hieroglyphs, enjoys it
Son likes history, very satisfied
Son seeing what he wanted to that relates to his studies
Teaching son history, son wants to see mummies
Vastness, money, like looking at artefacts, well laid out
Very impressed
Very informative, expose son to more history, geography, etc
Very interested to see mummies and Rosetta stone
Very interesting, good exhibits
Very interesting, lots of info
We have fun and learn a lot

6b. Somewhat

Couldn't find animal statues
Haven't seen enough
Just arrived
Just started their visit

6c. No

Couldn't find guides
8. Did your family make use of any of the family-oriented materials, such as backpacks or trails?

8a. Yes. Which one(s)?

- Backpacks
- Family map
- Handler
- Trail
- Trail, headphones

8b. No. Why not?

- Came in the back entrance and there was no information. The only maps they could find were the pay maps
- Couldn't find them
- Daughter is too young (age 3)
- Didn't get around to them
- Didn't need it because the kids are too old
- Didn't want to (x3)
- Have done it before
- Just got here
- Kids are too little
- Knew about them, but son cannot speak English
- No time
- Not aware (x68)
- Not enough
- Not going to be here that long
- Not interested
- Planning to
- Saw notices, but didn't do it
- Too young
- Vaguely familiar
- Weren't looking for them
- Will use later (x3)
10. What did your family like most about this gallery?

All the different types of coins
All of it is impressive
All the different money from past and present, as well as different countries
All the different types of coins; how modern money is made
All the modern stuff, all the different types of money
All the money
American currency, old currency
Beautiful, the atmosphere
Big Coins (x2)
Big coins, money press, old money tins
Big coins, the board, weirdly-shaped coins
Big coins, tiny coins
Big gold coin, Yugoslavian 5 million dollar bill
Big machines
Big machines, scales were interesting
Change in currency over time
Child surprised at the size of money; liked it
Children fascinated by old coins
Chinese case in the center (new year)
Chinese case. Hoards, different coins
Chinese Coins, Big gold coin
Chinese coins, old one-pound notes, cash register
Chinese money
Coin machines, most things
Coins
Coins from different countries
Cowry shells, how money has changed over the years, everything
Credit cards, paper money, expensive coins
Different countries' money
Easy to use
Enjoyed Chinese money
Everything (x2)
Five-million note; notes in general, stamps and other tools used to make money
Gold jewellery, really small coins, money-making machines, big coins
Half million lire note; old English notes I remember
Hands-on (x3)
Hands-on stuff
Hands-on stuff, gold coins, Roman coins, Big stone Yap coin
Hands-on stuff, old paper money
Hands-on, oddly shaped currency
History of how it has changed, Handler
History of money
History of money is very interesting
How it shows how money has changed
Impressed by bags of coins, likes hands-on stuff
Information is interesting, lots of old things
Interesting & simple
Interesting, old money
Just the coins
Kid liked hands-on stuff
Kid liked staring at money
Knives/swords, piggy bank
Layout, history of coinage, what people used for money
Liked Persian coins. Hands-on was cool
Liked the bank notes; all of it
Liked the bank notes; old coins are fascinating; size of coins, history of money development
Liked the pictures in the gallery, liked Chinese money
Machine to tell if money is real
Machines used to make money. Big coins, money from all over the world
Money (x2)
Money from their country
Money machines, cash register
Money press, cash register
New Money
Old coins, really old coins. History of coins
One-pound note, old coins the boy recognized, cash register
Overall presentation was good
Printing machine, hands-on stuff
Printing press & size of coins
Printing press, don’t usually think about how money is made; how all the different metals were used
Reducing machine, cash registers, history of money very interesting, all very interesting
Roman coins, cool to see Celtic coins, paper money
Swedish Copper
Swords used as coins
Swords/clubs, gold money
The coins
The money, its huge
The Old Coins
The printing press
The variety of coins
They found an item (The Alton Treasure) that was from near their home.
Unusual Coins
Variety of different types of money. Oddly shaped coins. Like learning how the money was. Hands-on-stuff made. Gold + Silver coins. Big Chinese coins
Variety of money; how money changes through the ages
Very calm, enjoyed hands-on exhibit
Very interesting where things are found, boards are interesting; Alexander coins, gold coins, jewellery
Very interesting, all the money throughout history, nice to be able to touch things
Very interesting, coins, everything
Very Interesting, History
Very interesting, see evolution of money, what it's used for, how it replaced bartering
Well laid out, informative
Well-spaced, well laid out, interesting because son has been reading about Romans,
    machines are interesting too
What you learn most about the objects
11. What did your family like the least about this gallery?

Boring
Could be more hands-on
Didn't like credit cards, need more hands on stuff
Didn't like the coin with lion missing a paw
Have a working machine
More hands-on activities
No gold bars
No seats, no eating or drinking
Not as exciting as some other galleries
Not though things to touch (didn't notice handler)
Not very interested in the vases for holding money
Surprised there's not more interactive parts to the exhibits
The money
They just walked through
Too high something lower to look at
Touch and feel stuff
Very crowded (x2)
What's up with the Chinese New Year stuff
13. The informational panels below the cases will likely be replaced with ones that are more family-friendly. Would you prefer that these are:

13a. Other

- Easier to read, include main points
- Even Dutch Children can understand simpler English
- Larger text; hard to understand chronology
- Multilingual
- Multimedia related to subjects in cases
- Parents & children (x18)
- Son cannot speak English, so it wouldn't matter
14. Would you prefer that these panels include:

14a. Other

Kept as is \((x4)\)
Relate money to the modern world
Replace panels with electronic multimedia
18. Do you or your family members have any other suggestions on how to make the money gallery more family-friendly?

A guide whom visitors could approach to get more info from
Ability to stamping money
Activities would be good if you could sign up for it at the entrance; for money press, it would be cool if kids could operate a press and make their own coins
Being able to touch things; do a better job showing the progression of money to children
Bigger, more coins!
Different languages
Electronic interactives, multimedia
Free gold coins!
Give away free money; have kids stamp out their own coins and take it home with them
Give away money; more background on things, where in England some of the coins were found, so kids can relate to them more
Give away more money!
Give us some money to keep
Hard to see everything
Have a coin machine that makes paper coins that people can take with them (maybe have it so that people can enter into the machine the time period and country and they will get that coin); have people dressed up in clothing that corresponds to the gallery they hang out in and act like they are from that time or just explain things to kids; more interactive stuff for kids (even if it costs money, it would help raise cash for the museum)
Have backpack opportunities more clearly labelled
Have computers to explain things; touch screens and interactive exhibits
Have guide for children to take through gallery, give a brief intro to the history of money
Have kids make their own coins
have more interactive exhibits
Have special activities for kids; make their own coins or coin designs
Have trouble with the chronology of things, difficult to keep track of things. Need a clearer, theme timeline.
Information simple and to the point, easier for children, information to highlight important objects, more interesting information, less dry. Condense information for people who can only spend 5-10 minutes in the gallery
Interactive
Interactive, Bartering demo
Just more colourful really
Little bit of music maybe
Live guides to explain things more
Maybe have an activity where the kids can make their own notes
More connections to now, more tactile stuff
More hands on material
More hands on, videos, computers
More hands-on activities
More hands-on or guides that are like story-tellers
More information staff, more information on what rooms are closed
More Interactive
More interactive stuff
More interactive things
More interactive things, a set time for children's activities; more about how money is made, exchanged, etc
More Interactive, maybe show how many is stamped
More Languages
More on Persia, some things associated with Persia confused with Afghanistan, more information from other visitors, buggies for children
More pictures/visuals; touching stuff "If I touched something that belonged to one of England's Queens, I would have security all over me, and yet kids are always getting away with touching Egyptian and Greek sculptures that are thousands of years old"
More visuals
More visuals, more attractiveness
Rubbings and things to touch
Separate money by nationality
Signs for children pointing out most interesting and popular objects
Something interactive like a money press; something they can make and take away and see how it worked
Things that kids can hold, maybe videos
Translations in German
Workshops that they can schedule ahead of time
2.3. Observation Summary

Sample Size: N=100

<table>
<thead>
<tr>
<th>Object</th>
<th>Interaction (% of Families)</th>
<th>Weighted Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>37%</td>
<td>1.3</td>
</tr>
<tr>
<td>2</td>
<td>29%</td>
<td>1.0</td>
</tr>
<tr>
<td>3</td>
<td>13%</td>
<td>0.6</td>
</tr>
<tr>
<td>4</td>
<td>49%</td>
<td>1.6</td>
</tr>
<tr>
<td>5</td>
<td>14%</td>
<td>0.4</td>
</tr>
<tr>
<td>6</td>
<td>45%</td>
<td>1.5</td>
</tr>
<tr>
<td>7</td>
<td>16%</td>
<td>0.4</td>
</tr>
<tr>
<td>8</td>
<td>24%</td>
<td>0.8</td>
</tr>
<tr>
<td>9</td>
<td>22%</td>
<td>0.6</td>
</tr>
<tr>
<td>10</td>
<td>58%</td>
<td>2.0</td>
</tr>
<tr>
<td>11</td>
<td>16%</td>
<td>0.5</td>
</tr>
<tr>
<td>12</td>
<td>16%</td>
<td>0.4</td>
</tr>
<tr>
<td>13</td>
<td>46%</td>
<td>1.4</td>
</tr>
<tr>
<td>14</td>
<td>37%</td>
<td>1.3</td>
</tr>
<tr>
<td>15</td>
<td>27%</td>
<td>1.0</td>
</tr>
<tr>
<td>16</td>
<td>27%</td>
<td>1.1</td>
</tr>
<tr>
<td>17</td>
<td>25%</td>
<td>1.0</td>
</tr>
<tr>
<td>18</td>
<td>36%</td>
<td>1.6</td>
</tr>
<tr>
<td>19</td>
<td>28%</td>
<td>1.2</td>
</tr>
<tr>
<td>20</td>
<td>3%</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Number of Families Observed: 100

Average Visit:
- Number of Wall Cases Used: 2.87
- Number of Centre Cases Used: 2.20
- Number of Wall Panels Used: 0.14
- Number of Upper Case Panels Used: 0.27
- Number of Lower Case Panels Used: 0.39
- Amount of Time Spent: 3.48
- % Who Spend More Than 5 Minutes: 22%
  - Number of Adults: 1.6
  - Number of Children: 1.8

Average Weighted Engagement Levels:
- Total Family Engagement per Visit: 20.17
- Family Engagement per Object: 3.31

Average Engagement by Age Group:
- Groups with Children aged 0-4: 2.68
- Groups with Children aged 5-10: 3.41
- Groups with Children aged 11-16: 3.24
2.4. Attendance Count Summary

Average Family Makeup
0.93 Adult Females
0.77 Adult Males
0.77 Youth Females
0.72 Youth Males

Average Family Size
3.2 persons

Average Number of Adults per Family
1.7

Average Number of Children per Family
1.5

Average Number of Families per Hour
20.9

Average Number of Family Members per Hour
65.93

Extrapolated from above data:

Average Number of Family Members per Week
3856.91

Average Number of Family Members per Year
196,702.16

Percentage out of Total Estimated Family Visitors
39%

N.b. all attendance data was collected in the HSBC Money Gallery
3. Participatory Data

Close Observations-

1. Family went to the bathroom first thing when they arrived. They had to make 4 bathroom trips with their kids during the 3 hour visit.
2. Father and mother reading many of the labels, sometimes aloud for the kids to hear.
3. Kids and parents asking a lot of questions about the exhibits. Parents asking the children a lot of questions about what they learned about a specific subject or exhibit in school. The kids mostly asked their parents questions about the exhibits, and the parents asked me questions about them mostly. There were a good amount of exceptions however, when the kids would ask me things, or the parents would ask the children questions about an exhibit to test their knowledge on the subject. It was mostly only the oldest daughter who would ask me questions, the two boys were too young and shy to ask me questions. I can’t remember the kids ever asking each other questions, and same with the parents asking each other questions about the galleries. The family asked each other many questions about the history behind things like the mummification process, the history of money in England, about the Sutton Hoo burial site, why the Aztecs made turquoise masks, why the Egyptians would mummify people, and so on. The parents asked me hard questions like what the Rosetta Stone talks about, how and when the British Museum got all their Egyptian objects, why the scarabs were significant to Egyptians, and so on. I couldn’t really answer any of these kinds of questions that the parents asked well.
4. Father took lots of photos at first of anything interesting that he saw, less so later on when he let his two oldest kids play with the camera and take photos.
5. The mother asked the older son to read a label for her to test him and try to improve his reading skills. I believe she might have asked one or two other questions to her children like this, in order to test them and make them learn.
6. Family only looked at the northern half of the Egyptian Sculpture gallery.

Notes on how the family goes through the gallery

1. They kind of just skipped around the galleries, just looking at the things that really/directly interested them. They usually looked at objects for a pretty long period of time if they were interesting. The parents would read most labels, while the oldest daughter would read a few here and there.
2. The family wanted to see the Aztec and Egyptian galleries right now because it’s what the kids are learning in school so they are more interested in the subjects.
3. The family got held up at the Living and Dying gallery on our way to the Americas gallery, because the kids liked the colourful costumes and the mother liked the main exhibit with all the pills and other drugs.
4. The kids always wanted to show the parents any cool objects or exhibits that they saw.

Notes on the Adults-

1. Mother really liked the exhibit in the Living and Dying gallery that has photos of all these normal people at various phases in their lives, along with a big sheet of pills. She says she likes to look at pictures of real life people, can relate to them better. She also really
liked the Aztec turquoise mosaics because she thinks turquoise is pretty, and she liked the mummies because she had never seen real mummies before. The mother seemed to be more into the deeper, more sophisticated exhibits and read many labels.

2. The father really liked the old one pound notes, as well as the statue of Ramses II. He also seemed fascinated with the weapons in the Americas gallery (various clubs and daggers). The father was also intrigued by how much all the ancient cultures were obsessed with their Gods and religion. The father also really liked any objects that had to do with Christianity, especially if they showed scenes and stories from the bible. He would point these objects out to his family, and the children would also get somewhat excited since apparently the parents read bible stories to their children.

Notes on the Children-
1. The kids touched lots of objects in the museum. They all really loved the hands-on exhibit in the money gallery.
2. The two older kids were learning about Ancient Egypt in school, the older son is also learning about the Aztecs, while the daughter had learned about Sutton Hoo from her previous school.
3. The youngest son was very difficult for his parents to deal with at the museum. He had to go to the bathroom often, said he wanted to go home a bunch, had to be carried a lot because he couldn’t handle all the stairs and walking around in the museum. He quieted down once we started looking at the hands-on exhibit in the money gallery. He would keep on picking up pieces of money that interested him.
4. The oldest son really loved the old weapons, and he also enjoyed the Aztec gallery with the turquoise masks and the coiled snake statue.
5. The daughter really liked the Egyptian jewellery, the Roman jewellery, various European and British jewellery, and of course, the mummies. She also liked the ancient gaming pieces in room 2. The daughter could read very well for being so young, and asked me a bunch of intelligent questions about the exhibits.
6. All of the kids seemed to really like the goat statue in the Egyptian Sculpture gallery. The two older children also seemed interested in the animal skin robes in the Americas gallery.

Other thoughts-
1. Youngest son kicked the older son in the butt randomly and nearly made him cry.
2. The two oldest kids at one point fought over their dad’s camera. The camera really entertained the two older kids, who wanted to take lots of pictures.
3. They took photos of themselves in front of a totem pole--> The only photo they were actually in. They also took photos of most of the jewellery that the daughter saw, the money safe/alm box, the one pound note in the Money gallery, a few Greek mosaics, the Aztec mosaics, various mummies, many of the Sutton Hoo treasures, and a few other things in the Egyptian Sculpture gallery.
4. The father mentioned that “The map isn’t crystal clear, it ought to say ‘these are the top 5 galleries’” Basically the father wanted the map to show all the cool things to see and do (like hands-on exhibits) in the museum, and where they are located.
5. The family thanked me repeatedly for giving them advice on what galleries to go to, and for treating them to lunch. The mother said that otherwise they would have felt overwhelmed by everything in the museum and wouldn’t have seen as much cool stuff.

6. The family was curious about my project and asked me a lot of questions about my life at home, my school, and the project we are doing at the museum.

7. The parents complained about the food in the museum being so expensive.

8. The mother mentioned that the toilets in the ladies room didn’t seem to be working properly.

9. The dad imitated the pose of the statue of a Greek discus thrower.

10. The family really liked the hands-on stuff, the mother couldn’t stop raving about it and the father was highly impressed as well. All the kids seemed to really like handling the money as well. They stayed put for a very long time at the hands-on display, probably a good ten minutes, which was probably longer than they stayed put at anything else besides lunch.

11. They seemed to especially enjoy the labels on the Rosetta stone, they were very informative.
4. Original Forms

4.1. Surveys

Gallery Analysis Survey for Family Groups

Date:        Recorder: 
Time:       Current Gallery: Egyptian Sculpture

1. Demographics:

<table>
<thead>
<tr>
<th></th>
<th>0-2</th>
<th>3-4</th>
<th>5-8</th>
<th>9-12</th>
<th>13-16</th>
<th>17-20</th>
<th>21-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-59</th>
<th>60+</th>
<th>PNS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Where is your family visiting from?
   ☐ London ☐ Elsewhere in the UK ☐ Overseas

3. Have you or any family members visited the British Museum before?
   ☐ Yes, within the past two years
   ☐ Yes, more than two years ago
   ☐ No

4. What is your family’s first language? ____________________

5. What is the main reason your family decided to visit the museum today?
   ☐ Leisure/Enjoyment ☐ Major Attraction
   ☐ General Educational Visit: ☐ Parents ☐ Children:
      ☐ NC linked ☐ NC non-linked
   ☐ Specific Object ☐ Specific Gallery or Exhibition
   ☐ Special Event ☐ Other: ____________________

6. Were your family’s expectations for the visit met?
   ☐ Yes
   ☐ Somewhat   Why? __________________________________________
   ☐ No   Why not? _______________________________________

7. What galleries have your family visited or plan on visiting today?
   ☐ Africa     Themed:
   ☐ Americas   ☐ Enlightenment
   ☐ Ancient Egypt ☐ Living & Dying
   ☐ Ancient Greece & Rome ☐ Money
   ☐ Asia      ☐ Temporary Exhibitions
   ☐ Europe
   ☐ Middle East

8. Did your family make use of any of the family-oriented materials, such as backpacks or trails?
   ☐ Yes   Which one(s)? ______________________________
   ☐ No   Why not? ______________________________

9. What did your family like about this gallery?
10. What did your family like the least about this gallery?

11. Did your family find any of the labels or information panels particularly helpful? If so, which ones?

12. Did your family find any of the labels or information panels unclear or poorly-written? If so, which ones?

13. If you were discussing this gallery with someone who has not seen it, what would you tell them that it is about? (Prompt if necessary; i.e., if they say it is about “Egypt,” ask “What about Egypt?”)

14. Do you or your family members have any other suggestions or comments on this gallery?
   □ Yes; Please elaborate:
   □ No
Gallery Analysis Survey for Family Groups

Date: Recorder:
Time: Current Gallery: HSBC Money Gallery
Hands-on: Yes No

1. Demographics:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>PNS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2</td>
<td>3-4</td>
<td>5-8</td>
<td>9-12</td>
<td>13-16</td>
<td>17-20</td>
<td>21-24</td>
<td>25-34</td>
<td>35-44</td>
<td>45-54</td>
<td>55-59</td>
<td>60+</td>
</tr>
</tbody>
</table>

2. Where is your family visiting from?
   - London
   - Elsewhere in the UK
   - Overseas

3. Have you or any family members visited the British Museum before?
   - Yes, within the past two years
   - Yes, more than two years ago
   - No

4. What is your family’s first language? ____________________

5. What is the main reason your family decided to visit the museum today?
   - Leisure/Enjoyment
   - Major Attraction
   - General Educational Visit: Parents Children: NC linked NC non-linked
   - Specific Object
   - Specific Gallery or Exhibition
   - Special Event
   - Other: ________________

6. Were your family’s expectations for the visit met?
   - Yes
   - Somewhat Why? ________________
   - No Why not? ________________

7. What galleries have your family visited or plan on visiting today?
   - Africa
   - Americas
   - Americas
   - Ancient Egypt
   - Ancient Greece & Rome
   - Asia
   - Asia
   - Europe
   - Europe
   - Middle East
   - Middle East
   - Themed:
     - Enlightenment
     - Living & Dying
     - Money
     - Temporary Exhibitions

8. Did your family make use of any of the family-oriented materials, such as backpacks or trails?
   - Yes Which one(s)? ____________________
   - No Why not? ____________________ (skip 9)

9. Would you have liked these programs to include materials for this gallery?
   - Yes
   - No
   - No preference

10. What did your family like most about this gallery?
11. What did your family like the least about this gallery?

The British Museum is currently looking to make this gallery more family-friendly, and we would appreciate your feedback on this aspect of the gallery.

12. On a scale of 1-5, how family-friendly do you feel this gallery has been? (1 is not family-friendly; 5 is very family-friendly)
   - 1
   - 2
   - 3
   - 4
   - 5

13. The informational panels below the cases will likely be replaced with ones that are more family-friendly. Would you prefer that these are:
   - For children
   - For parents to teach children
   - Kept like it is (skip 14)
   - No preference (skip 14)
   - Other: ___________________________

14. Would you prefer that these panels include:
   - Summary of objects
   - More information about popular objects
   - Simplified version of current information
   - No preference
   - Other: ___________________________

15. Would you like it if family-friendly exhibits are clearly labelled as family-friendly?
   - Yes
   - No
   - No preference

16. Do you feel that the information presented in this gallery for families and younger audiences should be geared more toward the National Curriculum standards? (Skip if not from UK)
   - Yes
   - No
   - No preference

17. Would your family have more fun if we added brief activities for children within the money gallery? For example, having them search for an object.
   - Yes
   - No
   - No preference

18. Do you or your family members have any other suggestions on how to make the money gallery more family-friendly?
   - Yes; Please elaborate:
   - No
### 4.2. Observations

**Coding and Weighting Guidelines**

<table>
<thead>
<tr>
<th>Points</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pt.</td>
<td>G</td>
<td>Glancing without stopping</td>
</tr>
<tr>
<td>2 pts.</td>
<td>L1</td>
<td>Looking &lt;5 seconds</td>
</tr>
<tr>
<td>3 pts.</td>
<td>L2</td>
<td>Looking 5-10 seconds</td>
</tr>
<tr>
<td>4 pts.</td>
<td>L3</td>
<td>Looking &gt;10 seconds</td>
</tr>
<tr>
<td>2 pts.</td>
<td>R</td>
<td>Reading</td>
</tr>
<tr>
<td>0.5 pts.</td>
<td>D</td>
<td>Discussion w/ others in group</td>
</tr>
<tr>
<td>0.5 pts.</td>
<td>P</td>
<td>Took picture</td>
</tr>
</tbody>
</table>
Gallery Analysis Observation Sheet

Date:       Recorder: 
Time:      Current Gallery: Egyptian Sculpture Gallery

Estimated Demographics

Under 5: ________________ 5-10: ________________
11-16: ________________ Adult: ________________
Gallery Analysis Observation Sheet

Date:       Recorder:
Time:       Current Gallery: HSBC Money Gallery

Estimated Demographics

Under 5: ________________  5-10: ________________
11-16: ________________  Adult: ________________
4.3. Participatory Notes Form

Date: Recorder:
Time: Family Number:

Family Demographics

<table>
<thead>
<tr>
<th>Age Group</th>
<th>PNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td></td>
</tr>
<tr>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>5-8</td>
<td></td>
</tr>
<tr>
<td>9-12</td>
<td></td>
</tr>
<tr>
<td>13-16</td>
<td></td>
</tr>
<tr>
<td>17-20</td>
<td></td>
</tr>
<tr>
<td>21-24</td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td></td>
</tr>
<tr>
<td>55-59</td>
<td></td>
</tr>
<tr>
<td>60+</td>
<td></td>
</tr>
</tbody>
</table>

Where they are visiting from
- [ ] London
- [ ] Elsewhere in the UK
- [ ] Overseas

Whether they’ve been to the Museum before
- [ ] Yes, within the past two years
- [ ] Yes, more than two years ago
- [ ] No

Which galleries they visit
- [ ] Africa
- [ ] Americas
- [ ] Ancient Egypt
- [ ] Ancient Greece & Rome
- [ ] Asia
- [ ] Europe
- [ ] Middle East
- [ ] Themed:
- [ ] Enlightenment
- [ ] Living & Dying
- [ ] Money
- [ ] Temporary Exhibitions

Close Observation Notes: (How the family interacts with one another, discuss objects, general behaviour)

Notes on how the family goes through the galleries: (Style of walking through a gallery (straight-line, zigzag, etc.); e.g., do they skip some exhibits, or try to look at all of them? How long do they typically look at something, do they just glance at some objects?)

Notes on the adults: (Which galleries did they want to see, what did they particularly like in each gallery, what did or did not interest them?)

Notes on the children: (Which galleries did they want to see, what did they particularly like in each gallery, what did or did not interest them?)

Other thoughts on the family:
British Museum Gallery Study
Family-Based Recommendations for Improvements to the Egyptian Sculpture and HSBC Money Galleries

Christopher Cleary
Christina Ernst
Michael Moscardini
Robert Stanford

26th April 2007
Preface

This document is intended to aid the British Museum in their efforts to improve the overall family experience in their galleries. It was created in April 2007 by a team of students from Worcester Polytechnic Institute in Worcester, Massachusetts USA, as part of their completed Interactive Qualifying Project.

This document contains recommendations to improve family offerings for the Egyptian Sculpture and HSBC Money Galleries. The recommendations were crafted from data obtained through oral surveys and visitor observations. In constructing these suggestions, feasibility and other pragmatic factors were considered. For a more detailed breakdown of background information, methodology, and detailed results, please refer to the complete Interactive Qualifying Project document, titled *British Museum Gallery Study: An Analysis of the Effectiveness of Select Galleries for Families*. For a summarized version of the collected data, please see *British Museum Gallery Study: The Data*. 
# Table of Contents

1. General Recommendations ...................................................................................................................4  
   1.1. Advertisement of Family-Oriented Materials ..............................................................................4  
   1.2. Family-Friendly Displays ............................................................................................................5  
   1.3. National Curriculum Materials ....................................................................................................7  
2. Egyptian Sculpture Gallery ..................................................................................................................9  
   2.1. “Do Not Touch” Signs .................................................................................................................9  
   2.2. Label Size and Placement ............................................................................................................9  
   2.3. Label Content .............................................................................................................................10  
   2.4. Gallery Narrative .......................................................................................................................10  
   2.5. Family-Friendly Panels ..............................................................................................................11  
3. HSBC Money Gallery ........................................................................................................................13  
   3.1. Panel Audience and Content ......................................................................................................13  
   3.2. Activities for Children ...............................................................................................................14  
   3.3. Family-Friendly Logo ................................................................................................................15  
   3.4. National Curriculum Content .....................................................................................................16  
   3.5. Personal Connections .................................................................................................................17

# Table of Figures

Figure 1: Families’ Reasons for Not Using Family Materials .................................................................4  
Figure 2: Family Activities Stela ..........................................................................................................5  
Figure 3: Relative Interest Levels of Objects in the Money Gallery .....................................................6  
Figure 4: Relative Engagement Levels of Objects in the Money Gallery .............................................6  
Figure 5: Families’ Primary Reasons for Visiting the British Museum ...............................................7  
Figure 6: Learning Outcomes of the Egyptian Sculpture Gallery .......................................................11  
Figure 7: Preferences for Informational Panel Audiences in the Money Gallery ...............................13  
Figure 8: Preferences for Informational Panel Content in the Money Gallery ..................................14  
Figure 9: Preferences for the Addition of Integrated Activities in the Money Gallery ....................15  
Figure 10: Preferences for the Addition of a Family-Friendly Logo in the Money Gallery .............16  
Figure 11: Preferences for the Addition of National Curriculum Material in the Money Gallery .....17
1. General Recommendations

The following recommendations aim at improving the overall family experience at the museum, and are not specific to any gallery.

1.1. Advertisement of Family-Oriented Materials

**Recommendation:** Increase signage for the availability of family-oriented materials, such as the activity backpacks and trails.

**Rationale:** Of the two hundred families surveyed, only thirteen percent made use of at least one family-oriented material. Of those who did not use these materials, seventy-five percent were not aware of their availability:

![Figure 1: Families' Reasons for Not Using Family Materials](image)

This is significant, as responses from families who did use the materials indicated that they “make things a lot more fun.” As families benefit from these materials, their experiences at the British Museum could be significantly improved with increased awareness of such materials. At the present time, there is poor advertisement for the materials in the Great Court, and no advertisement in the North Entrance:
Although these stelas are bright and centrally located in the Great Court, the colour scheme and vertical text significantly decreases their effectiveness. Additionally, despite the fact that the family materials are advertised on the free visitor maps, families have also had problems finding these maps. A further suggestion is to centralize the availability of such materials in the Great Court, where they are easier for entering visitors to find. This would require moderate effort, especially if new materials or desks are to be added to the Great Court, but it would be a worthy investment, as it has the potential of significantly improving the family experience.

1.2. **Family-Friendly Displays**

**Recommendation:** Increase the number of family-friendly display cases throughout the Museum.

**Rationale:** One hundred families were surveyed in the HSBC Money gallery, in addition to another one hundred families who were observed during visitor tracking studies:
Through analysis of both raw interest level (measured by the percentage of families who at least glance at the object) and engagement level (a weighted measure of how thoroughly families
interact with an object), Case 10 proved to be the most popular and engaging case. It was also mentioned several times as a favourite object by families who were surveyed in the Money gallery. This was an experimental case that contained a bright display on the Chinese New Year and featured brief activities integrated into the informational panels. From the success of this case, it can be recommended that similar cases could be used effectively in other galleries. This recommendation would require moderate effort, as new cases would need to be created and added to the galleries.

1.3. National Curriculum Materials

Recommendation: A pamphlet containing highlights of National Curriculum-linked material currently in the galleries should be made available to visiting families.

Rationale: One hundred families were asked to identify their primary reason for visiting the British Museum:

![Pie chart showing families' primary reasons for visiting the British Museum]

Figure 5: Families' Primary Reasons for Visiting the British Museum

Twenty-seven percent of the visiting families said they came primarily for educational purposes. An additional fourteen percent came to see specific galleries and made mention of visiting that gallery because their child was learning about the relevant material in school. Eighty-three
percent\(^1\) of the families visited the ancient Egyptian galleries, and approximately sixty percent visited the Ancient Greece and Roman galleries, which are both tied into the National Curriculum. From this combination of data, it can be assumed that a large portion of British families are visiting the Museum to reinforce their children’s National Curriculum education. Therefore, it might prove helpful to produce a pamphlet that highlights National Curriculum-linked material in each of the galleries. This would require moderate effort, as the galleries would have to be analyzed to form a compilation of Curriculum-linked material, followed by the production of the pamphlet itself.

\(^1\) This value was derived from the HSBC Money gallery surveys only, as incorporating the data from the Egyptian Sculpture gallery itself skews the data. Inclusion of this data changes the value to approximately ninety percent.
2. Egyptian Sculpture Gallery

The recommendations for the Egyptian Sculpture Gallery were developed with several considerations in mind. Because the artefacts in the gallery are so large, the feasibility of moving them is highly unlikely. Therefore, these recommendations aim to provide valuable suggestions that do not require the reorientation of any objects. With new labels already planned in the near future, more attention was placed on visual displays and family content.

2.1. “Do Not Touch” Signs

Recommendation: Increase the number of “Do Not Touch” signs in the Egyptian Sculpture gallery and place them in more visible locations.

Rationale: The data that best emphasizes this recommendation is the fact that at least six surveyed families responded that the “hands-on” environment of the Egyptian gallery is one of its best features. In addition, survey family 34 stated that “kids get yelled at for touching” the objects, and another four families have mentioned that the “Do Not Touch” policy should be stated more clearly. Reprimanding a child for something that should have been expressed more clearly can easily ruin the entire family’s visit. To make these signs more effective, they could include sample materials that the families are encouraged to touch, in order to show how they wear down over time. The gallery could also include small touch-stations, where visitors can feel examples of the materials used throughout the gallery. This would require minimal effort, as it only involves the replacement of signs, and the addition of small stations.

2.2. Label Size and Placement

Recommendation: Increase the size of the object labels in the Egyptian Sculpture gallery and place them in more obvious locations in relation to their respective object.

Rationale: Many families mentioned during the surveys that they had problems reading the labels in the Egyptian gallery. Family 37 mentioned that “since things are so crowded, it’s hard to read a label when other people are around,” indicating that they are too small and not placed well. The same family suggested that they “could be bigger with bolder lettering.” Several other
families expressed similar sentiments. Given the large amount of blank space around the objects, and the fact that they are due to be replaced in the near future, implementing this change should require minimal effort.

### 2.3. Label Content

**Recommendation:** Design the informational labels in the Egyptian Sculpture gallery to be more informative and understandable.

**Rationale:** Of the one hundred families surveyed in the Egyptian Sculpture gallery, at least five mentioned that the labels did not contain enough information about the pieces. They have asked for information regarding:

- general Egyptian history and culture
- how and why the sculptures were made
- what the sculptures were used for
- how the sculptures were acquired
- why the sculptures are in their current state

Two other families suggested the addition of a pronunciation key for the Egyptian titles and names. As suggested by at least another three families, another improvement might include the addition of more graphics or visuals to accompany the text and make the labels more engaging. Because the labels are to be rewritten in the near future as part of the planned renovation, this recommendation should require minimal additional effort.

### 2.4. Gallery Narrative

**Recommendation:** Strengthen the narrative of the Egyptian Sculpture gallery to improve visitor understanding.

**Rationale:** One hundred surveyed families were asked to identify the gallery’s major themes:
Nearly one-third of the families gave a response that was overly general, even when prompted for more specific answers, indicating that the gallery narrative is unclear. The remaining answers varied significantly, further emphasizing this lack of clarity. Family 55 suggested a “simple timeline [of] the progression of Egyptian history in the gallery [because] the panels showing the different dynasties are not clear enough about that,” which was echoed by at least one other family. To make the timeline more engaging and useful, it could also include graphics that relate the objects to their appropriate time period, e.g., pictures of popular objects linked to their place in history. This recommendation would require significant effort, as it involves coordinating the information presented in the entire gallery.

2.5. Family-Friendly Panels

**Recommendation:** Redesign the wall panels in the Egyptian Sculpture gallery so that they are more attractive and engaging for family groups.

**Rationale:** Of the one hundred families observed in the Egyptian gallery, an average of 4% interacted with any given informational panel. This is likely due to their lack of colour and the overwhelming amount of text. Colourful panels with a more manageable quantity of text that
presents Egyptian history in an interesting and concise manner would be better able to educate and entertain a broader range of visitors. This should require minimal effort, as the panels and labels are due to be replaced in the near future.
3. HSBC Money Gallery

The recommendations for the HSBC Money Gallery were guided with the help of the gallery curator, Laura Philips. The gallery is due to be refreshed this year with the addition of new panels and photos, as well as the testing and removal of some items. Much of the analysis was based on questions and improvement possibilities that Ms. Philips provided. Since there are no plans to substantially alter the gallery’s physical orientation, these suggestions will instead focus on the addition of family material and content, instead of the physical layout.

3.1. Panel Audience and Content

**Recommendation:** Replace the informational panels below the cases with more family-friendly ones geared toward children. These panels should include either a summary of the objects in the case or a simplified version of the content already present.

**Rationale:** One hundred families were surveyed about which age group the lower information panels should target:

![Figure 7: Preferences for Informational Panel Audiences in the Money Gallery](image)

Forty-two percent of respondents preferred that the lower panels should be directed at children. One family pointed out that the lower panels provide the perfect height for a younger child to read. Children provided with information they can understand in a graphically appealing way become more engaged with the material.

Families were also asked what they thought the panels should contain in terms of informational content:
While there is no clear majority, thirty-two percent of families preferred that the panels include a simplified version of the material that they already contain. This would allow the children to get a broader understanding of the topics in each case. The use of simplified language on the panels would make them easier to understand for not only British children, but also for those who do not speak English as their first language. One Dutch respondent stated that generally their children can read simple English, which is likely the case across many nationalities. Implementing this recommendation would require minimal effort, since the panels are due to be replaced soon.

### 3.2. Activities for Children

**Recommendation:** Add integrated activities for children in the HSBC Money gallery.

**Rationale:** One hundred families were asked whether they would prefer the addition of activities for children, integrated into the informational panels:
Eighty-nine percent of respondents stated that they would support this type of modification to the gallery. In addition, families were asked if they had any other suggestions of ways in which the British Museum can make the gallery more family-friendly. Forty-seven percent of seventy-four suggestions called for the inclusion of more interactivity within the gallery. Although many families suggested the integration of interactive multimedia, the likelihood of such a modification is quite low, as it would alter the essence of the Museum. However, another nineteen percent of these suggestions mentioned the addition of something the children can physically take away from the gallery, e.g., making their own coin or note, or making a coin rubbing. These suggestions may not be possible, as the cost and staffing required to maintain the gallery would significantly increase. This modification would also require a significant amount of space in the gallery that is currently not available. Other simpler activities could include searches for certain images, colours, or patterns, integrated into the informational panels. The feasibility of these simple activities is reasonable, as they would only involve modification to the panels, which are due to be replaced in the near future.

**3.3. Family-Friendly Logo**

*Recommendation:* Develop a logo to help families identify family-friendly exhibits.
Rationale: One hundred families were asked whether they would prefer the addition of a logo that denotes an exhibit as family-friendly:

![Pie chart showing preferences for the addition of a logo. 79% prefer Yes, 17% No, 4% No preference. N=100.](image)

Figure 10: Preferences for the Addition of a Family-Friendly Logo in the Money Gallery

Seventy-nine percent of responding families stated that they would prefer the institution of such a logo, as it would help guide their journey throughout the museum. If families knew which exhibits were geared toward children, they could better plan their stay and spend less time searching for suitable exhibits. This would mark objects similar to those in the existing family trails, but would not adhere to a specific theme and would encompass a larger portion of the Museum’s galleries. The addition of such a logo could be accomplished in one of two ways: the cases or labels themselves could be marked, or a small map denoting family-friendly exhibits could be posted at the entrances to each gallery. Either method would require minimal effort to instate, especially in the Money gallery, where the panels are due to be replaced.

### 3.4. National Curriculum Content

Recommendation: The information currently provided in the HSBC Money gallery should not be modified to relate more closely to the National Curriculum standards.

Rationale: Throughout the course of the surveys, families from the UK were asked if the information within the gallery should be geared more toward the National Curriculum standards:
Fifty-nine percent of respondents stated that they did not feel it is necessary to modify the information in favour of the National Curriculum standards. Of the few families who gave further comments, four mentioned the fact that the Museum is multinational, and that it would only benefit children of the UK. Family 35 also mentioned that the National Curriculum “doesn’t fit with [the] nature of the gallery.”

**3.5. Personal Connections**

**Recommendation:** Identify the national origins of objects in the HSBC Money gallery so that families can find and relate to content in the gallery.

**Rationale:** In the surveys, one hundred families were asked to list their favourite elements of the gallery. Several families particularly enjoyed objects from their nations of origin. Family 3 stated that the Alton Treasure was from near their home, and were particularly excited to find it at the Museum. Further research has shown that visitors are better able to appreciate and absorb the content of galleries if they can form personal connections with specific items. This could be accomplished through several methods. The first would be to either colour code labels by country or add small national flag icons to the labels. This would require little effort, as the labels and panels are due to be replaced. Another option is to use the central experimental...
display case (Case 10) to highlight the money of different nations on a rotating basis. This would also require relative little effort, as the content of this case changes on a regular basis.