Appendices

Appendix A

Research processes in detail

A1. The Index of Multiple Deprivation 2004 (IMD 2004)

The Indices of Multiple Deprivation 2004 (IMD 2004) is a composite index derived from a series of other indices, using information from the 2001 Census and similar data-sets. It is based on the premise that deprivation is ultimately experienced by individuals. The overall IMD 2004 rank (as used here) is determined from seven sub-indices:

- Income
- Employment
- Health and disability
- Education, skills, training
- Barriers to housing and services
- Living environment
- Crime

The IMD 2004 measures multiple deprivation at Super Output Area level (SOA). SOAs are aggregates of Census output areas with units of, on average, 1500 individuals. The intent is to uncover smaller pockets of deprivation which may remain hidden in larger units such as wards and enable a consistent unit of measurement.[1] In total there are 32,482 SOAs in England. Each SOA has been given a rank based on the analysis of the seven sub-categories as outlined above, where 1 is the most deprived SOA and 32,482 is the least deprived SOA.

Where postcodes were missing or incomplete or from outside of England they could not be linked to a relevant IMD 2004 rank. Different indices are compiled for Scotland and Wales for example which make comparison difficult.[2] Once the postcodes were ranked, in order to facilitate the analysis they are divided into 10% categories following the boundaries below, e.g. the top 10% of deprived SOAs in England would fall in between a ranking of 1 and 3248 (Fig A1a).

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[1] Neighbourhood Renewal Unit, 2004, *The English Indices of Deprivation 2004: Report to the Office of the Deputy Prime Minister*, Stationary Office, London
[2] See http://www.scotland.gov.uk/stats/simd2004/ for Scottish Index of Multiple Deprivation 2004 which has six sub-indices instead of seven [accessed 07 08 2007]

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Fig. A1a: Categories for presenting the IMD 2004 rank

Category	Boundaries	
Top 10%	1	3248
10-20%	3249	6496
20-30%	6497	9744
30-40%	9745	12992
40-50%	12993	16241
50-60%	16242	19489
60-70%	19490	22737
70-80%	22738	25985
80-90%	25986	29233
Bottom 10%	29234	32482

It should be borne in mind that the IMD 2004 categories refer to units of 1500 people, and although they may be more accurate than measuring deprivation than at ward level, they may still mask individual circumstances.

A2. Rural and Urban Area Classification 2004

The Rural and Urban classification is the product of a joint project to produce a single and consistent classification of rural and urban areas. Two measurement criteria were used in creation of the definitions of rural and urban based on hectare grid squares:

- Settlement form – either dispersed dwellings, hamlet, village, small town, urban fringe and urban (>10k population)
- Sparsity – each hectare grid square is given a score based on the number of households in the surrounding areas up to a distance of 30km

These hectare grid squares were then applied to Census 2001 Output Areas, Wards and Super Output areas.   The classification can therefore be used with any data source that can produce results at these levels.[3] Through the Neighbourhood Statistics website (http://neighbourhood.statistics.gov.uk) the Lower Layer Super Output Area (LSOA) can be identified for a postcode, which then enables, through an EXCEL dataset, the relevant rural or urban classification to be found. Unlike other units, LSOAs are categorised into just three domains:

- Urban >10k
- Town and Fringe
- Villages, hamlets and isolated dwellings

The resulting classification is based on the predominant settlement type within the relevant area.[4]

In the report this process is referred to as the Rural / Urban morphology database.

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[3] http://www.statistics.gov.uk/geography/downloads/Introductory_Guide.pdf [accessed 07 08 2007]

[4] http://www.statistics.gov.uk/geography/downloads/Rural_Urban_Metadata.pdf [accessed 07 08 2007]

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A3. ACORN classification

Information, albeit basic, was available from websites such
http://www.upmystreet.com/ which enabled an approximation of the 'types' of
people who were visiting The Bowes Museum and the National Gallery during the
periods of research to be identified from their postcode. This website enabled
access to the ACORN classification system, a geo-demographic tool built by the
commercial company CACI which can be used to identify and understand the UK
population for marketing purposes.   ACORN categorises all 1.9 million UK postcodes,
which have been described using over 125 demographic statistics within England,
Scotland, Wales and Northern Ireland, and 287 lifestyle variables, and is based on
the premise that people in similar areas have the same needs and lifestyles.[5]
However there is the important caveat attached that the descriptions are based on
the neighbourhood in which the household is located, which is a wider area than
that identified by the postcode itself:

> "…the overview describes characteristics frequently found in these
> neighbourhoods. Since most postcodes include a mix of people we don't
> expect everyone there will fit the description perfectly."[6]

The ACORN tool categorizes people into 'types' which give details of what their
income, lifestyle choices and social class are likely to be. Because it is developed as
a consumer and marketing tool it can only give a crude approximation of the types
of respondents from their postcodes but it may be helpful for comparison purposes.

There are some discrepancies between the ACORN classification and the IMD 2004
because both datasets are built for different purposes. The IMD 2004 was
developed for the Office of the Deputy Prime Minister to provide a measure of
neighbourhood deprivation at Lower Layer Super Output area, approximately 1500
people. In contrast ACORN classifies areas according to similar key characteristics,
using the IMD 2004 and detailed census data alongside information from consumer
lifestyle surveys to group households into categories which reflect their lifestyle
choices and consumer behaviours.[7] Consequently, ACORN is not a true measure of
deprivation although it does classify some households according to high
unemployment, health problems and severe overcrowding. [8] Since we were looking
for an overview of the types of people completing response cards we have not
gone into detail regarding the possible reasons for these discrepancies, other than
that they are built with different aims in mind.

All UK postcodes, except Northern Ireland, can be categorized under the ACORN
system so postcodes from Wales and Scotland, which have to be excluded under
the IMD 2004, could be included.

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[5] http://www.caci.co.uk/acorn/whatis.asp [accessed 26 09 2006]

[6] http://www.upmystreet.com/local/my-neighbours/neighbourhood-profile/l/DL2+2DG.html
[accessed 26 09 2006]

[7] DfES, *Technical Review of deprivation indicators used in local authority funding formulae*,
Crown Copyright, July 2006

[8] Annex 1: Measuring Deprivation, Extract from the *Compendium of Clinical and Health
Indicators User Guide*, National Centre for Health Outcomes Development, Crown Copyright,
April 2005,
http://www.nchod.nhs.uk/NCHOD/Method.nsf/d3034ecd39b65e4965256cd2001d834f/31d35
44ae989a8a080256d41004a6c0f/$FILE/Compendium%20User%20Guide%202005%20Apr%20A
nnex%201%20V1.doc [accessed 27 09 2006]

A4. Chi Square tests

A chi square test was undertaken where it was felt important to test if a relationship between two variables was significant, for example where cross-tabulations have been used to compare two variables such as interest in art and gender. However it must be noted that Chi square tests cannot always detect real difference where sample sizes are small.

Typically a significance value of less than 0.05 is considered significant, e.g. that the two variables are related, are probably 'true' and not due to chance.

Appendix B

Second case study: a Teesdale Primary School and The Bowes Museum

B1   Aims and objectives for 'The Madonna of the Pinks'
B2   The National Gallery timetable and aims and objectives
B3   Middleton-in-Teesdale Primary School 'The Madonna of the Pinks' project presentation at The Bowes Museum

B1. Aims and objectives for The Madonna of the Pinks

B1.1 The Bowes Museum and Primary School

- Engaging in art, gathering some understanding of the symbolism within the painting.
- Using knowledge to improve drawing/painting skills.
- Experience the use of different media including sculpture and digital work.
- Developing work in both small and large groups.
- Developing ideas to create a finalised project.

B1.2 The Bowes Museum

- Develop a long-term partnership with a school that have a focused art approach.
- Gather evidence of long-term impact from pictures.
- Use one exhibition to stimulate an exploration of art in many different formats.
- For Museum staff to have the opportunity to engage and re-engage with a group of students over a prolonged length of time to assess their responses and meet their evolving needs.

B1.3 The Bowes Museum artist

- This project will strengthen my own links and relationship with the school as an artist, as well as developing my experience of working on longer-term projects. The benefits will include working with the same group of children and building up a relationship through the project to see their understanding and development of skills.
- The children will have an opportunity to experiment with and try new techniques, using materials and skills which they might not normally have time to experience within school. By looking at the painting and its meaning in depth, I will work with the children to interpret the imagery and their own thoughts and feelings about the painting.

- The results of working with the children and the school on this project will be a developed relationship for possible future partnerships, as well as a greater understanding of how and why such paintings were made and some of the techniques, materials and skills used by artists. Each child involved will have evidence of their learning, showing how they have developed their own skills and knowledge.

B1.4 The Bowes Museum Artist's Project

Final Outcome:

- A collection of <u>private</u> ideas and understandings gained from exploring *Madonna of the Pinks* and the other paintings in the exhibition.
- For children to collate their work for their own private reflection (as the *Madonna of the Pinks* was intended).

We will explore three areas of interest identified by both the Museum and the School that address our aims and objectives:

1)   How did the Renaissance painters paint?
- Study of the different types of painting techniques used within the Renaissance period resulting from the development of egg tempera to oil. (Compare Raphael's smooth brush strokes to Ghirlandaio's quick, sharp strokes).
- Have a go at working in both of the above media.
- Practice colour mixing using colours nearest to pigments available at the time.
- Practice painting various element from Raphael's picture e.g. pinks, flesh tones, the landscape.
- Practice overlaying colours to achieve warm and cool tones.

2)   What is it like to sketch a mother and child?
- Invite a mother and child into the school for the children to sketch –look at the difficulties that having a 'live' model can create.
- Try and create rapid sketches of a child like those in the *Madonna of the Pinks* booklet

3)   What is shown in the painting? What symbols are included in the painting? What do they mean?
- Children to create mind maps that explore the images and symbols in the painting – e.g. the landscape, the pinks, the clothing, the expressions on Mary and Jesus' faces – relate these symbols to other pictures within the exhibition.
- Using different media to take a multimedia approach to the picture. Use cut out copies of the painting, digital cameras to capture information, paint, pencil, pen and ink.

B1.5 Timetable of activities for Bowes Museum Artist:

Day 1 – Using paint (Individual work)	Materials
AM – Children will experiment with, and be shown how to mix oil paints/colours. Concentrating on painting different textures as in the painting, such as skin, cloth, hair, flowers and landscape. Look at the meanings of colours/flowers used. PM – Children will create their own interpretation of 'Mother and Child', using skills using colour mixing.	Oil paints, linseed, odourless solvent, brushes, tear-off palettes, oil paper, boards and/or canvas. Cloth (similar to painting), Pinks, pos. images of landscapes.
Day 2 – Drawing from Life (Individual work)	
AM – Looking at the face, and how artists use sketching/drawing techniques to correctly draw the face and figure in proportion. Including expression and pose, and their possible meanings/intentions. PM – Life drawing session, working from 'mother and child'. (find out if ok to take photos – to be used for multimedia session)	Drawing paper, Earth toned drawing pencils. Pastel drawing paper, pastels, fixative
Day 3 – Multimedia (group work)	
AM only – Children will work with collected images, including drawings, photographs, photocopies, and digital prints to compose several group pieces of work exploring what they have learned about the painting and its meaning.	Colour and black and white copies of sketches, photographs of original painting. Copies of children's own sketches and painting. Other photographs of mother and child, such as life model (to check), baby magazines etc… Computer, digital camera, scanner, printer, ink cartridges, photo quality paper. Scissors, pritt, mounting card
Additional session- Container	
Children will work in small groups for an hour or so each group, either over a full day or two half days. Each child will produce a container or box to house their results of the project, with the intention to keep everything together, safe and private as with the original Raphael painting.	Yet to be decided.

B2. The National Gallery timetable and aims and objectives

B2.1 Aim

- To introduce some of the tools and materials of sculpture and experiment with transcribing the painted image into three dimensions.
- To provide the opportunity to discuss the images in the exhibition and their relevance to contemporary children

B2.2 Details of activity

Using the Madonna of the Pinks and other Madonna images, we will look at how the relationships between mother and child are described by their body language. By physically trying out some of the positions in the paintings, we can discuss the decisions made by the artists. We will then make a wire armature, giving consideration to basic proportion, and play with positioning the figure.

B2.3 Materials

We will use two types of clay, terracotta, and self-hardening grey clay and we will discuss their properties, before clothing the armature in clay.

B2.4 Links between The Bowes Museum and National Gallery aspects of the project

- All aspects of the school's aims for the project (in terms of medium exploration, symbolism, social aspects of working in art, developing of skills and developing ideas for a finalized project), should be met by a combination of working with artists from both venues.
- Subject matter and the medium used by both venues will complement each other to gain a 'whole' understanding of the painting: understanding of the mother and child relationship, composition, use of colour.
- A combination of working with the two venues should show a complementary understanding of the use of materials and their properties used in artwork. The National Gallery focus for this will be on the appropriate use of materials used in sculpture, whilst The Bowes Museum focus on paintings will explore the use of different paints and types of material that these can appropriately be painted on to.
- The purpose of the finished pieces of artwork will be different between the two venues but will again complement each other. Whilst The Bowes Museum work will allow children to have a greater understanding of Renaissance painting styles and techniques, The National Gallery will develop this understanding into a more contemporary exploration of the form of mother and child, exploring modern techniques that can be used to achieve this.

B3. The Teesdale Primary School 'The Madonna of the Pinks' project presentation at The Bowes Museum

What follows is a transcription of the pupils' project presentation at the Bowes Museum. The entire class participated in the presentation. In a line the children took turns to read out what had been their favourite thing about working on the project. There was a large range of responses, including comments relating to techniques and 'working with real artists' 'going to a museum', and seeing the Madonna of the Pinks.

Names of pupils and other research participants have been removed to protect confidentiality.

B3.1 Introduction

Good afternoon and welcome to all the parents and supports we have here today. We are going to give you a taster of some of the activities we have been doing over the past month relating to The Madonna of the Pinks.

Unfortunately we can't describe **every**thing because we've just done **too** much stuff and we'd be here all evening!

Firstly, here's a selection of tasks we have completed or new techniques we have learned.

(Everyone shouts)

Now I give you [our] School's Presentation.

B3.2 Oil Painting

USING A PAINTING BLOCK

- We are going to talk about oil painting, a task we completed with [artist] from the Bowes Museum.

- These are examples of some of our classes work.

GOING TO SEE THE MADONNA OF THE PINKS
CREATING A PRINT BLOCK

- The first thing we did was draw some flowers and cloth in still-life onto paper.
- Once we'd completed a small painting, we decided we'd be clever and paint a big one.

MAKING THE SCULPTURES
WORKING WITH A MASTERPIECE

- We chose our favourite bit and made it bigger on oil painting paper.
- These are examples of some of our classes work.

- We learned so much about Madonna of the Pinks that we painted our own versions onto board.

MY FAVOURITE THING WAS…………………………………

LIFE DRAWING

- When we'd done this [artist] showed us how to mix colours using a small amount of paint. She showed us how to make a colour darker without adding black.
- When we'd finished drawing them we used all the techniques we'd learned to finish them.

USING THE OIL PAINTS
MAKING SCULPTURES

- Then we started our own paintings. We learned how to use linseed oil and san-sa-dor to thin the paint and clean the brushes.
- Here's some examples, in the finished cases our friends will be talking about.

GOING TO THE MUSEUM

B3.3 Printing

RE-ENACTING A PAINTING

[Artist from National Gallery] and [National Gallery educator] came back to school to do some printing with us. We used the painting of Bacchus and Ariadne to give us some ideas.

EVERYTHING!
USING PASTELS

[National Gallery educator] told us the story of the characters in the picture. Then we chose one of the people or animals from the painting to make into a print.

GETTING MESSY

First we drew the outline of our chosen character on a piece of paper, then we glued on some string following the pencil lines. We brushed ink onto the string, covered the paper with cloth and pressed down. When we lifted the cloth, we had made a print.

MAKING A FOLDER
WE USED ACRYLIC PAINTS

We did more printing with [artist]. We made a printing block to use to decorate folders to keep all our work in.

PAINTING OUR OWN MADONNA OF THE PINKS

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First we drew some shapes on some foam, then we cut them out. We glued the shapes onto a piece of card. We used silver, gold and bronze acrylic paint to cover the shapes.

ALL OF IT!
MIXING SKIN TONES

Then we pressed the stamps carefully onto the cover of the folder. We tried not to move the stamp so that the print would not smudge. Here is what we made.

DRAWING

B3.4 Armatures

QUICK SKETCHES

- We're going to talk about how to make armatures. These are clay and metal sculptures.
- You have to make sure the clay is really smooth or you're person will look like the Michelin Man! We tried really hard.

GETTING MESSY!
STILL LIFE DRAWING

- First, you start with the head and this is how you do it (DO IT!)
- We looked carefully at our joints, ankles, knees, hips, elbows and wrists. This helped us to put our armature in to the correct position.
- When two complimentary colours go together they look more colourful. For example the blue looks more blue!

ARMATURES
IMAGINATIVE DRAWING

- Once you've made the head and legs, you've got to add the arms. This was quite tricky but we all managed it with [artist] and [NG educator]'s help. This is what it will look like!
- Once the clay was on and we'd done the facial features, we had to wait for them to dry – it didn't take long!

EVERYTHING INCLUDING HAVING FUN!
LOOKING AT PAINTINGS FROM DIFFERENT TIMES

- We learned a new technique called thumbing. This is where you put the clay on carefully from a large blob you have.
- We'd learned so much about complimentary colours and how Raphael used them, we used them to paint our figures.
- This is a finished sculpture using blue and gold as complimentary colours.

HAVING LOTS OF FUN

B3.5 Drawing

STRING PRINTS

- We are going to talk about drawing and what we used to draw.
- We designed our boards on paper. Everybody had different ideas but these are some of ours.

This is what the finished painting looked like.

MAKING SCULPTURES
PRINTING ON CLOTH

- So as you know, the painting is called The Madonna of the Pinks. We have done drawing based on this painting with both [artists].
- It was also difficult because [the baby] wouldn't stay still! However we managed it in the end.

GOING TO THE BOWES MUSEUM
WORKING IN SMALL GROUPS

Our first task was drawing a still life picture of some carnations and complimentary cloths.

SEEING THE REAL MADONNA OF THE PINKS
WORKING WITH REAL ARTISTS

- We found it quite difficult to draw the creases in the material as well as the flowers.
- We used this drawing as inspiration for our own imaginative painting.

ALL OF IT!
PAINTING ON BOARDS

Because the Madonna of the Pinks is a portrait of two people – mother and child – we were given the opportunity to draw a real life mother and baby – [names removed] modelled for us.

MAKING THE SCULPTURES

LEARNING ABOUT THE HISTORY OF THE MADONNA OF THE PINKS.
We didn't use pencil this time. We drew with Conte Crayons or pastels onto special paper which really bumpy (textured).

ALL OF IT!

Appendix C

Research tools

C1   Response card for adults used at the Bowes Museum

C2   Response card for adults used in the gallery at the National Gallery, October half-term 2005

C3   Response card for children used in the gallery at the National Gallery, October half-term 2005

C4   Response card for adults used at the Family workshops at the National Gallery, October half-term 2005

C5   Response card for children used at the Family workshops at the National Gallery, October half-term 2005

C6   Questionnaire for participants in Teenage workshops at the National Gallery, London, October half-term 2005

C1. Response card for adults used at the Bowes Museum

(Front)

RAPHAEL'S
MADONNA OF THE PINKS

We are interested in what you think about the Madonna of the Pinks......

WRITE/DRAW HERE

Your age?* 0-3   4-11   12-16   17-24   25-34   35-44   45-54   55-64   65+

Your gender?*   Male   Female

How interested are you in art?*   Not at all   A little bit   Very much

Your postcode?*

* This information will only be used so that we can learn more about our visitors

Please Turn Over...

(Back)

Yes

No

Are you willing to be contacted by a researcher to give us more information?

If yes, please can you give us the following details so that we can contact you:

Name

Telephone

Email
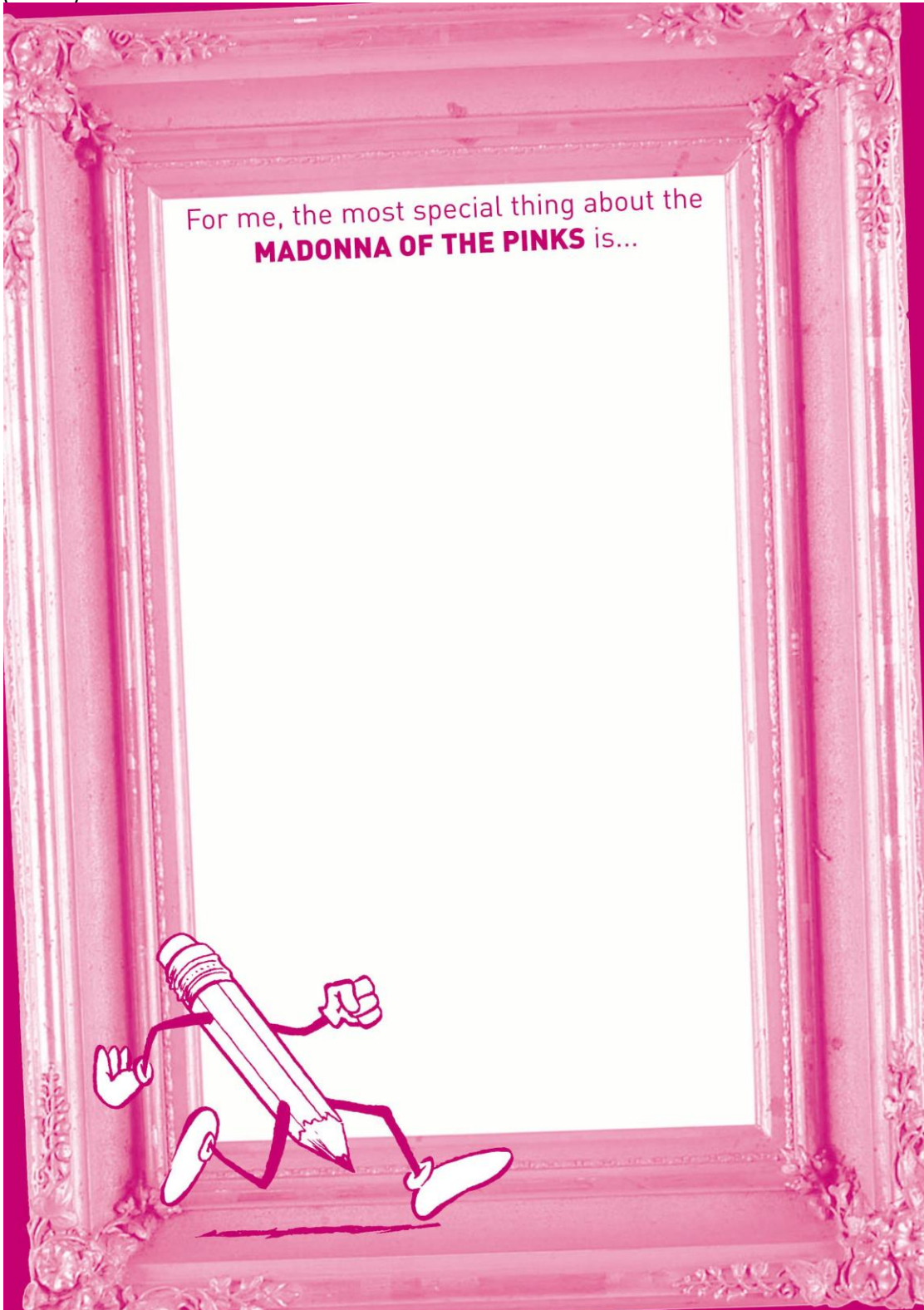
Thank you very much! Your comments will help us to understand better how people feel about the paintings in our collections.

RCMG
Research Centre for
Museums and Galleries

University of Leicester

C2. Response card for adults used in the gallery at the National Gallery, October half-term 2005

(Front)

(Back)

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C3. Response card for children used in the gallery at the National Gallery, October half-term 2005 [9]

(Front)
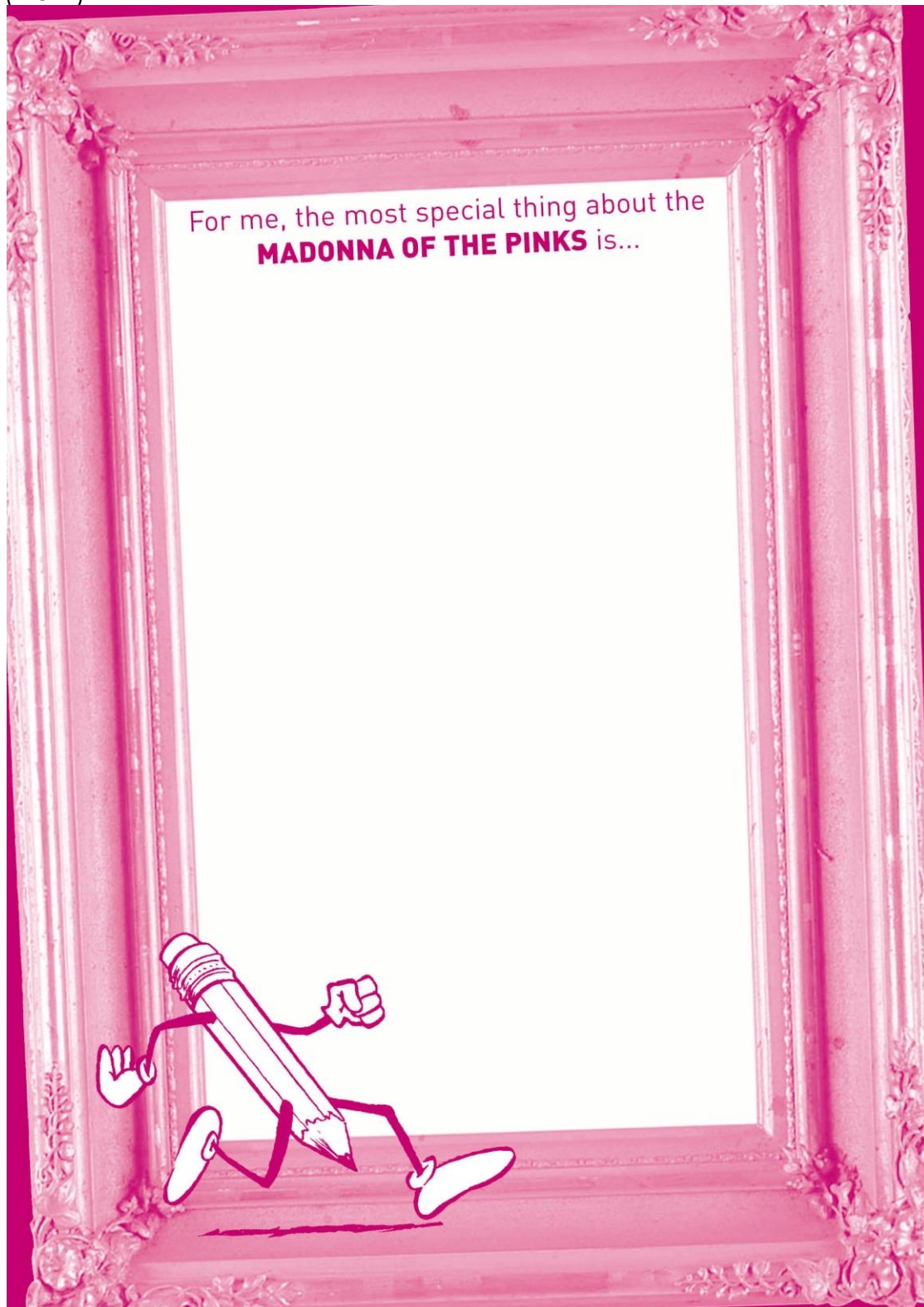
For me, the most special thing about the
MADONNA OF THE PINKS is...

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(Back)

This information will only be used so that we can learn more about our visitors

RCMG
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Museums and Galleries

Age ⚪

Are you a **Boy** ⚪ **Girl** ⚪

Have you visited with:-

Family ⚪

Friends ⚪

Group ⚪ (like after school club)
What is the name of your group? _____

Where do you live?

Village ⚪

Town ⚪

City ⚪

What is the name / postcode? _____

C4. Response card for adults used at the Family workshops at the National Gallery, October half-term 2005

(Front)

(Back)

C5. Response card for children used at the Family workshops at the National Gallery, October half-term 2005

(Front)

For me, the most special thing about the
MADONNA OF THE PINKS is...

(Back)

C6 Questionnaire for participants in Teenage workshops at the National Gallery, London, October half-term 2005

We'd like to hear about your experiences today….

Have you learnt any facts about the Madonna of the Pinks today?

Yes □ No □

Please tell us what…

Do you understand the painting better now than when you first saw it?

Yes □ No □

Please tell us how…

Have you learnt any new skills today?

Yes □ No □

Please tell us what…

What difference has coming here today made to you?

Do you visit art galleries? Often □ Sometimes □
Never □

Do you visit the National Gallery? Often □ Sometimes □
Never □

How interested are you in art?   Interested □   V. Interested □
                                          Extremely Interested □

Do you do art in school?   Yes □ No □

Do you do art out of school?   Yes □ No □

Is your family interested in the arts? Yes □ No □

If so tell us how…

Name:

Address and Home Ph. No.:

Age: **Gender:**   Male   Female

Ethnicity: White □   Mixed □   Black or Black British □
                     Chinese □   Asian or Asian British □

Name and Address of School:

Are you willing to be contacted by a researcher to give us more information? (We would contact your parents first for their permission)

Yes □   No □

Thank you very much! Your comments will help us to understand better how people feel about the paintings in our collections.

You can find out about us at http://www.le.ac.uk/ms/rcmg/rcmg.htm

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Appendix D

Coding tree for the QSR N6 analysis