



NATURAL HISTORY MUSEUM
DINOSAUR EXHIBITION
Formative Evaluation

Trail

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1.0 Aims

This evaluation intended to discover how effectively the planned trail clues work.

The aims were to find out the following:

- Are the levels of the clues right for the age group of 7+
- Can visitors find the mystery dinosaurs if they randomly choose 2 clues?

2.0 Methodology

The evaluators were:

- Helen O’Riain
- Kate Pontin

Dates data gathered:

- Saturday January 28th with family groups
- Monday January 30th with school groups

Tools used were

- 3 sets of dinosaur clues which result in the participant guessing which dinosaur they have clues for tested on children between the ages of 7 and 11 (Appendix 1).
- A brief accompanying interview which asked about the activity (see appendix2)
- A variety of card selections were made. Some children chose 2 (13), others 4 (9) while others had all five (24) but with variations for particular clues.

Sample

Total: 46

Age range 5-11, but most aged 8 (30)

Mixture of girls and boys

Nine families

Schools: Montem Primary School, 7 and 8 year olds

New Kings primary school, 8 and 9 year olds

3.0 Results

Did participants choose the correct dinosaur?	27 chose the correct answer, sometimes by chance and with 3 people with help from their family. (56%) 19 got it wrong although they were frequently sure that they were right!
Did they enjoy the activity?	All except 3 people enjoyed doing it.
Was it too difficult	Many said they found it easy or

	ok, even if they didn't get the right answer. Perceptions were of something they could do. Ten found it quite difficult
Could they use only 2 cards to identify the dinosaur?	Of those using 2 cards 8 out of 13 managed to get the correct answer. Having a picture did not seem to have a significant impact on getting the correct answer within this sub-group .
Did the picture help	In discussion children explained that they found the picture helpful. Some children finding the word clues difficult to read and understand. As a result some guessed at the answer.

Possible title	Numbers with a preference
Junior Palaeontologist	
Dinosaur Detective	3
Mystery Dinosaur Trail	6
Fossil Fact Finder	4
Dinosaur Hunter	1
Dinosaur Discovery	5
What Dinosaur?	1
Dino Jaws Trail	2
Other suggestions	

Not all children had an opinion and were rather overwhelmed by the list. Some children had problems reading and so it was read to them. Even so many found the choice un-exciting. This may be because they had had enough of being interviewed (as we did this at the end). Those with a preference voted as shown above. They liked the words mystery and discovery.

3.1 Issues raised by participants

- The first card is the most useful card and helped children make a critical decision about the type of diet.
- The pictures are very helpful and in particular the drawn one. The fossil pictures were not so easy to understand
- The written clues were not always easy to read. Some children had difficulties with some of the words such as dinosaur and thumb. These children were largely those with reading problems
- Many children had problems understanding concepts.
 - For example the difference between leaf shaped teeth and diamond ones – a picture here would be good

- It was hard to see on the dinosaur if it had a strong bite or a weak one!
- For some children there were too many clues and they got fed up with reading them. In particular no 4 had too many clues on it.
- Some managed to read the clues but did not actually picture what they meant – eg the guts one
- Cards with information they found difficult or found superfluous were forgotten about. This included the card about the guts.

3.2 Issues raised by evaluators:

- As children may only access a random card all cards need to have diagnostic information and stand-alone as much as possible.
- Are the children going to have to remember the clues or will their ticket barcode provide a summary of information when they are about to choose the dinosaur? Many found it difficult to hold the information they had read just for the short time we worked with them.
- Does it matter if they get it wrong – will they still get a certificate?

4.0 Summary and Recommendations

- The trail was popular and I think will be even more so when using a barcode type system
- However with a crowded room many are not going to access all the cards
- With the variable reading and understanding skills seen we feel it is important that visual clues are prominent eg the fossil evidence and the picture and also visuals of the teeth.
- Written ones need to be simple such as card number 1.
- Each card needs to have diagnostic information and need to be able to stand alone as much as possible, if a correct answer is critical. If a child only accesses one clue they need to be able to make a reasonable stab at the answer.
- How are the children going to remember the data – will it be fed back to them when they get to choose the answer? If not many will forget the information they have collected.

Appendix 1 concept & clues

Your dinosaur ate meat.

Your dinosaur had a strong, slashing bite for tearing up meat.

Your dinosaur had very sharp and narrow curved claws.

Your dinosaur had very sharp, curved teeth.

No stomach contents for your dinosaur have been found.

Your dinosaur had sharp claws for catching and holding other animals.

Your dinosaur had short guts.

Your dinosaur had jaws full of sharp, curved teeth.

Your dinosaur grabbed hold of its victims with this



Your dinosaur grabbed hold of its victims with this



Your dinosaur ate plants.

Your dinosaur had a strong bite for chopping and grinding tough plants.

Your dinosaur had a thumb spike and hoof-like 'claws'.

Your dinosaur had many diamond-shaped teeth.

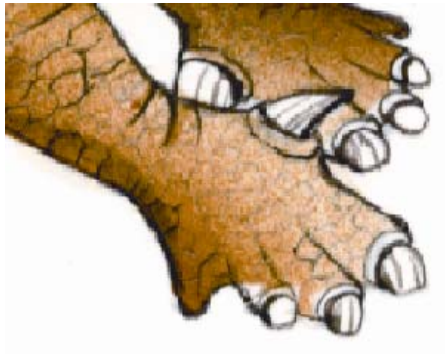
No stomach contents for your dinosaur have been found.

Your dinosaur had a flexible little finger for grasping food.

Your dinosaur had quite big guts.

Your dinosaur had a toothless horny beak at the front of the mouth and teeth at the back.

Your dinosaur grabbed food with this



Your dinosaur grabbed food with this



Your dinosaur ate plants.

Your dinosaur had quite a weak bite for grabbing plants.

Your dinosaur had rounded, blunt hoof-like 'claws'.

Your dinosaur had small, leaf-shaped teeth.

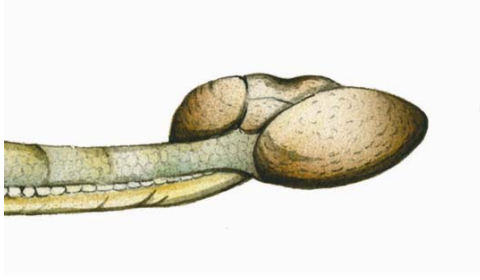
No stomach contents for your dinosaur have been found.

-----Your dinosaur walked on its hands.

Your dinosaur had very large guts.

-----Your dinosaur had a flattened skull, and a toothless horny beak.

Your dinosaur protected itself with this swinging



weapon

Your dinosaur protected itself with this swinging weapon



Appendix 2

Natural History Museum: Trail evaluation

We are testing out a trail for our new dinosaur exhibition. Would you help us by having a go. You have to try and guess the dinosaur from a series of clues. We will show you some pictures of dinosaurs to choose from at the end.

Approach

Shown only 2 cards	Shown all cards with a picture	Shown all cards without a picture
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Question	Visitor 1	2	3	4	5	6
2 cards, picture or all						
Age						
Other family details.						
Can visitor find the identity of the dinosaur						
Do you like this sort of activity						
Is this one too easy ?						

Appendix 3

Possible names for the digital trail

1. Junior Palaeontologist
2. Dinosaur Detective
3. Mystery Dinosaur Trail
4. Fossil Fact Finder
5. Dinosaur Hunter
6. Dinosaur Discovery
7. What Dinosaur?
8. Dino Jaws Trail
9. Other suggestions