



**Antarctica Exhibition  
Formative Evaluation of Computer Games  
Skidoo  
Part Two  
Natural History Museum, London**

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## **1.0 Introduction**

**This document provides a short report on the second formative evaluation of one computer activity, snowmobile, for the temporary exhibition on Antarctica (2007).**

1.1 The aims of the evaluation are to assess the effectiveness of achieving exhibit aims but also to assess the logistics of using the computer game.

The exhibit aims are that visitors will:

- have fun playing the skidoo game
- know there are meteorites in Antarctica
- be surprised by the unfamiliar Antarctic landscape

Key messages are:

1. Antarctica is an ideal location to find meteorites
2. researchers use skidoos to look for meteorites in the Antarctica.
3. research in Antarctica involves exploration and navigation.
4. riding a skidoo is fun!

## **2.0 Methodology**

Family groups were used to pilot the computer game skidoo on the 4<sup>th</sup> April in the courtyard space in the Natural History Museum.

Participants were given a limited brief introducing the exhibition and the testing process but not the activity itself.

Interviews and observations were of 11 boys and 10 girls aged between 5 and 11.

### 3.0 Results

Please see appendix 1 for full set of results from the participants.

The table below sets out a summary of findings from the interviews and observations.

Question/observation factor	Summary of feedback
1 Was it fun	Participants found the exhibit great fun and many said it was their favourite out of the exhibits they tested. Some had an opportunity to have a second go and would have happily stayed even longer!
1b Why?	They enjoyed the realistic nature of the activity and the speed. They enjoyed exploring for meteorites and gaining points.
2 What was the activity about? (Check for learning about meteorites)	<p>Nearly all participants understood it was about collecting meteorites. Only a few younger ones did not understand this and thought they were collecting rocks. Two boys also were so excited that they did not read the instructions very much and just launched into the activity.</p> <p>Most children (except a few younger ones) already knew that meteorites were from out of space but were unaware that they could be found in the Antarctica.</p>
3 Did you understand what to do (use the controls)?	Nearly all the children understood how to use the controls and had no issues at all. A couple of children were not sure what they were looking for (ie what the meteorites would actually look like) and one didn't understand that you have to drive over them.

4 Did you hit any obstacles? Was this fun? Did you lose any meteorites?	They loved meeting the obstacles and enjoyed the challenge of negotiating them. A few managed to have crashes and lose meteorites. Of these some did not see the meteorites coming out of the snowmobile.
5 What did you think of the scoring system?	This was easy and logical for them.
6 Did you know why the meteorites were different colours?	Most realised they were different colours and often suggested the idea that this was because meteorites could vary. One child did not notice they varied and <b>one child was colour-blind and thus could only see grey.</b>
7 Did the map help you?.	A few used the map but most did not even notice it. Of those that did only a few were able to use it in a planned and organised way.
8 Did you understand why the game ended when it did?	They all realised they had had their turn on the game. Only a few were aware that this was because they had run out of fuel. However all were happy with the length of time the game gave you and showed no surprise when it did end.
9 Did you discover how to find out more at the end? What sorts of things would you like to see online??	<p>None of the children bothered to read the text after seeing their score. One of two parents pointed out the information but by and large they were not aware that there could be a follow-up on the internet. They were so excited with the score that their interaction ended there and some had already wandered off by then as they had already worked out from the tally what their score was.</p> <p>Of those that were asked about whether they would like to find out more on the internet some said they didn't have a computer but the others were interested – either for more of the game or for</p>

	more about the topic in general.
10 What did you feel the exhibit was asking you to become/do?(working with scientists)	This question attempted to ask about who they might be doing this activity. Some were unable to truly engage with the question but many explained they felt like explorers. A significant minority understood that they were being scientists and studying the specimens they were collecting.
11 Did you find out anything about meteorites? Do you know what they are?	Most children (except a few younger ones) already knew that meteorites were from out of space but were unaware that they could be found in the Antarctica.

## 2.0 Recommendations

- The activity works well and is very enjoyable.
- Only a few used the map but the rest of us took all our concentration just to steer the snowmobile! Many participants did not realise that the game ended because the fuel had run out but they were not concerned about this.
- Children either felt like explorers or scientists while doing the activity.
- Learning is limited to understanding that meteorites can be found in Antarctica and that they can vary. It is a shame that the original information is now lost all together but perhaps this can go on the Internet? However this feature was not known about as most children did not read the last piece of text, as they were excited about their success. **The availability of the Internet service needs to be made clearer elsewhere to attract users.**

## Appendix 2

### Snowmobile Formative Evaluation Part Two

#### Questions and observations

#### Observations

These were undertaken of the first group of participants to understand how they used the exhibit.

	Start game	Use controls	Meteorite colours	Scoring understood	Timing	Enjoy collisions	Lose meteorites	Read about online content
<b>1) Boy aged 4</b>	√ with help from carer	√	Needed help to see what to collect	√	x	√	Didn't lose any	x
<b>2) Boy 8</b>	√	√	No problem	√	Appeared to be no issue	√	"	
<b>3) Girl 9</b>	√	√ reverse button not a lever	"	√	"		"	
<b>4) Girl 9</b>	√ watched someone	√	"	√	"		"	Would want to if could but didn't see
<b>5) Boy 10</b>	√	√	"	√	"	√	"	Didn't see
<b>6) Girl 8</b>	√	√	Is that one – what do you press Didn't know to go over the meteorite	√	√	√		So excited about score didn't stop to read it
<b>7) Boy 11</b>	√ wanted	√		√	Thought	√	√	

<b>German</b>	the German text!				game over			
<b>8) Girl 11</b>	√	√	Didn't know	√	Yes run out of fuel			Didn't notice
<b>9) Girl 10</b>	√	√	√	√		√		If had a computer I would like to look but didn't see the text.
<b>10) Girl 11</b>	√	√	√	√		√	√	Didn't notice
<b>11) Girl 11</b>	√	√	√	√	Didn't see the fuel gauge Just thought time had run out	√		Didn't know what going online meant – doesn't use computers
<b>12) Girl 6</b>	√	√	√	√	Didn't know about fuel	√	√	Didn't notice
<b>13) Girl 9</b>	√	√ button wrong	X wasn't clear	√	√	√	√	Didn't notice

## Interviews

Question	Did you have fun? Marks out of 10	Why was it fun?	What was the activity about?	Did you understand what to do?	Did you enjoy the obstacles?	Was the scoring system ok?	Did you notice the meteorites were different colours?	Did the map help you?	Did you find anything out?/ did you feel like a scientist/ internet?
<b>1) Boy 4 Italian</b>	Loves it – did it many times in between siblings No English	√	N/k	√	√	√	N/k	N/k	N/k
<b>2) Boy 8</b>	Really good 10/10	Going fast and slow	Get some rocks from the sky	√	√	√ got a point	√ orangey one	X saw it but didn't use	Already knew about meteorites But didn't know from Antarctica
<b>3) Girl 9</b>	9/10	Felt like you were there	Getting rocks	Difficult to manoeuvre when go fast	√	√	They were different	Too small	About meteorites
<b>4) Girl 9</b>	7/10	Needed to get points goes fast	Get rocks that found	√	Drove carefully	√	Maybe reds can fall out	√	Found our about red rocks
<b>5) Boy 10</b>	10/10	Lots to do I like the ice	Rocks fallen to the earth Send back to the lab To be examined	√	no	fine	From different parts	no	Being a scientist. Found out about meteorites

<b>6) Girl 8</b>	√	Hard to control	Going fast Feel like a snowmobile	Hard to control	√	√	Different types	x	Only thought about being a scientist when prompted But felt had learnt about meteorites Rocks from space landed on ice
<b>7) Boy 11</b>	10/10	The simulation of being on snowmobile	Collecting meteorites	Do you drive over them? Big lump of rock not one!	fun			Didn't see it	An adventurer rather than a scientist Easier second time
<b>8) Girl 11</b>	8/10	Steering was fun	Find meteorites Collect tests A scientist	√	√	√	From different places	no	A scientist Knew about meteorites but didn't know you can find them in Antarctica
<b>9) Girl 10</b>	10/10	Fun when you work out what to do	Drive around and try to get meteorites – they are from space	√	√	√	Yes – maybe some from nearer the sun	x	Thought I was a scientist yes. Found out about meteorites
<b>10) Girl 11</b>	8/10 brilliant	Driving it	Get rock things	√	√	√	Didn't know why	x	Felt like an explorer, Knew about meteorites
<b>11) Girl 11</b>	8/10	Really god fun steering	Steer and collect lumps	√	√	√		x	Felt like an archaeologist
<b>12) Girl 6</b>	9/10	Going	Find things	Not sure	√	√	√		Felt like an explorer

		really fast		what looking for needed help					
<b>13) Girl 9</b>	5/10 – but loved it!	Control snowmobile	Find meteorites		√	√	Some still hot		Become a scientist Knew about meteorites
<b>Shorter interviews</b>									
<b>15) Boy 9</b>	15/10	About meteorites – I like dinosaurs and they were killed by them		Too fast to read Not sure what to do		√	√		Felt like a racer and not a scientist Much clearer in second go – less collisions
<b>16) Boy 6</b>	10/10			√	√				
<b>17) Boy 11</b>	10/10		To collect Find out where they are	√	√	√	√	Used map a little bit to check sometimes	Already knew about meteorites But didn't know at Antarctica Didn't read about online Felt like an explorer – exciting
<b>18) Boy 10</b>	√ 10/10	Fun Exploring the snowy		The big rocks were not meteorites	√	√	√	x	Didn't read last sentences Knew about meteorites already

		land Very realistic		Can I get more fuel?					but didn't know found in Antarctica. Would look at internet Knew about meteorites before came. Wiped out dinosaurs. Felt like an explorer and not a scientist
<b>19) Boy 9</b>		Goes fast Like collisions		Didn't read instructions – too excited Knew stopped when ran out of fuel.	√	√	√		
<b>20) Boy 9</b>	√			No problem	√	√	Didn't realise lost them when crashed again Colour blind so all looked grey!	Used map – very careful second time and learnt more about what it was about	Felt like a scientist finding out about meteorites.
<b>21) Boy 10</b>		Knew what to do but not sure	Rushed to have a go – didn't really read text – too						

		it was meteorit es he was collectin g	excited						
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