

White Rook Projects



Interactives and Activity Boxes for museums, galleries and historic sites

White Rook Projects designs and manufactures interactive installations and collections to encourage learning in museum and heritage environments. Every setting has different needs depending on audiences, surroundings, staff input and budget and we specialise in providing bespoke activities. Our aim is to produce activities which link the learner to the setting or object, to provide interpretive methods to suit a range of learning styles and to achieve pre-defined learning objectives. We can carry out formative and summative evaluation to ensure that the interactives meet audience needs and remain relevant. We provide supplier lists, replacement costs and management plans to enable you to maintain the interactives, and / or would be happy to discuss maintenance contracts if you prefer. The following projects provide an insight into our approach.

Dorset and the Sea

Dorset County Council commissioned two activity sets to travel around the county's 40 museums. The sets were linked to an educational website called 'Dorset and the Sea', which explored the county's history of smuggling and shipwrecks. They were in two specially made containers – a 'smuggler's barrel' and a 'sailor's chest', each containing some 15 separate activities – and were designed for use by families with children between 3 and 11 years old. Before production, the activities were evaluated with family groups. In addition to more 'regular' activities such as bespoke costumes, jigsaws and handling collections, the sets included more unusual activities, listed here:

Smugglers' barrel

Smugglers' 'call my bluff' card game

In the history of smuggling it's hard to separate fact from fiction! On one side of the cards is a picture of a person, activity or object and on the other a description. One person reads out the description and the other(s) have to decide if it is true or false.

Modern smuggler's suitcase

A suitcase containing items to show some of the techniques which modern small-scale smugglers use to bring contraband into Britain – a hollowed out shoe heel, book and a 'walkman' with contraband in the battery compartment.



18th century Dorset dialect

A CD player in the barrel with local oral history recordings of dialect as spoken at the time of the smugglers.

Smuggler's job interview

A 'smuggler chief' is recruiting members of his/her gang. There is an interview card giving the requirements for the job and 14 character cards. Two or more people can play the game.

Shipwreck activities in the 'sailor's chest'

Wreck detective

A box with real items brought up from the wreck site of the 'Earl of Abergavenny' (1805), with an information booklet containing documentary evidence and questions and handling activities. A fictionalised account of the wreck based on historical sources made specific reference to the items in the handling collection, and was designed to be read out to children by parents.

Hold fast!

Sailors had to know how to tie knots. Using instructions in the box, users tie knots with the cord. A red and a green cord is attached to the chest for reef knots.

X marks the spot

A map of the Dorset coast in the 18th century from the Dorset Record Office showing the wreck sites, with ship models and rock samples. You have to place the right ship on each wreck site, and put rock samples at the right places along the coastline.

Signalling flags

Bring the gallery to life by hauling up a message on a rope, using naval signalling flags. The activity uses authentic chandlery including pulleys, cleats and shackles.

Feedback:

'Thanks again for all your hard and creative work on the boxes - I think they're great and I'm sure they will be a success' – Janet Bell, Dorset County Museums Officer

'My overall view, and that of all the stewards participating in the scheme, is that the exhibit was a resounding success. A great many visitors came to the museum who otherwise may not have visited, particularly children, and many of them were local residents as opposed to tourists.' – Peter Andrews, Curator, Blandford Museum



Dorset County Museum, Dorchester

The county museum commissioned three project carts to encourage family learning in the galleries. Each cart was intended to stand out in the (rather traditional) galleries and make the statement that children were welcome and learning and fun were encouraged. The museum already had a strong LEA-funded education service and the carts were aimed at family visitors. The list below shows some of the more unusual activities, but there were also costumes, spelling games, jigsaws and handling sets.



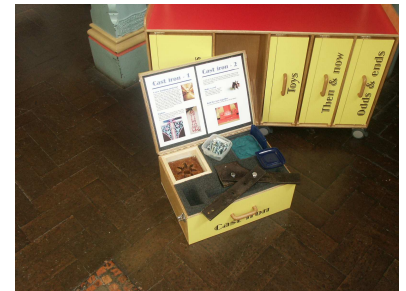
Victorian gallery

Cast iron

To encourage children to look at the architecture of the gallery. They use an example of ironwork from the building make a mould in a tray of modelling dough, or create their own 'ironware' from a hard mould based on a local 19th century wooden pattern. They can also use a range of nuts and bolts to join two drilled and tapped pieces of cast iron.

Then & now

A trail with photo cards of modern appliances etc. and activities. Children have to search the gallery for the equivalent Victorian artefact. Supported by a jigsaw of a Victorian scene.



Archaeology gallery

Patterns

Using a pot-shaped tray of modelling dough, children select stamps based on designs on Neolithic, Bronze Age and Roman pottery in the gallery to create their own design.

Bronze axehead

A tray for casting a Bronze Age axehead. Axeheads and casts are on display in the gallery.

Feedback:

'Wonderful! The museum looks like a circus!' – Richard de Peyer, Curator

Royal Albert Memorial Museum , Exeter

A set of 12 activity boxes for use by 3-7 year olds, either within school groups or on family visits. Besides extending its informal learning facilities, the museum wanted to develop the educational use of three of its galleries which were underused by children: the World Cultures gallery, Natural History gallery and Decorative Arts gallery. The museum wanted to use items on the open market where possible so that replacement was easier. The boxes had just been installed when the museum was nominated for the Guardian's 2003 'Kids in Museums' award.

Decorative Arts gallery

Gears and clocks to study mechanisms and time in the clocks gallery.

A tea set to play with next to the display of 18th century silver tea services.

Colour paddles for children to interpret the glass displays by playing with coloured light.

Collecting sounds in the clocks gallery – children put pictures of various clocks into boxes labelled with sounds ('ding', 'tick', 'whirr').



World Cultures gallery

Storytelling activities – parents are given a variety of stories related to objects on display and children are encouraged to make up their own, using a 'wand' as their storyteller's staff.

Felt faces – getting young children to make up their own 'mask' design using felt noses, ears, eyes etc. on a colourful face template.

Make your own **Indian bead design** – an activity for parents while children are involved with something else!

Language cards – the same words and phrases in English and 7 ethnic languages represented in the galleries.

Genuine African **musical instruments** to play in the galleries.



Natural History gallery

Follow the footprints – children put animal footprints on a trail around the gallery leading to their owner.

Animals in rôle – children dress up as animals and parents have discussion sheets about 'are humans animals?' looking at arms, feet, eyes, bones, etc.

Camouflage collage – a game in which photo cards of a range of animals in the gallery chosen for their camouflage are placed against the right natural background.

Colourful animals – children create a brightly coloured bird or butterfly in a template, using acetate and iridescent film.

Romans gallery

Roman costumes – to overcome the problems of space and creasing, children can try on masks and look at themselves in a mirror in the lid of the box. There is also a replica Roman helmet, with replica 'Vindolanda tablets' to assist rôle play.

Roman lyre – a specially made replica lyre as played by the Romans, with strings in a standard octave and a tuning key.

Latin flashcards – activities and puzzles using cards with Latin words on one side and pictures on the other, to make up sentences; also Roman numerals.

Roman games – authentic, 'home made' Merels and knucklebones games.

Egyptians gallery

Materials that last – or not! – a feely bag exercise with a range of different materials including pottery, metal, wood, leather, plastic, etc. to lead to discussion about decay – a big feature of Egyptian archaeology.

Hieroglyphic Snap! – a version of the familiar card game to assist in learning the range of basic hieroglyphics.

Costumes – as with the Roman box, a range of masks to put on and look in the mirror.

Wrap a mummy – how to make this activity less grisly? We used a cuddly toy of a bird and added all the essentials including canopic jars, amulets and bandages.

Comments from parents:

'Thank you! 2 hours just flew by! Well worth paying council tax for!'

'These were exceptionally good boxes suitable for both my six year olds and my two year old – thank you!'

'This is great! My children have never spent so much time in this gallery, while the five year olds played my 9 year old sat and sketched – for the first time!'

Evaluation report 2005:

Findings: *'there is no doubt that the activities enhanced [family] learning experiences and positively influenced the way they regard the museum as a good place to visit both for the children to learn through play and – for most families observed - for all the family to share learning experiences together.'*

Recommendation: *'To maintain the Activity Boxes for future use, as they support and enrich learning in the museum and encourage family visits and return visits, and to build on the excellent reputation that the Boxes are acquiring among families.'*

‘Wrapping the Globe’ at the Royal Albert Memorial Museum , Exeter and The Museum in the Park, Stroud

Two activity boxes to provide interactive learning opportunities for Key Stage 2 children visiting the ‘Wrapping the Globe’ temporary exhibition (2004-5), which explored the impact of the West Country textile trade (especially the fine woollen cloth used for British army ‘redcoat’ uniforms) on native peoples and the evidence of this trade in today’s ethnographic museum collections. The activities were designed to meet National Curriculum requirements in Design & Technology.

Weaving loom – a small frame loom and range of fibres to experiment with.

Carding – hand carding combs to try out carding with two different types of fleece.

Handling collections – materials available to Native Americans; examples of historic processed textiles and goods; examples of modern textiles.

Choose a costume – design a costume for a British soldier and a Native American, using a range of textiles beneath a costume template.

Shrink the world – using a world map, children measure the time taken to travel from England to other parts of the world in 1850 and today.



Bill Douglas Centre for the History of Cinema and Popular Culture, University of Exeter

An activity box to extend the services for family and community users, incorporating a fascinating selection of toys and games around the museum's collection of 18th-20th century optical toys. This collection is a classic case of the need for interactive interpretation: the originals in the glass cases were highly interactive but cannot be handled, so this box provided an essential further level of interpretation for visitors. See www.billdouglas.org for more information.

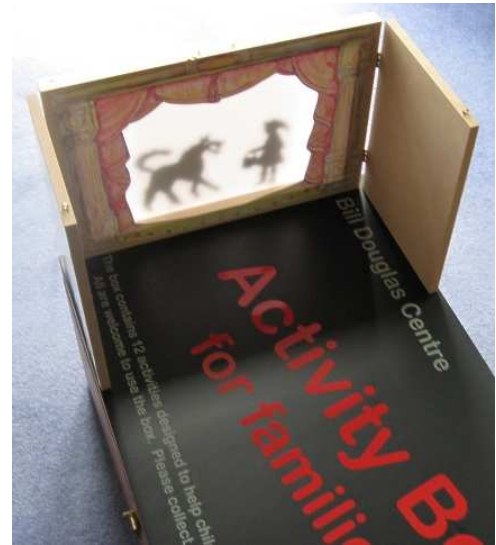
Shadow show – a proscenium arch backlit so that puppets can be used in a story (right).

Fun with mirrors – experiments with curved mirrors and kaleidoscopes.

Making pictures move – the wonderfully named Victorian toys including Phenakistoscope, Taumatrope and Zoetrope, followed by flipbooks which were the immediate precursors of early cinema.

Seeing in 3D – from the early Perspective Box through to the Stereoscopic viewer and Viewmaster and the more recent 3D experiments with coloured glasses.

Mystery objects and gallery close-ups – activities encouraging close observation of objects to gain a better understanding of their individual history and original function.



Topsham Museum

As part of the same Renaissance-funded community museum project as the Bill Douglas Centre, this local museum with strong maritime links (Topsham was the original port for Exeter), this contract provided family learning provision in two of the newer galleries. The boxes included activities based around costumes, maps and plans, signalling flags, sailmaking, boatbuilding, traders' marks, Victorian education and the natural history of the Exe estuary. To fit in with the new design fit-out in the galleries, the activities were housed in a Victorian school desk and a 1930s suitcase (part of a display about Topsham's links with the wider world). Topsham Museum was nominated for the Art Fund Award for these new galleries in 2008.

St. Nicholas Priory, Exeter

Two replica Tudor chests containing family learning activities in this exquisite Tudor townhouse within the remains of a medieval priory in Exeter. The activities were in a historic setting rather than a gallery so the finish was more important, with games, costumes and music which formed part of the experiential interpretation of the building. Activities included:

Costumes – sets for boys, girls and mums, including handmade leather shoes to Tudor design. The chests incorporated perspex mirrors in the lids to enhance the experience;

Music – handmade replica Psaltery and Tabor, together with headphones and an MP3 player to experience Tudor music in an authentic setting (see right);

Games – Playing cards, Fox and Geese, 5-Stones and Ball-and-Cup, again offering a deeper experience of the historic setting.



Buckfast Abbey Education Centre

As a living Benedictine monastery, Buckfast is strong on education and the monks opened a special centre for use by schools. This was fitted with some 30 interactives designed for supervised but independent learning activities by 7-13 year olds. The activities include:

Archaeology

Rebuild a medieval window – beside stone tracery excavated at Buckfast, children use replicas, and the missing pieces, to rebuild the whole window, then use posters to date it.

Piece together the past – children reconstruct three broken (modern) plates and bowls inside casts made from the pottery before it was smashed.

Tiled floor – using designs from medieval encaustic tiles excavated at Buckfast, children design their own tiled floor, using individual and quarter-pattern tiles.

Building

Spiral Staircase – children place steps inside a ‘turret’ to show that a spiral staircase is a very simple structure, made from identical self-supporting blocks.

Build an arch – using actual size wooden blocks and a ‘former’, children build an arch over a gap and then remove the former and walk over the ‘bridge’.

Flying Buttress – children build a model of a church which will only stay standing when flying buttresses are used.

Art, Music and Crafts

Organ – a working model of a pipe organ, complete with bellows, perspex-fronted air reservoir, keys, stops and a combination of wood and metal pipes.

Illuminated Letter – on a ‘chained book’ in a ‘medieval stall’, children use attractively painted pieces of wood to create a letter of their choice.

Gregorian Chant booth – a booth containing headphones where a child can sit alone and listen to the beautiful sounds of Gregorian Chant.

Beehive tessellation – using hexagonal pieces, children ‘fill the beehive’, discovering how well the shapes tessellate at the same time as placing the pollen, larvae and honey in the right places in the hive.



Interactive model of the Parthenon for Weston Park Museum, Sheffield



A large scale model (approx. 3m long, 1.5m wide and 1m high – see pint glass for scale above) made from Jiffycell. The brief was to provide an exciting introductory activity for pupils visiting the museum to study Ancient Greece. The model comes apart and is designed for a group of 20 to 30 children to work together as surveyors, architects, clients, builders etc. to assemble the building. It consists of stepped bases, 46 columns, entablatures, pediments, 14 rafters and 10 roof panels. The brief also asked for the model to demonstrate some of the techniques used by the original Greek builders, so the columns are fixed with dowels and sockets and the entablatures are joined at the corners by a system of ‘staples’.



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