

school. This was to be a key factor in our planning.

We decided to undertake a full term project covering many areas of the curriculum using Thornton Abbey, our local English Heritage site, as a focus. I discussed our plan at some length with Nigel Aspinall, the Custodian. His knowledge of the site and obvious enthusiasm for our project were invaluable.

We agreed to use the visit to the abbey by Edward I in 1304 as a central theme within our topic because at about that time the main abbey buildings were complete, but the additional chapels and gatehouse had not yet been built. It was therefore a good example of the layout of a 'typical' abbey.

I have always believed that any school visit must have clear educational aims, be well planned and thoroughly researched and prepared. Despite this I have often felt frustrated because, following a visit, so many questions arise which really need a subsequent visit to answer satisfactorily. Usually financial constraints prevent such a follow up visit. With the aid of the Rural Schools Support Team, however, we were able to plan a series of short visits to Thornton and to other English Heritage sites.

We began by giving the children some background information about the life of monks and a general idea of life in the fourteenth century. We then made our first half day visit to Thornton Abbey. Nigel showed the children round the site and told them a little of its history. He took a great deal of trouble to involve the children and to encourage them to look for clues to the past in the evidence all around them.

We returned to school and it was decided that the only way to get a clear idea of what the abbey had looked like in its heyday would be to make a model. In

the abbey guidebook is the usual plan, shaded to show the dates when different parts were completed. This was a start, but a lot more information would be required to plan and build an accurate model. The children realised this so we began some serious research into monastic buildings of the Middle Ages using reference books. The children soon discovered that there were many different kinds of monks, and that building styles changed over the many years that were always needed to build an abbey.

At this stage we paid our second half-day visit to Thornton Abbey armed with sketch pads, rulers, tape measures and protractors. The children divided into groups to measure the site, make rubbings of masons' marks, examine the tile patterns and make sketches of details of the building and the one remaining significant part of the original abbey, the corner where the south transept meets the chapterhouse. The children were able to

measure the height of this feature by triangulation.

This information helped a little with planning the model but the children still had no idea how tall to make the central nave and presbytery aisles and the central tower of the abbey. They had become more observant since the first visit and had begun to notice features that they had not previously seen.

They noticed that the base of the presbytery pillars were square but those in the nave were octagonal. They realised that this was evidence of building work begun at different times, and that a doorway step was worn on only the right hand side, evidence of double doors. Already some of our aims in the project were being achieved, to encourage the children to ask themselves questions and try to find their own answers based on evidence. All the time the children were using reference books to gather background information on life in the

early fourteenth century.

We were now ready for our next visit. We found that Beverley Minster was built at about the same time as Thornton Abbey. The Minster church is still used and in excellent condition. When I approached the Verger he was very helpful and agreed to take the children up a spiral staircase into the roof space. There the children could examine leaded windows at close range and were able to see a tread wheel crane in operation. They examined the roof structure and the vaulting, looking down through a boss hole to the floor twenty five metres below, and began to understand some of the difficulties of the medieval builders working with wooden scaffolding and hurdles.

Outside the Minster building the children began to use their new found observational skills to notice roof lines and blocked doors and windows — evidence showing where abbey buildings had once stood and where alterations had been made. They noticed and sketched the elaborate decoration for later reference when decorating the scale model.

They made sketches and took photographs of the exterior of the Minster noticing especially the different patterns of windows built at different times. They studied the Minster floor plan and compared it with the existing building. All of a sudden they had a much better understanding of the Thornton Abbey plan. They realised that the pillars gave important clues to the shape of the building, marking the positions of the aisles and the central tower. They realised that the size of a buttress gives a clue to the height of the wall it supports.

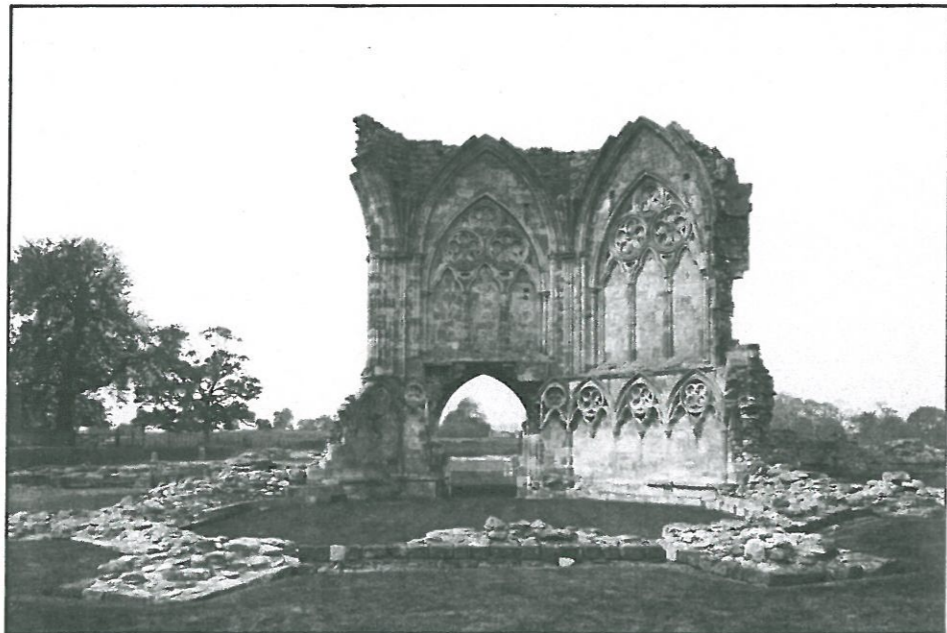
Construction of the model began. The building plan was broken down into mathematical solids. Cuboids and triangular prisms were made by different children from scrap cardboard. Careful and accurate measurement to the nearest millimetre was essential to ensure that the different parts fitted each other. When the structure of the abbey church was completed it was covered with photocopies of brick paper drawn by one of the children. Other children designed and drew scale size windows based on the design of the existing blank windows in the south transept and chapterhouse. Other groups constructed the other abbey buildings.

By now words such as 'presbytery', 'western range', 'frater', 'dorter' and 'transept' were a part of every day conversation. Serious discussions were held and even arguments broke out on matters such as whether the Abbot stayed in the western range after the gatehouse had been built, and whether or not faint lines on the aerial photograph were evidence of the site of the infirmary, a cloister fountain and a walled orchard or garden.

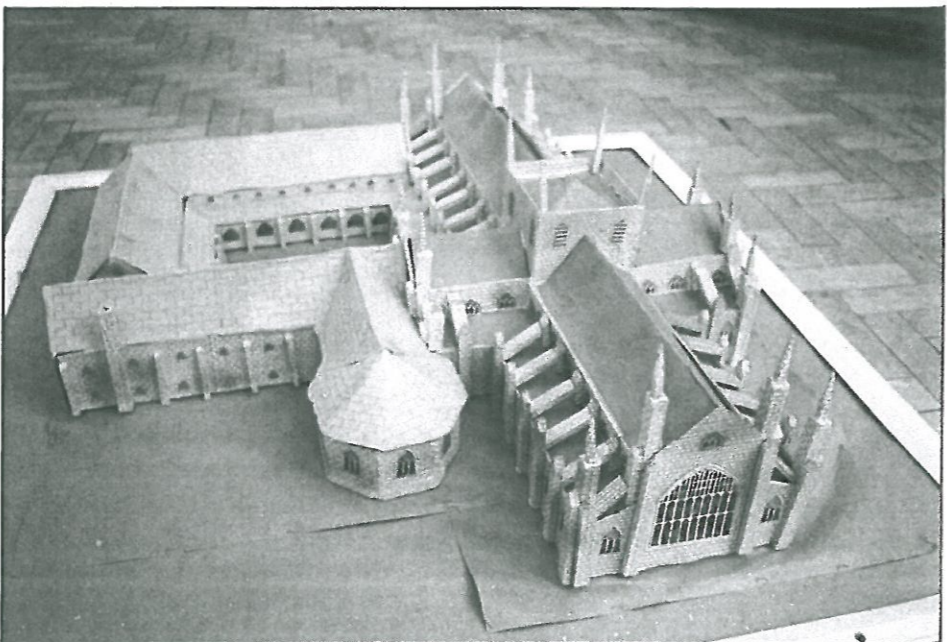
While all this was going on we had also been working on secular life in the fourteenth century. To give the children wider experience of life in the Middle Ages we took them to another English Heritage site, Gainsborough Old Hall. Once again the Custodian was extremely helpful when



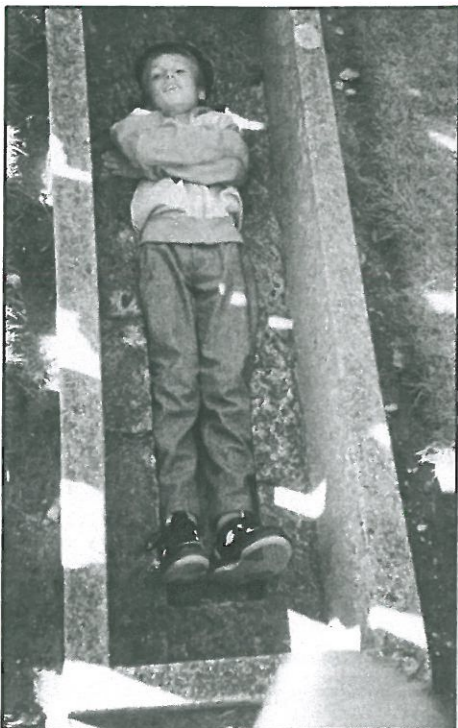
ABOVE: Scullions present the Pike in the Pond.
BELOW: Preparing for the re-enactment.



ABOVE: The ruins of Thornton Abbey, Humberside.
BELOW: Model of Thornton Abbey made from scrap materials.



BELOW: Grave testing.



out and written in prose and poetry about their experiences. They had learned the value of teamwork. We had all learned that your mind goes blank when a reporter pushes a microphone in your face!

Perhaps the climax of the project is best summed up by Matthew, one of our nine year old children, who wrote, 'I did

enjoy myself yesterday. It was the bestest(sic) day I have ever had. I loved the food that Mrs Tuck made for us. I wish I could bring that day back but I cannot.'

John Knight
Headteacher, East Halton County Junior and Infant School, South Humberside.

Thornton Abbey, Humberside, is 10m NE of Scunthorpe on a minor road N of A160. OS map 113; ref TA115190. This Augustinian abbey was founded in 1139 and has a magnificent 14th century gatehouse with ruins of the Abbey church and chapter house.

Tel 0904-658626 to book a free group visit.

Learning from Objects

English Heritage has recently published *A teacher's guide to learning from objects* by Gail Durbin, Susan Morris and Sue Wilkinson, a further volume in our Education on Site series. It suggests ways of analysing objects and includes a number of practical activities for teaching the skills necessary to get the most from a visit to a site or museum.

INVESTIGATING AN OBJECT

ASK QUESTIONS ABOUT

PHYSICAL FEATURES CONSTRUCTION FUNCTION DESIGN VALUE

HOW DO WE FIND OUT?

OBSERVATION RESEARCH/KNOWLEDGE DISCUSSION

CONCLUSIONS

The following are extracts from the book.

This book aims to:

- ★ show how the ability to interpret objects aids our understanding of the world
- ★ show that specialist knowledge is not essential to learn from objects
- ★ help teachers to make use of objects in the classroom and at sites
- ★ make objects central to the curriculum not simply classroom decorations
- ★ show cross-curricular applications and teaching techniques

Learning to Relate Structure to Function

The design of most artefacts is influenced principally by the use to which they will be put. Other influences are the aesthetic judgement of the designer, economic considerations and the availability and appropriateness of materials from which to make them. Current tastes and

preferences also have an influence. Children need to understand these fundamental points in order to be able to move to the higher levels of thought about objects.

Horses for Courses

Before children can be critical about a maker's choice of materials they need to distinguish and name different materials. Make a classroom collection of examples, eg. brass, iron, pottery, wax, wood, lead, marble, chalk, or ask the children to assemble one. Discuss the different characteristics of each material. You could experiment with them and test them for water resistance, hardness, conductivity, strength or weight. Discuss what each material might most efficiently be used for and then discuss the problems of finding suitable materials to perform specific tasks. This activity teaches an understanding of the characteristics of different materials.

What's It For?

Make a collection of similar artefacts where the function is not necessarily known, for example, tongs (eyebrow tweezers, fire tongs, sugar tongs, old wooden washing tongs, ice tongs) or brushes (hair, dog, teeth, wool-cards, hearth, bottle). Try to work out what each one was used for. Discuss the different materials used and why they have been chosen. Discuss the nature of the choices facing a maker.

The Conservation Game

This activity shows how some materials are more suitable for certain functions than others. It also illustrates the problems of conservation faced by museums and why some objects should not be handled. Make a collection of different materials, for example an eggshell, a piece of new white cloth, a piece of glazed cotton, a piece of white paper, a piece of clear plastic, a glossy photograph. Divide each thing in half and put one half in a safe place. Without explaining why you are doing it, pass the other halves round the class from hand to hand three times. Compare the two halves. What changes have occurred? Discuss how you might choose the material of something that was to be handled frequently. Might the class have handled things differently if they had been told to take care of them? Discuss the implications of your findings for museums that are trying to preserve objects for hundreds of years or to historians or archaeologists who are assessing evidence. The activity could be varied by burying objects to discover the consequences of damp or by leaving items exposed to the light.

Continuity, Change and Progress

Objects provide graphic illustration of continuity and change. The classic typological displays of flint tools, policemen's helmets or embroidered samplers are based on demonstrating the changes and similarities to be found over the course of time. You can also use objects in a more challenging way. Ask why changes have occurred and why objects have become obsolete. Why do miners no longer use Davy lamps? Why did the penny farthing go out of production? Why do we no longer use feather mattresses? How much time passed between changes? Why? Changes are never isolated. Children can look for the causes and the consequences. Why were gas cookers introduced? What effect did this have on home life, women, the design of houses, cookery and cooking equipment?

Objects show that progress does not necessarily mean benefit. Lead pipes brought people water supplies but also poisoned them. Double-glazed windows cut out draught but create new problems of condensation. A change on one front may cause several fresh problems which have then to be solved.

THINKING ABOUT THINGS

This book has emphasised the importance of observation; all analysis and deduction should stem from it and be based upon it. In this chapter we move from the visible to the abstract to deal with the selection of objects and issues relating to their use.

CHOOSING OBJECTS

Select the objects to use according to the points you want to make. Certain categories of object have particular strengths and weaknesses.

- Uniformly shaped, undecorated, other simple objects, eg. a flat dish, may look easy to describe initially, but their plainness can make it very hard to hypothesise about function or use owing to a lack of clues.

- Familiar household items have plenty of potential and are not discounted. They can be used to demonstrate the value of being able to see something with new eyes, and to show everyone else will not.

Close observation

Through careful observation of objects it is possible to work out details of their method of construction and manufacture.



This pot shows clear signs of being made by hand. It is uneven and not completely circular. The rounded base has been done by pressing sticks, bones or fingernails into the clay.



The even profile of this jug shows the use of a wheel to shape it. The mottled surface, characteristic of salt-glazed pottery. During the course of firing salt is thrown in the kiln, which vapourises and then is deposited on the surface of the pot in the form of a glaze.



This medieval trowel is made from wrought iron. The construction of the handle from thin, twisted strips is characteristic of this method of shaping, which is achieved by heating and hammering the metal.



These modern pincers are made from cast iron. The raised trade mark and the lines running down both sides of each handle are signs that a mould was used. The circular section of the handles is achieved through casting rather than hammering and the solidity of the object is another characteristic of the process.



Wheel-made pottery can be recognised by its even appearance and its small horizontal lines running round the pot where the grit in the clay dragged against the potter's hands. The base is generally flat where it was in contact with the wheel.



This glass is hand-blown. The clues are the uneven thickness of the glass and the separate application of the rim and handle. The rim has been cut and not rounded off as it would have been in a mould.



These bottles, showing different stages of production, were made in a mould. The lettering has a soft, rounded appearance common in mould-made products, the general shape of the bottles is regular and in some examples you can see the line where pieces of the mould joined. Sometimes mould marks are smoothed off but it is often possible to feel them even when they can no longer be clearly seen.

A teacher's guide to learning from objects costs £3.50 and can be ordered by post. See the **Education on Site** section in our catalogue **Resources**.

History and the National Curriculum

In issue 8 of Remnants English Heritage Education Service commented on the Interim Report for History. Now that the Final Report has been published at last, we will be sending the following comments to the Department of Education and Science. We shall also be commenting in more detail to the National Curriculum Council.

In response to the Secretary of State for Education's invitation for comments on the National Curriculum History Working Group's Final Report, we offer the following comments:

As the body appointed by government to oversee the safety of England's historic inheritance, English Heritage is committed to bringing about the long-term conservation and widespread understanding and enjoyment of the historic environment. English Heritage welcomes the Group's positive approach to the use of the physical evidence for the past in history teaching. We are particularly glad to see the following clear statements in its report:

'It is important that field trips, and museum and site visits, form an integral part of the school curriculum for history' (from 10.2).

'The use of all the senses can help convey an image of living in the past' (from 10.3).

The Group also speaks of 'an uncompromising respect for the evidence' (from 10.5).

We applaud the Group's commitment to implementing these proposals, in particular through initial and in-service teaching training. English Heritage already makes a contribution to teacher training, for example through its annual 'Learning from the Past' residential course.

We feel that the PESC formula is an interesting approach to outlining the programmes of study and are pleased to see that two of the four sections are 'Social and religious' and 'Cultural and aesthetic'. We think the Group is right to give equal weight to each section. This will require pupils to be introduced to all types of evidence for the past.

We feel, however, that the Group has not followed through its apparent commitment to its statement (in 1.7 viii) that, 'History draws on the record of the entire human past'. There is little reference to prehistory — a period of the human past far greater than the time covered by written records.

On the Attainment Targets we are pleased to see that historical knowledge is tested through each of the Attainment Targets and that knowledge has not been isolated in a single Attainment Target that removes it from its context and framework of understanding. We do feel, however, that some of the statements and examples in the attainment targets will need careful re-working. They are often not properly hierarchical and we think

that some of the Targets are too difficult for the intended levels.

On the structure of the History Course we support the concept of the School Designed History Study Units and especially welcome the introduction of one in Key Stage 4. However, we wish that they were not so prescriptive in Key Stages 3 and 4. In Key Stage 3 we wonder why teachers could not be given the choice between a study based on British social history and, for example, one based on a study of the local historic environment. In Key Stage 4 there is hardly a reference to the rich diversity of physical evidence for the periods covered. This could be corrected in a SDHSU which specifically asks teachers to use their local historic environment. As it stands the instructions say 'starting at least before 1500'. We think that the instructions could more specifically suggest that pupils are given the opportunity to 'revisit' much earlier periods than they will be studying in this Key Stage. Pupils could be studying the prehistoric and early historic periods in this Study Unit. This would support the Group's repeated comments about early history such as, '...that earlier periods of history are more readily understood by younger pupils, while recent events are intelligible only to pupils in the later years of school. We do not believe this to be correct.'

We regret the omission of the Greek Achievement proposed for Key Stage 4 in the Interim Report. This would have allowed pupils to study this important part of the physical evidence for our past which has had such an influence on our present surroundings, for example from great historic houses to the design of the local bank or town hall.

On the Detail of the Programmes of Study we like the PESC formula but feel that there is often too much detail generally, at the expense of clear and precise guidance on the appropriate content of each HSU which could be better dealt with in the Focus section. There is, in our view, a lack of clarity between essential and exemplary information. For example, in HSU 13 Domestic life, families and childhood in Roman and Victorian times they list 'toys' as essential, yet 'pots' as exemplary. What is the rationale for this? Does the word 'information' mean 'fact'? Perhaps content might have been a better word to use.

On the Design of the Programmes of Study we welcome the broader approach to HSUs which are not confined within a

prescriptive timespan, for example HSU 9 Food and farming through history. We wonder, therefore, why the breadth given under Focus is not reflected in the Programmes of Study. Were people not concerned with food before the 'ancient near East'? Their definition of food and farming is cereal based. There is no opportunity here for the study of early food-gathering peoples or, indeed, all those millions in other parts of the world who cultivated yams and other crops. The introduction here (and in Ships and seafarers through history and Houses and places of worship through history and Land transport through history) of earlier cultures and other parts of the world would provide not only opportunities for multi-cultural links within the course but a more comprehensive approach to the study of the past.

On Chronology we feel that the Group was right to take a roughly chronological framework but that they have not carried through many of the general statements they make in the report. For example, in 2.25 iii they say, 'Key Stage 2 involves a broad chronological sweep from earliest times to the present day'. This is simply not the case. The Group's view of the past must be interpreted, from this report, as starting no earlier than the Romans in the case of Britain and the first farming periods in the near East.

On Assessment we feel that this could be simplified by reducing the number of attainment targets to 3 re-allocating the content of Attainment Target 4 to the other Attainment Targets. We feel that you cannot assess separately the presentation and information of Attainment Target 4: Organising and Communicating the result of historical study.

We note, however, that there will no longer be Standard Assessment Tasks for Key Stages 1 and 2. We propose that the National Curriculum Council develops methods of assessment for those Key Stages. We would like to see continuous school assessment and methods of assessing pupils' understanding of physical evidence developed.

English Heritage Education Service

English Heritage EDUCATIONAL

Resources

C A T A L O G U E 1 9 9 0

HANDBOOKS FOR TEACHERS

This major series is intended to help teachers planning a site visit. Historical background is combined with a variety of possible study approaches, documentary sources, and photocopyable activity sheets for classroom and on-site work, together with practical information about the site.

Appuldurcombe House Elizabeth Newbery

Based on the now ruined 18th century house near Wroxall on the Isle of Wight, the pack attempts to reconstruct life there when it was first built. There is a trail along public footpaths to look for the remains of Capability Brown's landscape gardens and another activity based on trees. Cut-out materials allow children to create their own cabinet of curiosities back at school.

16 pages, card covers, A4 size, plus 2 trails and a cut-out, 1987. ISBN 1-85074-148-4 Price: £2.00
Quote Code: XN 09164

See also videos ▶

The Avebury Monuments Lawrence Coupland

There is a stimulating range of material in this pack which covers Avebury Circles, West Kennet Long Barrow, the Sanctuary, Silbury Hill and West Kennet Avenue. The materials are pitched at 9-13 year olds as well as at GCSE level. The exercises are based on first-hand observation and deduction at the site and the use of documentary evidence in classroom preparation and follow-up work. A board game is also included.



We produce a wide range of resources for teachers, including books, videos, posters, slide packs and computer software, along with our journal, Remnants and a variety of free support material, such as site information leaflets.

20 pages, card covers, A4 size, plus 14 assorted leaflets and booklets, 1988. ISBN 1-85074-173-5 Price: £3.50
Quote Code: XN 09165

See also videos ▶

Carisbrooke Castle Rosemary Cooper

Carisbrooke Castle is one of our most visited sites. Following a historical introduction this book suggests five possible approaches to the castle including the use of evidence and a maths based exercise. Copyright-free activity sheets are included together with instructions for model making and cookery.

36 pages, card covers, A4 size, 1988. ISBN 1-85074-194-8 Price: £2.50
Quote Code: XN 09166

See also Videos and Posters ▶

Cleeve and Machelney Abbeys Sue Watling

Cleeve Abbey, Somerset is one of the best preserved Cistercian sites in the South West. Together with the remains of Benedictine Machelney, the sites are representative of many other smallish monasteries, illustrating different but complementary aspects of monastic life. The handbook contains pupils' information sheets with

drawings based on contemporary drawings, and activity sheets for site use. It is aimed at the 9-13 age range and applicable across the whole curriculum.

48 pages, card covers, A4 size, 1989. ISBN 1-85074-238-3 Price: £3.50
Quote Code: XN 09167

Framlingham and Orford Castles John Fairclough

These Suffolk castles, both with substantial remains are a visual basis for the study of the past and a starting point for activities extending across the curriculum. They can be studied as entities in themselves or used to

NEW